ORMOND BEACH SPECIFIC PLAN FINAL EIR Volume I

Submitted to:

City of Oxnard Development Services

Submitted by:

URS Corporation

November 2009

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µg	micgrogram
ACMs	asbestos-containing materials
ACOE	U.S. Army Corps of Engineers
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic volume
ADWF	average dry weather flow
AF	Acre-feet
AFY	Acre-feet per year
ANSI	American National Standards Institute
APAC	Agricultural Policy Advisory Committee
APCD	Air Pollution Control District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
ASR	Aquifer Storage and Recovery
AST	aboveground storage tank
AWT	Advanced Water Treatment
BBA	Brown-Buntin Associates, Inc.,
BFE	Base Flood Elevation
bgs	below ground surface
BMP	Best Management Practice
BP	before present
BRAC	Base Realignment and Closure
BRP	basin retention pond
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
Caltrans	State of California Department of Transportation
CAP	Coastal Area Plan
CBC	California Building Code
CCA	California Coastal Act
CCAA	California Clean Air Act
CCC	California Coastal Commission

CCR	California Code of Regulations
Cd	Camarillo loam
CDE	California Department of Education
Ce	Camarillo loam, sandy substratum
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, Liability Act
CESA	California Endangered Species Act
CESQG	Conditionally Exempt Small Quantity Generator
cfs	cubic feet per second
CGS	California Geological Survey
CHAS	Comprehensive Housing Affordability Strategies Program
CHMIRS	California Hazardous Material Incident Report System
CHP	California Highway Patrol
CIP	Capital Improvement Plan
CMWD	Calleguas Municipal Water District
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas
CNPS	California Native Plant Society's
CO	carbon monoxide
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources
CSUCI	California State University Channel Islands
CSUF	California State University, Fullerton
CUPA	Certified Unified Program Agency
CURB	City Urban Restriction Boundary
CWA	Clean Water Act
DAR	Dial a Ride
DDD	dichlorodiphyldichloroethylane
DDE	dichlorodiphyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DDWEM	Division of Drinking Water and Environmental Management
DHS	California Department of Health Services
DMV	Department of Motor Vehicles
DOGGR	California Department of Conservation, Division of Oil, Gas, and Geothermal Resources
DTSC	California Department of Toxic Substance Control
DWR	California Department of Water Resources
EDR	electrodialysis reversal
EFH	Essential Fish Habitat
EHD	Environmental Health Division
EIR	Environmental Impact Report
ESAs	Environmental Site Assessments

ESHA	Environmentally Sensitive Habitat Area
ET	evapotranspiration rate
FAA	Federal Aviation Administration
FCGMA	Fox Canyon Groundwater Management Agency
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FSRU	floating storage and regasification unit
FSZA	Farmland Security Zone Act
ft	foot/feet
g	rate of gravity
GAC	granular activated carbon
GP	General Plan
gpad	gallons per acre per day
GREAT Program	Groundwater Recovery Enhancement and Treatment Program
H2S	hydrogen sulfide
HCD	Department of Housing and Community Development
HCM	Highway Capacity Manual
HHWE	Household Hazardous Waste Element
HIST	Historical UST
Hn	Hueneme sandy loam
HRT	Hydraulic retention time
ICU	Intersection Capacity Utilization
IFI	Important Farmlands Inventory
ITE	Institute of Transportation Engineers'
IWPP	Integrated Watershed Protection Plan
km	Kilometer
l	Liter
LAFCO	Local Agency Formation Commission
LARWQCB	Los Angeles Regional Water Quality Control Board
LAS	Lower Aquifer System
LBPs	lead-based paints
lbs	pounds
LCA	California Land Conservation Act
LCC	Land Capability Classification
LDL	Larson Davis Laboratories
LE	Land Evaluation
LESA	Land Evaluation and Site Assessment
LNG	liquefied natural gas
LOS	Level of Service
LUE	Land Use Element

LUST	Leaking underground storage tank
M&I	municipal and industrial
m3	cubic meter
MBTA	Migratory Bird Treaty Act
MF	microfiltration
MFA	multi-family attached
mg	milligram
mgd	million gallons per day
mm	millimeter
MMRP	Mitigation Monitoring and Reporting Plan
MRF	Materials Recovery and Waste Transfer Facility
MSA	Magnuson-Stevens Fishery Conservation and Management Act
msl	mean sea level
MWD	Metropolitan Water District of Southern California
NAHC	Native American Heritage Commission
NAS	Naval Air Station
NAWS	Naval Air Weapons Station
NBVC	Naval Base Ventura County
NCCPA	Natural Community Conservation Planning Act
NF	nanofiltration
NFIP	National Flood Insurance Program
NGVD	National Geodetic Vertical Datum
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO2	nitrogen dioxide
NOI	Notice of Intent
NOX	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination Program
NPL	Superfund National Priorities List
NRHP	National Register of Historic Places
O3	ozone
OBGS	Ormond Beach Generating Station
OES	Office of Emergency Services
OGAC	Open-Graded Asphalt Concrete
O-H	Oxnard-Hueneme
OHWM	ordinary high water mark
OID	Oxnard Industrial Drain
OTC	Oxnard Transportation Center
OTM	Oxnard Traffic Model
OUHSD	Oxnard Union High School District
OVESD	Ocean View Elementary School District
OVWMD	Ocean View Municipal Water District
OWWTP	Oxnard Wastewater Treatment Plant
Pa	Pacheco silty clay loam

PACE	Program for Accelerated College Education
Pb	lead
PCE	passenger car equivalent
PCI	pre-construction notice
pCi	picocuries
PHPD	Port Hueneme Police Department
PHWA	Port Hueneme Water Agency
PLEM	pipeline-ending manifold
PM10	particulate matter with an aerodynamic diameter of 10 microns or smaller
PM2.5	fine particulate matter
POC	pollutant of concern
ppb	Parts per Billions
pphm	parts per hundred million
ppm	parts per million
PRC	Public Resources Code
PRG	preliminary remediation goal
PTP	Pumping-Trough Pipeline
Q	developed flow
RASA	Regional Aquifer-System Analysis
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RMP	Risk Management Plan
RO	reverse osmosis
ROC	reactive organic compounds
RPA	Recreation Planning Area
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SA	Site Assessment
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCADA	Supervisory Control and Data Acquisition System
SCAG	Southern California Association of Governments
SCAT	South Coast Area Transit
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCRRA	Southern California Regional Rail Authority
SCS	Soil Conservation Service
SDWA	Safe Drinking Water Act
SFD	single-family detached
SHPO	State Historic Preservation Office
SMP	Stormwater Quality Management Plan
SO2	sulfur dioxide
SOAR	Save Open Space and Agricultural Resources
SOI	sphere of influence

SPCP	Stormwater Pollution Control Plan
SQMP	Stormwater Quality Management Program
SQUIMP	Stormwater Quality Urban Impact Mitigation Plan
SR	State Route
SRRE	Source Reduction and Recycling Element
SSF	Southland Sod Farms
SWPCP	Storm Water Pollution Control Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State of California Water Resources Control Board
TACs	Toxic air contaminants
TDM	Transportation Demand Management
TDS	total dissolved solids
TGC	Southern California Gas Company
TMDLs	total maximum daily loads
TPH	Total Petroleum Hydrocarbons
Ts	Tidal Flats
TTF	tertiary treatment facility
UAS	Upper Aquifer System
UBC	Uniform Building Code
UF	ultrafiltration
UPRR	Union Pacific Railroad
URBEMIS	Computer program for estimating air emissions developed by State of California Air Resources Board
USAR	urban search and rescue
USC	United States Code
USDA	US Department of Agriculture
USEPA	US Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
UWCD	United Water Conservation District
UWMP	Urban Water Management Plan
VCRAT	Ventura County modified rational method ???
VCRATIONAL	models. Needed?
VCRR	Ventura County Railroad
VCWPD	Ventura County Watershed Protection District
VCWPD	Ventura County Flood Control District
VISTA	Ventura Intercity Service Transit Authority
VOCs	volatile organic compounds
WMA	watershed management area
WSA	Water Supply Assessment
WSPG	Water Surface Pressure Gradient Software
XA	Xerorthents cut and fill areas
yr	year
ZOI	Zone of Influence

NOISE DEFINITIONS

Acronym	Definition
dB	decibel
dB(A)	A-weighting filter for sound level measurement
Hz	hertz
L10	A-weighted sound level equaled or exceeded 10 percent of a time period
L50	Sound level equaled or exceeded 50 percent of a time period
L90	Sound level equaled or exceeded 90 percent of a time period
Ldn	Noise levels adjusted for nighttime sensitivity
Leq	Equivalent sound level
Lmax	Maximum noise level observed
Lmin	Minimum noise level observed
STC	Sound Transmission Loss Class

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The City of Oxnard (City) has received applications for two specific plans from separate applicants to guide development in a portion of the Ormond Beach area, Ventura County (Figures ES-1 and ES-2). The first, the SouthShore Specific Plan, calls for a variety of residential uses, a small amount of mixed-use commercial development, an elementary school, a high school, a manmade lake, and supporting park and open space uses (Figure ES-3). The second, the South Ormond Beach Specific Plan, calls for a mixture of light industrial and business park uses, as well as supporting open space (Figure ES-4). Both specific plan projects are located within the City's Sphere of Influence (SOI) in the unincorporated area of Ventura County. This Environmental Impact Report (EIR) evaluates the environmental effects of these proposed projects. The EIR identifies significant impacts of the project, as well as feasible mitigation measures and alternatives to avoid or reduce such impacts. Pursuant to the California Environmental Quality Act (CEQA), the City of Oxnard Planning Commission and City Council will use the information in the EIR during their consideration of the applications, which will involve public hearings and will be considered as separate applications. The EIR also serves to inform the public about the project and to facilitate public input.

ES.1 RECIRCULATED DRAFT EIR

In May 2007, the City of Oxnard published the Ormond Beach Specific Plan Draft Environmental Impact Report (DEIR). The DEIR/DEIS assessed the potential environmental implications of implementing two proposed specific plans: the SouthShore Specific Plan and the South Ormond Beach Specific Plan. The May 2007 DEIR was circulated for public review and comment for a period of 60 days, ending on July 20, 2007. During the public review process, the City accepted approximately 65 written and/or oral communications with comments on the proposed projects and the DEIR. The City reviewed those comments to identify specific environmental concerns and determine whether any additional environmental analysis would be required to respond to issues raised in the comments. Based on that review, the City determined that several subjects addressed in the DEIR warranted additional analysis. These sections included the following:

- **Water Resources:** Based on additional water supply planning conducted by the City, new information became available to updated the analysis and impact conclusion related to water supply and demand, at both project and cumulative levels.

- **Biological Resources:** In response to comments received on the DEIR, the City and the project applicants reconsidered the overall approach to managing activities that

might affect offsite sensitive biological resources (habitats and species). This included adjustments in the project commitments to resource management, resulting in a change in characterization of potential impacts.

- **Air Quality:** During the period of preparation for the May 2007 DEIR, new information became available concerning approaches to addressing greenhouse gases (GHG) and climate change in CEQA documents. In response to this new information and comments submitted on the DEIR, the City decided to introduce a new discussion of these issues and to place it in the Air Quality section of the report.

- **Alternatives Analysis:** In response to comments submitted on the May 2007 DEIR, the City determined that it would be prudent to update the discussion of alternatives to the project to include an alternative that would result in a lower level of development than the proposed projects. Thus, Chapter 4 now includes a comparative review of such an alternative (Alternative 5).

The City also took the recirculation opportunity to address a variety of other comments submitted on the May 2007 draft, although those changes did not constitute significant new information per CEQA. Thus, the City has opted to republish the entire document, rather than selected sections. The following discussions outline the statutory framework for the City's decision to recirculate.

ES.1.1 Recirculation of the DEIR Pursuant to CEQA

The recirculation of an environmental impact report (EIR) is governed by Section 21092.1 of the Public Resources Code. This section states that:

> *When significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 and consultation has occurred pursuant to Sections 21104 and 21153, but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report.*

Significant new information is defined in Section 15088.5(a) of the State CEQA Guidelines:

> *As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to*

> *mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement.*

"Significant new information" requiring recirculation includes, for example, a disclosure showing that:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

As described above, in considering recirculation of the DEIR, the City determined that at least the first and third of these categories of new information would be relevant.

ES.1.2 Responses to Comments on the DEIR

Pursuant to Section 21092.1 of the Public Resources Code, Section 15088.5(f)(1) of the CEQA Guidelines provides the following direction:

> *When an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and, in such cases, need not respond to those comments received during the earlier circulation period. The lead agency shall advise reviewers, either in the text of the revised EIR or by an attachment to the revised EIR, that although part of the administrative record, the previous comments do not require a written response in the final EIR, and that new comments must be submitted for the revised EIR. The lead agency need only respond to those comments submitted in response to the recirculated revised EIR.*

In light of this provision, the City requested that reviewers of the Recirculated DEIR (RDEIR) submit new comments focused on this document. While the comments submitted on the May 2007 DEIR proved informative and influenced the updated content of the DEIR, the City did not provide formal responses to them.

ES.1.3 Responses to Comments on the RDEIR

In accordance with Chapter 15088 of the California Environmental Quality Act (CEQA) Guidelines, the City of Oxnard, as the lead agency, has reviewed the comments received on the Recirculated Draft Environmental Impact Report (RDEIR) for the Ormond Beach Specific Plan Projects (dated July 2008) and has prepared written responses to the written comments received. The RDEIR was initially circulated for a 45-day public review period that began on July 24, 2008. In response to requests from several stakeholders, the City agreed to extend the review period by 15 days through September 22, 2008. The comments that the City received and the City's responses to those comments are included in Volume II of this FEIR.

ES.2 SUMMARY OF THE PROPOSED PROJECTS

The project sites comprise the Ormond Beach Specific Plan Study Area, located on the Oxnard Plain in Ventura County, California (Figure ES-1). The boundaries of the Study Area are the easterly extension of West Pleasant Valley Drive on the north, an irregular line extending parallel to the Pacific Ocean on the south, the Olds Road and Arnold Road alignments on the east, and an irregular line that includes the Edison Drive alignment on the west (Figure ES-2). With the exception of a Southern California Edison transmission line right-of-way on the western edge, the property is located in unincorporated Ventura County, but within the City of Oxnard's SOI as defined by LAFCO, and within the City of Oxnard's City Urban Restriction Boundary (CURB) limits. The Study Area is currently almost exclusively used for agricultural activities. Sod-farming operations occupy the majority of these cultivated lands, while strawberries and other agricultural row crops are produced in the northeast portion of the site.

The Study Area is surrounded by non-agricultural uses within the City of Oxnard to the north, west, and south. Existing adjacent uses include single-family residential to the north (Villa Capri and Tierra Vista neighborhoods) and light industrial uses (vehicle preparation centers) to the west. A green-waste composting facility (Agromin Wood Products), the Reliant Energy Ormond Beach Generating Station, and natural features, including wetland, dune, and beach areas, adjoin the Study Area to the south. The southeastern corner of the Study Area is adjacent to the perimeter of Naval Base Ventura County Point Mugu. Existing adjacent uses also include agricultural operations to the east and southwest. The predominant crops within the properties east and southwest of the Study Area are row crops and sod. The Study Area is located approximately two miles east of the Port of Hueneme. Figure 2-1 (Section 2 of this report) shows surrounding ownerships.

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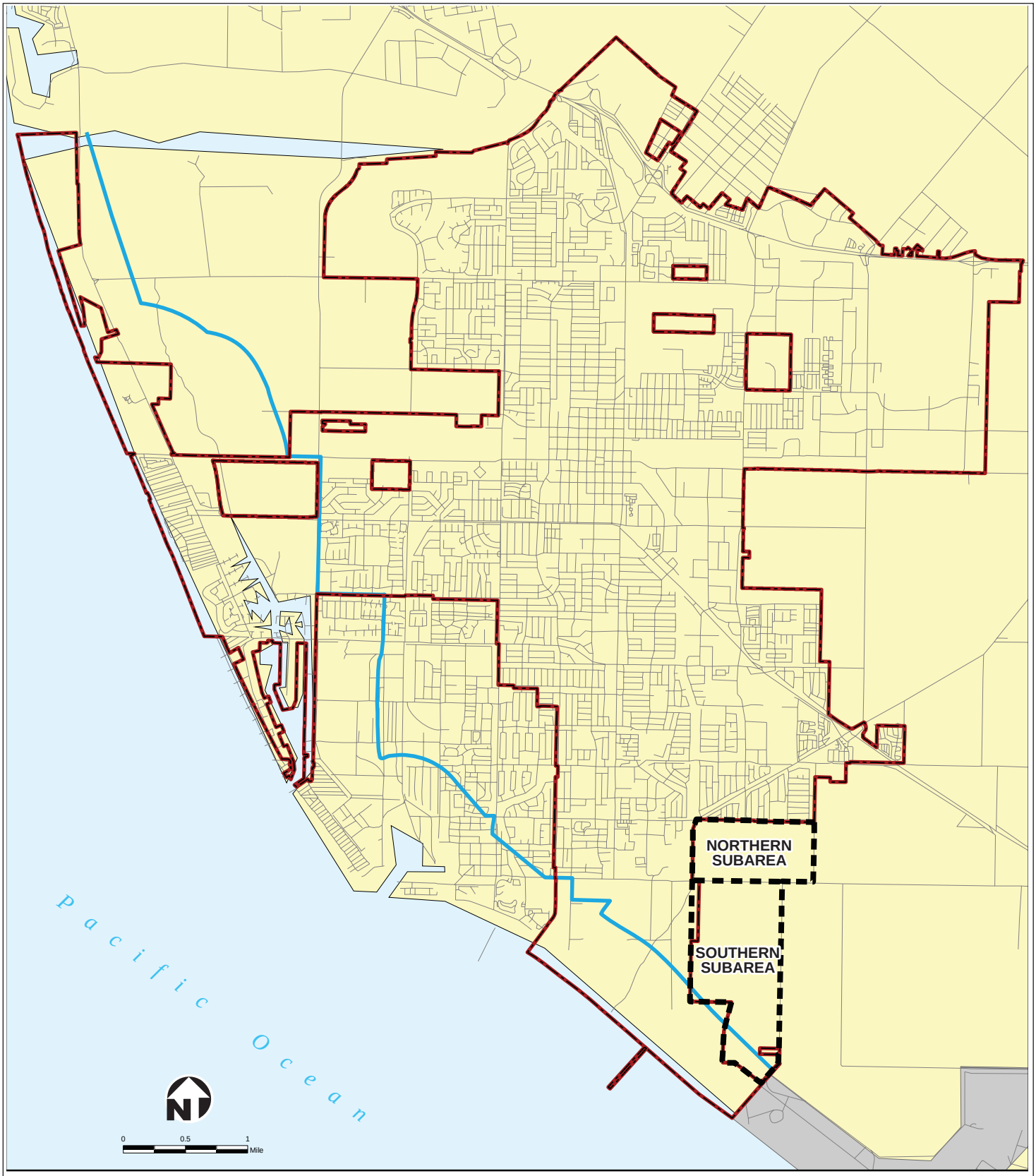

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Legend

- City Limits
- Ormond Beach Specific Plan Study Area
- Naval Air Weapons Station Point Mugu
- Coastal Zone Boundary Line

Ormond Beach Specific Plan EIR URS Corporation	Figure ES-1. **REGIONAL LOCATION**	Nov. 2009

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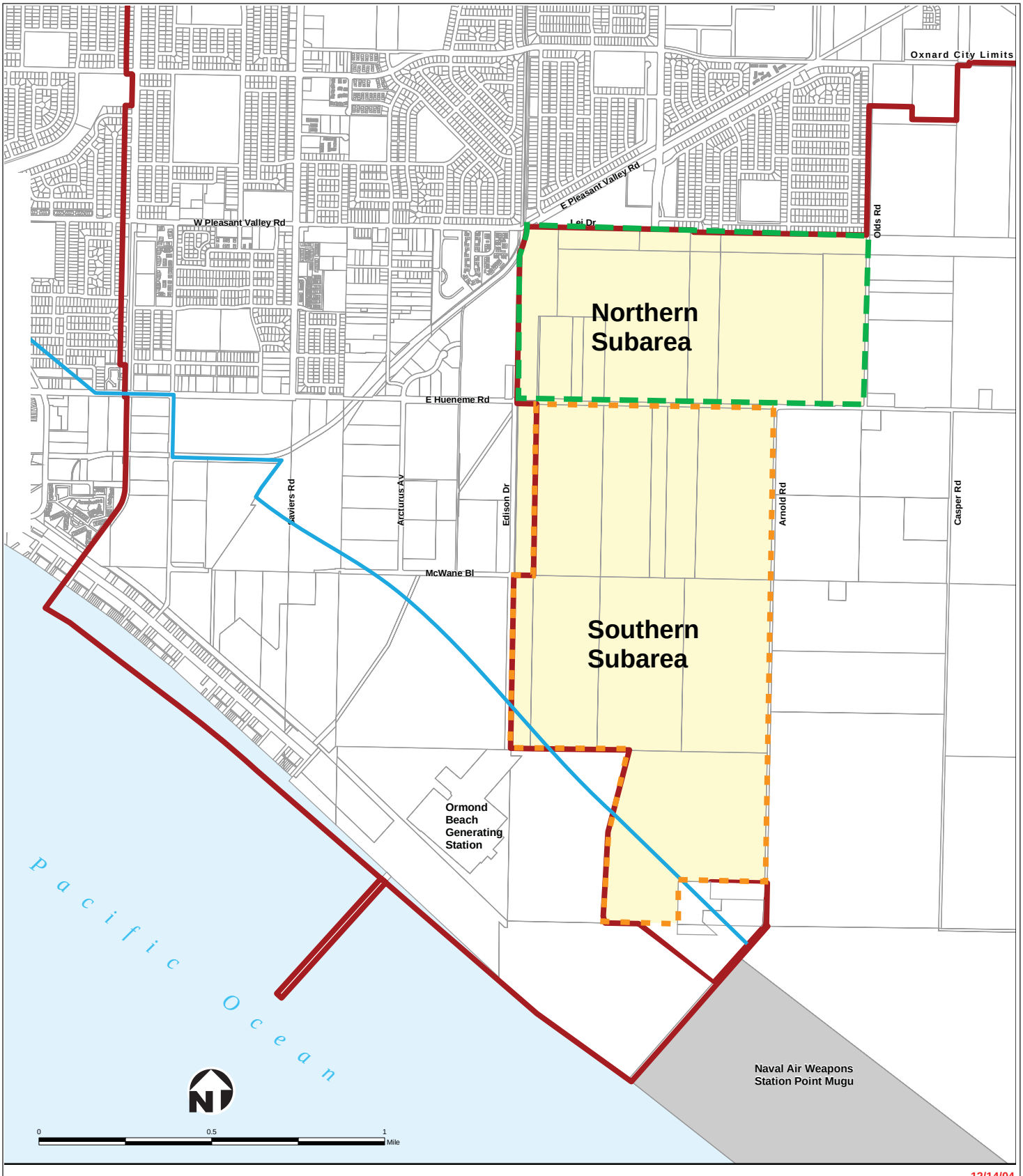

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Legend

- City Limits
- Naval Air Weapons Station Point Mugu
- Specific Plan Project Area
- Coastal Zone Boundary Line

Ormond Beach Specific Plan EIR	Figure ES-2. **SPECIFIC PLAN STUDY AREA**	Nov. 2009
URS Corporation		

The Study Area is further divided by Hueneme Road into two subareas: the Northern Subarea and the Southern Subarea. The Northern Subarea is proposed to be annexed as the SouthShore Specific Plan project area, while a portion of the Southern Subarea would be annexed as the South Ormond Beach Specific Plan project area. The SouthShore and South Ormond Beach specific plans annexations would total approximately 700 acres of unincorporated Ventura County (Figure ES-1). The City is considering and may approve adoption of either or both Specific Plans. If both specific plans are approved, approximately 330 acres would either be dedicated or otherwise protected in open space and parks uses or remain in agricultural use. Table ES-1 shows the specific breakdown of land uses.

TABLE ES-1
SPECIFIC PLAN LAND USE DESIGNATIONS

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**% of Total**	**Acres**	**% of Total**	**Acres**	**% of Total**
Residential-low	56.5	17.5%			56.5	6.2%
Residential-low Medium	37.3	11.6%			37.3	4.1%
Residential-medium	40.9	12.7%			40.9	4.5%
Mixed-use (Commercial)	4.2	1.3%			4.2	0.5%
Business/Research Park			61.3	10.3%	61.3	6.7%
Light Industrial	37.2	11.6%	217.5	36.6%	254.7	27.8%
School	63.5	19.7%			63.5	6.9%
Park	39.6	12.3%			39.6	4.3%
Agriculture			228.6	38.4%	228.6	24.9%
Misc Open Space	25.4	7.9%	51	8.6%	76.4	8.3%
Other	17.4	5.4%	36.4	6.1%	53.8	5.9%
Total	**322.0**	**100.0%**	**594.8**	**100.0%**	**916.8**	**100.0%**

ES.2.1 Northern Subarea

The SouthShore Specific Plan proposes to accommodate a mix of uses including up to 1,283 residential dwelling units of various types and densities; an elementary school; a high school; a community park; neighborhood parks; an 18-acre lake; a mixed-use commercial marketplace; light industrial uses; and open space and trails.

ES.2.2 Southern Subarea

The South Ormond Beach Specific Plan proposes to develop approximately 279 of its 595 acres. The area immediately south of Hueneme Road would be developed primarily with

light industrial (217.5 acres) and business/research park (61.3 acres) uses. The remaining developed areas would include detention/biofiltration areas and greenbelts. A new overlay zone is being proposed along Edison Drive for port-related uses serving the Port of Hueneme. The southern 230 acres of the Southern Subarea would continue in agricultural use and would not be annexed to the City as part of this project. This property may be sold to the California Coastal Conservancy or partner organization for use as part of the larger Ormond Beach wetland restoration project. The California Coastal Conservancy is coordinating the restoration and maintenance planning of this area (Figure ES-5). All existing agricultural uses will continue in this area until the restoration process begins.

The projects are located on the Oxnard Plain, an area that will include continuing agricultural uses immediately adjacent to the project areas. Therefore, each Specific Plan provides a minimum 150-foot agricultural vegetative buffer ("shelter belt") between the proposed development and the adjacent ongoing agricultural operations. Both Specific Plans also identify public pedestrian paths along the eastern edge of the project areas, demarcated by Olds and Arnold roads and down SouthShore Drive/Rose Avenue consistent with the City Master Plan of Bikeways.

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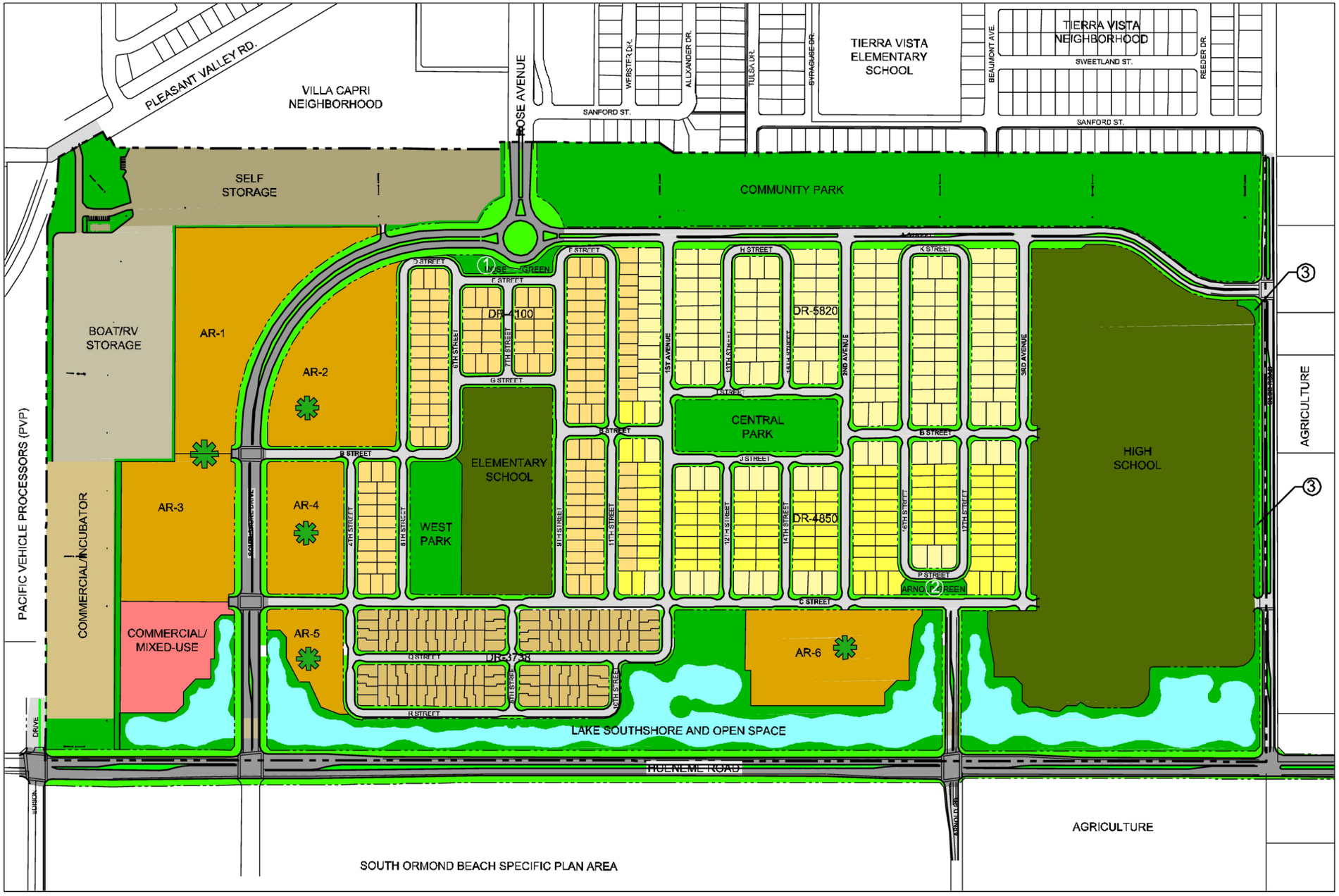
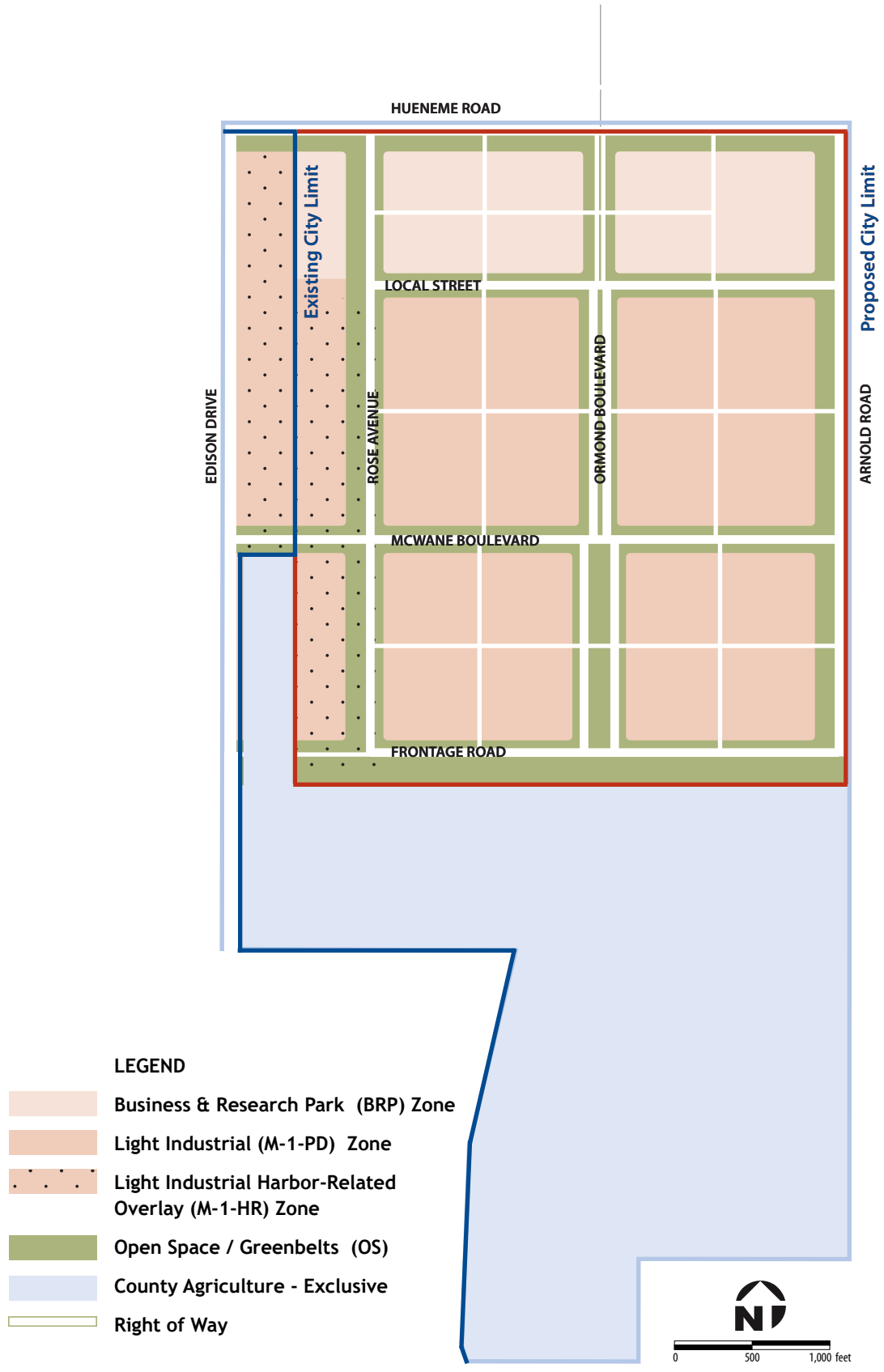
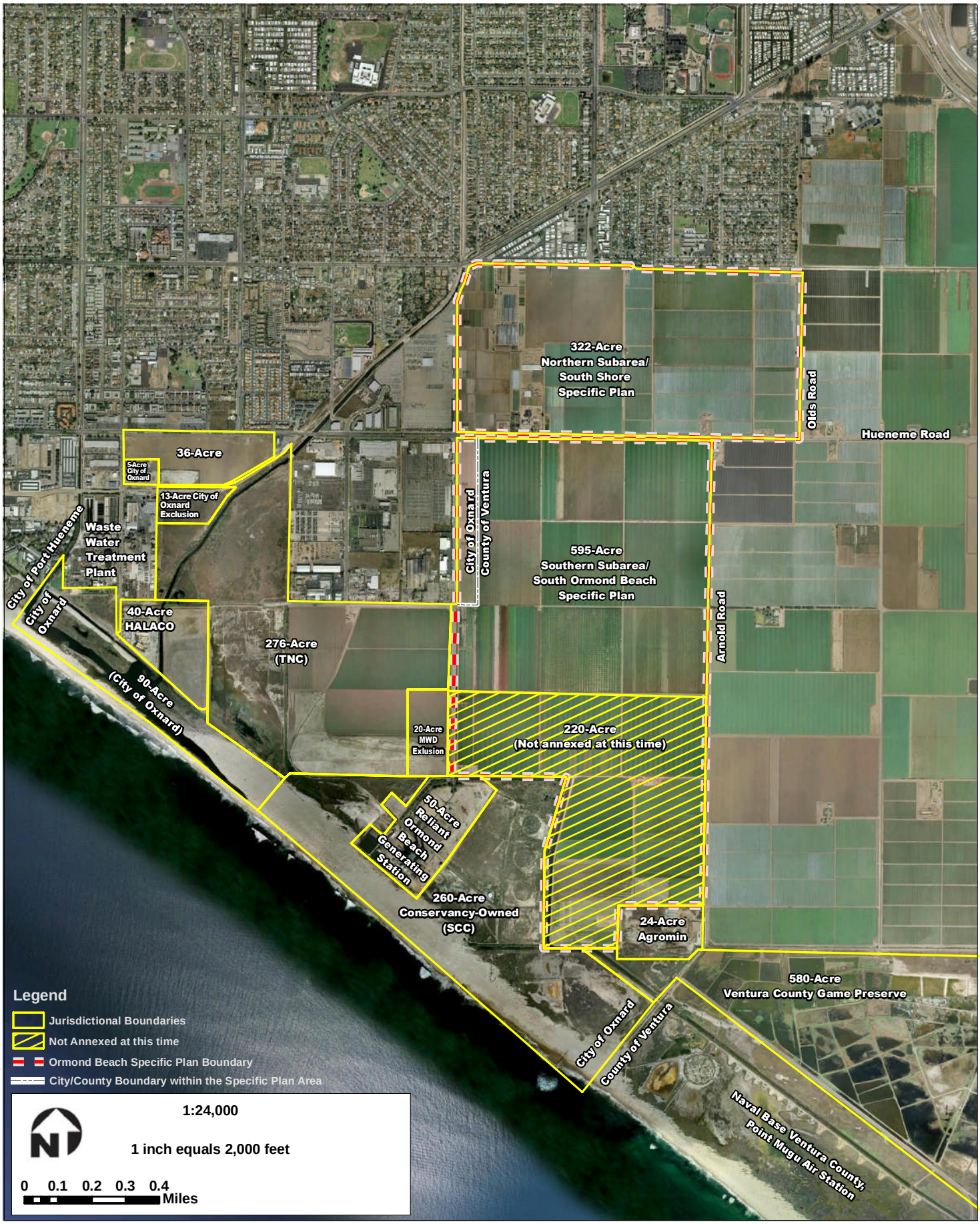


Ormond Beach Specific Plan EIR **URS Corporation**	**Source:** City of Oxnard SouthShore Specific Plan Dated: August 28, 2009	Figure ES-3. **PROPOSED SOUTHSHORE SPECIFIC PLAN**	Nov. 2009



Ormond Beach Specific Plan EIR URS Corporation	**Source:** South Ormond Beach Specific Plan, Mar 2009	Figure ES-4. **PROPOSED SOUTH ORMOND BEACH SPECIFIC PLAN**	Nov. 2009



Ormond Beach Specific Plan EIR **URS Corporation**	**Source:** *Aspen Environmental Group* *© 2009 Google Earth*	Figure ES-5. **PROJECT AREA WITH SELECTED SURROUNDING OWNERSHIP**	Nov. 2009

ES.3 REQUIRED APPROVALS

The projects require a number of discretionary approvals by both the Planning Commission and the City Council, including the following:

- General Plan amendment for each subarea.
- Establishment of zoning for the Northern and Southern subareas through adoption of specific plans for the project areas. The exception is the southernmost 220 acres in the Southern Subarea, which will retain its zoning under Ventura County jurisdiction.
- Approval of development agreements for each of the subareas.
- Approval of tentative tract maps for each of the subareas.

In addition to these City of Oxnard actions, other permits or actions by other agencies for which this document may be used are as follows:

- With the exception of the southernmost 220 acres, reorganization and approval by Local Agency Formation Commission (LAFCO) of annexation of the Northern and Southern subareas. Annexation would be accompanied by the simultaneous detachment of the same area from the Ventura County Resource Conservation District and the Ventura County Fire Protection District.
- Annexation to Metropolitan Water District of Southern California and Calleguas Municipal Water District.
- Army Corps of Engineers Nationwide Permit for activities within waters of the U.S. (33 CFR 330).
- Los Angeles Regional Water Quality Control Board Section 401 Water Quality Certification.
- Ventura County Watershed Protection District approval.

ES.4 ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

The proposed specific plan projects represent discretionary actions subject to the environmental review requirements of the California Environmental Quality Act (CEQA). Therefore, this Environmental Impact Report (EIR) has been prepared to evaluate the impacts of the projects.

The City of Oxnard's Planning and Environmental Services Division determined in its initial review that there was a potential for the projects to cause significant environmental impacts and that an EIR was clearly required for the projects. Therefore an initial study was not

required to be prepared, pursuant to Section 15063 (a) of the CEQA Guidelines. The City did, however, sponsor a Community Scoping Meeting in June 2004 to inform interested stakeholders about the proposed projects and to solicit comments about them. As part of this process, the City presented three preliminary land use concepts for review and comment. The comments that the City received during and following the Scoping Meeting provided the basis for the development of project alternatives to considered in this EIR.

In September 2005, the City issued a Notice of Preparation (NOP) and subjected the NOP to a 30-day public review period. The City received written comments on the NOP from the following parties: County of Ventura Resource Management Agency, Planning Division; Oxnard Union High School District, Calleguas Municipal Water District, Ocean View Elementary School District, California Department of Transportation, Ventura County Air Pollution Control District, Ventura County Watershed Protection District, County of Ventura Public Works Agency Transportation Department, Ventura Local Agency Formation Commission, Southern California Association of Governments, Department of the Navy, Metropolitan Water District, California Governor's Office of Planning and Research (OPR), Roger Pariseau, and California Department of Toxic Substances Control (see Appendix G).

In May 2007, the City of Oxnard published the Ormond Beach Specific Plan Draft Environmental Impact Report (DEIR). The DEIR assessed the potential environmental implications of implementing two proposed specific plans: the SouthShore Specific Plan and the South Ormond Beach Specific Plan. The May 2007 DEIR was circulated for public review and comment for a period of 60 days, ending on July 20, 2007. During the public review process, the City accepted approximately 65 written and/or oral communications with comments on the proposed projects and the DEIR. The City also hosted two Planning Commission hearings (June 21 and July 19, 2007) and a separate community workshop on July 16, 2007. The City reviewed the comments submitted through these various forums and identified several specific environmental concerns that warranted additional environmental analysis. As a result, the City decided to revise and recirculate the DEIR.

The Recirculated Draft EIR (RDEIR) published on July 24, 2008, initiating a 45-day public review period. In response to requests from several stakeholders, the City agreed to extend the review period by 15 days through September 22, 2008. As part of the public review process, the City hosted a Planning Commission hearing on August 21, 2008.

As noted earlier, an EIR is an informational document to advise the public agency decision-makers and the public of the environmental effects of a project. CEQA Guidelines Section 15151 provides direction on the standard of adequacy for an EIR, stating the following:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

ES.5 SUMMARY OF IMPACTS

The proposed specific plan projects would result in significant unavoidable impacts (Class I) for which there are no feasible mitigation measures and alternatives to the project that would avoid these impacts while still meeting the project objectives. The proposed Northern Subarea (SouthShore) Specific Plan would result in Class I impacts in five issue areas, while the Southern Subarea Specific Plan (South Ormond Beach) would result in Class I impacts in four issue areas. The Class I impacts are summarized below and are listed in Table ES-2 (Northern Subarea) and Table ES-3 (Southern Subarea).

Northern Subarea Class I Impacts (Significant and Unavoidable)

- **Air Quality:** Exceedance of thresholds from construction- and project-related operational ROC and NO_X emissions, resulting from heavy equipment used during construction, residential and non-residential sources including vehicular traffic, space and water heating, and consumer products.
- **Agricultural Resources:** The proposed development of the Northern Subarea would convert approximately 322 acres of prime farmland currently used for agricultural operations to urban and open space uses.
- **Noise:** Significant increases in traffic noise levels at noise-sensitive receivers located along several roadway segments. Along Pleasant Valley Road, City's Noise Ordinance standards would be exceeded for existing residential development.
- **Visual/Aesthetic Resources:** The transition of land from agricultural to urban uses constitutes a substantial change in the visual character of the area. The City of Oxnard views agricultural lands as an important visual resource, and loss of this resource is an unavoidable consequence of development.

Southern Subarea Class I Impacts (Significant and Unavoidable)

- **Air Quality:** Exceedance of thresholds from construction- and project-related operational ROC and NO_X emissions resulting from heavy equipment used during construction, residential and non-residential sources including vehicular traffic, space and water heating, and consumer products.
- **Agricultural Resources:** The proposed project would convert approximately 375 acres of prime farmland currently used for agricultural operations to non-agricultural uses. The remaining 220 acres included in the Southern Subarea would continue to be available for agricultural production.
- **Visual/Aesthetic Resources:** The transition of land from agricultural to urban uses constitutes a substantial change in the visual character of the area. The City of Oxnard views agricultural lands as an important visual resource, and loss of this resource is an unavoidable consequence of development.

The proposed project would also result in various significant but feasibly mitigated, impacts (Class II). These impacts are summarized below and the mitigation measures to avoid these impacts, or to reduce them to less than significant levels, are presented in Section 3.0 of this document. These impacts and the associated mitigation measures are described in more detail in Table ES-2 (Northern Subarea) and Table ES-3 (Southern Subarea).

Northern Subarea Class II Impacts (Significant but Feasibly Mitigated)

- **Geology and Geologic Hazards**: Impacts from erosion, as well as hazards from seismic activity, expansive and collapsible soils.
- **Water Resources**: Water Supply and demand; short- and long-term potential impacts to runoff water quality; short term construction-related drainage impacts; potential wastewater treatment and conveyance infrastructure impacts.
- **Air Quality:** Soil import, grading and excavation, and equipment operation during construction activities would generate construction-related air pollutant emissions.
- **Hazards and Hazardous Materials:** The proposed project could result in impacts related to potentially contaminated soils and/or groundwater contamination resulting from the historical agricultural operations, at concentrations above regulatory action levels. Potentially significant adverse health impacts to construction workers and/or future project site residents could occur if high levels of residual pesticides are present at the site.

- **Biological Resources:** 302 acres of habitat for common and special-status wildlife species, particularly birds, while marginal because it consists of agricultural crops and is adjacent to residential development, will be impacted as a result of the proposed project. Indirect impacts to offsite sensitive bird foraging habitat will result from increased visitation associated with increased human occupation of the area. Affected species include Western Snowy Plover (*Charadrius alexandrinus nivosus*) and California Least Tern (*Sterna antillarum browni*) that nest and forage at Ormond Beach and in the case of Least terns, along the adjacent drainage ditches.
- **Agricultural Resources**: Dust generated during construction could be deposited on adjacent agricultural lands with planted crops, temporarily reducing productivity. In addition, increase in traffic may result in permanent increase in emissions that could affect crops in adjacent agricultural lands.
- **Transportation and Circulation**: The addition of temporary soil import-related trips, as well as long-term development-generated would affect two intersections.
- **Noise**: The changes in traffic associated with future development of the Northern Subarea would result in significant increases in traffic noise levels at noise-sensitive receptors.
- **Cultural Resources**: Grading activities associated with site preparation could impact previously undiscovered cultural resources.

Southern Subarea Class II Impacts (Significant but Feasibly Mitigated)

- **Geology and Geologic Hazards**: Impacts from erosion, as well as hazards from seismic activity, expansive and collapsible soils.
- **Water Resources:** Water supply and demand; short- and long-term potential impacts to runoff water quality; short term construction-related drainage impacts; potential wastewater treatment and conveyance infrastructure impacts.
- **Air Quality:** Grading, excavation, and equipment operation during construction activities would generate construction-related air pollutant emissions.
- **Hazards and Hazardous Materials:** The proposed project could result in impacts related to potentially contaminated soils and/or groundwater contamination resulting from the historical agricultural operations, at concentrations above regulatory action levels. Potentially significant adverse health impacts to construction workers and/or future project site residents could occur if high levels of residual pesticides are present at the site. In addition, due to the rural nature of the site, septic systems may be present within the site boundaries.

- **Biological Resources:** The proposed project could result in direct impacts to various adjacent habitats due to potentially invasive landscape plant species. 375 acres of habitat for wildlife species, while marginal because it consists of agricultural crops and is adjacent to industrial development, will be impacted as a result of the proposed project. Impacts to both sensitive and common wildlife species, particularly birds, will occur. Indirect impacts to offsite sensitive bird foraging habitat will result from increased visitation associated with increased human occupation of the area. Affected species include Western Snowy Plover, California Least Tern, and White-faced Ibis, all of which nest and forage either at Ormond Beach, the Pt. Mugu wetlands, or local drainage ditches.
- **Agricultural Resources**: Dust generated during construction could be deposited on adjacent agricultural lands with planted crops, temporarily reducing productivity. In addition, increase in traffic may result in permanent increase in emissions that could affect crops in adjacent agricultural lands.
- **Noise**: The changes in traffic associated with future development of the Northern Subarea would result in significant increases in traffic noise levels at noise-sensitive receivers
- **Cultural Resources**: Grading activities associated with site preparation could impact previously undiscovered cultural resources.

Various adverse, but less than significant, impacts would also occur due to the proposed projects. These impacts are described in more detail in Table ES-2 (Northern Subarea) and Table ES-3 (Southern Subarea). They include impacts to drainage, geological hazards, biological resources, and visual resources.

There is also one beneficial impact for this project. Agricultural ditches will be replaced with bioswales that capture runoff that will be vegetated with native wetland species. This would improve the habitat quality an increase the acreage of wetlands and waters of the U.S. from 5 to just under 50 acres.

ES.6 ALTERNATIVES

The following alternatives to the proposed project were evaluated in the EIR:

- Alternative 1: Proposed Project with High School located East of Olds Road, instead of within Northern Subarea
- Alternative 2: No Project/Existing City Plan (General Plan 2020)
- Alternative 3: No Project/Continuation of Existing Uses (Existing County Zoning)
- Alternative 4: Conservation

In addition to these four alternatives, a fifth alternative has been added in response to comments received on the May 2007 DEIR. This alternative reflects a lower level of development intensity in the interest of including an alternative that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects, as required by CEQA.

Alternative 1: Property Owners' Request with High School East of Olds Road

This alternative is nearly identical to the specific plans as proposed, except the high school site proposed in the Northern Subarea would be located to the east, just outside of the Study Area.

- **Northern Subarea:** This alternative would provide an increase in the number of residential units (from 1,283 to 1,545) and other adjustments to the plan to accommodate the additional residential development. The high school would be developed outside of the Study Area to the east of the Northern Subarea.
- **Southern Subarea:** The Southern Subarea would not be affected under this alternative; it would be developed consistent with the proposed project.

Alternative 2: No Project/Existing Plan (City of Oxnard 2020 General Plan)

Under Alternative 2, the proposed specific plans would not be implemented and, in the short-term, the land would remain in its existing uses (predominantly agricultural) under the County of Ventura General Plan and zoning jurisdiction. A potential consequence of this No Project alternative, however, would be future annexation to the City of Oxnard and development in accordance with the existing land use designations of the Oxnard General Plan 2020 Land Use Element.

- **Northern Subarea:** Development in accordance with the existing General Plan 2020 would result in a residential community in the Northern Subarea consisting of 1,964 residential dwelling units in a uniform low-medium density. The Northern Subarea would also include just over 200,000 square feet of general commercial uses, as compared to approximately 63,000 square feet of mixed-use commercial and nearly 570,000 square feet of light industrial uses under the proposed specific plan project.
- **Southern Subarea:** Under this alternative, the northern portion of the Southern Subarea would develop with approximately 2,100 medium-density residential dwelling units. The remainder of the Southern Subarea, currently designated as Public Utility/Energy Facility, would probably remain vacant for some time and would then be subject to a plan update for alternate uses. The ultimate uses might include some research and industrial uses as proposed, but that outcome is not certain.

Alternative 3: No Project/No Annexation (County of Ventura General Plan/Zoning)

Under this No Project alternative, the existing agricultural uses in both subareas would continue indefinitely under the existing County of Ventura General Plan (Agriculture) and zoning ordinance (Agriculture-Exclusive). The current agricultural uses of the area are dominated by sod farming, with some strawberries or other row crops in the northeast corner of the Study Area. It is possible that other agricultural crops may be planted consistent with existing entitlements. This alternative would avoid the direct physical changes caused by the proposed project or the previously described alternatives. It would also preserve the current agricultural uses and the habitat provided by those uses. This No Project Alternative would also leave a large area of the City of Oxnard 2020 General Plan without implementation. The demand for the uses proposed under the General Plan would, thus, have to be accommodated in other areas of the City of Oxnard or elsewhere. This might lead to pressure for development beyond the CURB limit of Oxnard, with adverse effects in other areas similar to those under Alternatives 1 and 2.

Alternative 4: Conservation Alternative

Under this alternative, all of the Study Area north of McWane Boulevard (approximately 563 acres) would remain in agricultural uses, while the area south of McWane Boulevard (approximately 350 acres) would be set aside for resource protection. The area south of McWane is, and has been, part of a larger area considered by both the Coastal Conservancy and the Nature Conservancy for acquisition for inclusion in the larger Ormond Beach park and open space complex. Both conservancies have completed acquisitions in the area and it is likely that a substantial part of the area south of McWane may be acquired for conservation purposes. This alternative would avoid the physical changes and impacts that would attend development under the specific plans. It would also provide a much larger buffer area and conservation of agricultural uses north of the potential Ormond Beach restoration area. Indirect effects of this alternative would be similar to those described above for Alternative 3, since it may lead to proposals to accommodate development demand in areas not currently planned for that purpose.

Alternative 5: Less Intensive Development

This alternative was added in response to comments received on the May 2007 DEIR. Those comments expressed concern that the four alternatives evaluated in that document did not include an alternative that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects, as required by CEQA. In response, the City worked with the project applicants to identify development alternatives that would satisfy those criteria. The result is Alternative 5, which

is a composite of the alternatives for the Northern and Southern Subareas and reflects a lower level of intensity than the other alternatives that call for development (i.e., the Project and Alternatives 1 and 2).

- **Northern Subarea:** Under Alternative 5, the developed part of Northern Subarea would be reduced in size, the amount of residential acreage would be increased, and the density of proposed residential development would be reduced. The reduction in size of approximately 60 acres would occur along the northern and eastern edges of the Study Area, where it is assumed that the existing agricultural uses would remain. These changes would result in the elimination of the community park and the high school proposed as part of the project. Approximately 10 acres of the site proposed for the high school under the project would be converted to residential uses. In addition, the densities in remaining residential areas would be reduced, primarily along the eastern side SouthShore Drive and the northern edge of Lake SouthShore.

- **Southern Subarea:** In the Southern Subarea, Alternative 5 would consist of designating the entire developed area as Harbor Industrial. Since the permitted floor-area ratio would be considerably lower under this alternative, there would be a substantial reduction in the total square footage of development compared with the project. The type of development would, however, shift from employment-intensive business park and light industrial uses to the type of port-related industrial that currently occurs to the west of the Study Area. Since these uses tend to support very low employment densities, there would be a reduction in the employment capacity of the area, and thus a reduction in the severity of impacts associated with human occupation.

TABLE ES-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
Class I Impacts – Ormond Beach (Northern Subarea)			
3.4 Air Quality	AQ-3: Construction-Related Emissions. Architectural coatings and heavy equipment used during proposed construction activities produces combustive NOX and ROG emissions. Emissions from the construction of development projects are accounted for in the County ozone attainment planning process.	AQ-2: Construction-Related Control Measures. ROC and NO_X emissions generated by project construction shall be kept to a minimum by following these control measures: 1. Minimize equipment idling time. 2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. 5. Use low VOC architectural coatings to reduce evaporative ROC emissions.	Significant and unavoidable
3.4 Air Quality	AQ-4: Project-Related Emissions. Operations of the project would produce significant ROC and NO_X emissions from all combined residential and non-residential project sources, including vehicular traffic, space heating, water heating, and consumer products. Project-related emissions were estimated using the URBEMIS2007 model. This analysis assumes that the project would be fully built-out by the year 2020.	AQ-3: Operational Control Measures. Measures to reduce operational and vehicle emissions to the extent feasible shall be identified and incorporated in conditions of approval for any Tentative Tract Map or development permit within the Specific Plan. AQ-4: TDM Fee Program. Transportation Demand Management (TDM) Fee Program shall be developed for the project and approved by the City of Oxnard prior to the issuance of the first building permit for any project within the Study Area. This program shall determine the total TDM fee to be paid for individual projects within the Study Area, consistent with City standards and the methodology identified in Section 7.5.3 of the Ventura County APCD Guidelines	Significant and unavoidable

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.8 Agriculture	AG-5: Direct Farmland Conversion. Development of the Northern Subarea would convert approximately 322 acres of land currently used for agricultural operations to urban and open space uses. The City of Oxnard has reviewed a variety of actions that might offset the effects of the loss of productive agricultural land. This includes requirements for direct preservation of agricultural land elsewhere in the region and/or financial contribution to efforts to acquire conservation easements or deed restrictions on land currently used for production. The City has also considered imposition of other requirements such as stockpiling of high quality topsoil and offering it as soil amendments for marginally viable agricultural land; converting nearby areas not used for farmland to farmland (e.g., open space or industrial lands); and/or financially contributing to an organization that performs agricultural conservation. Based on its evaluation of these and other potential measures, the City has concluded that they would not be feasible for the Ormond Beach Specific Plan projects.	Cannot be feasibly mitigated	Significant and unavoidable
3.11 Noise	NOISE-1: Traffic Noise with Northern Subarea Development. Compared with existing conditions, the changes in traffic associated with future development of the Northern Subarea would result in significant increases in traffic noise levels at noise-sensitive receivers located along several roadway segments, according to either the exceedance standard or the change standard or both. Along Pleasant Valley Road, existing residential development would be exposed to exceedances of the City's Noise Ordinance standards and the opportunities for mitigation are limited.	NOISE-1: Rose-SouthShore Drive Exterior Noise. The required setbacks to ensure compliance of new residential areas with the City of Oxnard exterior noise standard of 60 dB L_{dn} would be in the range of 140 feet from the centerline of Rose-SouthShore Drive. With the proposed cross-section, the distance from the centerline to the edge of the right-of-way would be 55 feet. The applicants have also proposed 34-foot landscape buffer along SouthShore Drive. Thus, the proposed total distance from the centerline to the edge of the attached residential parcels along SouthShore Drive would be 89 feet. The site layout and structural design of the attached residential areas along SouthShore Drive would, thus, need to incorporate features to mitigate exterior noise levels to City standards. NOISE-2: Outdoor Activity Areas. The project should be designed to ensure	Significant and unavoidable

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		that outdoor activity areas are shielded from direct view of major roadways. Shielding could be achieved by building orientation (so that the back yards are shielded by the homes), or by the use of noise barriers. The proposed layout of the Northern Subarea calls for outdoor activity areas to be separated from SouthShore Drive by attached residential buildings. The project should also be designed to ensure satisfaction of the exterior noise standards for traffic generated by traffic on internal roads. The specific design of noise barriers, berms or combinations thereof will depend upon the final roadway and lot designs, and upon the grading plans. To achieve a meaningful amount of noise reduction using barriers or berms, these should be designed to break line of sight between the source and receiver. Generally, a barrier 6 feet high located on level ground will provide about 5 dB noise level reduction for traffic noise. An improvement of about 1 dB would be expected for each 1-foot increase in barrier height beyond breaking line of sight. NOISE-3: Interior Noise Exposure. The methods required to mitigate interior noise exposures would depend on the locations of the residences relative to the roadways. In general, if the exterior traffic noise exposure is 65 dB L_{dn} or less, no exceptional construction techniques would be required. Where the exterior traffic noise level is between 65 dB and 75 dB L_{dn}, it is usually feasible to achieve the interior noise standard of 45 dB L_{dn} by installing acoustically-rated glazing, using stucco or brick siding, and by minimizing the surface area of glazing that faces the roadways. Where the exterior traffic noise exposure exceeds 75 dB L_{dn}, it is usually more difficult to achieve the interior noise standard in residences. NOISE-4: Post-Design Acoustical Analysis. To ensure satisfaction of the exterior and interior traffic noise standards for the noise sensitive land uses within the Study Area, an acoustical analysis should be prepared after the	

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		roadway and lot designs and grading plans have been finalized. The recommendations prepared as a result of that analysis should be implemented so that the noise standards are achieved.	
3.11 Noise	NOISE-4: Traffic Noise with Combined Subarea Development. Compared with existing conditions, the changes in traffic associated with future development of both the Northern and Southern subareas would result in significant increases in traffic noise levels at noise sensitive receivers located along the several roadway segments, according to either the exceedance standard or the change standard or both: Along Pleasant Valley Road, existing residential development would be exposed to exceedances of the City's Noise Ordinance standards and the opportunities for mitigation are limited.	NOISE-1: Rose-SouthShore Drive Exterior Noise. The required setbacks to ensure compliance of new residential areas with the City of Oxnard exterior noise standard of 60 dB L_{dn} would be in the range of 140 feet from the centerline of Rose-SouthShore Drive. With the proposed cross-section, the distance from the centerline to the edge of the right-of-way would be 55 feet. The applicants have also proposed 34-foot landscape buffer along SouthShore Drive. Thus, the proposed total distance from the centerline to the edge of the attached residential parcels along SouthShore Drive would be 89 feet. The site layout and structural design of the attached residential areas along SouthShore Drive would, thus, need to incorporate features to mitigate exterior noise levels to City standards. NOISE-2: Outdoor Activity Areas. The project should be designed to ensure that outdoor activity areas are shielded from direct view of major roadways. Shielding could be achieved by building orientation (so that the back yards are shielded by the homes), or by the use of noise barriers. The proposed layout of the Northern Subarea calls for outdoor activity areas to be separated from SouthShore Drive by attached residential buildings. The project should also be designed to ensure satisfaction of the exterior noise standards for traffic generated by traffic on internal roads. The specific design of noise barriers, berms or combinations thereof will depend upon the final roadway and lot designs, and upon the grading plans. To achieve a meaningful amount of noise reduction using barriers or berms, these should be designed to break line of sight between the source and receiver. Generally, a barrier 6 feet high located on level ground will provide about 5 dB noise level reduction for traffic noise. An improvement of about 1 dB	Significant and unavoidable

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		would be expected for each 1-foot increase in barrier height beyond breaking line of sight. NOISE-3: Interior Noise Exposure. The methods required to mitigate interior noise exposures would depend on the locations of the residences relative to the roadways. In general, if the exterior traffic noise exposure is 65 dB L_{dn} or less, no exceptional construction techniques would be required. Where the exterior traffic noise level is between 65 dB and 75 dB L_{dn}, it is usually feasible to achieve the interior noise standard of 45 dB L_{dn} by installing acoustically-rated glazing, using stucco or brick siding, and by minimizing the surface area of glazing that faces the roadways. Where the exterior traffic noise exposure exceeds 75 dB L_{dn}, it is usually more difficult to achieve the interior noise standard in residences. NOISE-4: Post-Design Acoustical Analysis. To ensure satisfaction of the exterior and interior traffic noise standards for the noise sensitive land uses within the Study Area, an acoustical analysis should be prepared after the roadway and lot designs and grading plans have been finalized. The recommendations prepared as a result of that analysis should be implemented so that the noise standards are achieved.	
3.13 Aesthetics/ Visual Resources	AES-9: Visual Character. The Specific Plan Study Area is predominantly used for agricultural operations. The approval of the two specific plans and development of all of the proposed land uses would result in the transition of the area from a rural agricultural area to an urban area. When compared to existing conditions, the transition of land use intensity to an urban area would have a substantial change in the visual character.	Cannot be feasibly mitigated	Significant and unavoidable

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
Class II Impacts – Ormond Beach (Northern Subarea)			
3.2 Geology	GEO-1: Erosion. The proposed project would result in development of residential housing and mixed uses in the Northern Subarea. Development of residential, mixed use and light industrial structures and improvements to open space could result in substantial soil erosion or the loss of topsoil.	GEO-1: Erosion Control Measures. Construction plans, including the Grading and Drainage Plan, Construction SWPPP, and/or Post-Construction Erosion and Sediment Control Plan, shall incorporate measures, as appropriate, to minimize erosion.	Less than significant
3.2 Geology	GEO-2: Slope Stability. Project grading is not likely to include the placement of cut and fill slopes. Given the gently sloping nature of the site, any final slopes included in the project would not be anticipated to create an unstable slope. However, though not thought of as a "slope" in the traditional sense of the word, excavations have many similarities to slopes when evaluating stability of excavation sidewalls. Some deep excavations may be necessary for the installation of improvements such as the proposed Lake SouthShore in the Northern Subarea, and deep excavations may be susceptible to failure. The presence of high groundwater conditions and potential for encountering collapsible soils are two contributing factors to excavation instability. In any case, engineered slopes or excavations included in the project would be required to meet established standards in the CBC and City Grading Ordinance.	GEO-1: Erosion Control Measures. Construction plans, including the Grading and Drainage Plan, Construction SWPPP, and/or Post-Construction Erosion and Sediment Control Plan, shall incorporate measures, as appropriate, to minimize erosion. GEO-2: Excavation Oversight. In order to avoid slope stability hazards, all temporary excavations shall be designed according to CBC, OSHA, and City standards for temporary construction excavations and slopes. All plans submitted for approval of a Development Permit for development projects in the Northern Subarea and the Southern Subarea shall incorporate design recommendations for mitigation of unstable temporary construction slopes and excavations as investigation by registered soils engineers and engineering geologists	Less than significant
3.2 Geology	GEO-3: Seismic Hazards. An earthquake on a nearby fault could result in strong ground shaking. Ground shaking has the potential to cause fill material to settle, instigate liquefaction, and cause physical damage to structures, property, utilities, and road access. Ground shaking has the potential to cause injury and death to humans.	GEO-3: Seismic Design. In order to avoid seismic hazards, all structures shall be designed to earthquake standards for CBC Seismic Zone 4, and appropriate building setbacks from active and potentially active faults shall be applied. All plans submitted for approval of a Development Permit shall incorporate design recommendations contained in the geotechnical and geological studies for mitigation of seismic hazards. Design-level geotechnical and geological studies shall be performed as part	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		of the final design effort for the project. Significant soil improvement measures may be needed to mitigate potential for liquefaction and ground settlement, as determined by the design-level geotechnical studies. Seismic design criteria will be refined by the applicant's geotechnical consultant. All grading and earthwork recommendations shall be incorporated into the final project design, including the Final Grading Plan. A Registered Civil Engineer or Certified Engineering Geologist shall supervise all grading activities. The project shall be designed and constructed in compliance with all applicable codes and regulations.	
3.2 Geology	GEO-4: Expansive Soils. Soils with moderate shrink-swell (expansive) potential have been identified in the Study Area. Soils with expansion potential contain clay minerals that expand when wet and shrink when dry. Repeated shrinking and swelling of the soil can result in damage to foundations, fill slopes, utilities, and other associated facilities, as well as such structures as Lake SouthShore in the Northern Subarea. Site-specific geotechnical studies will be required to identify areas underlain by expansive soils and provide appropriate mitigation measures.	GEO-4: Detailed Soils Analysis. In order to avoid soil-related hazards, the project applicant shall investigate and implement recommendations set forth by the applicant's geotechnical engineer and refine the project design through detailed soils analysis. The design of the proposed foundation systems and floor slabs of the proposed structures, and Lake SouthShore shall consider the likely presence of expansive soil conditions, as well as collapsible and compressible soil conditions that have a high potential for both short- and long-term settlement and compression.	Less than significant
3.2 Geology	GEO-5: Collapsible Soils and Sensitive Soils. The surface soils may be dry and porous to depths of 12 to 24 inches below existing grade, and may be susceptible to collapse, compression, and settlement with increasing moisture content.	GEO-4: Detailed Soils Analysis. In order to avoid soil-related hazards, the project applicant shall investigate and implement recommendations set forth by the applicant's geotechnical engineer and refine the project design through detailed soils analysis. The design of the proposed foundation systems and floor slabs of the proposed structures, and Lake SouthShore shall consider the likely presence of expansive soil conditions, as well as collapsible and compressible soil conditions that have a high potential for both short- and long-term settlement and compression.	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.3 Water Resources	WATER-1: Water Supply Availability. As documented in the North Ormond Beach Water Supply Assessment & Verification (July 2008) and its Addendum (November 2009), development of the Southern Subarea (in accord with the SouthShore Specific Plan) would generate estimated water demand of about 833 acre feet per year (AFY). Of this total, 443 AFY would be for potable needs and the balance (390 AFY) would be for landscaping and other non-potable needs. Based on the WSA, the project would have develop a program to offset a minimum of 402 AFY of demand through some combination of additional water supply contributions through extraordinary facilities development, extraordinary conservation measures, in-City retrofits, contributions to the development of recycled water facilities, or similar measures.	WATER-1: On-site Domestic Water System. WATER-2: On-site Recycled Water System WATER-3: Exterior Water Conservation WATER-4: Grey Water. WATER-5: Drought-Tolerant Landscaping.	Less than significant
3.3 Water Resources	WATER-4: Construction-Related Surface Water Quality. According to the ESA prepared for the Northern Subarea, at least two adjoining offsite properties (have reported subsurface petroleum releases and contamination. It is likely that construction/demolition will require dewatering and that groundwater will be encountered. Dewatering could result in the discharge of groundwater contaminated with petroleum products. Pesticide contaminants from agricultural runoff have been found in samples obtained from sediment and wildlife in the Oxnard Drain. Indications are that the contaminant levels are decreasing due to changes in agricultural practices, but contaminant levels remain a concern. Another concern would be increased mobilization of contaminated sediments due to increased runoff to the Oxnard Drain from the new development, ultimately impacting Mugu or Ormond Beach lagoons.	WATER-6: Environmental Site Assessment. An environmental site assessment adequate to identify potential sources of stormwater contaminants and areas requiring remediation. The assessment must include the location and condition of areas used for the storage of pesticides and herbicides, petroleum storage tanks or fueling areas, septic tanks, and underground storage tanks. Areas of soil staining should be noted and the potential contaminant identified. Soil should be excavated to determine the exact vertical extent of contamination. If during soil removal, staining indicates petroleum contamination continuing below the ground surface, sampling should be performed to characterize the extent of contamination and identify appropriate remedial measures. WATER-7: De-Watering. De-watering operations during construction will utilize established BMPs for limiting the discharge of sediment. Prior to the discharge of de-watering from shallow groundwater, water quality sampling will be performed to determine if the groundwater to be de-watered is contaminated with pesticides or petroleum products. If levels of pollutants	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		are present in quantities exceeding applicable water quality standards, the de-watering will be pumped and removed for proper disposal offsite. WATER-8: Stormwater Pollution Prevention Plan. The applicants shall submit to the City evidence of County review and approval of the receipt letter of a completed Notice of Intent (NOI) and waste discharge identification number to obtain coverage under the NPDES General Permit for Discharges Associated with Construction Activity issued by the California State Water Resources Control Board. Along with the NOI, the applicant shall submit to the County a Stormwater Pollution Prevention Plan (SWPPP) and monitoring program consistent with SWRCB rules for the construction phase of the project prior to initiating construction. WATER-9: Stormwater Pollution Control Plan. Prior to issuance of any construction/grading permits a Stormwater Pollution Control Plan (SWPCP) will be prepared. The SWPCP will include erosion and sediment control BMPs for both active and inactive (previously disturbed) construction areas.	
3.3 Water Resources	WATER-5: Post-Construction Surface Water Quality. The Northern Subarea would incorporate an 18-acre lake for water retention. Stormwater from within the Northern Subarea will be routed by internal stormwater culverts and drains to the lake. The lake would retain all dry-weather non-stormwater runoff and temporary storage for up to a 100-year storm event. The lake will retain the 25-year storm event and discharge it slowly to the Oxnard Industrial Drain. Based on a meeting between the RWQCB and the City of Oxnard on January 22, 2007, the lake would be required to retain the runoff of any storm event up to a 25-year storm event without discharging. If this is done, a discharge permit would not be required. However, the lake surcharge capacity of 54 AF may not be adequate to retain the runoff from a 25-year storm without discharge. The discharge from the lake to the OID of any stormwater	WATER-10: SQUIMP Development Guidelines. A combination of non-structural and structural BMPs (e.g., bioswales, permeable pavement, etc.) shall be installed to effectively prevent the discharge of pollutants from the residential units, roads, equestrian facilities, and open space easements and, their conveyance, either directly or through storm drain systems into natural watercourses and the Pacific Ocean.	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	resulting from runoff up to the 25-year storm event would require an individual stormwater discharge permit.		
3.3 Water Resources	WATER-7: Surface Runoff Erosion. Increased surface runoff from the Study Area during construction and occupation could result in short-term and long-term erosion and sedimentation impacts to the watercourses and waterbodies in the study area.	WATER-11: Drainage Plan. A drainage plan including a detailed hydraulic analysis will be necessary to determine the needed capacity of new drainage and detention facilities. The volume of runoff for design storms must be estimated according to the standards provided in the VCWPD's Hydrology and Design manuals. Storm drain systems must be designed to comply with the requirements of the City of Oxnard Master Plan of Drainage by incorporating adequate capacity to convey a 10-year frequency storm. Sumps must be designed for a 50-year storm and provided with an emergency overflow escape path WATER-12: Stormwater Control Structures and Devices. The projects in both the Northern and Southern Subarea Specific Plans propose to construct detention basins to attenuate peak stormwater runoff flows. In the case of the Northern Subarea Specific Plan, the detention basin will take the form of an artificial lake. Due to the amount of water collected and the presence of shallow groundwater, these basins will require relatively large footprints to provide enough volume to perform their desired function. Detention Basin storage volume should be based on VCWPD hydrographs and the requirements of the VCWPD Hydrology Manual. Stormwater retention and protection structures (i.e., detention basins, outlet dissipaters, etc.) and other industry standard erosion protection devices (i.e., silt fences, jute netting, straw bales, bioswales, etc.) shall be constructed, installed, and made operational during the initial phases of site grading. Pre- and post-construction surface runoff from the new residential developments shall not exceed existing conditions. A registered civil engineer specializing in flood control or other qualified professional shall design stormwater structures to ensure that adequate flood control capability is met.	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.3 Water Resources	WATER-9: Wastewater Collection and Treatment. The 2005 Wastewater Master Plan Update for the City of Oxnard includes the proposed Ormond Beach Study Area in its wastewater flow projections. Therefore, build out of the Study Area has been accounted for in the analysis of future wastewater infrastructure needs. Additional studies are, however, needed to assess the impact to the existing sewer and wastewater treatment infrastructure.	WATER-15: Downgradient Sewer Study. Prior to issuance of building permits for the Northern Subareas, the City of Oxnard shall complete a sewer study and implement the recommended upgrades to the downgradient wastewater system to ensure that the existing system is adequate to convey sewage flows from the proposed Project.	Less than significant
3.4 Air Quality	AQ-1: Soil Import in the Northern Subarea. The Northern Subarea would require import of fill from an offsite source. The import material will be transported to the site during the rough grading operation and will be deposited into fills as part of the grading operations.	AQ-1: Dust Control Measures. Dust generated by project construction shall be kept to a minimum by following dust control measures. AQ-2: Construction-Related Control Measures. ROC and NO_X emissions generated by project construction shall be kept to a minimum by following these control measures: 1. Minimize equipment idling time. 2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. 5. Use low VOC architectural coatings to reduce evaporative ROC emissions.	Less than significant
3.4 Air Quality	AQ-2: Construction-Related Particulates. Ground disturbances and equipment operation during construction activities produce potentially significant, but feasibly mitigated short-term PM_{10} emissions. Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories:	AQ-1: Dust Control Measures. Dust generated by project construction shall be kept to a minimum by following dust control measures. AQ-2: Construction-Related Control Measures. ROC and NO_X emissions generated by project construction shall be kept to a minimum by following these control measures:	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	entrained dust, and vehicle and equipment emissions. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} emissions.	1. Minimize equipment idling time. 2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. 5. Use low VOC architectural coatings to reduce evaporative ROC emissions.	
3.5 Hazards	HM-1: Impacts from Potentially Contaminated Soils Resulting from Agricultural Operations. Although the area has been used for agriculture for several decades, the specifics of these operations are unknown. The Phase I ESA prepared for the Northern Subarea identified superficial stains and odor in several locations, which may be indicative of soil contamination. There is also a potential for pesticides, herbicides, fuels, and other chemicals used in various agricultural operations to be present onsite. These substances may have resulted in soil and/or groundwater contamination at concentrations above regulatory action levels. Potentially significant adverse health impacts to construction workers and/or future project site residents could occur if high levels of residual pesticides are present. In addition, due to the rural nature of the Study Area, septic systems may be present.	HM-1: Soil Sampling: The majority of the Study Area has been utilized for agricultural purposes for several decades and may contain pesticide residues in the soil. Soil sampling shall occur throughout the subject site, as part of a Phase II ESA, including any known pesticide mixing areas. In order to adequately assess the extent of any existing soil contamination affecting the site, a Phase II ESA complying with ASTM standards shall be completed before recordation of any Tract Maps for the proposed Study Area. The sampling and the comprehensive Phase II ESA will determine if pesticide concentrations exceed established regulatory requirements and will identify proper handling procedures that may be required.	Less than significant
3.5 Hazards	HM-2: Impacts from Hazardous Materials Leaks and Spills Recorded Onsite and on Adjacent Properties. The Phase I ESAs prepared for the Study Area identified occurrences within the Study Area and adjacent properties.	HM-2: Groundwater Evaluation. At least two facilities adjoining the Northern Subarea have reported subsurface petroleum releases and contamination. The properties have impacted soil and groundwater; however, the extent of lateral contamination remains undefined. In order to adequately assess the	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		extent of any existing hazardous materials contamination affecting the site, a groundwater evaluation complying with ASTM standards shall be completed before recordation of any Tract Maps for the proposed Study Area.	
3.5 Hazards	HM-3: Impacts from Asbestos-Containing Materials and Lead-Based Paints. Based upon the period during which the existing onsite structures were built (prior to 1978), it is likely that ACMs and LBPs are present onsite and would have to be handled properly prior to demolition activities.	HM-3: Phase II ESA. Based on the period during which the existing structures in both the Northern and Southern subareas were built (prior to 1978), ACM and LBP may be present within the existing onsite structures and shall be handled properly prior to remodeling or demolition activities. In order to adequately assess the presence of ACMs and LBPs affecting the site, a Phase II ESA complying with ASTM standards shall be completed before recordation of any Tract Maps for the proposed Study Area. If either ACMs or LBPs are identified in the structures, then removal of these materials in compliance with state and federal requirements shall be undertaken prior to demolition of the structure, and the removed materials will be disposed of at an approved landfill.	Less than significant
3.5 Hazards	HM-6: Impacts to Public Health from Migration of Contaminants from the Halaco Superfund Site. Based on current information, the Halaco site is not expected to present a hazard to human health at the Ormond Beach Specific Plan Study Area because the proposed Project would not use groundwater, and because limited sampling in a residential area near the Halaco site did not show elevated levels of site contaminants. However, since the Study Area is located less than 4 miles from the Halaco site, this preliminary assessment must be confirmed upon completion of USEPA's and CDPH's Health Risk Assessments prior to issuance of any building permits.	HM-4: Halaco Site HRAs. The City must affirm that the USEPA's and CDPH's Health Risk Assessments conclude that the Halaco site presents no risk to future development in the Study Area before issuing any building permits for the proposed Project.	Less than significant
3.6 Biology	BIO-4: Direct Impacts to Common Wildlife Species--Bird Foraging Habitat. The Northern Subarea provides marginal habitat for foraging	BIO-2: Foraging Habitat Creation/Restoration. In order to mitigate this impact, coastal native grassland/dune foraging habitat for raptors and other	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	birds and raptors such as Red-tailed Hawk, Red-shouldered Hawk, and American Kestrel, as well as a variety of other common passerines and shorebirds listed in Appendix A-1. The habitat is marginal because it consists of agricultural crops and is adjacent to residential development. An estimated 295.5 acres of agricultural land and 6.5 acres of agricultural ditches will be impacted as a result of the proposed project in the Northern Subarea.	birds in the vicinity of the project site near coastal wetlands must be restored or enhanced at a mitigation ratio of 0.1 to 1 resulting in at total of 30.2 acres for the Northern Subarea.	
3.6 Biology	BIO-6: Direct Impacts to Common Wildlife Species--Nesting Birds. Activities associated with grading and construction have the potential to disturb nesting birds on and adjacent to the site to the degree that the nests may be abandoned, resulting in a direct loss of an active bird nest.	BIO-3: Pre-Construction Survey for Nesting Birds. A pre-construction survey for nesting birds will be conducted by a qualified biologist to determine if active nests of special-status birds, or common bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, are present in the construction zone or within 100 feet (200 feet for raptors) of the construction zone. The survey shall be conducted no earlier than 45 days and no sooner than 20 days prior to construction or site preparation activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February through July).	Less than significant
3.6 Biology	BIO-7: Direct Impacts to Special Status Wildlife—Special-status Bird Foraging Habitat. Impacts to special-status wildlife are limited to sensitive bird species that are known to occur or could potentially occur in the Northern Subarea. The project site has the potential to be used by these sensitive species for foraging only, and breeding is not expected, except for the low possibility of breeding burrowing owls. Evaluating the loss of foraging habitat to one single species as a result of the proposed project would be considered less than significant because it would not reduce the foraging opportunities to a point that would significantly impact the foraging opportunities for these species; however, evaluating collectively the loss of this foraging habitat to a large diversity of sensitive birds of prey, raptors, and shorebirds would be a significant	BIO-2: Foraging Habitat Creation/Restoration. In order to mitigate this impact, coastal native grassland/dune foraging habitat for raptors and other birds in the vicinity of the project site near coastal wetlands must be restored or enhanced at a mitigation ratio of 0.1 to 1 resulting in at total of 30.2 acres for the Northern Subarea.	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	impact.		
3.6 Biology	BIO-8: Direct Impacts to Special Status Wildlife--Burrowing Owl (Athene cunicularia). The burrowing owl is a federal and state species of concern. The decline of this species was recognized as early as the 1940s. The decline is attributable to the conversion of grasslands and pasturelands to agriculture and to the destruction of ground squirrel colonies by plowing and poisoning. The burrowing owl is unique because it lives in the abandoned burrows of ground squirrels. They modify the burrows to suit their needs by digging. It is one of the few diurnal owls and can be seen in the day perched on fence posts or near the entrance to their burrow. While no burrowing owls were observed during the survey and they are not known to occur in the Northern Subarea, there is a low potential for this owl to occur to forage onsite since it has been observed in the adjacent sod farms.	BIO-2: Foraging Habitat Creation/Restoration. In order to mitigate this impact, coastal native grassland/dune foraging habitat for raptors and other birds in the vicinity of the project site near coastal wetlands must be restored or enhanced at a mitigation ratio of 0.1 to 1 resulting in at total of 30.2 acres for the Northern Subarea. BIO-4: Pre-Construction Survey for Burrowing Owl. Since there is potential for burrowing owls forage in the Study Area and to nest within the Northern Subarea, the following measures shall be implemented in order to avoid take of burrowing owls. A qualified biologist will survey for burrowing owl activities within the Study Area 30 days prior to construction to assess burrowing owl presence and need for further mitigation. If owls are nesting in the Study Area, the nest will be avoided by a minimum of a 250-foot buffer until fledging has occurred. Burrowing owls typically breed from late March to July.	Less than significant
3.6 Biology	BIO-10. Indirect Impacts to Sensitive Offsite Habitats. Indirect impacts to adjacent sensitive habitats are possible as a result of the proposed project. The Ormond Beach and Point Mugu areas support a wide array of sensitive plant and wildlife species and sensitive habitat that could be impacted indirectly by increased development in the adjacent upland areas. Sensitive habitats that could be indirectly impacted by the proposed project include southern coastal saltmarsh, freshwater and brackish water marsh, tidal flats, foredune and coastal dune scrub. Industrial development close to these areas would likely result in higher human use of the area which would cause negative impacts to habitat such as trampling and introduction of non-native and invasive plant populations. Since these sensitive habitats support several special-status plant and wildlife species, there is a potential for these indirect	BIO-5: Wetland Runoff Control. Although bioswales are incorporated into the project design to reduce pollution and runoff, their function is limited, so additional measures must be implemented to minimize runoff and pollution from entering nearby wetlands. Therefore, in addition to the long-term water quality monitoring program proposed in Mitigation Measure Water-10, trash traps shall be installed at all entrances to bioswales and a maintenance program to remove trash on a routine basis shall be implemented by the City.	Significant but mitigable

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	impacts to be significant. The proposed project incorporates some physical measures to reduce indirect impacts such as lighting, noise, and human intrusion by including an 18.3 acre lake that would inhibit domestic cats from crossing Hueneme Road and eventually reaching habitat areas in the southern part of the Southern Subarea and areas farther to the south. Also, pursuant to a Development Agreement with the City, the developer is required to contribute to implementation of an "Ormond Beach Natural Resource Management Program." The purpose of the Natural Resource Management Program would be to reduce or avoid impacts to sensitive natural resources, particularly Western snowy plovers and California least terns at Ormond Beach, that would result from expected increased visitation. The program would provide adequate funding for the following resource protection measures at Ormond Beach: (a) Fencing; (b) Signage; (c) Predator Management; (d) Invasive Plant Control; (e) Public Information; and (f) Enforcement.		
3.6 Biology	BIO-11: Indirect Impacts to Special Status Wildlife Western Snowy Plover (Charadrius alexandrinus nivosus). Snowy plovers are present at Ormond Beach and are not expected to occur in the Northern Subarea. Indirect impacts, including increased human presence and domestic animals, would be reduced by the lake and associated open space/greenbelt buffer included in the proposed project and implementation of the Ormond Beach Natural Resource Management Program (see description under Impact 10).	BIO-5: Wetland Runoff Control. Although bioswales are incorporated into the project design to reduce pollution and runoff, their function is limited, so additional measures must be implemented to minimize runoff and pollution from entering nearby wetlands. Therefore, in addition to the long-term water quality monitoring program proposed in Mitigation Measure Water-10, trash traps shall be installed at all entrances to bioswales and a maintenance program to remove trash on a routine basis shall be implemented by the City.	Less than significant
3.6 Biology	BIO-12: Indirect Impacts to Special Status Wildlife California Least Tern (Sterna antillarum browni). The California Least Tern is a state and federally endangered species. The historical breeding range of this species is along the Pacific coast from Monterey County, California to southern Baja California, Mexico. Nesting locations are in dry sand or dirt	BIO-5: Wetland Runoff Control. Although bioswales are incorporated into the project design to reduce pollution and runoff, their function is limited, so additional measures must be implemented to minimize runoff and pollution from entering nearby wetlands. Therefore, in addition to the long-term water quality monitoring program proposed in Mitigation Measure Water-10, trash	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	near lagoons or estuaries with a dependable food supply. Due to decreasing habitat, terns are often forced to nest on manmade structures such as airports or landfills. They usually arrive around mid-April and breed in colonies from mid-May to early August and then migrate south over the winter. This species is known to forage along the Oxnard Canal No. 3 adjacent to the Southern Subarea and to breed at Ormond Beach. Indirect impacts, including increased human presence and domestic animals, would be reduced by the lake and associated open space/greenbelt buffer included in the proposed project and implementation of the Ormond Beach Natural Resource Management Program (see description under Impact 10).	traps shall be installed at all entrances to bioswales and a maintenance program to remove trash on a routine basis shall be implemented by the City.	
3.8 Agriculture	AG-4: Dust Impacts to Local Crops. Dust generated during construction could be deposited on adjacent agricultural lands with planted crops, temporarily reducing productivity. In addition, increase in traffic may result in permanent increase in emissions that could affect crops in adjacent agricultural lands.	AQ-1: Dust Control Measures. Dust generated by project construction shall be kept to a minimum by following dust control measures. AG-1. Buyer Notification. A buyer notification shall be recorded on a separate information sheet with the final map pursuant to City of Oxnard Standard Conditions.	Less than significant
3.10 Transportation	TRANS-1: Peak Hour Traffic Conditions—Northern Subarea. Based on City of Oxnard established thresholds of significance, the addition of trips generated by development in the Northern Subarea is forecast to result in a potentially significant impact at only two study intersections: Ventura Road/Hueneme Road and Saviers Road/Channel Islands Boulevard.	TRANS-1: Northern Subarea Traffic. To eliminate the significant impacts associated with development of the Northern Subarea, mitigation measures designed in accordance with City standards are recommended for the following facilities: Ventura Road/Hueneme Road Saviers Road/Channel Islands Boulevard	Less than significant
3.10 Transportation	TRANS-2: Peak Hour Traffic Conditions—Combined Subareas. Based on City of Oxnard established thresholds of significance, the addition of the Southern Subarea project-generated trips is forecast to result in potentially significant impacts at 15 study intersections.	TRANS-2: Combined Subarea Traffic. To eliminate the significant impacts associated with development of the Combined Subareas, mitigation measures designed in accordance with City standards are recommended for the following facilities: Ventura Road/Hueneme Road	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		Saviers Road/Channel Islands Boulevard Saviers Road/Pleasant Valley Road Saviers Road/Hueneme Road Rose Avenue/Gonzales Road Rose Avenue/Cesar Chavez Drive Rose Avenue/Camino Del Sol Rose Avenue/Santa Lucia Avenue Rose Avenue/Eastman Avenue Rose Avenue/Oxnard Boulevard Rose Avenue/Channel Islands Blvd/SR-1 Southbound Ramps Rose Avenue/Pleasant Valley Road Rose Avenue/Sanford Street Rice Avenue (SR-1)/Pleasant Valley Road SR-1 Southbound Ramps/Hueneme Road	
3.10 Transportation	TRANS-3: Northern Subarea Soil Import Traffic. Soil import access to the Northern Subarea is planned to last 11 weeks at a temporary soil import driveway on Hueneme Road west of Olds Road. The source of the import soil is the Calleguas Creek dredging project planned and operated by Ventura County Watershed Protection District. The addition of temporary soil import-related trips is forecast to result in a potentially significant impact at two intersections.	TRANS-3: Northern Subarea Soil Import Traffic. To eliminate the identified temporary significant impacts forecast to occur during the 11-week soil import, the following measures are offered for consideration: SR-1 Southbound Ramps/Hueneme Road – The project applicant shall make a fair share contribution to install a temporary traffic signal during the 11-week soil import. It should be noted signalization of the SR-1 Southbound Ramps/Hueneme Road intersection is planned by County of Ventura and Caltrans staff but has been delayed due to funding deficiencies. Wood Road/Hueneme Road – The project applicant shall make a fair share contribution to install a temporary traffic signal during the 11-week soil import Hueneme Road from City Limits to Laguna Road – The project applicant shall make a pro-rata contribution to the cost of repaving or rehabilitating	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		Hueneme Road to account for damage cause by hauling of soil.	
3.11 Noise	NOISE-1: Traffic Noise with Northern Subarea Development. Compared with existing conditions, the changes in traffic associated with future development of the Northern Subarea would result in significant increases in traffic noise levels at noise-sensitive receivers located along several roadway segments, according to either the exceedance standard or the change standard or both.	NOISE-1: Rose-SouthShore Drive Exterior Noise. The required setbacks to ensure compliance of new residential areas with the City of Oxnard exterior noise standard of 60 dB L_{dn} would be in the range of 140 feet from the centerline of Rose-SouthShore Drive. With the proposed cross-section, the distance from the centerline to the edge of the right-of-way would be 55 feet. The applicants have also proposed 34-foot landscape buffer along SouthShore Drive. Thus, the proposed total distance from the centerline to the edge of the attached residential parcels along SouthShore Drive would be 89 feet. The site design of the attached residential areas along SouthShore Drive would, thus, need to accommodate another 50 feet between the front edge of the parcels and outdoor living areas to achieve the recommended setback of 140 feet from the centerline. With proper site design of the residential areas along SouthShore Drive, mitigation to this standard would be feasible. NOISE-2: Outdoor Activity Areas. The project should be designed to ensure that outdoor activity areas are shielded from direct view of major roadways. Shielding could be achieved by building orientation (so that the back yards are shielded by the homes), or by the use of noise barriers. The proposed layout of the Northern Subarea calls for outdoor activity areas to be separated from SouthShore Drive by attached residential buildings. The project should also be designed to ensure satisfaction of the exterior noise standards for traffic generated by traffic on internal roads. The specific design of noise barriers, berms or combinations thereof will depend upon the final roadway and lot designs, and upon the grading plans. To achieve a meaningful amount of noise reduction using barriers or berms, these should be designed to break line of sight between the source and receiver. Generally, a barrier 6 feet high located on level ground will provide about 5	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		dB noise level reduction for traffic noise. An improvement of about 1 dB would be expected for each 1-foot increase in barrier height beyond breaking line of sight. NOISE-3: Interior Noise Exposure. The methods required to mitigate interior noise exposures would depend on the locations of the residences relative to the roadways. In general, if the exterior traffic noise exposure is 65 dB L_{dn} or less, no exceptional construction techniques would be required. Where the exterior traffic noise level is between 65 dB and 75 dB L_{dn}, it is usually feasible to achieve the interior noise standard of 45 dB L_{dn} by installing acoustically-rated glazing, using stucco or brick siding, and by minimizing the surface area of glazing that faces the roadways. Where the exterior traffic noise exposure exceeds 75 dB L_{dn}, it is usually more difficult to achieve the interior noise standard in residences. NOISE-4: Post-Design Acoustical Analysis. To ensure satisfaction of the exterior and interior traffic noise standards for the noise sensitive land uses within the Study Area, an acoustical analysis should be prepared after the roadway and lot designs and grading plans have been finalized. The recommendations prepared as a result of that analysis should be implemented so that the noise standards are achieved.	
3.11 Noise	NOISE-2: Point Mugu Naval Air Station Noise. Although the 65 CNEL noise contour for the installation is outside the Ormond Beach project border, the southeast part of the project is subject to aircraft overflights operating to and from the facility, with temporary high peak noise levels. While the installation's operations do not constitute a significant impact on the project site, any potential noise-sensitive land uses located in the Northern Subarea should be informed that the area is subject to military aircraft overflights.	Mitigation Measure Noise-5: Point Mugu Naval Air Station Noise. The project shall incorporate noise attenuation measures (e.g., double-paned window or higher grade windows, HVAC) and shall disclose to purchasers the potential for peak noise levels that exceed standards.	Less than significant
3.12 Cultural Resources	CULTURAL-1: Construction-related Grading. Grading activities	CULTURAL-1: Construction Period Monitoring. An archaeologist will monitor	Less than

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	associated with site preparation at the proposed development site (including residential, mixed-use commercial, light industrial, developed open space uses) in the Study Area could impact previously undiscovered cultural resources.	all initial grading or excavation. An archaeologist will monitor all initial construction grading or excavation. If unanticipated resources are discovered, they will be evaluated according to the procedures set forth at CEQA Section 15064.5. If the evaluation determines that such resources are either unique or significant archaeological or historical resources and that the project would result in significant effects on those resources, then further mitigation would be required. In cases where the resources are unique, then avoidance, capping, or other measures, including data recovery, would be appropriate mitigation. If the resources are not unique, then recovery, without further mitigation, would be appropriate.	significant
Class III Impacts – Ormond Beach (Northern Subarea)			
3.2 Geology	GEO-6: Coastal Flooding, Tsunami, and Sea-Level Rise. Coastal flooding associated with tsunamis and/or sea level rise could affect the coastal areas of Oxnard. The Study Area is not within 100- or 500-year floodplain and is not expected to be inundated by a tsunami. While there is research suggesting that sea-level rise could exacerbate the probability of coastal flooding in the Study Area by the end of the 21st century, additional local research and analysis are required to more fully understand how local circumstances would affect such probability. With the application of the City's development standards and continued focus on effective emergency management planning, the potential for coastal flooding is deemed to be less than significant (Class III).	None required.	Less than significant
3.3 Water Resources	WATER-2: Water Facility Construction. The Northern Subarea will require the construction of facilities associated with Phase 1 of the GREAT program to ensure a 20-year supply of potable and recycled water. The City of Oxnard has adopted a project level EIR/EIS for the	None required.	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	GREAT program. Most of the infrastructure for Phase 1 and Phase 2 of the GREAT program is proposed for construction at existing water facilities or involves replacement and expansion of existing water service pipelines within existing right-of-ways. The GREAT EIR/EIS includes a Monitoring, Mitigation, and Reporting Plan (MMRP) which addresses the construction impacts of Phase 1 and Phase 2.		
3.3 Water Resources	WATER-3: Wasteful Use of Water. Individual building projects within the Northern Subarea would be required to meet standard requirements of the City, State, and Uniform Building Code. These requirements act to conserve potable water, ensure adequate water flow, and pay for the construction of improvements to the water distribution system as outlined in the City's Water Master Plan.	None required.	Less than significant
3.3 Water Resources	WATER-6: Flood Control and Stormwater Drainage. During construction, the proposed lake (Lake SouthShore) would function as an interim water quality management system reducing silts from plugging existing downstream drainage facilities. Since the lake would collect and subsequently treat runoff, it would reduce the amount of sediment running off from the site in comparison to existing conditions. At the onset of rough grading, interim water quality basins (used prior to lake completion) would be required in the event rainfall occurs prior to completion of the lake grading. The interim water quality basins would be sized appropriately to mitigate any potential release of sediment to downstream drainage facilities. With onsite detention of runoff being handled through the lake, the project would not release flow at a greater rate than currently leaves the site based on the 10-year, 24-hour storm event. Runoff from a 10-year storm will be captured in the storm drain system and directed to the lake, thereby reducing any overflow of runoff that	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	currently exists at Arnold, Hueneme, and Olds Roads. Localized flooding in the Northern Subarea during a 10- or 100-year event will not flood building pads in the development as building pads will be constructed above the peak 100-year water surface elevation.		
3.3 Water Resources	WATER-8: Changes in Flow Directions. Construction activities within the Northern Subarea have the potential for increasing the runoff flowrate of stormwater from the site. Depending on the phase of construction, the flow directions and volume of stormwater flow could change, exceeding the capacity of existing drainage channels. This could result in sheetflow flooding on adjacent streets. However, the Northern Subarea will incorporate onsite retention and detention and would not increase runoff during the construction period of this project.	None required.	Less than significant
3.4 Air Quality	AQ-10. CO hotspots. Implementation of the proposed project would lead to increased traffic volumes on local roadways. An analysis of potential CO concentrations based on 2020 project conditions using CALINE4 was conducted to estimate potential exposure of sensitive receptors to substantial CO concentrations (or "hotspots"). The results show that implementation of the project would not expose sensitive receptors to substantial CO concentrations.	None required	Less than significant
3.5 Hazards	HM-4: Impacts Associated with Radon. Based on the State of California Department of Health Services Radon Database for California, the proposed project site does not have a predicted average indoor screening level greater than 4.0 pCi/l. USEPA recommends remedial actions only when radon levels exceed 4.0 pCi/l.	None required	Less than significant
3.5 Hazards	HM-5: Impacts from Future Accidental Release of Hazardous Materials. The proposed project will include residential, commercial, and light industrial uses. Since any facilities using hazardous substances will have	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	to be designed, constructed, and operated in accordance with applicable regulations, no significant impacts are expected to occur.		
3.5 Hazards	HM-11: Electromagnetic Fields. Electromagnetic fields occur independently of one another as electric and magnetic fields at the 60-Hz frequency used in transmission lines, and both are created by electric charges. Electric fields exist when these charges are not moving. Magnetic fields are created when the electric charges are moving. The magnitude of both electric and magnetic fields falls off rapidly as the distance from the source increases (proportional to the inverse of the square of distance). However, the existing transmission line is located within a 250-foot-wide easement area. In addition both specific plans have proposed commercial and/or industrial uses within the easterly portion of the existing transmission right-of-way. Potential impacts associated with EMF exposure to residential areas are less than significant (Class III) and no mitigation is necessary.	None required	Less than significant
3.5 Hazards	HM-14: Offsite Contaminated Soil Disposal. There is the potential for cumulative impacts resulting from disposal of contaminated soil associated with remediation activities at an appropriate offsite disposal facility, which will be determined by the type and concentration of the contaminant. This potential impact would occur if site remediation is required, and actual impacts will only be determined after completion of a comprehensive Phase II ESA. The amount of contaminated soil generated by this project is expected to be relatively minor and no significant contribution to cumulative effects associated with potential reduced landfill capacity is anticipated. All necessary remediation activities, including transport and disposal of contaminated soil, would be in compliance with the regulating agencies' requirements.	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.6 Biology	BIO-1: Direct Impacts to Habitat and Vegetation--Invasive Species. The Northern Subarea does not contain native vegetation; however, impacts to nearby native vegetation at Ormond Beach could potentially include invasive species used in landscaping that could escape into natural areas and out-compete native vegetation.	BIO-1: Invasive Plant Species Control. To reduce the impacts of non-native plants colonizing adjacent native habitats, the landscaping plan for the proposed Northern Subarea shall be revised so as to exclude invasive plants that frequently escape into native habitats, particularly those identified on the California Invasive Plant Council's website under the current Invasive Plant Inventory.	Less than significant
3.6 Biology	BIO-2: Direct Impacts to Habitat and Vegetation Stormwater Runoff. An increase in impervious area in the developed portions of the project site would likely cause increased runoff into wetlands and waters of the U.S. and could potentially contain higher amounts of pollutants such as oil and gas runoff. Most of the stormwater runoff will be filtered and captured in the manmade lake that will connect with the Oxnard Industrial Drain as proposed in the specific plan for the Northern Subarea.	None required	Less than significant
3.6 Biology	BIO-5: Direct Impacts to Common Wildlife Species. Displacement/Mortality of Wildlife. In addition to the loss of bird foraging habitat, the proposed development would directly disturb wildlife on the project site and potentially those areas adjacent to the site. Most species are expected to be displaced to adjacent areas of similar habitat, provided it is available at the onset of construction activity. However, wildlife that emigrate from the site are vulnerable to mortality by predation and unsuccessful competition for food and territory. In addition, species of low mobility (particularly burrowing mammals, amphibians, and reptiles) are expected to be destroyed during site preparation and construction.	None required	Less than significant
3.6 Biology	BIO-10. Direct Impacts to Wildlife Corridors. The Northern Subarea is positioned adjacent to existing residential development and is bordered	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	by a major road to the south. Although it provides some connectivity to other wildlife habitat south of Hueneme Road, the connectivity is limited by Hueneme Road and surrounding development.		
3.7 Land Use	LAND-1: Consistency with General Plan Land Use Policy. Table 3.7-2 outlines a series of policies from the General Plan Land Use Element that are focused specifically on the Ormond Beach Study Area. These include Balanced Development, Historical Functional Issues/Management Problems, Aesthetic Appearance, Recreational and Open Space Amenities, and the Regional Airport Facility. The specific plan for the Northern Subarea would be consistent with the policies of the City of Oxnard 2020 General Plan Land Use Element.	None required	Less than significant
3.7 Land Use	LAND-2: Consistency with General Plan Land Use Map. The proposed land use map for the Northern Subarea provides a higher level of articulation in terms of location and specification of use type than the General Plan Land Use Map, but is generally consistent with the General Plan, with one notable exception. The light industrial uses (self-storage and commercial/incubator) west of Rose Avenue along the northern and western edges of the Study Area designations are not consistent with the General Plan's Open Space Buffer designation. Since the project includes a proposal to amend the City's General Plan Land Use Map to reflect proposed designations, under CEQA and City thresholds for assessment of Land Use Planning impacts, the Northern Subarea impacts are considered less than significant.	None required	Less than significant
3.7 Land Use	LAND-3: Consistency with Zoning Ordinance and Map. The specific plan for the Northern Subarea calls for the application of six City zoning categories: R-1 (Detached Residential); R-2 (Detached Residential); R-3 (Attached Residential); C-2 (General Commercial); M-L (Light	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	Manufacturing); and C-R (Community Reserve). None of these zones, as applied in this subarea, would be consistent with the County's current zoning for the area. As part of the project approval process, the applicants are seeking annexation of most of the Study Area to the City of Oxnard. With annexation, the applicants will need to establish zoning for the annexed land consistent with the above description, which, in response to State Planning Law, will also establish consistency with the proposed General Plan amendments.		
3.7 Land Use	LAND-4: Land Use Compatibility. The determination of the compatibility of land uses can be very subjective. For purposes of this analysis, the concept focuses on the interaction between uses, both existing and proposed, and the extent to which one use might adversely affect another. The areas immediately adjacent to the Northern Subarea consist of residential neighborhoods (to the north), agricultural uses (to the east and south), and industrial uses (to the west). Except for the area to the south, which would convert to light industrial uses, all neighboring areas are expected to retain their existing development types.	None required	Less than significant
3.7 Land Use	LAND-5: Consistency with Housing Element. The City's Housing Element includes a variety of policies and programs concerning housing, including identification of suitable sites to accommodate the City's regional fair share of affordable housing for the five-year period covered by the Element. The specific plan for the Northern Subarea includes a policy commitment to complying with the City's Affordable Housing Ordinance. As noted in Section 3.7.1 under General Plan, the Housing Element's evaluation of sites does not include the Ormond Beach area, so there would be no effect on the Element's fair share objectives.	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.7 Land Use	LAND-6: Consistency with LAFCO Policy. The Northern Subarea and all but 220 acres of the Southern Subarea will be seeking annexation to the City of Oxnard and the Calleguas Municipal Water District. In October 2007, Ventura LAFCO published an updated LAFCO Commissioner's Handbook. Pursuant to state law, the Handbook is "a compilation of all of the written policies and procedures adopted by the Ventura LAFCO." Annexation of the Northern Subarea to the City of Oxnard would conform to the LAFCO's standards and the Guidelines for Orderly Development.	None required	Less than significant
3.7 Land Use	LAND-7: Consistency with SCAG Goals and Policies. Policies of SCAG's Regional Comprehensive Plan and Guide, Regional Transportation Plan (RTP), and Compass Growth Vision may be applicable to this project.	None required	Less than significant
3.7 Land Use	LAND-8: Long-Term Changes in Land Use Patterns and Growth Inducement. From a land use perspective, the Ormond Beach specific plans, including the required general plan amendments and rezonings, in combination with other proposed development in South Oxnard, would potentially affect the existing regional land use setting by displacing agricultural uses with residential, commercial, industrial, public, and open space uses.	None required	Less than significant
3.8 Agriculture	AG-1: Ag Zoning/ Williamson Act Conflicts. The proposed project is not under a Williamson Act Contract. The existing zoning within most of the Study Area is Agricultural Exclusive (A-E) (Ventura County Non-Coastal Zoning Ordinance, 12-06-05 Edition). The Study Area also includes a small portion of land in its extreme southern portion designated as Coastal Agricultural (C-A).	None required	Less than significant
3.8 Agriculture	AG-2: Induced Farmland Conversion. The proposed project is not expected to directly or indirectly result in conversion of adjacent farmlands to non-agricultural use.	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.8 Agriculture	AG-3: Ag Water Supply. Existing active water wells within the Study Area would no longer be used for agricultural irrigation and the groundwater pumping rights would be transferred to the City of Oxnard for M&I uses. The transfer of the groundwater allocation to the City for urban uses is not expected to result in a significant impact to agricultural water supply, as it would follow GMA's allocation transfer restrictions.	None required	Less than significant
3.8 Agriculture	AG-6: Land Use Conflicts. The Northern Subarea is presently used for agricultural operations. Properties east of the Northern Subarea are also used for agriculture and would remain in agricultural use after completion of the proposed project. The development of urban uses with sensitive receptors (such as residential lots and school uses) close to the agricultural operations could create conflicts between these land uses.	AG-1. Buyer Notification. A buyer notification shall be recorded on a separate information sheet with the final map pursuant to City of Oxnard Standard Conditions	Less than significant
3.9 Public Facilities and Services	PFS/Schools-1: Elementary Schools. Development of the Ormond Beach Specific Plan Study Area may generate a partial need for a new elementary school within the area. A 10-acre (net) potential elementary school site has been designated within the proposed Northern Subarea development, pending approval by OVESD. Either execution of an agreement between OVESD and the developer to complete the school at this site, or payment of the statutory development fees pursuant to Government Code Section 65995 would reduce these impacts to a level considered less than significant.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Schools-2: High Schools. Current school capacity does not adequately accommodate the anticipated number of students generated from the Ormond Beach Study Area. This impact would be reduced to a level considered less than significant through payment of state-mandated new development fees (Government Code Section 65995) by both the developers of the Northern and Southern Subarea projects.	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.9 Public Facilities and Services	PFS/Fire Protection-4. Construction-related Fire Hazards. A large amount of wood framing would occur within the Study Area during construction. In association with the framing operations, electrical, plumbing, communications, and ventilation systems would be installed in each structure. Given that these systems would be subject to City Codes and inspection by City personnel it is assumed they would be properly installed. In addition, construction sites would also be subject to City requirements relative to water availability and accessibility for fire fighting equipment. Adherence to City Codes and requirements during construction would reduce the potential for fire hazards within the Study Area to less than significant levels.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Fire Protection-5: Delays in Emergency Response. Construction of the proposed project would increase traffic both on and adjacent to the Study Area during work hours. This impact is considered less than significant given the periodic and short-term nature of construction-related traffic. With regard to emergency plans and evacuation routes, the proposed project would be required to comply with all standards and policies included in the City of Oxnard General Plan Safety Element and Zoning Ordinances. Therefore, no impacts to emergency plans and evacuation routes would occur.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Fire Protection-6: Community Fire Protection Service. The demand for fire protection services would increase as the Northern Subarea develops over time. The Development Agreements call for the developers of the Northern and Southern Subareas to contribute 75 percent of the funds for the construction of a new fire station in south Oxnard. The remaining 25 percent would be contributed by the City. This lump-sum payment would be due at the issuance of the 1250th building permit.	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.9 Public Facilities and Services	PFS/Police Protection-9: Construction-related Police Protection Service Impacts. The proposed project would require police protection services. The City of Oxnard Police Department will be responsible for police protection service to the project area. The construction phase of the proposed project would not normally require police protection services, except in cases of trespassing, theft, and vandalism. These are not unusual at a construction site, but are occasional, and the impact to police services would be less than significant. In addition, construction sites usually hire private security firms, further reducing the need for police services during construction.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Police Protection-10: Construction Traffic Impacts. Construction of the proposed project would increase traffic both on and adjacent to the Study Area during work hours. Slow-moving construction-related traffic on local adjacent roads may temporarily impact traffic flows on local roadways, contribute to vehicle accidents, and delay emergency vehicles traveling through the area.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Police Protection-11: Community Police Protection Service Impacts. The demand for police protection services would increase as the Northern Subarea develops over time. The specific plan for the Northern Subarea includes an approximately 1,000-square-foot police substation with the proposed attached residential housing developed in Phase I of the project. There would also be shared office space for Police Department staff/volunteer use in the new fire station, ensuring that the development permitted does not adversely affect the City's ability to provide adequate police protection services.	None required	Less than significant
3.9 Public Facilities and Services	Impact PFS/Parks and Recreation-14: Parkland Standards. The Northern Subarea plans for approximately 7.9 acres (net) of	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	neighborhood parkland, trails and open space, and 44 acres of open space, including a 25.6-acre (net) community park, an 18-acre lake, and open space. Therefore, the proposed project meets or exceeds park and recreation area requirements.		
3.9 Public Facilities and Services	PFS/Solid Waste-16: Construction Waste. Site preparation and construction activities would generate approximately 19,245 cubic yards of construction waste for residential development, assuming no diversion of construction wastes. In addition, construction activities would generate 16,686 cubic yards of construction waste for commercial, office, and light industrial development.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Library Services-19: Libraries. The City's Public Library system currently has adequate capacity to serve the City. The new South Oxnard Library building at the intersection of Bard and Saviers Road will provide library services to the Study Area community. The impact to library services is therefore expected to be less than significant.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Utilities-22: Electricity Consumption (Construction). Electrical energy would be consumed temporarily during construction activities. Construction activities are not expected to consume significant amounts of energy, because the proposed project would be developed in phases over 10 to 15 years. No significant construction-related impacts on electrical supply or service will result from the proposed project.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Utilities-23: Natural Gas Consumption (Construction). Due to the nature of construction activities, natural gas would not be consumed during development of the proposed project. The proposed project is not expected to result in significant impacts to natural gas service.	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.9 Public Facilities and Services	PFS/Utilities-24: Electricity Consumption (Project). Development of the uses allowed by the project would place new demands on electrical service provided by SCE, and would require new or upgraded delivery infrastructure to transmit the energy to uses within the Study Area. According to the California Energy Commission (CEC) Technical Report to California Energy Outlook 2000, the additional electrical demand of the project can be accommodated within the long-term source and distribution planning. Individual building projects within the proposed project Study Area will be required to comply with the Energy Building Regulations adopted by the CEC.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Utilities-25: Natural Gas Consumption (Project). As the proposed project is built and occupied, new demands for natural gas would occur. The proposed project can be accommodated within the long-term source and distribution planning of The Gas Company. Future uses within the project site will be required to comply with Title 24 of the California Administrative Code.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Utilities-29: Other Utilities. Verizon Communications and Adelphia/Time Warner's projections indicate that telephone, internet and cable service will be available to accommodate the proposed Northern and Southern Subarea developments' needs, since infrastructure will be placed concurrent with development.	None required	Less than significant
3.10 Transportation	TRANS-4: Freight Movement. As described in the existing setting description, the Study Area, because of its proximity to the Port of Hueneme, plays a significant role in the transport of freight and goods. As a result, both freight rail and trucking are key features of the overall transportation system. While there is no existing or planned rail access to the Study Area, the City of Oxnard has designated Hueneme and	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	Arnold Roads and Edison Drive as truck routes. Each of these roadways is expected to continue to serve freight movement needs, as well as accommodating new traffic associated with residential and commercial development in the Northern Subarea and light industrial and business park uses in the Southern Subarea. As discussed under Impacts Trans-1 and Trans-2 and their associated mitigation measures, the specific plans for these areas have identified roadway improvements that will accommodate all traffic associated with development in the area, including truck-based freight movement.		
3.10 Transportation	TRANS-5: Transit Services. Future development in both the Northern and Southern subareas will generate increased demand for transit services. In recognition of this fact, the specific plans for each subarea include commitments to accommodation of public transit. This includes designing connections to primary arterials which are likely to serve as future transit routes (e.g., Rose Avenue, SouthShore Drive, and Hueneme Road); roadway layouts that maximize opportunities for designated public transportation stops; pedestrian-oriented neighborhoods that encourage pedestrian and bicycle connections with transit stops; transit supportive land uses to enhance the viability of transit; and commitment to quality design for public transportation stops, including benches and graphics that address all transit system standards. The project developers will work with public transportation providers within the throughout the engineering and buildout of the specific plans. The specific design of the public transportation system will be determined based on the service provider's routes and technical requirements. With such coordination, the impacts of development under the specific plans will result in a less than significant (Class III) impact on transit services in the Study Area.	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.10 Transportation	TRANS-6: Non-motorized Transportation (Bike and Pedestrian). With development under the specific plans for the Northern and Southern subareas, there will be increased demand for non-motorized transportation facilities to connect work, shopping, residential, and recreational uses. Both specific plans include a variety of on- and off-street bike and pedestrian facilities to ensure that non-motorized transportation needs are accommodated. This includes accommodation of the Pacific Coast Bike Route in the design of Hueneme Road.	None required	Less than significant
3.11 Noise	NOISE-3: UPRR Railroad Noise. The UPRR railroad runs diagonally adjacent to the northwest corner of the project boundary. The planned project land use along the section of railroad tracks is light industrial. There are no noise sensitive land uses planned near this noise source.	None required	Less than significant
3.11 Noise	NOISE-8: Pacific Vehicle Preparation Facility Noise. Noise from truck loading operations at the Pacific Vehicle Preparation Facility would have potential to be a significant noise impact, as the facility operates 24-hours per day. Vehicles are driven from the Port of Hueneme to the facility, and then are sent out via trucks and trains. The planned adjacent land use near the facility is light industrial. Since no noise sensitive land uses are planned near the facility, the impacts of noise originating from Pacific Vehicle Preparation operations is considered less than significant.	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-1: Scenic Vistas-Rose Avenue. The Northern Subarea would utilize an extension of Rose Avenue as the main north/south entrance to the Specific Plan Area. The existing terminus of Rose Avenue does not provide any direct view of the southern coastline or mountain and foothill backdrops that are considered scenic vistas according to the City's General Plan. While the area would be converted from agricultural	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	operations to developed urban land uses, from the vantage point of Rose Avenue, the development of the Northern Subarea would not obstruct scenic vistas based on the fact that scenic vistas would not be affected		
3.13 Aesthetics/ Visual Resources	AES-2: Scenic Vistas-Hueneme Road (Northern Subarea). Hueneme Road is identified as a scenic roadway in the City's General Plan. The proposed man-made lake separating the residential uses from Hueneme Road would act as a visual buffer, separating homes that could visually impair views of the Santa Monica Mountains to the east from the perspective of an eastbound motorist. Presently, motorists traveling in the westbound direction on Hueneme Road have views of the existing urban areas. No views of the coastline are visible from this perspective. As the man-made lake would provide a separation of the proposed residential neighborhoods from Hueneme Road, the existing views of the Santa Monica Mountains to the east from the perspective of eastbound motorists and pedestrians would be preserved. There are no scenic vistas from the perspective of a westbound motorist traveling on Hueneme Road.	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-3: Scenic Vistas-Pleasant Valley Road. Pleasant Valley Road is also identified as a scenic roadway in the City's General Plan. Only a small section of Pleasant Valley Road passes along the northwestern portion of the Specific Plan area. Because the eastward viewshed from Pleasant Valley Road is so limited and because the buildings within the Study Area will be set-back from the road, the potential impacts of project development on scenic vistas to the Santa Monica Mountains are considered less than significant	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.13 Aesthetics/ Visual Resources	AES-4: Scenic Vistas-Olds Road. The landscaped buffer area/shelterbelt separating Olds Road from the high school will create a visual buffer that will prevent view obstruction of the distant mountain views to the north from the perspective of northbound motorists or pedestrians. The coastline to the south is obstructed from view by sand dunes to the south. Thus, there are no important scenic vistas from the vantage point adjacent to Olds Road facing the southerly direction, so the proposed development in the Northern Subarea would not impact scenic vistas.	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-8: Scenic Highways. The closest State Scenic Highway to the Specific Plan area is Highway 1, which is located approximately two miles to the east of the Specific Plan Area. While views from Highway 1 would be slightly altered as the Specific Plan area would be developed with urban uses, the predominant visual features visible from the highway are the coastal areas to the south and agricultural lands and the Santa Monica Mountains to the east and northeast. Based on the distance of Highway 1 from the Specific Plan Area and the fact that no scenic vistas would be obstructed.	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-10: Daytime Light and Glare. Development of the Ormond Beach Specific Plan would increase the amount of glare (indirect reflected light) generated in the immediate area during the daytime. Daytime sources of glare would primarily be generated by the activities of people, and the sun reflecting off glass windows of structures, automobiles, and trucks.	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-11: Nighttime Light and Glare. The development of the Ormond Beach Specific Plan would also introduce new sources of nighttime light and glare. Nighttime sources of light would include vehicle headlights and lights used within buildings located throughout the project site.	None required	Less than significant

TABLE ES-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – NORTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
Class IV Impacts- Ormond Beach (Northern Subarea)			
3.6 Biology	BIO-3: Direct Impacts to Habitat and Vegetation. Waters of the U.S. The agricultural ditches will be replaced with bioswales that capture runoff from the proposed residential development into a lake that will connect with the Oxnard Industrial Drain. The lake and bioswales will be vegetated with native wetland species and include 12 acres of lake which would improve the habitat quality an increase the acreage of waters of the U.S. from 6.5 to 12 acres. This would be a beneficial impact.	None required	Beneficial

TABLE ES-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
Class I Impacts – Ormond Beach (Southern Subarea)			
3.4 Air Quality	AQ-6: Construction-Related Emissions. Architectural coatings and heavy equipment used during proposed construction activities produces combustive NO_X and ROG emissions. Emissions from the construction of development projects are accounted for in the County ozone attainment planning process.	AQ-2: Construction-Related Control Measures. ROC and NO_X emissions generated by project construction shall be kept to a minimum by following these control measures: 1. Minimize equipment idling time. 2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. 5. Use low VOC architectural coatings to reduce evaporative ROC emissions.	Significant and unavoidable
3.4 Air Quality	AQ-7: Project-Related Emissions. Operations of the project would produce significant ROC and NO_X emissions from all combined residential and non-residential project sources, including vehicular traffic, space heating, water heating, and consumer products. Project-related emissions were estimated using the URBEMIS2007 model. This analysis assumes that the project would be fully built-out by the year 2020.	AQ-3: Operational Control Measures. Measures to reduce operational and vehicle emissions to the extent feasible shall be identified and incorporated in conditions of approval for any Tentative Tract Map or development permit within the Specific Plan. AQ-4: TDM Fee Program. Transportation Demand Management (TDM) Fee Program shall be developed for the project and approved by the City of Oxnard prior to the issuance of the first building permit for any project within the Study Area. This program shall determine the total TDM fee to be paid for individual projects within the Study Area, consistent with City standards and the methodology identified in Section 7.5.3 of the Ventura County APCD Guidelines.	Significant and unavoidable
3.8 Agriculture	AG-7: Direct Farmland Conversion. The proposed project would convert approximately 375 acres of land currently used for agricultural operations to non-agricultural uses. The remaining 220 acres included in the Southern Subarea would continue to be available for agricultural production. The City of Oxnard has reviewed a variety of actions that might offset the effects of the loss of productive agricultural land. This	Cannot be feasibly mitigated	Significant and unavoidable

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	includes requirements for direct preservation of agricultural land elsewhere in the region and/or financial contribution to efforts to acquire conservation easements or deed restrictions on land currently used for production. The City has also considered imposition of other requirements such as stockpiling of high quality topsoil and offering it as soil amendments for marginally viable agricultural land; converting nearby areas not used for farmland to farmland (e.g., open space or industrial lands); and/or financially contributing to an organization that performs agricultural conservation. Based on its evaluation of these and other potential measures, the City has concluded that they would not be feasible for the Ormond Beach Specific Plan projects.		
3.13 Aesthetics/ Visual Resources	AES-9: Visual Character. The Specific Plan Study Area is predominantly used for agricultural operations. The approval of the two specific plans and development of all of the proposed land uses would result in the transition of the area from a rural agricultural area to an urban area. When compared to existing conditions, the transition of land use intensity to an urban area would have a substantial change in the visual character.	Cannot be feasibly mitigated	Significant and unavoidable
Class II Impacts – Ormond Beach (Southern Subarea)			
3.2 Geology	GEO-1: Erosion. The proposed project would result in development of business park and light industrial use in the Southern Subarea. Development of associated structures and improvements to open space could result in substantial soil erosion or the loss of topsoil.	GEO-1: Erosion Control Measures. Construction plans, including the Grading and Drainage Plan, Construction SWPPP, and/or Post-Construction Erosion and Sediment Control Plan, shall incorporate measures, as appropriate, to minimize erosion.	3.2 Geology
3.2 Geology	GEO-2: Slope Stability. Project grading is not likely to include the placement of cut and fill slopes. Given the gently sloping nature of the site, any final slopes included in the project would not be anticipated to create an unstable slope. However, though not thought of as a “slope” in the traditional sense of the word, excavations have many similarities to slopes when evaluating stability of excavation sidewalls. Some deep excavations may be necessary for the installation of improvements and deep excavations may be susceptible to failure. The presence of high groundwater conditions and potential for encountering collapsible soils	GEO-1: Erosion Control Measures. Construction plans, including the Grading and Drainage Plan, Construction SWPPP, and/or Post-Construction Erosion and Sediment Control Plan, shall incorporate measures, as appropriate, to minimize erosion. GEO-2: Excavation Oversight. In order to avoid slope stability hazards, all temporary excavations shall be designed according to CBC, OSHA, and City standards for temporary construction excavations and slopes. All plans submitted for approval of a Development Permit for development projects in the Northern Subarea and the Southern	3.2 Geology

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	are two contributing factors to excavation instability. In any case, engineered slopes or excavations included in the project would be required to meet established standards in the CBC and City Grading Ordinance.	Subarea shall incorporate design recommendations for mitigation of unstable temporary construction slopes and excavations as investigation by registered soils engineers and engineering geologists	
3.2 Geology	GEO-3: Seismic Hazards. An earthquake on a nearby fault could result in strong ground shaking. Ground shaking has the potential to cause fill material to settle, instigate liquefaction, and cause physical damage to structures, property, utilities, and road access. Ground shaking has the potential to cause injury and death to humans.	GEO-3: Seismic Design. In order to avoid seismic hazards, all structures shall be designed to earthquake standards for CBC Seismic Zone 4, and appropriate building setbacks from active and potentially active faults shall be applied. All plans submitted for approval of a Development Permit shall incorporate design recommendations contained in the geotechnical and geological studies for mitigation of seismic hazards. Design-level geotechnical and geological studies shall be performed as part of the final design effort for the project. Significant soil improvement measures may be needed to mitigate potential for liquefaction and ground settlement, as determined by the design-level geotechnical studies. Seismic design criteria will be refined by the applicant's geotechnical consultant. All grading and earthwork recommendations shall be incorporated into the final project design, including the Final Grading Plan. A Registered Civil Engineer or Certified Engineering Geologist shall supervise all grading activities. The project shall be designed and constructed in compliance with all applicable codes and regulations.	3.2 Geology
3.2 Geology	GEO-4: Expansive Soils. Soils with moderate shrink-swell (expansive) potential have been identified in the Study Area. Soils with expansion potential contain clay minerals that expand when wet and shrink when dry. Repeated shrinking and swelling of the soil can result in damage to foundations, fill slopes, utilities, and other associated facilities. Site-specific geotechnical studies will be required to identify areas underlain by expansive soils and provide appropriate mitigation measures.	GEO-4: Detailed Soils Analysis. In order to avoid soil-related hazards, the project applicant shall investigate and implement recommendations set forth by the applicant's geotechnical engineer and refine the project design through detailed soils analysis. The design of the proposed foundation systems and floor slabs of the proposed structures shall consider the likely presence of expansive soil conditions, as well as collapsible and compressible soil conditions that have a high potential for both short- and long-term settlement and compression.	3.2 Geology
3.2 Geology	GEO-5: Collapsible Soils and Sensitive Soils. The surface soils may be dry and porous to depths of 12 to 24 inches below existing grade, and may be susceptible to collapse, compression, and settlement with increasing moisture content.	GEO-4: Detailed Soils Analysis. In order to avoid soil-related hazards, the project applicant shall investigate and implement recommendations set forth by the applicant's geotechnical engineer and refine the project design through detailed soils analysis. The design of the proposed	3.2 Geology

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		foundation systems and floor slabs of the proposed structures shall consider the likely presence of expansive soil conditions, as well as collapsible and compressible soil conditions that have a high potential for both short- and long-term settlement and compression.	
3.3 Water Resources	WATER-10: Water Supply Availability. As documented in the South Ormond Beach Water Supply Assessment & Verification (July 2008) and its Addendum (November 2009), development of the Southern Subarea (in accord with the South Ormond Beach Specific Plan) would generate estimated water demand of about 965 acre feet per year (AFY). Of this total, 785 AFY would be for potable needs and the balance (180 AFY) would be for landscaping and other non-potable needs. Based on the WSA, the project would have develop a program to offset a minimum of 402 AFY of demand through some combination of additional water supply contributions through extraordinary facilities development, extraordinary conservation measures, in-City retrofits, contributions to the development of recycled water facilities, or similar measures.	WATER-1: On-site Domestic Water System. WATER-2: On-site Recycled Water System WATER-3: Exterior Water Conservation WATER-4: Grey Water. WATER-5: Drought-Tolerant Landscaping.	Less than significant
3.3 Water Resources	WATER-13: Construction-Related Surface Water Quality. The ESA prepared for the Southern Subarea identified superficial stains and odor which may be indicative of soil contamination in several locations. Pesticides, herbicides, fuels and other chemicals used in various agricultural operations could be present onsite. During construction these contaminants (if present) could be transported into the agricultural drain system and eventually to Mugu Lagoon.	WATER-6: Environmental Site Assessment. An environmental site assessment adequate to identify potential sources of stormwater contaminants and areas requiring remediation. The assessment must include the location and condition of areas used for the storage of pesticides and herbicides, petroleum storage tanks or fueling areas, septic tanks, and underground storage tanks. Areas of soil staining should be noted and the potential contaminant identified. Soil should be excavated to determine the exact vertical extent of contamination. If during soil removal, staining indicates petroleum contamination continuing below the ground surface, sampling should be performed to characterize the extent of contamination and identify appropriate remedial measures. WATER-7: De-Watering. De-watering operations during construction will utilize established BMPs for limiting the discharge of sediment. Prior to the discharge of de-watering from shallow groundwater, water quality sampling will be performed to determine if the groundwater to be de-watered is contaminated with pesticides or petroleum products. If levels	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		of pollutants are present in quantities exceeding applicable water quality standards, the de-watering will be pumped and removed for proper disposal offsite. WATER-8: Stormwater Pollution Prevention Plan. The applicants shall submit to the City evidence of County review and approval of the receipt letter of a completed Notice of Intent (NOI) and waste discharge identification number to obtain coverage under the NPDES General Permit for Discharges Associated with Construction Activity issued by the California State Water Resources Control Board. Along with the NOI, the applicant shall submit to the County a Stormwater Pollution Prevention Plan (SWPPP) and monitoring program consistent with SWRCB rules for the construction phase of the project prior to initiating construction. WATER-9: Stormwater Pollution Control Plan. Prior to issuance of any construction/grading permits a Stormwater Pollution Control Plan (SWPCP) will be prepared. The SWPCP will include erosion and sediment control BMPs for both active and inactive (previously disturbed) construction areas. .	
3.3 Water Resources	WATER-14: Post-Construction Surface Water Quality. The specific plan for the Southern Subarea includes a detention/ biofilter buffer zone with bioswales that will separate the open space area shown on the plan from the proposed industrial areas. These bioswales may be acceptable to address post-construction water quality issues. However, the design, capacity, and layout of the bioswales have not been provided. The specific plan for the Southern Subarea commits to complying with the BMPs.	WATER-10: SQUIMP Development Guidelines. A combination of non-structural and structural BMPs (e.g., bioswales, permeable pavement, etc.) shall be installed to effectively prevent the discharge of pollutants from the residential units, roads, equestrian facilities, and open space easements and, their conveyance, either directly or through storm drain systems into natural watercourses and the Pacific Ocean.	Less than significant
3.3 Water Resources	WATER-15: Flood Control and Stormwater Drainage. A preliminary drainage plan incorporating hydrologic modeling of stormwater runoff from the existing site has been developed for the Southern Subarea. It is known that the southern portion of the Southern Subarea drains to the Oxnard Drain, but it is not certain if this is the drainage for the entire site. Southwest Sod has current plans for maintenance and dredging of the Oxnard Drain which will improve its flow capacity. Because this is a	WATER-11: Drainage Plan. A drainage plan including a detailed hydraulic analysis will be necessary to determine the needed capacity of new drainage and detention facilities. The volume of runoff for design storms must be estimated according to the standards provided in the VCWPD's Hydrology and Design manuals. Storm drain systems must be designed to comply with the requirements of the City of Oxnard Master Plan of Drainage by incorporating adequate capacity to convey a	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	waterway within unincorporated Ventura County, improvement to the Oxnard Drain will need to meet the requirements of the Ventura County Stormwater Ordinance. Construction activities at the Southern Subarea could result in discharges of sediment which would compromise the flow capacity of the Oxnard Drain and any other agricultural drains servicing the Project Area. Agricultural drainage channels operated and maintained by the Oxnard Drainage District No. 2 may not have the capacity for the increased runoff associated with construction. At the present time, potential impacts due to flooding during construction cannot be fully assessed.	10-year frequency storm. Sumps must be designed for a 50-year storm and provided with an emergency overflow escape path WATER-12: Stormwater Control Structures and Devices. The projects in both the Northern and Southern Subarea Specific Plans propose to construct detention basins to attenuate peak stormwater runoff flows. In the case of the Northern Subarea Specific Plan, the detention basin will take the form of an artificial lake. Due to the amount of water collected and the presence of shallow groundwater, these basins will require relatively large footprints to provide enough volume to perform their desired function. Detention Basin storage volume should be based on VCWPD hydrographs and the requirements of the VCWPD Hydrology Manual. Stormwater retention and protection structures (i.e., detention basins, outlet dissipaters, etc.) and other industry standard erosion protection devices (i.e., silt fences, jute netting, straw bales, bioswales, etc.) shall be constructed, installed, and made operational during the initial phases of site grading. Pre- and post-construction surface runoff from the new residential developments shall not exceed existing conditions. A registered civil engineer specializing in flood control or other qualified professional shall design stormwater structures to ensure that adequate flood control capability is met. WATER-13: Construction Base Elevation. New construction shall have the lowest floor, including basement, elevated above the Base Flood Elevation (BFE). A general requirement is to elevate building pads at least one foot above the BFE. WATER-14: Road Elevation. At least one route of ingress and egress to any development should be available during a 100-year flood.	
3.3 Water Resources	WATER-16: Surface Runoff Erosion. Increased surface runoff from the Study Area during construction and occupation could result in short-term and long-term erosion and sedimentation impacts to the watercourses and waterbodies in the study area.	WATER-11: Drainage Plan. A drainage plan including a detailed hydraulic analysis will be necessary to determine the needed capacity of new drainage and detention facilities. The volume of runoff for design storms must be estimated according to the standards provided in the VCWPD's Hydrology and Design manuals. Storm drain systems must be designed to comply with the requirements of the City of Oxnard Master Plan of Drainage by incorporating adequate capacity to convey a	

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		10-year frequency storm. Sumps must be designed for a 50-year storm and provided with an emergency overflow escape path WATER-12: Stormwater Control Structures and Devices. The projects in both the Northern and Southern Subarea Specific Plans propose to construct detention basins to attenuate peak stormwater runoff flows. In the case of the Northern Subarea Specific Plan, the detention basin will take the form of an artificial lake. Due to the amount of water collected and the presence of shallow groundwater, these basins will require relatively large footprints to provide enough volume to perform their desired function. Detention Basin storage volume should be based on VCWPD hydrographs and the requirements of the VCWPD Hydrology Manual. Stormwater retention and protection structures (i.e., detention basins, outlet dissipaters, etc.) and other industry standard erosion protection devices (i.e., silt fences, jute netting, straw bales, bioswales, etc.) shall be constructed, installed, and made operational during the initial phases of site grading. Pre- and post-construction surface runoff from the new residential developments shall not exceed existing conditions. A registered civil engineer specializing in flood control or other qualified professional shall design stormwater structures to ensure that adequate flood control capability is met.	
3.3 Water Resources	WATER-17: Wastewater Collection and Treatment. The 2005 Wastewater Master Plan Update for the City of Oxnard includes the proposed Ormond Beach Study Area in its wastewater flow projections. Therefore, build out of the Study Area has been accounted for in the analysis of future wastewater infrastructure needs. Additional studies are, however, needed to assess the impact to the existing sewer and wastewater treatment infrastructure.	WATER-15: Downgradient Sewer Study. Prior to issuance of building permits for the Northern Subareas, the City of Oxnard shall complete a sewer study and implement the recommended upgrades to the downgradient wastewater system to ensure that the existing system is adequate to convey sewage flows from the proposed Project.	Less than significant
3.4 Air Quality	AQ-5: Construction-Related Particulates. Ground disturbances and equipment operation during construction activities produce potentially significant, but feasibly mitigated short-term PM_{10} emissions (Table 3.4-9). Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories: entrained dust and vehicle and equipment emissions. Entrained dust	AQ-1: Dust Control Measures. Dust generated by project construction shall be kept to a minimum by following dust control measures. AQ-2: Construction-Related Control Measures. ROC and NO_X emissions generated by project construction shall be kept to a minimum by following these control measures: 1. Minimize equipment idling time.	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} emissions.	2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. 5. Use low VOC architectural coatings to reduce evaporative ROC emissions.	
3.5 Hazards	HM-7: Impacts from Potentially Contaminated Soils Resulting from Agricultural Operations. Impacts from Potentially Contaminated Soils Resulting from Agricultural Operations. The Study Area has been used for agriculture for several decades, although the specifics of these operations are unknown. The Phase I ESA prepared for the Southern Subarea identified superficial stains and odor in several locations, which may be indicative of soil contamination. There is a potential for pesticides, herbicides, fuels and other chemicals used in various agricultural operations to be present onsite. These substances may have resulted in soil and/or groundwater contamination at concentrations above regulatory action levels. Potentially significant adverse health impacts to construction workers and/or future project site residents could occur if high levels of residual pesticides are present at the site. In addition, due to the rural nature of the site, septic systems may be present within the site boundaries.	HM-1: Soil Sampling: The majority of the Study Area has been utilized for agricultural purposes for several decades and may contain pesticide residues in the soil. Soil sampling shall occur throughout the subject site, as part of a Phase II ESA, including any known pesticide mixing areas. In order to adequately assess the extent of any existing soil contamination affecting the site, a Phase II ESA complying with ASTM standards shall be completed before recordation of any Tract Maps for the proposed Study Area. The sampling and the comprehensive Phase II ESA will determine if pesticide concentrations exceed established regulatory requirements and will identify proper handling procedures that may be required.	Less than significant
3.5 Hazards	HM-9: Impacts from Asbestos-containing Materials and Lead-based Paints. Based upon the period during which the existing onsite structure was built (prior to 1978), it is likely that ACM and LBP are present onsite and would have to be handled properly prior to demolition activities.	HM-3: Phase II ESA. Based on the period during which the existing structures in both the Northern and Southern subareas were built (prior to 1978), ACM and LBP may be present within the existing onsite structures and shall be handled properly prior to remodeling or demolition activities. In order to adequately assess the presence of ACMs and LBPs affecting the site, a Phase II ESA complying with ASTM standards shall be completed before recordation of any Tract Maps for the proposed Study Area. If either ACMs or LBPs are identified	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		in the structures, then removal of these materials in compliance with state and federal requirements shall be undertaken prior to demolition of the structure, and the removed materials will be disposed of at an approved landfill.	
3.5 Hazards	HM-13: Impacts to Public Health from Migration of Contaminants from the Halaco Superfund Site. Based on current information (USEPA 2007a,b,c), the Halaco site is not expected to present a hazard to human health at the Ormond Beach Specific Plan Study Area because the proposed Project would not use groundwater, and because limited sampling in a residential area near the Halaco site did not show elevated levels of site contaminants. However, since the Study Area is located less than 4 miles from the Halaco site, this preliminary assessment must be confirmed upon completion of USEPA's and CDPH's Health Risk Assessments prior to issuance of any building permits.	HM-4: Halaco Site HRAs. The City must affirm that the USEPA's and CDPH's Health Risk Assessments conclude that the Halaco site presents no risk to future development in the Study Area before issuing any building permits for the proposed Project.	Less than significant
3.6 Biology	BIO-13: Direct Impacts to Habitat and Vegetation. Invasive Species. The Southern Subarea has minimal native vegetation; however, impacts to nearby native vegetation at Ormond Beach could potentially include invasive species used in landscaping that could escape into natural areas and outcompete native vegetation.	BIO-1: Invasive Plant Species Control. To reduce the impacts of non-native plants colonizing adjacent native habitats, the landscaping plan for the proposed Southern Subarea projects shall be revised so as to exclude invasive plants that frequently escape into native habitats, particularly those identified on the California Invasive Plant Council's website under the current Invasive Plant Inventory.	Less than significant
3.6 Biology	BIO-16: Direct Impacts to Common Wildlife Species. Bird Foraging Habitat. Approximately 370 acres of agricultural lands and 5 acres of agricultural ditches would be impacted by the proposed development in the Southern Subarea. Approximately 220 acres would be open space/agriculture and would remain transitional habitat to adjacent to Ormond Beach wetlands. The Southern Subarea is known as a foraging habitat for many shorebirds, passerines, and raptors.	BIO-2: Foraging Habitat Creation/Restoration. In order to mitigate this impact, coastal native grassland/dune foraging habitat for raptors and other birds in the vicinity of the project site near coastal wetlands must be restored or enhanced at a mitigation ratio of 0.1 to 1 resulting in at total of 15.5 acres for the Southern Subarea. This acreage reflects a credit for the Southern Subarea applicant's commitment to retention of 220 acres of the subarea for agricultural and/or open space uses, which will continue to serve as foraging habitat.	Less than significant
3.6 Biology	BIO-18: Direct Impacts to Common Wildlife Species. Nesting Birds. Activities associated with grading and construction have the potential to disturb nesting birds on and adjacent to the site to the degree that the	BIO-3: Pre-Construction Survey for Nesting Birds. A pre-construction survey for nesting birds will be conducted by a qualified biologist to determine if active nests of special-status birds, or common bird species	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	nests may be abandoned, resulting in a direct loss of an active bird nest. Bird nests with eggs or young are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Loss of active nests as a result of construction or other site-preparation activities may potentially be in conflict with these regulations and, depending upon the number and extent of active nests that would potentially be disturbed, could be considered a significant impact. Since the Southern Subarea has minimal trees or shrubs, nesting birds would be primarily ground-nesting birds such as killdeer or raptors in trees nearby but outside of the project site.	protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, are present in the construction zone or within 100 feet (200 feet for raptors) of the construction zone. The survey shall be conducted no earlier than 45 days and no sooner than 20 days prior to construction or site preparation activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February through July).	
3.6 Biology	BIO-19. Direct Impacts to Special Status Wildlife—Special-status Bird Foraging Habitat. Impacts to special-status wildlife are limited to sensitive bird species that are known to occur or could potentially occur in the Southern Subarea. The project site is known to be used by these sensitive species for foraging only, and breeding is not expected, except for the low possibility of breeding burrowing owls. Evaluating the loss of foraging habitat to one single species as a result of the proposed project would be considered less than significant because it would not reduce the foraging opportunities to a point that would significantly impact the foraging opportunities for these species; however, evaluated collectively the loss of this foraging habitat to a large diversity of sensitive birds of prey, raptors, and shorebirds would be significant.	BIO-2: Foraging Habitat Creation/Restoration. In order to mitigate this impact, coastal native grassland/dune foraging habitat for raptors and other birds in the vicinity of the project site near coastal wetlands must be restored or enhanced at a mitigation ratio of 0.1 to 1 resulting in at total of 15.5 acres for the Southern Subarea. This acreage reflects a credit for the Southern Subarea applicant's commitment to retention of 220 acres of the subarea for agricultural and/or open space uses, which will continue to serve as foraging habitat.	Less than significant
3.6 Biology	BIO-20: Direct Impacts to Special Status Wildlife. Burrowing Owl (Athene cunicularia). The burrowing owl is a federal and state species of concern. The decline of this species was recognized as early as the 1940's. The decline is attributable to the conversion of grasslands and pasturelands to agriculture, and to the destruction of ground squirrel colonies by plowing and poisoning. The burrowing owl is unique because it lives in the abandoned burrows of ground squirrels. They modify the burrows to suit their needs by digging. It is one of the few diurnal owls and can be seen in the day perched on fence posts or near the entrance to their burrow. While no burrowing owls were observed during the survey, there is a low	BIO-2: Foraging Habitat Creation/Restoration. In order to mitigate this impact, coastal native grassland/dune foraging habitat for raptors and other birds in the vicinity of the project site near coastal wetlands must be restored or enhanced at a mitigation ratio of 0.1 to 1 resulting in at total of 15.5 acres for the Southern Subarea. This acreage reflects a credit for the Southern Subarea applicant's commitment to retention of 220 acres of the subarea for agricultural and/or open space uses, which will continue to serve as foraging habitat. BIO-4: Pre-Construction Survey for Burrowing Owl. Since there is potential for burrowing owls forage in the Study Area and to nest within the Southern Subarea, the following measures shall be implemented in	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	potential for this owl to become resident and potentially breed at the site.	order to avoid take of burrowing owls. A qualified biologist will survey for burrowing owl activities within the Study Area 30 days prior to construction to assess burrowing owl presence and need for further mitigation. If owls are nesting in the Study Area, the nest will be avoided by a minimum of a 250-foot buffer until fledging has occurred. Burrowing owls typically breed from late March to July.	
3.6 Biology	BIO-22: Indirect Impacts to Offsite Sensitive Habitats. Indirect impacts to adjacent sensitive habitats are possible as a result of the proposed project. The Ormond Beach and Point Mugu areas support a wide array of sensitive plant and wildlife species and sensitive habitat that could be impacted indirectly by increased development in the adjacent upland areas. Sensitive habitats that could be indirectly impacted by the proposed project include southern coastal saltmarsh, freshwater and brackish water marsh, tidal flats, foredune and coastal dune scrub. Industrial development close to these areas would likely result in higher human use of the area which would cause negative impacts to habitat such as trampling and introduction of non-native and invasive plant populations. Since these sensitive habitats support several special-status plant and wildlife species, there is a potential for these indirect impacts to be significant. The proposed project incorporates some physical measures to reduce indirect impacts such as lighting, noise, and human intrusion by including a 200-foot wide greenbelt to serve as a buffer between the development and 220-acre open space/agriculture area. Also, pursuant to a Development Agreement with the City, the developer is required to contribute to implementation of an "Ormond Beach Natural Resource Management Program." The purpose of the Natural Resource Management Program would be to reduce or avoid impacts to sensitive natural resources, particularly Western snowy plovers and California least terns at Ormond Beach, that would result from expected increased visitation. The program would provide adequate funding for the following resource protection measures at Ormond Beach: (a) Fencing; (b) Signage; (c) Predator Management; (d) Invasive Plant Control; (e) Public Information; and (f) Enforcement.	BIO-5: Wetland Runoff Control. Although bioswales are incorporated into the project design to reduce pollution and runoff, their function is limited, so additional measures must be implemented to minimize runoff and pollution from entering nearby wetlands. Therefore, in addition to the long-term water quality monitoring program proposed in Mitigation Measure Water-10, trash traps shall be installed at all entrances to bioswales and a maintenance program to remove trash on a routine basis shall be implemented by the City.	Significant but mitigable

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.6 Biology	BIO-23: Indirect Impacts to Special Status Plants. Most of the project area is dominated by non-native species, so impacts to special-status plants as a result of the proposed project are limited to potential indirect impacts associated with the development of lands adjacent to the location of two sensitive species: the spiny rush (Juncus acutus ssp. leopoldii) and salt marsh bird's beak (Cordylanthus maritimus ssp. maritimus). Spiny rush, known to occur along Oxnard No. 3 Canal that borders the southern edge of the project site, has potential to be indirectly impacted by the proposed project. Salt marsh bird beak occurs at Ormond Beach and could be indirectly impacted by increased development at the project site. Indirect impacts that could potentially affect both of these species include increased runoff due to increased impervious layers, increased exotic species, and trampling associated with increased human use. These impacts would be reduced by the wetlands restoration buffers and bioswales that are included in the proposed project and implementation of the Ormond Beach Natural Resource Management Program (see description under Impact 22).	BIO-1: Invasive Plant Species Control. To reduce the impacts of non-native plants colonizing adjacent native habitats, the landscaping plan for the proposed Southern Subarea projects shall be revised so as to exclude invasive plants that frequently escape into native habitats, particularly those identified on the California Invasive Plant Council's website under the current Invasive Plant Inventory.	Less than significant
3.6 Biology	BIO-26: Indirect Impacts to Special Status Wildlife--Western Snowy Plover (Charadrius alexandrinus nivosus). Snowy plovers are present at Ormond Beach and are not expected to occur in the Southern Subarea. Indirect impacts associated with increased human presence would be reduced by the open space/greenbelt buffer that is included in the proposed project and implementation of the Ormond Beach Natural Resource Management Program (see description under Impact 22).	BIO-5: Wetland Runoff Control. Although bioswales are incorporated into the project design to reduce pollution and runoff, their function is limited, so additional measures must be implemented to minimize runoff and pollution from entering nearby wetlands. Therefore, in addition to the long-term water quality monitoring program proposed in Mitigation Measure Water-10, trash traps shall be installed at all entrances to bioswales and a maintenance program to remove trash on a routine basis shall be implemented by the City.	Less than significant
3.6 Biology	BIO-27: Indirect Impacts to Special Status Wildlife--California Least Tern (Sterna antillarum browni). The California Least Tern is a state and federally endangered species. The historical breeding range of this species is along the Pacific Coast from Monterey County, California to southern Baja California, Mexico. Nesting locations are in dry sand or dirt near lagoons or estuaries with a dependable food supply. Due to decreasing habitat, terns are often forced to nest on manmade structures such as airports or landfills. They usually arrive around mid-	BIO-5: Wetland Runoff Control. Although bioswales are incorporated into the project design to reduce pollution and runoff, their function is limited, so additional measures must be implemented to minimize runoff and pollution from entering nearby wetlands. Therefore, in addition to the long-term water quality monitoring program proposed in Mitigation Measure Water-10, trash traps shall be installed at all entrances to bioswales and a maintenance program to remove trash on a routine basis shall be implemented by the City.	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	April and breed in colonies from mid-May to early August and then migrate south over the winter. This species is known to forage along the Oxnard Canal No. 3 within the Study Area and to breed at Ormond Beach (WRA, 2005; BioResources Consultants, 2002; Jones & Stokes, 1995). Indirect impacts associated with increased human presence would be reduced by the open space/greenbelt buffer that is included in the proposed project and implementation of the Ormond Beach Natural Resource Management Program (see description under Impact 22).		
3.6 Biology	BIO-28: Indirect Impacts to Special Status Wildlife--White-faced ibis. The white-faced ibis is a California Species of Special Concern that breeds in isolated wetlands throughout western central and southeastern North America and into Central America. Mugu Lagoon and associated wetlands are important wintering areas for the white-faced ibis. Indirect impacts associated with increased human presence would be reduced by the open space/greenbelt buffer that is included in the proposed project and implementation of the Ormond Beach Natural Resource Management Program (see description under Impact 22.	BIO-5: Wetland Runoff Control. Although bioswales are incorporated into the project design to reduce pollution and runoff, their function is limited, so additional measures must be implemented to minimize runoff and pollution from entering nearby wetlands. Therefore, in addition to the long-term water quality monitoring program proposed in Mitigation Measure Water-10, trash traps shall be installed at all entrances to bioswales and a maintenance program to remove trash on a routine basis shall be implemented by the City.	Less than significant
3.8 Agriculture	AG-4: Dust Impacts to Local Crops. Dust generated during construction could be deposited on adjacent agricultural lands with planted crops, temporarily reducing productivity. In addition, increase in traffic may result in permanent increase in emissions that could affect crops in adjacent agricultural lands.	AQ-1: Dust Control Measures. Dust generated by project construction shall be kept to a minimum by following dust control measures. AG-1. Buyer Notification. A buyer notification shall be recorded on a separate information sheet with the final map pursuant to City of Oxnard Standard Conditions.	Less than significant
3.10 Transportation	TRANS-2: Peak Hour Traffic Conditions—Combined Subareas. Based on City of Oxnard established thresholds of significance, the addition of the Southern Subarea project-generated trips is forecast to result in potentially significant impacts at 15 study intersections.	TRANS-2: Combined Subarea Traffic. To eliminate the significant impacts associated with development of the Combined Subareas (Impact Trans-2), mitigation measures designed in accordance with City standards are recommended for the following facilities: Ventura Road/Hueneme Road Saviers Road/Channel Islands Boulevard Saviers Road/Pleasant Valley Road Saviers Road/Hueneme Road Rose Avenue/Gonzales Road Rose Avenue/Cesar Chavez Drive Rose Avenue/Camino Del Sol	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		Rose Avenue/Santa Lucia Avenue Rose Avenue/Eastman Avenue Rose Avenue/Oxnard Boulevard Rose Avenue/Channel Islands Blvd/SR-1 Southbound Ramps Rose Avenue/Pleasant Valley Road Rose Avenue/Sanford Street Rice Avenue (SR-1)/Pleasant Valley Road SR-1 Southbound Ramps/Hueneme Road	
3.11 Noise	NOISE-4: Traffic Noise with Combined Subarea Development. Compared with existing conditions, the changes in traffic associated with future development of both the Northern and Southern subareas would result in significant increases in traffic noise levels at noise sensitive receivers located along the several roadway segments, according to either the exceedance standard or the change standard or both.	NOISE-2: Outdoor Activity Areas. The project should be designed to ensure that outdoor activity areas are shielded from direct view of major roadways. The proposed layout of the Northern Subarea calls for outdoor activity areas to be separated from SouthShore Drive by attached residential buildings. The project should also be designed to ensure satisfaction of the exterior noise standards for traffic generated by traffic on internal roads. The specific design of noise barriers, berms or combinations thereof will depend upon the final roadway and lot designs, and upon the grading plans. To achieve a meaningful amount of noise reduction using barriers or berms, these should be designed to break line of sight between the source and receiver. Generally, a barrier 6 feet high located on level ground will provide about 5 dB noise level reduction for traffic noise. An improvement of about 1 dB would be expected for each 1-foot increase in barrier height beyond breaking line of sight. NOISE-3: Interior Noise Exposure. The methods required to mitigate interior noise exposures would depend on the locations of the residences relative to the roadways. In general, if the exterior traffic noise exposure is 65 dB L_{dn} or less, no exceptional construction techniques would be required. Where the exterior traffic noise level is between 65 dB and 75 dB L_{dn}, it is usually feasible to achieve the interior noise standard of 45 dB L_{dn} by installing acoustically-rated glazing, using stucco or brick siding, and by minimizing the surface area of glazing that faces the roadways. Where the exterior traffic noise exposure exceeds 75 dB L_{dn}, it is usually more difficult to achieve the interior noise	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
		standard in residences. NOISE-4: Post-Design Acoustical Analysis. To ensure satisfaction of the exterior and interior traffic noise standards for the noise sensitive land uses within the Study Area, an acoustical analysis should be prepared after the roadway and lot designs and grading plans have been finalized. The recommendations resulting from that analysis should be implemented to achieve noise standards.	
3.12 Cultural Resources	CULTURAL-2: Construction-related Grading. Grading activities associated with site preparation at the proposed development site (including business park and light industrial uses) in the Study Area could impact previously undiscovered cultural resources. In the event that project-related activities impact a previously undiscovered CRHR eligible cultural resource, this would be considered to be significant but feasibly mitigated.	CULTURAL-1: Construction Period Monitoring. An archaeologist will monitor all initial grading or excavation. An archaeologist will monitor all initial construction grading or excavation. If unanticipated resources are discovered, they will be evaluated according to the procedures set forth at CEQA Section 15064.5. If the evaluation determines that such resources are either unique or significant archaeological or historical resources and that the project would result in significant effects on those resources, then further mitigation would be required. In cases where the resources are unique, then avoidance, capping, or other measures, including data recovery, would be appropriate mitigation. If the resources are not unique, then recovery, without further mitigation, would be appropriate.	Less than significant
Class III Impacts – Ormond Beach (Southern Subarea)			
3.2 Geology	GEO-6: Coastal Flooding, Tsunami, and Sea-Level Rise. Coastal flooding associated with tsunamis and/or sea level rise could affect the coastal areas of Oxnard. The Study Area is not within 100- or 500-year floodplain and is not expected to be inundated by a tsunami. While there is research suggesting that sea-level rise could exacerbate the probability of coastal flooding in the Study Area by the end of the 21st century, additional local research and analysis are required to more fully understand how local circumstances would affect such probability. With the application of the City's development standards and continued focus on effective emergency management planning, the potential for coastal flooding is deemed to be less than significant (Class III).	None required.	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.3 Water Resources	WATER-12: Water Facility Construction. The Southern Subarea will require the construction of facilities associated with Phase 1 of the GREAT program to ensure a 20-year supply of potable and recycled water. The City of Oxnard has adopted a project level EIR/EIS for the GREAT program. Most of the infrastructure for Phase 1 and Phase 2 of the GREAT program is proposed for construction at existing water facilities or involves replacement and expansion of existing water service pipelines within existing right-of-ways. The GREAT EIR/EIS includes a Monitoring, Mitigation, and Reporting Plan (MMRP) which addresses the construction impacts of Phase 1 and Phase 2.	None required.	Less than significant
3.3 Water Resources	WATER-12: Wasteful Use of Water. Individual building projects within the Northern Subarea would be required to meet standard requirements of the City, State, and Uniform Building Code. These requirements act to conserve potable water, ensure adequate water flow, and pay for the construction of improvements to the water distribution system as outlined in the City's Water Master Plan.	None required.	Less than significant
3.4 Air Quality	AQ-10. CO Hotspots. Implementation of the proposed project would lead to increased traffic volumes on local roadways. An analysis of potential CO concentrations based on 2020 project conditions using CALINE4 was conducted to estimate potential exposure of sensitive receptors to substantial CO concentrations (or "hotspots"). The results show that implementation of the project would not expose sensitive receptors to substantial CO concentrations.	None required	Less than significant
3.5 Hazards	HM-8: Impacts from Hazardous Materials Leaks and Spills Recorded Onsite and on Adjacent Properties. The Phase I ESA prepared for the Southern Subarea identified one property within the Southern Subarea (Remie Callens Estate, 1552 E. Hueneme Road) listed in the HAZNET, Underground Storage Tank, Historical UST, Leaking UST, and Cortese databases. The site was listed due to a LUST that released gasoline to the soil. The case was reported closed on May 23, 1995, therefore, potential impacts (or a present REC) within the property resulting from this occurrence are unlikely.	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.5 Hazards	HM-10: Impacts Associated with Radon. Based on the State of California Department of Health Services Radon Database for California, the proposed project site does not have a predicted average indoor screening level greater than 4.0 pCi/l. USEPA recommends remedial actions only when radon levels exceed 4.0 pCi/l.	None required	Less than significant
3.5 Hazards	HM-11: Impacts from Future Accidental Release of Hazardous Materials. The proposed project will include general commercial, business/research park, and light industrial uses. The specific tenants of the uses is still unknown, thus it is not possible to assess potential hazards and significance. Since any facilities using hazardous substances will have to be designed, constructed, and operated in accordance with applicable regulations, no significant impacts are expected to occur.	None required	Less than significant
3.5 Hazards	HM-12: Electromagnetic Fields. Electromagnetic fields occur independently of one another as electric and magnetic fields at the 60-Hz frequency used in transmission lines, and both are created by electric charges. Electric fields exist when these charges are not moving. Magnetic fields are created when the electric charges are moving. The magnitude of both electric and magnetic fields falls off rapidly as the distance from the source increases (proportional to the inverse of the square of distance). However, the existing transmission line is located within a 250-foot-wide easement area. In addition both specific plans have proposed commercial and/or industrial uses within the easterly portion of the existing transmission right-of-way. Potential impacts associated with EMF exposure to residential areas are less than significant (Class III) and no mitigation is necessary.	None required	Less than significant
3.5 Hazards	HM-14: Offsite Contaminated Soil Disposal. There is the potential for cumulative impacts resulting from disposal of contaminated soil associated with remediation activities at an appropriate offsite disposal facility, which will be determined by the type and concentration of the contaminant. This potential impact would occur if site remediation is required, and actual impacts will only be determined after completion of a comprehensive Phase II ESA. The amount of contaminated soil	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	generated by this project is expected to be relatively minor and no significant contribution to cumulative effects associated with potential reduced landfill capacity is anticipated. All necessary remediation activities, including transport and disposal of contaminated soil, would be in compliance with the regulating agencies' requirements.		
3.6 Biology	BIO-14: Direct Impacts to Habitat and Vegetation. Stormwater Runoff. An increase in impervious area in the developed portions of the project site would likely caused increased runoff into wetlands and waters of the U.S. and could potentially contain higher amounts of pollutants such as oil and gas runoff. Most of the stormwater runoff will be filtered and captured in bioswales proposed in the specific plan for the Southern Subarea.	None required	Less than significant
3.6 Biology	BIO-17: Direct Impacts to Common Wildlife Species. Displacement/Mortality of Wildlife. In addition to the loss of bird foraging habitat, the proposed development would directly disturb wildlife on the project site and potentially those areas adjacent to the site. Most species are expected to be displaced to adjacent areas of similar habitat, provided it is available at the onset of construction activity. However, wildlife that emigrate from the site are vulnerable to mortality by predation and unsuccessful competition for food and territory. In addition, species of low mobility (particularly burrowing mammals, amphibians, and reptiles) are expected to be destroyed during site preparation and construction.	None required	Less than significant
3.6 Biology	BIO-21. Direct Impacts to Wildlife Corridors. As discussed earlier, the Study Area serves as a wildlife corridor for animals passing between the Ormond Beach wetlands and the open space areas of federal, state, and local parklands located to the southwest. The proposed development would limit the use of this area as a wildlife corridor. However, this is not a significant impact because the development is positioned adjacent to existing development to the north and proposes open space/agriculture for the southern portion of the Southern Subarea adjacent to Ormond Beach.	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.6 Biology	BIO-24: Indirect Impacts to Special Status Wildlife. Tidewater Goby (Eucyclobius newberryi). The tidewater goby is designated an endangered species by the USFWS. It occurs in coastal brackish lagoons along the central and southern California coast. Local resident populations are present in the nearby J Street Drain at Ormond Beach 1.3 miles west of the Southern Subarea. There are no known records of tidewater goby in Oxnard No. 3 Canal; however, due to the proximity to a known population and presence of suitable habitat there is a moderate potential for it to occur there. No direct impacts to the Oxnard No. 3 Canal are anticipated from the proposed project and therefore, there are no direct impacts to the tidewater goby. Indirect impacts would include increased pollution and runoff due to increased impervious areas and development; however, these would be less than significant with implementation of bioswales and stormwater detention areas as proposed in the specific plan for the Southern Subarea.	None required.	Less than significant
3.6 Biology	Impact BIO-25: Threespined Unarmored Stickleback. The threespined unarmored stickleback is a small, scaleless fish that is a Federal and State Endangered species. Its known populations are restricted to the Santa Clara drainage in Los Angeles and Ventura counties, the San Antonio Creek on Vandenburg Airforce Base, San Luis Obispo county, San Felipe Creek in San Diego county and Shay Creek in San Bernardino county. Habitat degradation, including stream channelization, urbanization, agriculture, and groundwater pumping are critical factors in the decline of the threespine unarmored stickleback. A population has been observed in the drainage ditch at Ormond Beach (General Plan, 1990). Suitable habitat is not present in the Southern Subarea, therefore, there are no direct impacts to the threespined unarmored stickleback. Indirect impacts would include increased pollution and runoff due to increased impervious areas and development; however, this would be less than significant (Class III) with implementation of bioswales and stormwater detention areas as proposed in the specific plan for the Southern Subarea and Mitigation Measure BIO-5.	None required.	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.7 Land Use	LAND-1: Consistency with General Plan Land Use Policy. Table 3.7-2 outlines a series of policies from the General Plan Land Use Element that are focused specifically on the Ormond Beach Study Area. These include Balanced Development, Historical Functional Issues/Management Problems, Aesthetic Appearance, Recreational and Open Space Amenities, and the Regional Airport Facility. The specific plan for the Southern Subarea would be consistent with the policies of the City of Oxnard 2020 General Plan Land Use Element.	None required	Less than significant
3.7 Land Use	LAND-2: Consistency with General Plan Land Use Map. The proposed land use map for the Southern Subarea represents a fundamental shift in the type and distribution of uses in the area, compared with the Oxnard 2020 General Plan Map. Whereas the adopted General Plan calls for residential and energy-related uses, the plan for the Southern Subarea calls for a mix of light industrial and open space uses. Since the project includes a proposal to amend the City's General Plan Land Use Map to reflect proposed designations, under CEQA and City thresholds for assessment of Land Use Planning impacts, the Southern Subarea impacts are considered less than significant.	None required	Less than significant
3.7 Land Use	LAND-3: Consistency with Zoning Ordinance and Map. The specific plan for the Southern Subarea calls for the application of two City zoning categories, M-1 (Light Industrial) and BRP (Business Research Park), and would leave in place the County's zoning for the southernmost 220 acres, A-E (Agricultural Exclusive). Neither the M-1 nor the BRP designations would be consistent with the County's current zoning for the area. As part of the project approval process, the applicants are seeking annexation of all but the southernmost 220 acres to the City of Oxnard. With annexation, the applicants will need to establish zoning for the annexed land consistent with the above description, which, in response to State Planning Law, will also establish consistency with the proposed General Plan amendments.	None required	Less than significant
3.7 Land Use	LAND-4: Land Use Compatibility. The determination of the compatibility of land uses can be very subjective. For purposes of this analysis, the concept focuses on the interaction between uses, both existing and	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	proposed, and the extent to which one use might adversely affect another. The areas immediately adjacent to the Southern Subarea consist of agricultural uses (to north and east), industrial uses (to the southwest and west), and open space (to the southeast). Except for the area to the north, which would convert to residential uses, all neighboring areas are expected to retain their existing development types.		
3.7 Land Use	LAND-5: Consistency with Housing Element. The City's Housing Element includes a variety of policies and programs concerning housing, including identification of suitable sites to accommodate the City's regional fair share of affordable housing for the five-year period covered by the Element. Since there is no housing proposed within the Southern Subarea, there would be no issues related to policy consistency with the Housing Element. The project will, however, result in the reduction in housing potential as a result of the substitution of residential designations with business park and light industrial designations. This reduction will not, however, affect the attainment of the Housing Element's quantified regional fair share objectives because the Study Area was not included the analysis of adequate sites.	None required	Less than significant
3.7 Land Use	LAND-6: Consistency with LAFCO Policy. The Northern Subarea and all but 220 acres of the Southern Subarea will be seeking annexation to the City of Oxnard and the Calleguas Municipal Water District. In October 2007, Ventura LAFCO published an updated LAFCO Commissioner's Handbook. Pursuant to state law, the Handbook is "a compilation of all of the written policies and procedures adopted by the Ventura LAFCO." Annexation of the Northern Subarea to the City of Oxnard would conform with the LAFCO's standards and the Guidelines for Orderly Development.	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.7 Land Use	LAND-7: Consistency with SCAG Goals and Policies. Policies of SCAG's Regional Comprehensive Plan and Guide, Regional Transportation Plan (RTP), and Compass Growth Vision may be applicable to this project.	None required	Less than significant
3.7 Land Use	LAND-8: Long-Term Changes in Land Use Patterns and Growth Inducement. From a land use perspective, the Ormond Beach specific plans, including the required general plan amendments and rezonings, in combination with other proposed development in South Oxnard, would potentially affect the existing regional land use setting by displacing agricultural uses with residential, commercial, industrial, public, and open space uses.	None required	Less than significant
3.8 Agriculture	AG-1: Ag Zoning/ Williamson Act Conflicts. The proposed project is not under a Williamson Act Contract. The existing zoning within most of the Study Area is Agricultural Exclusive (A-E) (Ventura County Non-Coastal Zoning Ordinance, 12-06-05 Edition). The Study Area also includes a small portion of land in its extreme southern portion designated as Coastal Agricultural (C-A).	None required	Less than significant
3.8 Agriculture	AG-2: Induced Farmland Conversion. The proposed project is not expected to directly or indirectly result in conversion of adjacent farmlands to non-agricultural use.	None required	Less than significant
3.8 Agriculture	AG-3: Ag Water Supply. Existing active water wells within the Study Area would no longer be used for agricultural irrigation and the groundwater pumping rights would be transferred to the City of Oxnard for M&I uses. The transfer of the groundwater allocation to the City for urban uses is not expected to result in a significant impact to agricultural water supply, as it would follow GMA's allocation transfer restrictions.	None required	Less than significant
3.8 Agriculture	AG-4: Dust Impacts to Local Crops. Dust generated during construction could be deposited on adjacent agricultural lands with planted crops, temporarily reducing productivity. In addition, increase in traffic may result in permanent increase in emissions that could affect crops in adjacent agricultural lands.	AQ-1: Dust Control Measures. Dust generated by project construction shall be kept to a minimum by following dust control measures. AG-1. Buyer Notification. A buyer notification shall be recorded on a separate information sheet with the final map pursuant to City of Oxnard Standard Conditions.	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.8 Agriculture	AG-8: Land Use Conflicts. The Southern Subarea is presently used for agricultural operations. Properties east and southwest of the Study Area are also agricultural land. The development of urban uses close to the agricultural operations adjacent to the proposed project site could create conflicts between these land uses.	AG-1: Buyer Notification. A buyer notification shall be recorded on a separate information sheet with the final map pursuant to City of Oxnard Standard Conditions	Less than significant
3.9 Public Facilities and Services	PFS/Schools-1: Elementary Schools. Development of the Ormond Beach Specific Plan Study Area may generate a partial need for a new elementary school within the area. A 10-acre (net) potential elementary school site has been designated within the proposed Northern Subarea development, pending approval by OVESD. Either execution of an agreement between OVESD and the developer to complete the school at this site, or payment of the statutory development fees pursuant to Government Code Section 65995 would reduce these impacts to a level considered less than significant.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Schools-2: High Schools. Current school capacity does not adequately accommodate the anticipated number of students generated from the Ormond Beach Study Area. This impact would be reduced to a level considered less than significant through payment of state-mandated new development fees (Government Code Section 65995) by both the developers of the Northern and Southern Subarea projects.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Fire Protection-4. Construction-related Fire Hazards. A large amount of wood framing would occur within the Study Area during construction. In association with the framing operations, electrical, plumbing, communications, and ventilation systems would be installed in each structure. Given that these systems would be subject to City Codes and inspection by City personnel it is assumed they would be properly installed. In addition, construction sites would also be subject to City requirements relative to water availability and accessibility for fire fighting equipment. Adherence to City Codes and requirements during construction would reduce the potential for fire hazards within the Study Area to less than significant levels.	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.9 Public Facilities and Services	PFS/Fire Protection-5: Delays in Emergency Response. Construction of the proposed project would increase traffic both on and adjacent to the Study Area during work hours. This impact is considered less than significant given the periodic and short-term nature of construction-related traffic. With regard to emergency plans and evacuation routes, the proposed project would be required to comply with all standards and policies included in the City of Oxnard General Plan Safety Element and Zoning Ordinances. Therefore, no impacts to emergency plans and evacuation routes would occur.	None required	Less than significant
3.9 Public Utilities and Services	PFS/Fire Protection-7: Community Fire Protection Service. The demand for fire protection services would increase as the Southern Subarea develops over time. The Development Agreements call for the developers of the Northern and Southern Subareas to contribute 75 percent of the funds for the construction of a new fire station in south Oxnard. The remaining 25 percent would be contributed by the City. This lump-sum payment would be due at the issuance of the 1250th building permit.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Police Protection-9: Construction-related Police Service. The proposed project would require police protection services. The City of Oxnard Police Department will be responsible for police protection service to the project area. The construction phase of the proposed project would not normally require police protection services, except in cases of trespassing, theft, and vandalism. These are not unusual at a construction site, but are occasional, and the impact to police services would be less than significant. In addition, construction sites usually hire private security firms, further reducing the need for police services during construction.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Police Protection-10: Construction-related Traffic. Construction of the proposed project would increase traffic both on and adjacent to the Study Area during work hours. Slow-moving construction-related traffic on local adjacent roads may temporarily impact traffic flows on local roadways, contribute to vehicle accidents, and delay emergency vehicles traveling through the area.	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.9 Public Facilities and Services	PFS/Police Protection-12: Community Police Service. The demand for additional police protection services would increase as the Southern Subarea develops over time. With the projected addition of the police substation included with the proposed attached residential housing developed in Phase I of the Northern Subarea Specific Plan, and the shared office space in the new fire station for Police Department staff and volunteer use, the development permitted under the proposed project would not adversely affect the City's ability to provide adequate police protection services.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Parks and Recreation-15: Parkland Standards. The Southern Subarea does not include residential uses and is not expected to have a significant impact on park and recreation facilities. However, the Southern Subarea has approximately 51 acres of parks and greenbelts and 220 acres of permanently dedicated open space. Therefore, the Southern Subarea will contribute to the amount of parks and open space in the project area.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Solid Waste-17: Construction Waste. Site preparation and construction activities would generate 17,457 cubic yards of construction waste for office and light industrial development. Construction waste would be processed at the MRF, which can adequately handle the waste from construction of the proposed project.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Library Services-20: Libraries. The City's Public Library system currently has adequate capacity to serve the City. The new South Oxnard Library building at the intersection of Bard and Saviers Road will provide library services to the Study Area community. The impact to library services is therefore expected to be less than significant.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Utilities-22: Electricity Consumption (Construction). Electrical energy would be consumed temporarily during construction activities. Construction activities are not expected to consume significant amounts of energy, because the proposed project would be developed in phases over 10 to 15 years. No significant construction-related impacts on electrical supply or service will result from the proposed project.	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.9 Public Facilities and Services	PFS/Utilities-23: Natural Gas Consumption (Construction). Due to the nature of construction activities, natural gas would not be consumed during development of the proposed project. The proposed project is not expected to result in significant impacts to natural gas service.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Utilities-26: Electricity Consumption (Project). Considering that commercial, office, and light industrial uses consume 10 Watts per square foot per year, it is estimated that the proposed project would consume a total of 49,877,290 Watts per year (see Table 3.9-11). Given the existing and planned electrical facilities, no significant impacts are expected to result from the proposed project.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Utilities-27: Natural Gas Consumption (Project). Total natural gas consumption at project build-out is estimated at 173,573 cubic feet per year. The proposed project is not expected to result in significant impacts to natural gas service.	None required	Less than significant
3.9 Public Facilities and Services	PFS/Utilities-29: Other Utilities. Verizon Communication's and Adelphia/Time Warner's projections indicate that telephone, internet, and cable service will be available to accommodate the needs of the proposed Northern and Southern subarea developments. Therefore, no significant impacts to these utilities are expected to occur.	None required	Less than significant
3.10 Transportation	TRANS-4: Freight Movement. As described in the existing setting description, the Study Area, because of its proximity to the Port of Hueneme, plays a significant role in the transport of freight and goods. As a result, both freight rail and trucking are key features of the overall transportation system. While there is no existing or planned rail access to the Study Area, the City of Oxnard has designated Hueneme and Arnold Roads and Edison Drive as truck routes. Each of these roadways is expected to continue to serve freight movement needs, as well as accommodating new traffic associated with residential and commercial development in the Northern Subarea and light industrial and business park uses in the Southern Subarea. As discussed under Impacts Trans-1 and Trans-2 and their associated mitigation measures, the specific plans for these areas have identified roadway improvements that will	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	accommodate all traffic associated with development in the area, including truck-based freight movement.		
3.10 Transportation	TRANS-5: Transit Services. Future development in both the Northern and Southern subareas will generate increased demand for transit services. In recognition of this fact, the specific plans for each subarea include commitments to accommodation of public transit. This includes designing connections to primary arterials which are likely to serve as future transit routes (e.g., Rose Avenue, SouthShore Drive, and Hueneme Road); roadway layouts that maximize opportunities for designated public transportation stops; pedestrian-oriented neighborhoods that encourage pedestrian and bicycle connections with transit stops; transit supportive land uses to enhance the viability of transit; and commitment to quality design for public transportation stops, including benches and graphics that address all transit system standards. The project developers will work with public transportation providers within the throughout the engineering and buildout of the specific plans. The specific design of the public transportation system will be determined based on the service provider's routes and technical requirements. With such coordination, the impacts of development under the specific plans will result in a less than significant (Class III) impact on transit services in the Study Area.	None required	Less than significant
3.10 Transportation	TRANS-6: Non-motorized Transportation (Bike and Pedestrian). With development under the specific plans for the Northern and Southern subareas, there will be increased demand for non-motorized transportation facilities to connect work, shopping, residential, and recreational uses. Both specific plans include a variety of on- and off-street bike and pedestrian facilities to ensure that non-motorized transportation needs are accommodated. This includes accommodation of the Pacific Coast Bike Route in the design of Hueneme Road.	None required	Less than significant
3.11 Noise	NOISE-4: Point Mugu Naval Air Station Noise. Although the 65 CNEL noise contour for the installation is outside the Ormond Beach project border, the southeast part of the project is subject to aircraft overflights operating to and from the facility. While the installation's operations do	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	not constitute a significant impact on the project site, any potential noise-sensitive land uses located in the Southern Subarea should be informed that the area is subject to military aircraft overflights.		
3.11 Noise	NOISE-5: Ormond Beach Generating Station Noise. Noise from the power generating station was generally inaudible at the project site.	None required	Less than significant
3.11 Noise	NOISE-6: SoCal Gas Company Pumping Station. The noise levels measured in the vicinity of the gas pumping station were in the range of 45 to 55 dB at the project site. Since no noise sensitive land uses are planned near this noise source, this impacts associated with noise from the SoCal Gas Company Pumping Station is considered less than significant.	None required	Less than significant
3.11 Noise	NOISE-8: Pacific Vehicle Preparation Facility Noise. Noise from truck loading operations at the Pacific Vehicle Preparation Facility would have potential to be a significant noise impact, as the facility operates 24-hours per day. Vehicles are driven from the Port of Hueneme to the facility, and then are sent out via trucks and trains. The planned adjacent land use near the facility is light industrial. Since no noise sensitive land uses are planned near the facility, the impacts of noise originating from Pacific Vehicle Preparation operations is considered less than significant.	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-5: Scenic Vistas – Hueneme Road. Hueneme Road to the north of the Southern Subarea is a scenic roadway according to the City of Oxnard's General Plan. While the setbacks along the Hueneme Road Scenic Corridor would preserve views of the Santa Monica Mountains from the perspective of an eastbound motorist, obstructions of the distant mountains would still likely occur based on the allowable height of the future buildings constructed adjacent to Hueneme Road.	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-6: Scenic Vistas – Arnold Road. Land uses that would be located adjacent to Arnold Road, include business park uses and light industrial uses in the northern portion of the Southern Subarea. A drainage channel and parkway approximately 120-feet wide would separate Arnold Road from the proposed land uses. The southern portion of the	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
	Subarea would be developed as a wetland restoration area. Although the agricultural buffer would preserve the northerly viewshed, the allowable buildings heights could result in obstructions of the distant mountains and foothills. The design guidelines in specific plan for the Southern Subarea include a commitment to consideration of "views and vistas, both from within and from off-site." This provision will allow the City to ensure that development within the area maintains visual corridors.		
3.13 Aesthetics/ Visual Resources	AES-7: Scenic Vistas – Edison Road. Edison Road would provide north/south access to the Southern Subarea of the Ormond Beach Specific Plan. As buildings constructed within this area can be constructed to a maximum height of 55 feet, potential view obstructions of the distant mountains and ridgelines could occur. Because the specific plan for the Southern Subarea includes a commitment to consideration of views and vistas, the impact is considered less than significant	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-8: Scenic Highways. The closest State Scenic Highway to the Specific Plan area is Highway 1, which is located approximately two miles to the east of the Specific Plan Area. While views from Highway 1 would be slightly altered as the Specific Plan area would be developed with urban uses, the predominant visual features visible from the highway are the coastal areas to the south and agricultural lands and the Santa Monica Mountains to the east and northeast. Based on the distance of Highway 1 from the Specific Plan Area and the fact that no scenic vistas would be obstructed.	None required	Less than significant
3.13 Aesthetics/ Visual Resources	AES-10: Daytime Light and Glare. Development of the Ormond Beach Specific Plan would increase the amount of glare (indirect reflected light) generated in the immediate area during the daytime. Daytime sources of glare would primarily be generated by the activities of people, and the sun reflecting off glass windows of structures, automobiles, and trucks.	None required	Less than significant

TABLE ES-3 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES – SOUTHERN SUBAREA

Resource Area	Impact Summary	Mitigation Measure Summary	Residual Impact
3.13 Aesthetics/ Visual Resources	AES-11: Nighttime Light and Glare. The development of the Ormond Beach Specific Plan would also introduce new sources of nighttime light and glare. Nighttime sources of light would include vehicle headlights and lights used within buildings located throughout the project site.	None required	Less than significant
Class IV Impacts – Ormond Beach (Southern Subarea)			
3.6 Biology	BIO-16: Direct Impacts to Habitat and Vegetation. Waters of the U.S. The agricultural ditches will be replaced with bioswales that capture runoff from the proposed residential development. The bioswales will be vegetated with native wetland species and will be part of a 51-acre open space/greenbelt area including pedestrian trails and outdoor eating areas. This would improve the habitat quality an increase the acreage of wetlands and waters of the U.S. from 5 to just under 50 acres. This would be a beneficial impact.	None required	Beneficial impact

SECTION 1
INTRODUCTION

SECTION 1.0 INTRODUCTION

1.1 BACKGROUND AND PURPOSE OF THE FEIR

This FEIR assesses the potential environmental implications of implementing two proposed specific plans: the SouthShore Specific Plan and the South Ormond Beach Specific Plan. The City of Oxnard (City) has received applications for these specific plans from separate applicants to guide development in on approximately 917 acres of the Ormond Beach area. The specific plan projects are located within the City's Sphere of Influence (SOI) in the unincorporated area of Ventura County, just south of the City's current city limits. The first, the SouthShore Specific Plan, calls for a variety of residential uses, a small amount of mixed-use commercial development, an elementary school, a high school, a manmade lake, and supporting park and open space uses (see Figure 2-2 in Section 2 of this report). The second, the South Ormond Beach Specific Plan, calls for a mixture of light industrial and business park uses, as well as supporting open space and continuation of agricultural uses (see Figure 2-3).

In May 2007, the City of Oxnard published the Ormond Beach Specific Plan Draft Environmental Impact Report (DEIR). The DEIR was circulated for public review and comment for a period of 60 days, ending on July 20, 2007. During the public review process, the City accepted approximately 65 written and/or oral communications with comments on the proposed projects and the DEIR. The City reviewed those comments to identify specific environmental concerns and to determine whether any additional environmental analysis would be required to respond to issues raised in the comments. Based on that review, the City determined that several subjects addressed in the DEIR warranted additional analysis. These sections included the following:

- **Water Resources:** Based on additional water supply planning conducted by the City, new information became available to updated the analysis and impact conclusion related to water supply and demand, at both project and cumulative levels.
- **Biological Resources:** In response to comments received on the DEIR, the City and the project applicants reconsidered the overall approach to managing activities that might affect offsite sensitive biological resources (habitats and species). This included adjustments in the project commitments to resource management, resulting in a change in characterization of potential impacts.
- **Air Quality:** During the period of preparation for the May 2007 DEIR, new information became available concerning approaches to addressing greenhouse gases (GHG) and climate change in CEQA documents. In response to this new information and comments submitted on the DEIR, the City decided to introduce a new discussion of these issues and to place it in the Air Quality section of the report.

- **Alternatives Analysis:** In response to comments submitted on the May 2007 DEIR, the City determined that it would be prudent to update the discussion of alternatives to the project to include an alternative that would result in a lower level of development than the proposed projects. Thus, Chapter 4 now includes a comparative review of such an alternative (Alternative 5).

As a result of these determinations, the City decided to revise and recirculate the DEIR. The City also took the recirculation opportunity to address a variety of other comments submitted on the May 2007 draft, although those changes did not constitute significant new information per CEQA. The City opted to republish the entire document, rather than selected sections. The following discussions outline the statutory framework for the City's decision to recirculate.

1.1.1 Recirculation of the DEIR Pursuant to CEQA

The recirculation of an environmental impact report (EIR) is governed by Section 21092.1 of the Public Resources Code. This section states that:

> *When significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 and consultation has occurred pursuant to Sections 21104 and 21153, but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report.*

Significant new information is defined in Section 15088.5(a) of the State CEQA Guidelines:

> *As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement.*

"Significant new information" requiring recirculation includes, for example, a disclosure showing that:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

- A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

As described above, in considering recirculation of the DEIR, the City determined that at least the first and third of these categories of new information would be relevant.

1.1.2 Responses to Comments on the DEIR

Pursuant to Section 21092.1 of the Public Resources Code, Section 15088.5(f)(1) of the CEQA Guidelines provides the following direction:

> *When an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and, in such cases, need not respond to those comments received during the earlier circulation period. The lead agency shall advise reviewers, either in the text of the revised EIR or by an attachment to the revised EIR, that although part of the administrative record, the previous comments do not require a written response in the final EIR, and that new comments must be submitted for the revised EIR. The lead agency need only respond to those comments submitted in response to the recirculated revised EIR.*

In light of this provision, the City requested that reviewers of the Recirculated DEIR (RDEIR) submit new comments focused on this document. While the comments submitted on the May 2007 DEIR proved informative and influenced the updated content of the DEIR, the City did not provide formal responses to them.

1.1.3 Responses to Comments on the RDEIR

In accordance with Chapter 15088 of the California Environmental Quality Act (CEQA) Guidelines, the City of Oxnard, as the lead agency, has reviewed the comments received on the Recirculated Draft Environmental Impact Report (RDEIR) for the Ormond Beach Specific Plan Projects (dated July 2008) and has prepared written responses to the written comments received. The RDEIR was initially circulated for a 45-day public review period that began on July 24, 2008. In response to requests from several stakeholders, the City agreed to extend the review period by 15 days through September 22, 2008. The comments that the City received and the City’s responses to those comments are included in Volume II of this FEIR.

1.2 SUMMARY OF THE PROPOSED PROJECTS

The Ormond Beach Specific Plan Study Area is located on the Oxnard Plain in Ventura County, California (Figure ES-1). The boundaries of the Study Area are the easterly extension of West Pleasant Valley Drive on the north, an irregular line extending parallel to the Pacific Ocean on the south, the Olds Road and Arnold Road alignments on the east, and an irregular line that includes the Edison Drive alignment on the west (Figure ES-2). With the exception of part of a Southern California Edison transmission line right-of-way on the western edge, the property is located in unincorporated Ventura County, but within the City of Oxnard's SOI as defined by LAFCO and within the City of Oxnard's City Urban Restriction Boundary (CURB) limits. The Study Area is currently almost exclusively used for agricultural activities. Sod-farming operations occupy the majority of these cultivated lands, while strawberries and other agricultural row crops are produced in the northeast portion of the site.

The Study Area is surrounded by non-agricultural uses within the City of Oxnard to the north, west, and south. Existing adjacent uses include single-family residential to the north (Villa Capri and Tierra Vista neighborhoods) and light industrial uses (vehicle preparation centers) to the west. A green-waste composting facility (Agromin Wood Products), the Reliant Energy Ormond Beach Generating Station, and natural features, including wetland, dune, and beach areas, adjoin the Study Area to the south. Naval Base Ventura County Point Mugu is located less than a mile southeast of the Study Area. Existing adjacent uses also include agricultural operations to the east and southwest. The predominant crops within the properties east and southwest of the Study Area are row crops and sod. The Study Area is located approximately two miles east of the Port of Hueneme. Figure 2.1-1 (Section 2 of this report) shows surrounding ownerships.

The Study Area is further divided by Hueneme Road into two subareas: the Northern Subarea and the Southern Subarea. The Northern Subarea is proposed to be annexed as the SouthShore Specific Plan project area, while a portion of the Southern Subarea would be annexed as the South Ormond Beach Specific Plan project area. The SouthShore and South Ormond Beach specific plans annexations would total approximately 700 acres of unincorporated Ventura County (Figure ES-1). The City is considering and may approve adoption of either or both Specific Plans. If both specific plans are approved, approximately 330 acres would either be dedicated or otherwise protected in open space and parks uses or remain in agricultural use. Table 1-1 shows the specific breakdown of land uses.

TABLE 1-1
SPECIFIC PLAN LAND USE DESIGNATIONS

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**% of Total**	**Acres**	**% of Total**	**Acres**	**% of Total**
Residential-low	56.5	17.6			56.5	6.2
Residential-low Medium	35.3	11.0			35.3	3.9
Residential-medium	44.5	13.8			44.5	4.9
Mixed-use (Commercial)	4.8	1.5			4.8	0.5
Business/Research Park			61.3	10.3	61.3	6.7
Light Industrial	37.2	11.6	217.5	36.6	263.3	28.7
School	68.1	21.2			68.1	7.4
Park	39.4	12.2	51.0	8.6	90.4	9.9
Agriculture/Open Space	20.3	6.3	228.6	38.4	240.3	26.2
Other	15.8	4.9	36.4	6.1	52.2	5.7
Total	**321.9**	**100.0**	**594.8**	**100.0**	**916.7**	**100.0**

1.2.1 Northern Subarea

The SouthShore Specific Plan proposes to accommodate a mix of uses including up to 1,283 residential dwelling units of various types and densities; an elementary school; a high school; a community park; neighborhood parks; an 18-acre lake; a mixed-use commercial marketplace; light industrial uses; and open space and trails.

1.2.2 Southern Subarea

The South Ormond Beach Specific Plan proposes to develop approximately 279 of its 595 acres. The area immediately south of Hueneme Road would be developed primarily with light industrial (218 acres) and business/research park (61 acres) uses; with the remaining developed areas to include detention/biofiltration areas and greenbelts. A new overlay zone is being proposed along Edison Drive for port-related uses serving the Port of Hueneme. The southern 220 acres of the Southern Subarea would continue in agricultural use and would not be annexed to the City as part of this project. This property may be sold to the California Coastal Conservancy or partner organization for use as part of the larger Ormond Beach wetland restoration project. The California Coastal Conservancy is coordinating the restoration and maintenance planning of this area. All existing agricultural uses will continue in this area until the restoration process begins.

The projects are located on the Oxnard Plain, an area that will include continuing agricultural uses immediately adjacent to the project areas. To protect the viability of these existing agricultural areas, each Specific Plan provides a minimum 150-foot agricultural vegetative buffer ("shelter belt") between the proposed development and the adjacent ongoing agricultural operations. Both Specific Plans also identify public pedestrian/bicycle paths

along the eastern edge of the Study Area, demarcated by Olds and Arnold roads, and along SouthShore Drive/Rose Avenue consistent with the City Master Plan of Bikeways.

1.3 REQUIRED APPROVALS

The projects require a number of discretionary approvals by both the Planning Commission and the City Council, including the following:

- General Plan amendment for each subarea.
- Establishment of zoning for the Northern and Southern subareas through adoption of specific plans for the project areas. The exception is the southernmost 220 acres in the Southern Subarea, which will retain its zoning under Ventura County jurisdiction.
- Approval of development agreements for each of the subareas.
- Approval of tentative tract maps for each of the subareas.

In addition to these City of Oxnard actions, other permits or actions by other agencies for which this document may be used are as follows:

- With the exception of the southernmost 220 acres, reorganization and approval by Local Agency Formation Commission (LAFCO) of annexation of the Northern and Southern subareas and the simultaneous detachment of the same area from the Ventura County Resource Conservation District and the Ventura County Fire Protection District.
- Annexation to Metropolitan Water District of Southern California and Calleguas Municipal Water District. Army Corps of Engineers Nationwide Permit for activities within waters of the U.S. (33 CFR 330).
- Los Angeles Regional Water Quality Control Board Section 401 Water Quality Certification.
- Ventura County Watershed Protection District approval.
-

1.4 ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

The proposed specific plan projects represent discretionary actions subject to the environmental review requirements of the California Environmental Quality Act (CEQA). Therefore, this Environmental Impact Report (EIR) has been prepared to evaluate the impacts of the projects. The Planning and Environmental Services Division determined in its initial review that there was a potential for the projects to cause significant environmental impacts and that an EIR was clearly required for the projects. Therefore an initial study was not required to be prepared, pursuant to Section 15063 (a) of the CEQA Guidelines. A Notice of Preparation (NOP) was issued in September 2005 for a 30-day public review period. The City received written comments on the NOP from the following parties: County of Ventura

Resource Management Agency, Planning Division; Oxnard Union High School District, Calleguas Municipal Water District, Ocean View Elementary School District, California Department of Transportation, Ventura County Air Pollution Control District, Ventura County Watershed Protection District, County of Ventura Public Works Agency Transportation Department, Ventura Local Agency Formation Commission, Southern California Association of Governments, Department of the Navy, Metropolitan Water District, California Governor's Office of Planning and Research (OPR), Roger Pariseau, and California Department of Toxic Substances Control (see Appendix G).

A Notice of Availability was issued concurrently with the RDEIR announcing that the document was available to the public and agencies for review and comment. Initially, a 45-day public review period was announced, but the City agreed to extend the review period to 60 days in response to requests from several stakeholders. During the review period, the City of Oxnard Planning Commission also conducted a public hearing on the RDEIR to receive comments on the document. The City reviewed the written comments received and has responded to all such comments. The comments and the City's responses are included in this Final EIR (see Volume II).

As noted earlier, an EIR is an informational document to advise the public agency decision-makers and the public of the environmental effects of a project. CEQA Guidelines Section 15151 provides direction on the standard of adequacy for an EIR, stating the following:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.*

SECTION 2
PROJECT DESCRIPTION

SECTION 2. PROJECT DESCRIPTION

This section describes the project at a sufficient level of detail to allow the public, reviewing agencies, and decision-makers to evaluate and review the environmental impacts of the proposed project. Section 15124 of the CEQA Guidelines requires that a Project Description include the following:

1) Maps of the location and boundaries of the proposed project and its regional location.
2) A statement of objectives including the underlying purpose of the project.
3) A description of the project's technical, economic, and environmental characteristics, including principal engineering proposals and supporting public service facilities.
4) A statement describing intended uses of the EIR, including the agencies that are expected to use the EIR in their decision-making, the permits and approvals required to implement the project, and any related environmental review and consultation requirements required by federal, state or local laws, regulations or policies.

2.1 PROJECT LOCATION AND BOUNDARIES

This EIR addresses the 916.8-acre Ormond Beach Specific Plan Study Area, located on the Oxnard Plain in unincorporated Ventura County, California, just outside the southeastern city limits of the City of Oxnard. The boundaries of the Study Area are the easterly extension of West Pleasant Valley Drive on the north, an irregular line extending parallel to the Pacific Ocean on the south, the Olds Road and Arnold Road alignments on the east, and an irregular line that includes the Edison Drive alignment on the west. The Study Area is further divided by Hueneme Road into two subareas: the 322.0-acre Northern Subarea and the 594.8-acre Southern Subarea (refer to Figure 2-1). These two subareas have separate applicants, each of which has developed a specific plan pursuant to Government Code Section 65451. The two specific plans are filed with the City of Oxnard under the names "SouthShore Specific Plan" for the Northern Subarea and "South Ormond Beach Specific Plan" for the Southern Subarea. This EIR addresses both subareas and both specific plans.

The City of Oxnard 2020 General Plan Land Use Element established 16 "Major Study Areas" (MSAs). Due to their size, historical agricultural uses, and undeveloped status, these MSAs were the subject of thorough study and review during the preparation of the 2020 General Plan. Among the MSAs established by the 2020 General Plan is the Ormond Beach Study Area (Area 16), a 2,789-acre area that encompasses the Ormond Beach Specific Plan Study Area (refer to Figure 2-2) . Within the MSAs, the 2020 General Plan Land Use Map also identified several "Specific Plan Areas" (SPAs), including one for the Ormond Beach area covering approximately 1,330 acres and encompassing the Ormond Beach Specific Plan Study Area.

In 1998, the City of Oxnard adopted the Save Our Agricultural Resources (SOAR) Ordinance which created a City Urban Restriction Boundary (CURB). SOAR was put on a ballot for voter approval in November 1998 and was subsequently approved. The purpose of the CURB is to create a boundary within which urban development will be allowed. Through the year 2020, the City of Oxnard will restrict urban services only to land located within the CURB. To be consistent with the City of Oxnard's SOAR Ordinance, new development must be located within the CURB limits.

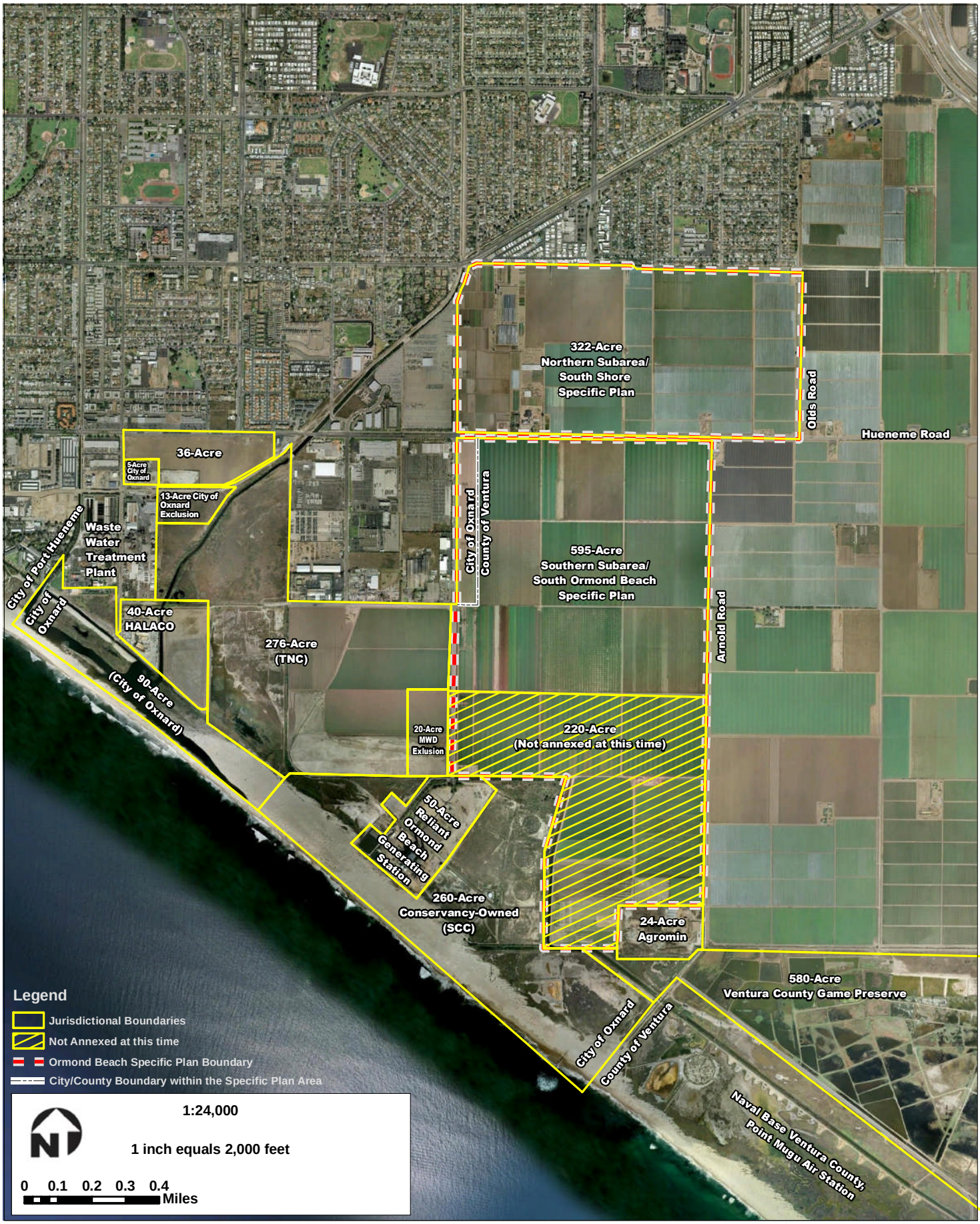
2.1.1 Northern Subarea Boundary

The Northern Subarea encompasses 321.7 acres located north of Hueneme Road. The Northern Subarea is bounded by Hueneme Road on the south, Edison Drive on the west and Olds Road on the east. Pleasant Valley Road turns diagonally from an east-west alignment to a northeast alignment at the northwest corner of the Northern Subarea. The Villa Capri Mobile Home Park and the Tierra Vista neighborhoods form the northern boundary of the Northern Subarea. Rose Avenue currently terminates at roughly the mid-point of the northern boundary Northern Subarea.

The Northern Subarea adjoins the corporate limits of the City of Oxnard to the north and west and lies within the City of Oxnard's Sphere of Influence (SOI) as determined by the Ventura County Local Area Formation Commission (LAFCO). It is located entirely within the CURB limits. The ownership and affected assessor parcel numbers (APNs) are shown in Table 2-1.

TABLE 2-1
SOUTHSHORE SPECIFIC PLAN PROPERTY OWNERS AND PARCEL NUMBERS

Property Owner	Acres	APNs
Southern California Edison	60.5	223-0-030-125, -145, -185, -195, -205
Pacific Lighting Service Company	0.7	223-0-030-225
Allen and Marilyn Camp	14.7	223-0-030-255
Ruby Ishimoto	5.0	223-0-030-275
Ruby Katsuda	9.8	223-0-030-285
Ritsuo & Kazuko Ito/Sachiko Ito	85.3	223-0-030-295
Raymond Swift	24.5	223-0-030-300
ITO Farms, Inc.	84.0	223-0-030-310
Plum Vista	35.4	223-0-030-320
City of Oxnard	1.8	224-0-043-155, 224-0-054-355
Total	**321.7**	



Ormond Beach Specific Plan EIR **URS Corporation**	**Source:** *Aspen Environmental Group* *© 2009 Google Earth*	Figure 2-1. **PROJECT AREA WITH SELECTED SURROUNDING OWNERSHIP**	Nov. 2009

2.1.2 Southern Subarea Boundary

The Southern Subarea encompasses approximately 595 acres located south of Hueneme Road between Edison Drive and Arnold Road. The area is bounded by Hueneme Road to the north, Edison Drive to the west, and Arnold Road to the east. With the exception of a Southern California Edison transmission line right-of-way on the western edge, the property is in unincorporated Ventura County. The entire subarea is located within the City of Oxnard's SOI as defined by LAFCO and within the City of Oxnard's CURB limits. The ownership and affected APNs are shown in Table 2-2.

TABLE 2-2
SOUTH ORMOND PROPERTY OWNERS AND PARCEL NUMBERS

Property Owner	Acres	APNs
Marathon Land	35.3	231-0-040-050, 231-0-040-095, 231-0-040-135, 231-0-040-195
Deardorf-Jackson	61.1	231-0-020-280, 231-0-020-290
Silver Star	42.3	231-0-020-30
Callens Ranch	69.8	231-0-020-315
Milligan Ranch	44.5	231-0-020-270
Southern California Edison	341.9	231-0-020-180, 231-0-040-200
Total	**594.9**	

2.2 PROJECT OBJECTIVES

The 2020 General Plan outlined objectives for each of the Major Study Areas identified in the Plan, including the 2,789-acre Ormond Beach area (Area 16). The objectives for the Ormond Beach area apply to an area that extends well beyond the boundaries of the 917-acre Ormond Beach Specific Plan Study Area. The objectives, thus, address a variety of issues relevant to areas not affected by the proposed specific plans. This includes areas along the coastal shoreline to the west of the Specific Plan Study Area and 1,600 acres of agricultural land to the east of the Study Area that were placed outside of the City Urban Restriction Boundary (CURB) following adoption of the 2020 General Plan. The objectives for the Ormond Beach Major Study Area, as expressed in the 2020 General Plan, are as follows:

- New development shall be comprehensively planned in a balanced and orderly manner, providing for housing, employment, retail, and recreation opportunities, while assuring timely and cost-effective provision for needed public services and infrastructure facilities.
- New development shall address historic functional issues and management problems, including:
  - Scattered, uncoordinated industrial and residential uses in the area
  - Inappropriate and environmentally damaging use of ocean front area
  - The lack of public access to beach areas suited to public use and enjoyment

  - Poor water management in the study area and related adverse effects on wetlands resources
- New development shall be designated and located to improve the appearance and function of this area by provisions for:
  - Buffering and landscaping adjacent to the Southern California Edison (now Reliant Energy) power plant site
  - Relocation or removal of the Halaco Engineering Company facility and restoration of the site
  - A broad mix of residential, commercial and open space uses that will create an overall appearance comparable to, or superior to the northern portion of the City
- New development shall protect existing public access to the shoreline, create new opportunities for access and enhance recreational opportunities for residents and visitors by:
  - Providing for a broad range of public recreation and visitor-serving commercial activities for residents and visitors
  - Creating new coastal access ways and public use areas
  - Improving access to the beachfront consistent with resource protection needs
- New development shall minimize adverse impacts on sensitive coastal resources, and protect significant coastal resources within the study area by:
  - Restoration and enhancement of wetlands and other sensitive habitats
  - Mitigating wetland resources and resource impacts, in a manner consistent with Coastal Act policies and U.S. Army Corps of Engineers 404 requirements (e.g., "no net loss")
  - Preparing a long-term habitat management program consistent with CEQA monitoring, Coastal Act and U.S. Army Corps 404 requirements.
- New development shall be located and designed to minimize or avoid adverse impacts on regional resources (e.g., air and water quality) and facilities (e.g., roadway, waste treatment facilities) consistent with regional growth management goals and objectives.
  - New development shall be sited and designed in a manner that will mitigate potential use conflicts and protect the ongoing operations of Southern California Edison (now Reliant Energy) Ormond Beach power station and the Navy's Point Mugu facilities.
  - New development shall be located and designed so as to assure continued consideration of the development of a new regional airport facility in the area if further analysis indicates that such a facility would be appropriate in this location.
  - New development shall provide a diversity of housing types to allow for a greater range of housing than currently is typical in the City, including mixed-use residential/commercial areas such as those in Mandalay Beach and Channel Islands Marina.

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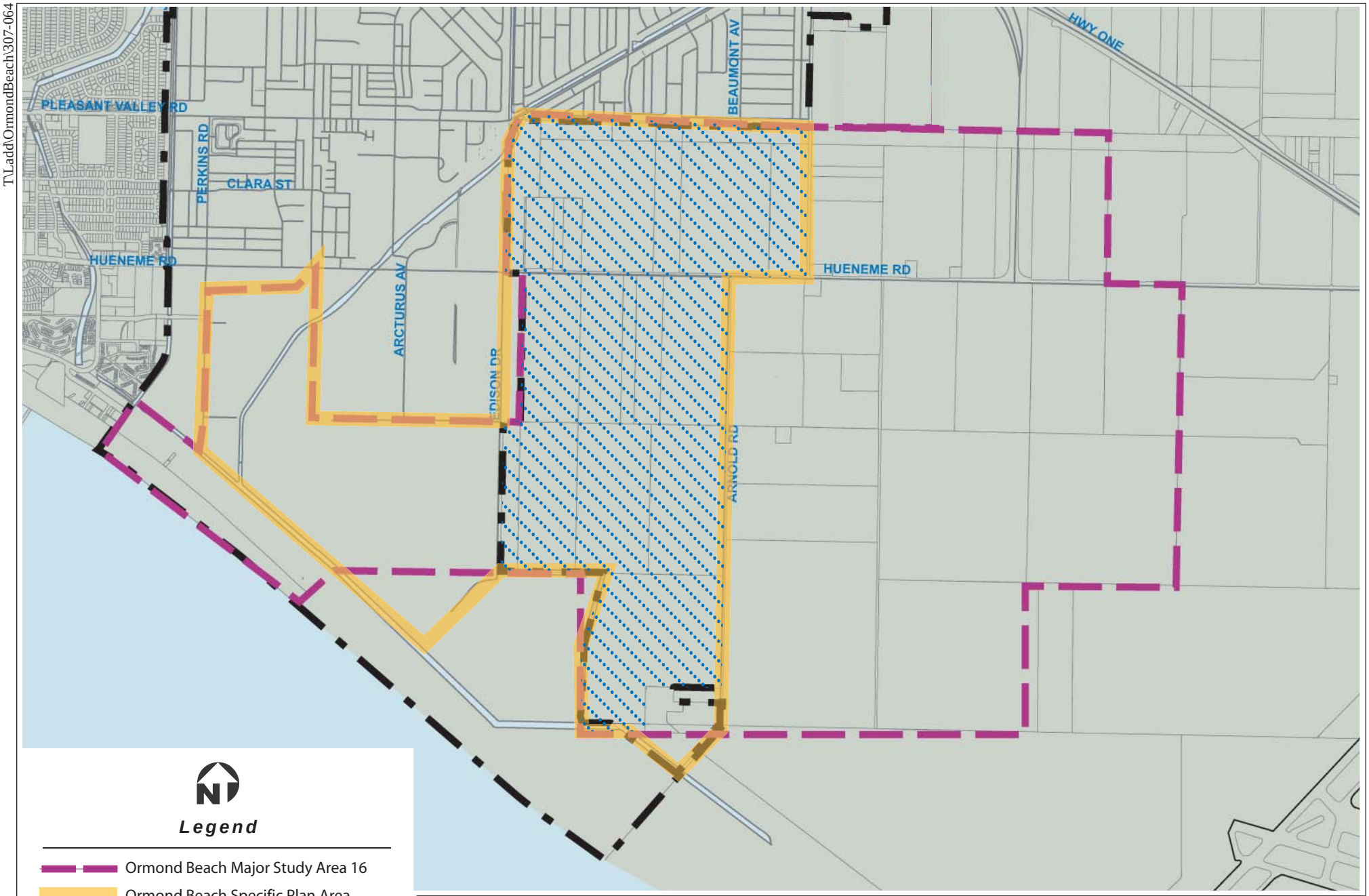

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *City of Oxnard 2020 General Plan* *Dated: March 2007*	Figure 2-2. **ORMOND BEACH COMBINED PLANNING AREAS**	Nov. 2009

2.2.1 Northern Subarea

In addition to the objectives presented in the 2020 General Plan, the project applicants (Hearthside Homes, LLC) have established objectives for the Northern Subarea Specific Plan, consistent with the provisions of Government Code 65451, as well as the policies set forth in the City's 2020 General Plan. These objectives are described in Table 2-3.

TABLE 2-3
SOUTHSHORE SPECIFIC PLAN OBJECTIVES

Provide a comprehensive land use plan that designates the distribution, location, and extent of all land uses, roadways and public facilities within the community
Create a cohesive community by providing a variety of housing, recreation, and neighborhood commercial opportunities so that families and individuals can live, work, and play within the community
Provide strong pedestrian connections between the Northern Subarea and compatible surrounding land uses, in particular, walkways to the existing neighborhoods to the north
Provide housing that is compatible with the existing character of the area and reflects the range of housing opportunities sought by the City's General Plan
Provide for a variety of housing types and sizes, connected to a variety of parks and open space experiences
Improve the visual character of this portion of the City, in particular as viewed from Hueneme Road, a designated scenic corridor
Plan this edge of the City in a manner that is complementary to and compatible with the agricultural areas east of Olds Road and south of Hueneme Road
Provide a pedestrian-oriented community that encourages walking and bicycling, reduces resident reliance upon the automobile, and fosters a traditional "small town" atmosphere
Provide community facilities – including an elementary school, a community park, and an open space corridor along Hueneme Road – that will serve the needs of the Oxnard residents both within and outside of the Northern Subarea
Provide a system of neighborhood parks, mini parks, and open space areas that will satisfy the needs of the residents of the Specific Plan Area
Provide both the opportunity to establish a new high school within the community, as well as an alternative to use this same land for other residential and public community facilities if the high school site is not acquired by the school district
Include planning areas and concepts that will encourage the creative use of technology to reduce energy and water consumption
Provide design guidelines and development regulations to promote consistent, high quality future community improvements
Provide for entry landscaping and signage suitable for the gateway entry to the City and to identify the project
Provide implementation programs that address phasing and financing necessary to carry out the successful build-out, operation and maintenance of the project
Provide a fiscally-sound community that will generate sufficient revenues to cover the cost of City services
Provide a Specific Plan that is "user friendly," in the sense of being both functional for city staff to administer and understandable to future builders and the general public

2.2.2 Southern Subarea

The objectives for the Southern Subarea, as established by the applicants (Marathon Land et al.), are described in Table 2-4.

TABLE 2-4
SOUTH ORMOND BEACH SPECIFIC PLAN OBJECTIVES

Allow for the California Coastal Conservancy's request to acquire 220 acres of coastal land as part of the Conservancy's Ormond Beach Wetlands Restoration Project
Respond to potential encroachment issues on the Point Mugu Naval Air Station (Naval Base Ventura County) operations by not locating residential uses south of Hueneme Road
Provide a comprehensive land use plan that designates the distribution, location and extent of all land uses, roadways and public facilities within the subarea
Provide a significant buffer area between the developed areas of the subarea and the potential wetland restoration area
Improve the visual character of this portion of the City, in particular as viewed from Hueneme Road, a designated scenic corridor
Plan the edges of the project to respond to adjacent uses including the Northern Subarea to the north, the agricultural uses to the east and the resource protection area to the south
Provide a sustainable infrastructure plan that will complement the nearby wetlands areas
Provide development regulations and design guidelines to promote community improvements that are of consistent high quality
Provide for entry landscaping and monument signage intended to identify the project
Provide a Specific Plan that clearly communicates the requirements to City staff, the public and future developers to facilitate successful implementation

2.3 PROJECT TECHNICAL, ENVIRONMENTAL, AND ECONOMIC CHARACTERISTICS

2.3.1 Overview

The applicants, Hearthside Homes, LLC (Northern Subarea) (Figure 2-3), and Marathon Land et al. (Southern Subarea) (Figure 2-4), are separately requesting the City of Oxnard to adopt the SouthShore Specific Plan and South Ormond Beach Specific Plan, respectively. The City has directed the applicants to process their Specific Plans concurrently, although each will be separately considered and will require separate actions by the City. Each Specific Plan would also require City approval of several other related actions, including the following:

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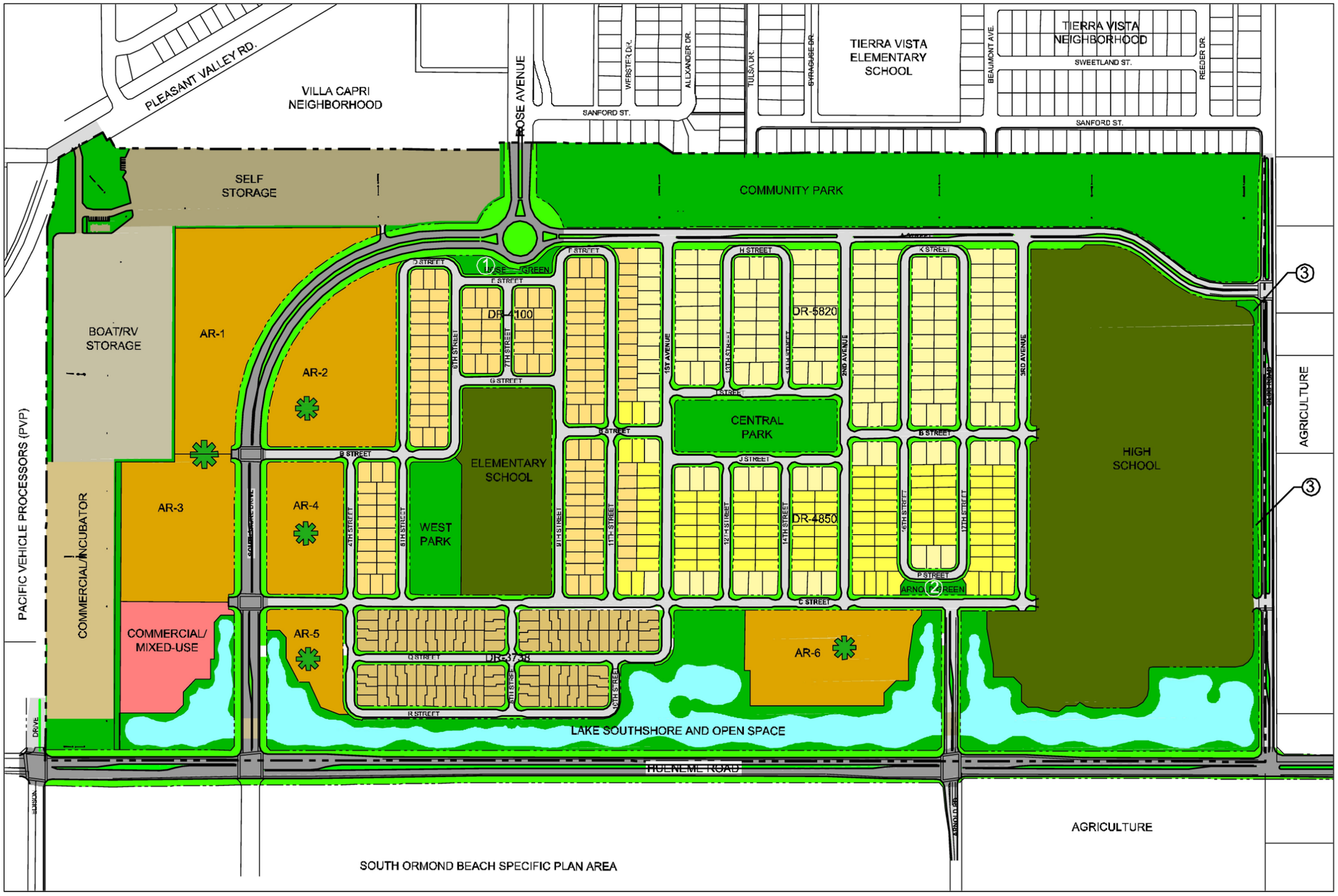

Ormond Beach Specific Plan EIR **URS Corporation**	**Source:** City of Oxnard SouthShore Specific Plan Dated: August 28, 2009	Figure 2-3. **PROPOSED SOUTHSHORE SPECIFIC PLAN**	Nov. 2009

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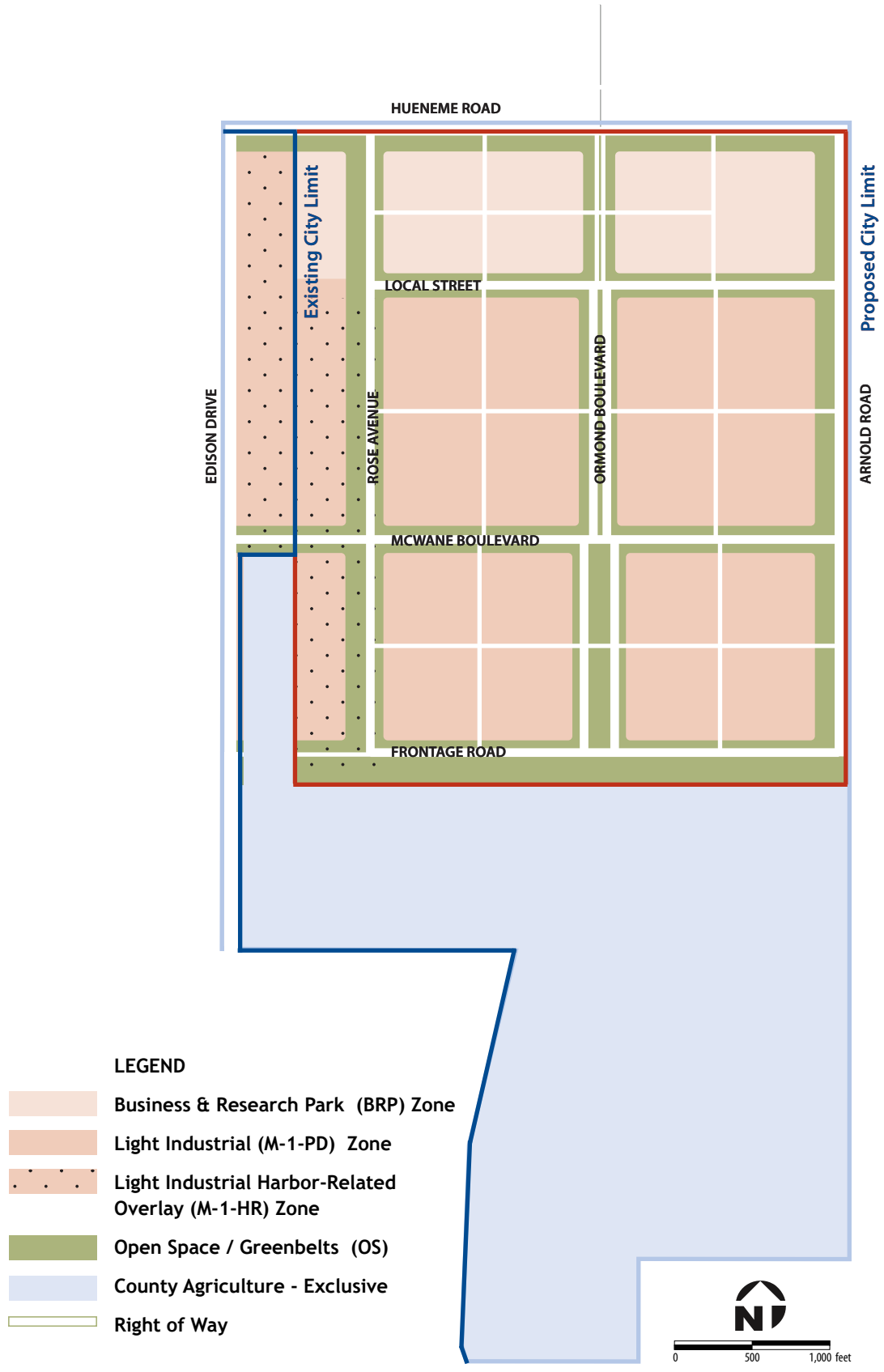


Ormond Beach Specific Plan EIR URS Corporation	**Source:** South Ormond Beach Specific Plan, Mar 2009	Figure 2-4. **PROPOSED SOUTH ORMOND BEACH SPECIFIC PLAN**	Nov. 2009

- Annexation of the portions of Specific Plan Study Area to the City LAFCO and the simultaneous detachment of the same areas from the Ventura County Resource Conservation District and the Ventura County Fire Protection District
- General Plan amendment for each subarea
- Establishment of zoning for the Northern and Southern Subareas according to the City's Zoning Ordinance, since they are not currently within the City limits
- Approval of development agreements for each of the subareas

Approval of tentative tract maps for each of the subareas California Government Code Section 65451 includes the following requirements for specific plans:

(a) A specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

(1) The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.

(2) The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.

(3) Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.

(4) A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2), and (3).

(b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

2.3.2 Study Area Context and Existing Conditions

The 917-acre Ormond Beach Specific Plan Study Area is part of the approximately 1,380-acre Specific Plan Area designated in the City's 2020 General Plan (adopted November 1990). Of the remaining acreage, 265 acres have been acquired by the State Coastal Conservancy for wetland restoration and buffer areas, 276 acres have been acquired by the Nature Conservancy for wetland restoration and buffer areas, and approximately 60 acres (the former Halaco property) were recently acquired by Alpha and Omega Development, LLC. The "Halaco Site" has been proposed by the US Environmental Protection Agency (EPA) and the State of California to be added to the Superfund National Priorities List. The City of Oxnard owns another 13 acres and the Metropolitan Water District owns 20 acres (refer to Figure 2-1).

The Study Area lies just outside of Oxnard's current corporate boundary, but is located in the Oxnard Sphere of Influence (SOI) as adopted by the Ventura County Local Agency Formation Commission (LAFCO). The Study Area is surrounded by a variety of uses. To the north, within the City of Oxnard, the land consists of developed single-family residential uses in the Tierra Vista and Villa Capri neighborhoods. To the south, in unincorporated Ventura County, the land consists of undeveloped property and the Reliant Energy electrical generation plant (Ormond Beach Generating Station). To the east, also in unincorporated Ventura County, the land consists of agricultural fields and Naval Base Ventura County (NBVC) Point Mugu. To the west, within the City of Oxnard, uses include light industrial (north of McWane Boulevard) and agricultural uses (south of McWane Boulevard).

2.3.2.1 Northern Subarea Existing Uses

Existing land use within the northern subarea consists of commercial agriculture, primarily strawberry and other agricultural row crop production. Southern California Edison's 220 KV overhead power transmission lines run along the northern and western edges of the subarea.

The agricultural fields that comprise the existing project site are relatively flat with approximately 11 feet of relief, northeast to southwest with elevations ranging from 14 to 25 feet. These fields are approximately one to 2.5 feet below the finished surface elevation of Hueneme Road. Drainage from the neighborhoods north and northeast of the site is intercepted by City of Oxnard storm drains that convey water to the west and to the Oxnard Industrial Drain. The Sanford System collects runoff from the farm fields northeast of Olds Road and Sanford Street through two recently installed connections to this system.

Stormwater from the agricultural fields exits the site at three locations. The first location is a 42-inch corrugated metal pipe at the corner of Edison Drive and Hueneme Road maintained by the City of Oxnard. The second is a 24-inch box culvert at Hueneme Road and Arnold Road. The final location is an 18-inch-high by 48-inch-wide concrete box culvert at the corner of Olds Road and Hueneme Road maintained by the County of Ventura.

Irrigation for crops in the Northern Subarea is provided by an existing agricultural water line. The 14-inch Mugu line and 16-inch Ocean view water lines bisect the Project site. These lines serve as distribution infrastructure for private water districts. They run in parallel west of Rose Avenue, along the north edge of the SCE property, then extend south to Hueneme Road, bisecting the Northern Subarea.

2.3.2.2 Southern Subarea Existing Uses

Existing land uses onsite include commercial agriculture (sod farming), with several small supporting farm structures. The western edge of the site along Edison Drive is an

approximately 250-foot wide strip owned by the utility company Southern California Edison (SCE) that includes fifteen towers supporting 220 KV overhead power transmission lines.

Agricultural lands are located to the east and west of the site. Adjacent to the southern boundary of the site are the Reliant Energy Ormond Beach Generating Station and the Agromin Wood Products facility. Further to the south are coastal dune and beach areas and the NVBC Point Mugu. A Pacific Vehicle Processors vehicle storage lot is located across Edison Road on the west. An agricultural ditch managed by the Oxnard Drainage District (ODD) defines the southern boundary of the site. The Oxnard Industrial Drain (OID), operated by the Ventura County Watershed Protection District, is located to the west.

Primary vehicular access to the site is provided by Hueneme Road. Rice Road, approximately 2.5 miles east of the site, connects to the 101 freeway.

The existing agricultural fields generally slope north to south, averaging 0.25 percent across the site. The elevation changes from approximately five feet above mean seal level (amsl) in the southwest area of the site within the Community Reserve area, to approximately 15 feet amsl at Hueneme Road. Stormwater from the current agricultural operations currently drains to the west and south from the project site to an agricultural ditch maintained by the Oxnard Drainage District (ODD). This agricultural ditch flows from the site through NBVC Point Mugu to Mugu Lagoon and the Pacific Ocean. During the 1930's a series of below-grade tile drains were installed to control ground water levels within the Southern Subarea. The drains empty into the ODD agricultural ditch but are in poor repair and currently convey minimal amounts of water.

Irrigation water for the current agricultural uses is provided by onsite agricultural wells. In addition to the onsite wells, there are a number of existing water lines in and surrounding the property. A 14-inch line serving the NBVC Point Mugu and a 16-inch line serving the Ocean View Water District are located in Hueneme Road.

2.3.3 Northern Subarea Specific Plan

The Northern Subarea consists of approximately 322 acres of the Study Area lying north of Hueneme Road and currently used for agriculture. The SouthShore Specific Plan proposes to provide a mix of uses including up to 1,283 residential dwelling units of varying types and densities; an elementary school; a high school; a community park; neighborhood parks; an 18-acre lake; a mixed-use commercial marketplace; light industrial uses; and open spaces and trails. Figure 2-3 and Table 2-5 show the proposed distribution of uses within the Northern Subarea. The SouthShore Specific Plan also proposes a system of public facilities and service infrastructure to support the proposed development. Development of the Northern Subarea will require approximately 450,000 cubic yards of fill material. The fill would consist of sub-

soil to be obtained from dredging material supplied by Ventura County. Soil transfer is projected to occur over an approximately 12 week timeframe. The SouthShore Project will be developed in two phases over a five-year period.

TABLE 2-5
SPECIFIC PLAN LAND USE DESIGNATIONS

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**DU/SF**	**Acres**	**SF**	**Acres**	**DU/SF**
Residential-Low	56.5	289			56.5	289
Residential-Low Medium	37.3	262			37.3	262
Residential-Medium	40.9	712			40.9	712
Mixed-Use (Residential)		20				20
Mixed-Use (Commercial)	4.2	62,726			4.2	62,726
Business/Research Park			61.3	934,580	61.3	934,580
Light Industrial	37.2	568,052	217.5	3,009,996	254.7	3,578,048
School	63.5				63.5	
Park	39.6				39.6	
Agriculture			228.6		228.6	
Misc Open Space	25.4		51.0		76.4	
Other	17.4		36.4		53.8	
Total Acreage	322.0		594.8		916.8	
Residential Units		1,283				1,283
Non-Residential Square Footage		630,778		3,944,576		4,575,354

2.3.3.1 Land Use

A total of 1,283 residential units are proposed for the Northern Subarea encompassing a wide range of housing as called for in the City of Oxnard 2020 General Plan. Densities will range from single-family homes of approximately 5 to 8 dwelling units per acre (du/ac) to multi-family densities of approximately 15 to 18 du/ac. The average density for all residential area within the Northern Subarea is approximately 9.5 dwelling units per gross acre which is consistent with the 2020 General Plan's zoning designation of Residential Low-Medium (8 to 12 du/ac). In general, densities are higher near SouthShore Drive and Hueneme Road, especially at the community entries.

A total of 551 single-family homes are planned in four residential lot sizes. The single-family residential neighborhoods are generally located within the interior of the Northern Subarea, where homes are focused on and around a series of parks and open space areas. Multi-family

attached residential neighborhoods will be generally located nearer the arterial highways within and bordering the Subarea. The number of affordable units will be ten percent of the total residential units within the project as required by the City of Oxnard. These will be rental apartment units.

The Southern California Edison (SCE) property that forms the westerly and northerly edge of the Northern Subarea, west of Rose Avenue, will incorporate three compatible uses: a 15.0-acre Self Storage facility, a 12.9-acre Boat and Recreational Vehicle Storage Facility and a 9.3-acre Commercial/Incubator Development containing one-story buildings.

The Land Use Plan for the Northern Subarea proposes 4.2 acres of mixed-use development at the northwest corner of SouthShore Drive and Hueneme Road. These uses include retail and personal service businesses as identified in the City of Oxnard's C-2 General Commercial Zone. Up to 20 attached residential units may be incorporated within the commercial area.

The Ventura County Agricultural Policy Advisory Committee (APAC) has developed guidelines to alleviate agricultural-urban interface conflicts. A 150-foot vegetative shelter belt to serve as an agricultural buffer is proposed on the eastern edge of the Northern Subarea to comply with the APAC guidelines.

2.3.3.2 Public Facilities

An approximately 28.5-acre Community Park will be located along the northern portion of the SouthShore development east of Rose Avenue. The park will contain pedestrian connections to and from the existing Tierra Vista neighborhood.

Neighborhood parks, West Park and Central Park will be linked along the centrally located east-west collector for Street B and incorporated into the residential neighborhoods. West Park would consist of 3.7-acres integrated with the playing fields for the SouthShore Elementary School to the east. West Park would contain amenities compatible with elementary-school-age users. Central Park would be a 5.2-acre park located in the center of the SouthShore development and would provide a moderately sized amphitheatre.

Other open space areas proposed for the Northern Subarea include Rose Green, Arnold Green, and the Olds Road Trail Corridor. Rose Green consists of a planted area within the roundabout located at the entrance to the SouthShore development from Rose Avenue. Arnold Green would be located at the terminus of Arnold Road at the "C" Street Intersection. The Olds Road Trail Corridor (Agricultural Buffer) would serve as a community landscape buffer and would incorporate a Class I multi-use trail as well as a Class II bicycle path.

Two new public school sites are planned within the Northern Subarea. An 9.6-acre elementary school would be developed in conjunction with West Park. A 53.9-acre high

school site is being considered along the easterly edge near the northwest corner of Hueneme Road and Olds Road.

Lake SouthShore, an 18-acre man-made lake within a larger 33.8-acre open space area, would be constructed along Hueneme Road. Lake SouthShore will serve a variety of functional purposes including stormwater detention and retention, recreation, and open space. A Class I multi-use trail would be constructed within the open space along Hueneme Road. The 12-foot wide trail would provide a link to the community pedestrian sidewalks and the Class II bike trail system along Hueneme Road, SouthShore Drive, "A" Street, and part of Rose Avenue.

2.3.3.3 Circulation

Primary access to the SouthShore residential development from the north and from Hueneme Road will be provided by SouthShore Drive. Rose Avenue north of the development will be extended south into the Northern Subarea and will become SouthShore Drive at the community roundabout. SouthShore Drive will run north-south from the roundabout to Hueneme Road.

East of the roundabout, "A" Street will run east-west to provide west side access from Olds Road. A west side second entry from Olds Road at "C" street could be provided if the high school is not acquired.

Access to the Northern Subarea from the south will be provided by SouthShore Drive and an extension of Arnold Road north to "C" Street.

Primary access to the future non-residential development on the westerly portion of the SCE Property will be from Edison Road and Pleasant Valley Drive.

Two signalized entries from Hueneme Road are planned to control access into and out of the Northern Subarea, one at SouthShore Drive and the other at Arnold Road.

Along with the extensions to Rose Avenue and Arnold Road, Olds Road will be improved along the entire easterly boundary of the Northern Subarea, from Hueneme Road north to the SCE corridor and Tierra Vista community. Edison Drive and Pleasant Valley Road will be improved to provide access to the self storage, boat/RV storage, and commercial/incubator uses planned for the SCE property.

Traffic calming roadway improvements would be incorporated including the following:

- Community entries and intersection details – use of monument signage and architectural elements as visual focal points

- Chokers – at intersection corners, the street narrows extending the sidewalk and planting strip
- Closures – used along the northern and southern project boundaries to make travel through neighborhoods circuitous
- Neighborhood traffic circle – a raised island planed at the intersection where Rose Avenue becomes SouthShore Drive
- Enhanced Paving – flat raised areas at the intersection of "A" Street and 1st, 2nd, and 3rd avenues

The Northern Subarea circulation plan is designed to facilitate connection with public transportation in the Oxnard area. Specific elements to meet the relevant Circulation Elements within the City of Oxnard 2020 General Plan will be incorporated during development based on the service provider's routes and technical requirements.

Pedestrian walkways and trails will connect to existing and future offsite walks at the Rose Avenue entry, the SouthShore Drive and Arnold Avenue entries, at Edison Drive and Olds Road, and at the west and east ends of Hueneme Road as it leaves the Northern Subarea. Trails within the Community Park will connect SouthShore with the two existing streets (Tulsa Drive and Beaumont Avenue) in the Tierra Vista neighborhood to the north.

The Northern Subarea will provide both Class I multi-use trails and well as Class II bikeways. The Class I multi-use trail will provide a nearly 3-mile-long pedestrian trail along SouthShore Lake, SouthShore Drive, and the Community Park. Class II bikeways will form a continuous 3-mile loop within the SouthShore community and are planned within the Community Park, along the western side of SouthShore Drive and Olds Road and within the Lake SouthShore open space area. Offsite bicycle linkages will be provided at the Rose Avenue community entry, west and east along Hueneme Road, and at the SouthShore Drive, Edison Drive, and Arnold Road intersections with Hueneme Road.

2.3.3.4 Drainage

In order to minimize the impact to the undeveloped City of Oxnard and Ventura County storm drain facilities downstream of the Northern Subarea development, the proposed specific plan includes multiple on-site above- and below-ground detention facilities and off-site drainage diversion and conveyance facilities. This includes an 18-acre man-made lake, Lake SouthShore, to address onsite drainage requirements. Lake SouthShore will provide the necessary stormwater storage for post development runoff, and will also meter outlet flow amounts to the Oxnard Industrial Drain. Almost all flows to the undeveloped areas of Arnold Road and Olds Road will be eliminated. In addition, developed flows for stormwater runoff

to the 42-inch corrugated metal pipe City storm drain at Edison Drive will not be greater than current flows.

Lake SouthShore will be constructed to have an operating volume of 108 acre-feet and an average depth of 8 feet. The lake will be lined with a 30-mil PVC or other liner approved by the City of Oxnard. The lake will be designed to provide passive water quality treatment by the incorporation of biofilters, wetland water quality filters, and aeration.

2.3.3.5 Water

Domestic water for the Northern Subarea would be supplied through existing and proposed waterlines around the perimeter of the project. The City of Oxnard is constructing a new blending station (Blending Station #5) at the northwest corner of the SouthShore Specific Plan boundary. This blending station will provide blended water to the Northern Subarea via a pipeline traversing the SCE property to SouthShore Drive to connect to the looping system in Hueneme Road.

Pipeline facilities for reclaimed water will be installed with the SouthShore development. It is anticipated that reclaimed water will be available in late 2009 as part of the City's Advanced Water Purification Plan (AWPP).

New storm drains will be required to convey drainage to Lake SouthShore. The storm drains were sized estimating a run-off of 2 cubic feet per second per acre (cfs/acre). The volume of lake storage was based on project run-off volumes.

Catch basins will be used to regulate the amount of surface water on SouthShore's street system. The lake level will allow streets to be designed with minimal grades and slopes in accordance with City of Oxnard standards.

2.3.4 Southern Subarea Specific Plan

The Southern Subarea consists of the proposed South Ormond Beach Specific Plan Area, comprising approximately 595 acres south of Hueneme Road. Development in the northern portion of the Southern Subarea would consist of a business/research park, light industrial facilities, and harbor-related uses. The business park would be zoned as a Business Research Park (BRP) and would be located within a 61.3-acre area adjacent to Hueneme Road. The remaining 217.5 acres would be zoned as Light Industrial Planned Development (M-1-PD). Within this zoning area, approximately 48 acres is proposed for designation under a new Harbor Overlay zone (M-1-HR) to serve port-related needs of the Port of Hueneme. Figure 2-4 and Table 2.5 show the proposed distribution of uses within the Southern Subarea.

The southernmost 229 acres are proposed to remain in agricultural production and would not be annexed by the City as part of this project. This property may be sold to the California Coastal Conservancy or partner organization for inclusion in the larger Ormond Beach Wetland Restoration Project. The existing Ventura County Agriculture Exclusive (A-E) zoning would remain in place. The proposed land use designation is Open Space/Agriculture, as shown in Figure 2-4.

Approximately 50 acres of green-belts and detention/bioswales will be incorporated into the developed areas to provide passive recreation, outdoor seating areas, and stormwater filtration. An oversized stormwater detention basin will create a buffer area between the developed area and the community reserve area. The buffer area is proposed to be more than 225 feet wide to minimize noise, light, and human intrusion into the resource areas.

Access to the developed site would be provided by an entry from Hueneme Road from a new point of connection at the terminus of SouthShore Drive/Rose Avenue. Existing street connections at Edison Drive and Arnold Road will be improved as secondary access points. Within the project, McWane Road will be extended to connect Edison Drive with Arnold Road to the east. Three driveways are also proposed to provide direct access from Hueneme Road to the business and research park area. Signalized intersections along Hueneme Road will be provided at Rose Avenue/SouthShore Drive and Arnold Road, and will include acceleration and deceleration lanes at Rose Avenue/SouthShore Drive. Bus pads and shelters would be provided within the right-of-way at locations to be determined by Southern California Area Transit (SCAT).

All streets will include pedestrian walkways at least five feet wide, with parkways. Pedestrian walkways and trails will connect to existing and future offsite walks at the Rose Avenue/SouthShore Drive entry and Arnold Road.

An integrated bicycle and pedestrian trail system will provide access throughout the project area. The trails will link the South Ormond Beach Specific Plan Area with the SouthShore and Tierra Vista neighborhoods to the north and the potential wetlands restoration area in the southern portion of the project site. As part of the Pacific Bicycle and Hiking Trail identified in the Circulation Element of the Oxnard 2020 General Plan, a Class I multi-use pedestrian and bicycle trail will be located within the public right-of-way on the south side of Hueneme Road between Edison Drive and Arnold Road. Class II bikeways will be provided in the public right of way on other public streets. The design of all bicycle facilities will conform to the standards contained in the City of Oxnard's 2002 Bicycle Facilities Master Plan.

Access trails will lead to the buffer area adjacent to the 229-acre agricultural area, and will run the length of the detention basin at the southern edge of the developed area. One trail will be raised on a berm to provide a view of the coastal areas to the south. The trail will include

interpretive areas with signage, benches, and wildlife viewing areas. A fence will be located on the downhill side of the berm below the trail to protect sensitive wildlife areas.

2.4 INTENDED USES OF THIS EIR

CEQA identifies the lead agency as that entity with principal responsibility for approving a project. The City of Oxnard is the Lead Agency for development of the Study Area and the two proposed Specific Plan Project Areas. Other responsible agencies include the Ventura County Local Agency Formation Commission (LAFCO), Calleguas Municipal Water District, Metropolitan Water District, Ocean View School District, Oxnard Union High School District, the California Regional Water Quality Control Board, and the California Coastal Conservancy, as described below.

2.4.1 Actions Covered by this EIR

The actions that are intended to be covered by this EIR are as follows:

- Approval of General Plan amendments to establish consistency with the provisions of the specific plans (e.g., changes to the 2020 Land Use Map designation for the Study Area, changes to the text of the Land Use Element concerning the Ormond Beach Specific Plan Area; modification of the Circulation Map to cover the Study Area)
- With the exception of the southernmost 220 acres, approval of annexation of the Specific Plan Study Areas to the City of Oxnard by LAFCO and the simultaneous detachment of the same area from the Ventura County Resource Conservation District and the Ventura County Fire Protection District
- Establishment of pre-zoning per the City's Zoning Ordinance
- Approval of Tentative Tract Map(s) for the proposed development areas of the Specific Plan Study Areas
- Approval of Development Agreements for the Northern and Southern Subareas between the respective applicants and the City of Oxnard
- Approval by the Metropolitan Water District of California and the Calleguas Municipal Water District of the annexation into their service districts

Pursuant to CEQA Guidelines Section 15161, this EIR is intended to be used by the City of Oxnard as a Project EIR for these actions.

Other agencies using the EIR in their decision-making (Responsible Agencies) include the following:

- Ventura County Local Agency Formation Commission (LAFCO): Approval of annexations and detachments

- Calleguas Municipal Water District/Metropolitan Water District: Approval of reorganization and annexation
- Ocean View School District: Development of an elementary school in the Northern Subarea
- Oxnard Union High School District: Development of a high school in the Northern Subarea
- California Regional Water Quality Control Board: Approval of required discharge permits
- California Coastal Conservancy: Approval of acquisition of 220 acres for restoration purposes

SECTION 3
ENVIRONMENTAL ANALYSES

SECTION 3.0 ENVIRONMENTAL ANALYSES

3.1 INTRODUCTION

This section analyzes the potential environmental effects of the proposed specific plans for the Northern and Southern Subareas of the Ormond Beach Study Area.

3.1.1 Content and Structure

This section includes the following subsections, which correspond with the required content of EIRs according to the CEQA statutes and guidelines.

- Geology and Geologic Hazards
- Water Resources
- Air Quality
- Hazards and Hazardous Materials
- Biological Resources
- Land Use and Planning
- Agricultural Resources
- Public Facilities and Services
- Transportation and Circulation
- Noise
- Cultural Resources
- Visual/Aesthetic Resources

Each of these subsections consists of a summary of the relevant existing conditions, an explanation of the regulatory framework affecting the subject, and a description of the potential project impacts and the mitigation measures proposed to address significant or potentially significant impacts.

For each impact discussion, the analysis concludes with a statement of the severity of the impact. These conclusions are presented according to the following classifications:

- **Class I – Significant and Unavoidable Impact.** An impact that cannot be avoided or reduced below the level of significance given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved.
- **Class II – Significant but Feasibly Mitigated Impact.** An impact that is potentially significant, but that can be reduced to below the significance level given reasonably available and feasible mitigation measures. Such an impact requires CEQA Findings to be made if the project is approved.

- **Class III – Less than Significant Impact.** An impact that may be adverse, but does not exceed the significance level and does not require mitigation measures under CEQA. However, mitigation measures that could further lessen the minor adverse impacts may be recommended, if available and feasible.
- **Class IV – Beneficial Impact.** An effect that would reduce an existing environmental problem or hazard.

Section 15126(c) of the CEQA Guidelines requires that an EIR also identify *"significant irreversible environmental changes which would be involved in the proposed project should it be implemented."* Section 15127 states that the information required by Section 15126.2(c) concerning irreversible changes, need to be included in EIRs prepared in connection with any of the following activities: a) the adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency; b) the adoption by a Local Agency Formation Commission of a resolution making determinations; or c) a project which will be subject to the requirement for preparing an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969. Since the two specific plans would be adopted by the City of Oxnard, significant irreversible environmental impacts are considered in Section 5.0, Other CEQA Considerations.

3.1.2 Cumulative Setting

CEQA defines cumulative impacts as two or more individual actions that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental effects of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. The consideration of the potential cumulative effects of all known projects within a reasonable range of a proposed project provides a more complete perspective on future environmental conditions. The City of Oxnard has posted on its website a list of planned, pending, and approved residential, commercial, and industrial projects within the City. Table 3.1-1 summarizes the total cumulative development in Oxnard based on this information as of July 2009. Table 3.1-2 details all residential projects of at least 10 units and all non-residential projects with at least 10,000 square feet, including all major specific plans under consideration (except for the Ormond Beach projects).

TABLE 3.1-1
CUMULATIVE PROJECT DEVELOPMENT SUMMARY

Project Type	Pending Development
Residential	10,850 Units
Commercial	4,790,000 Square Feet
Industrial	6,441,500 Square Feet

Source: City of Oxnard, Development Services Department, Development Summaries, July 2009

The proposed projects are located in the southern part of Oxnard, while the projects listed in Table 3.1-2 are spread geographically throughout the city. Some impacts are not necessarily cumulatively considerable in relation to development that occurs further from the proposed project. For example, aesthetic and noise impacts tend to be isolated to areas nearby the Study Area, while traffic and water supply impacts have broader reach. Thus, some individual cumulative impact discussions rely on a smaller geographic area and cumulative project assumptions based on the subject matter. These are noted in the cumulative impact discussions as appropriate. Other issue areas consider cumulative development over a larger geographic area, such as all development within the city (e.g., water and traffic).

TABLE 3.1-2
CUMULATIVE PROJECT LIST

Type	Developer	Project	APN	Status	Res Units	Comm'l SF	Ind SF
Residential	Various	RiverPark Projects	Various	1, 2, 4	1,886		
	Steadfast-Kyle Winning	Las Cortes	201010002	2	501		
	Casden	Casden			344		
	Trimark Pacific-Bill Teller	North Shore	183001074	4	292		
	Lauterbach & Associates	Arbor View (Mira Loma)	183016014	1	291		
	Shea Properties	Artisan Apartments	213003145	3	272		
	D. R. Horton	Seabridge	188025014	4	214		
	Paragon Communities	Westwinds		2, 4	207		
	Bill McRenolds	Gateway Walk	204002026	2	190		
	Tucker Investments-Anthony Delcado	Victoria/Hemlock	187006009	2	116		
	D.R. Horton	Orbela	185017009	4	105		
	Tucker Investments	Rose/Pleasant Valley	224002028	1	99		
	Mike Marlow	The Anacapa Condominiums	196003329	1	70		
	Pat McCarthy Construction	Paseo Nuevo	222007019	1	60		
	Press Courier Lofts, LLC	Press Courier Lofts	202019137	2	52		
	Aldersgate Investment	Colonial House Mixed Use	200025212	2	40		
	Cabrillo Econ Dev Corporation	Paseo De Luz	139025003	2	25		
	Cabrillo Econ Dev Corporation	Camino Gonzalez	139025003	2	18		
	Lauterbach & Associates	DAL- Villa San Lorenzo	222010201	1	16		
Commercial	Shea Properties	Riverpark-The Collection	132011023	4		604,781	
	Centerpoint Mall/Coastal Architects	Centerpoint Mall Master Plan	203032026	1		469,767	
	Duesenberg Investment Company	Third Tower	142002262	2		300,000	
	Upside Investments	Carriage Square/ Lowe's	139025012	2		142,698	
	T.M. Mian & Associates	Homewood Suites	213005203	3		98,798	
	Michael Penrod	Rose Ranch	215006112	3		77,800	
	Lauterbach & Associates	Radio Lazer	202009512	1		75,536	
	Investec	Rancho Victoria	185017009	3		48,850	
	David P. Waite	Embassy Suites Mandalay Beach Resort	191038010	1		37,900	
	Heritage Equites, LLC	CVS Shopping Center	204006023	3		27,190	
	Statham (Lance Smigel)	Statham Commercial	220001032	3		22,500	

TABLE 3.1-2
CUMULATIVE PROJECT LIST
(Continued)

Type	Developer	Project	APN	Status	Res Units	Comm'l SF	Ind SF
	Leedy Ying	Shops at Vineyard	142002116	2		20,000	
	Churchyard and Development LLC	Tesco	221023251	4		19,554	
	Lauterbach & Associates	Trinity Baptist Church	216006107	3		18,800	
	Cruz Espinosa	Victory Outreach Church	222010106	3		17,000	
	Archdiocese of Los Angeles	Our Lady of Guadalupe Church	201004107	1		17,000	
	Aldersgale Investments	Colonial House Mixed Use	200025202	2		16,000	
	Paul Poirier	Walgreens	183013031	4		14,410	
	Oxnard Center	Centerpoint Mall Building "S"	203032024	4		12,780	
	John Parezo	Oxnard Crossroads	145021115	1		11,326	
Industrial	Sunbelt Enterprises	Seagate	216020506	4			149,786
	RIF-I Oxnard, LLC	Seagate Industrial	216020324	1			142,000
	Raznick Realty Group	Lion's Gate Annex	220022009	1			124,195
	Harry Ross Industries	Harbor Freight	201017050	1			99,782
	Michael Wallace	Wallace Business Park	144014104	1			88,729
	D2 Development	Teal Club Self Storage	183009057	2			80,407
	EDCO	Unnamed	213003148	3			74,430
	City of Oxnard	Advanced Purification Facility	231009225	2			60,000
	Gary Shein	Industrial Condominium Conversion	220001021	1			36,480
	Sunbelt Enterprises	Rose & Eastman	216018311	4			33,000
	City of Oxnard Parks Division	RiverPark Landscape Maint Facility	132003301	1			15,579
	Mark Pittman	Alcaraz Catering	216016033	4			13,700
	Quinn Company	Quinn Equipment Rental Facility	216021104	3			12,012
	Latuerbach & Associates	Associated Ready Mixed	216016040	1			11,421
Specific Plans	Borchard Family	Teal Club			1,150	37,000	-
	Daily Group	Wagon Wheel/The Village			1,500	50,300	-
	Sakioka Farms Company	Sakioka Farms			900	2,600,000	5,500,000
	Jones Ranch Specific Plan	Jones Ranch			2,500	50,000	-

* Status: 1 = Proposed; 2 = Approved; 3 =Plan Check; 4 = Under Construction
Source: City of Oxnard, Development Services Department, Development Summaries, July 2009

3.2
GEOLOGY AND GEOLOGIC HAZARDS

3.2 GEOLOGY AND GEOLOGIC HAZARDS

This section describes the geologic processes and features of the Ormond Beach Specific Plan Study Area, assesses impacts of the proposed uses, and recommends mitigation measures to reduce potential project impacts. This includes topography, geology and geohazards, soils, and erosion potential. The majority of the information contained in this section is derived from previous reports, with updates based on more recent publications and sources, as listed in the references section, and GIS work.

3.2.1 Existing Conditions

3.2.1.1 Topographic Setting – Regional Overview

The Ormond Beach Study Area lies on the Oxnard Coastal Plain, located in the southwester part of the onshore Ventura Basin, south of the Santa Ynez-Topatopa Mountains in the Transverse Ranges Geomorphic Province.

The Transverse Ranges Province is an east-west trending belt of mountains and uplands bounded on the north by the Santa Ynez fault, on the east by the San Bernardino Mountains, on the south by the Transverse Ranges frontal fault zone, and on the west by the Pacific Ocean. The Province is characterized by a diverse assemblage of igneous, volcanic, metamorphic and sedimentary rocks ranging in age from Cretaceous (65 million years ago) to Holocene (recent). Pronounced east-west trending folds and reverse faults characterize the region and reflect regional north-south compressional forces.

The Ventura Basin is bounded on the north by the Santa Ynez-Topatopa Mountains and on the south by the Channel Islands, the western Santa Monica Mountains, and the Simi Hills. To the east, the basin is bounded by the San Gabriel fault zone, which trends diagonally from the northwest to southeast. To the west, the Santa Barbara Channel separates the offshore islands from the mainland. Near the Santa Barbara Channel, the Ventura Basin is a transitional zone consisting of a coastal plain and shoreline. The coastal plain is composed of a broad alluvial plain, some of which forms estuaries and lagoons.

The Study Area lies in the southwest onshore portion of the Ventura Basin, named the Oxnard Coastal Plain. The Study Area is on a very gently to gently sloping coastal alluvial plain formed by deposition from the Santa Clara River system. Deposition of sediments by the ancient Santa Clara River system over the Oxnard Coastal Plain includes only a fraction of deposition in the Ventura Basin that spans back to the Cretaceous Period.

The natural topography of the Study Area has been considerably modified by humans. Clearing and grading of land for agriculture from the 1800s through the early 1900s resulted

in erosion and gullying of several areas and paving of roads has contributed to runoff and further erosion.

Elevations in the Study Area range from approximately 5 feet above mean sea level (msl) at the southern property boundary to approximately 25 feet above msl at the northern boundary. As depicted on Figure 3.2-1, the general slope gradient across the Study Area is approximately 0.25 percent from the northeast to the southwest.

3.2.1.1.1 Northern Subarea

The topography of the Northern Subarea, proposed for residential and mixed use development, slopes very gently to the southwest with the elevation changing from approximately 15 feet above mean sea level at the southwest corner of the site to 25 feet in the northeast corner of the site area (see Figure 3.2-1).

3.2.1.1.2 Southern Subarea

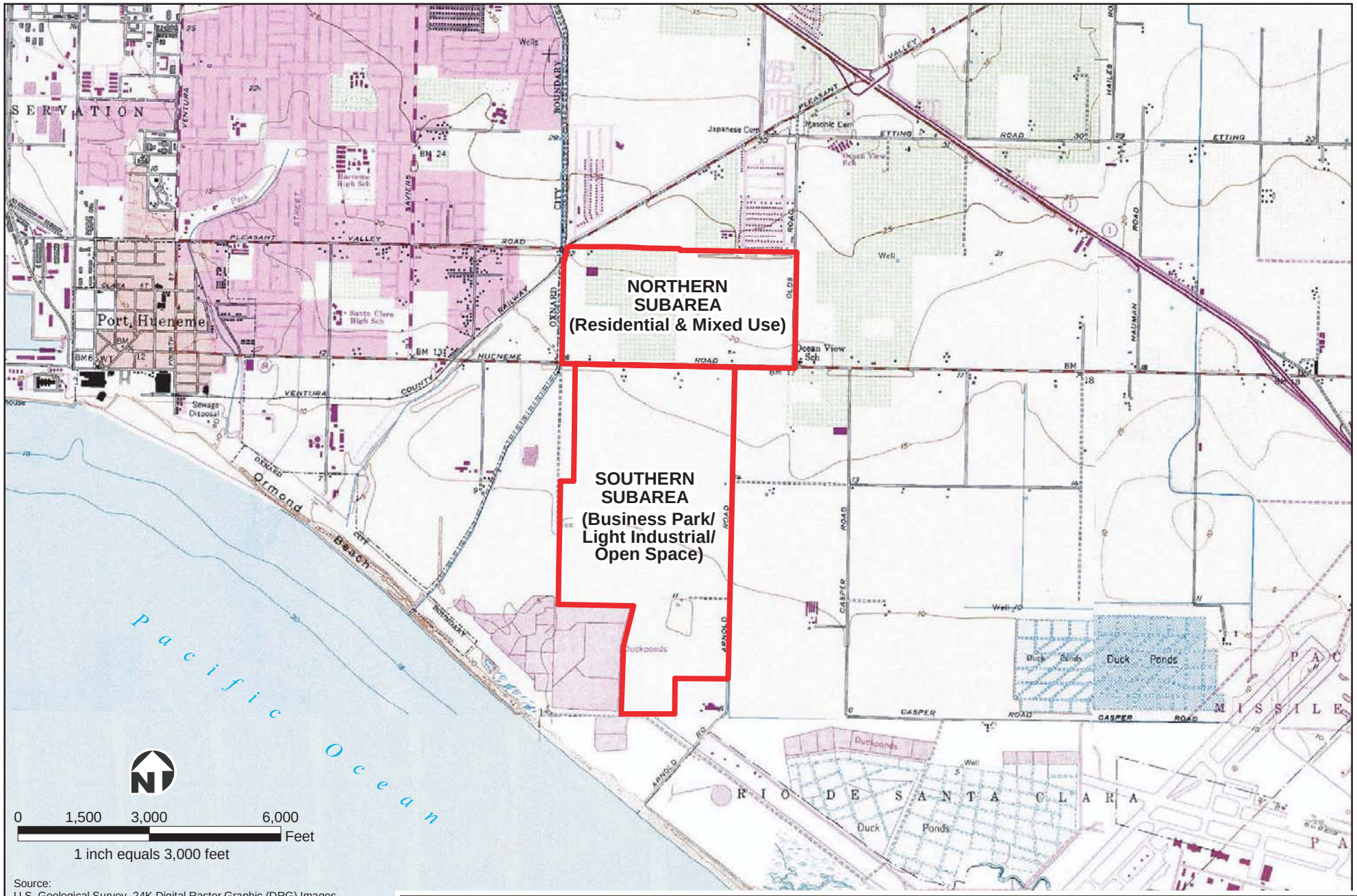
The topography of the Southern Subarea, proposed for light industrial and open space/agricultural uses, is also generally very consistent in gradient with the elevation changing from approximately 5 feet above mean sea level in the southwest area of the site to approximately 15 feet in the northern area (see Figure 3.2-1).

3.2.1.2 Geology – Regional Overview

3.2.1.2.1 Tectonic Setting

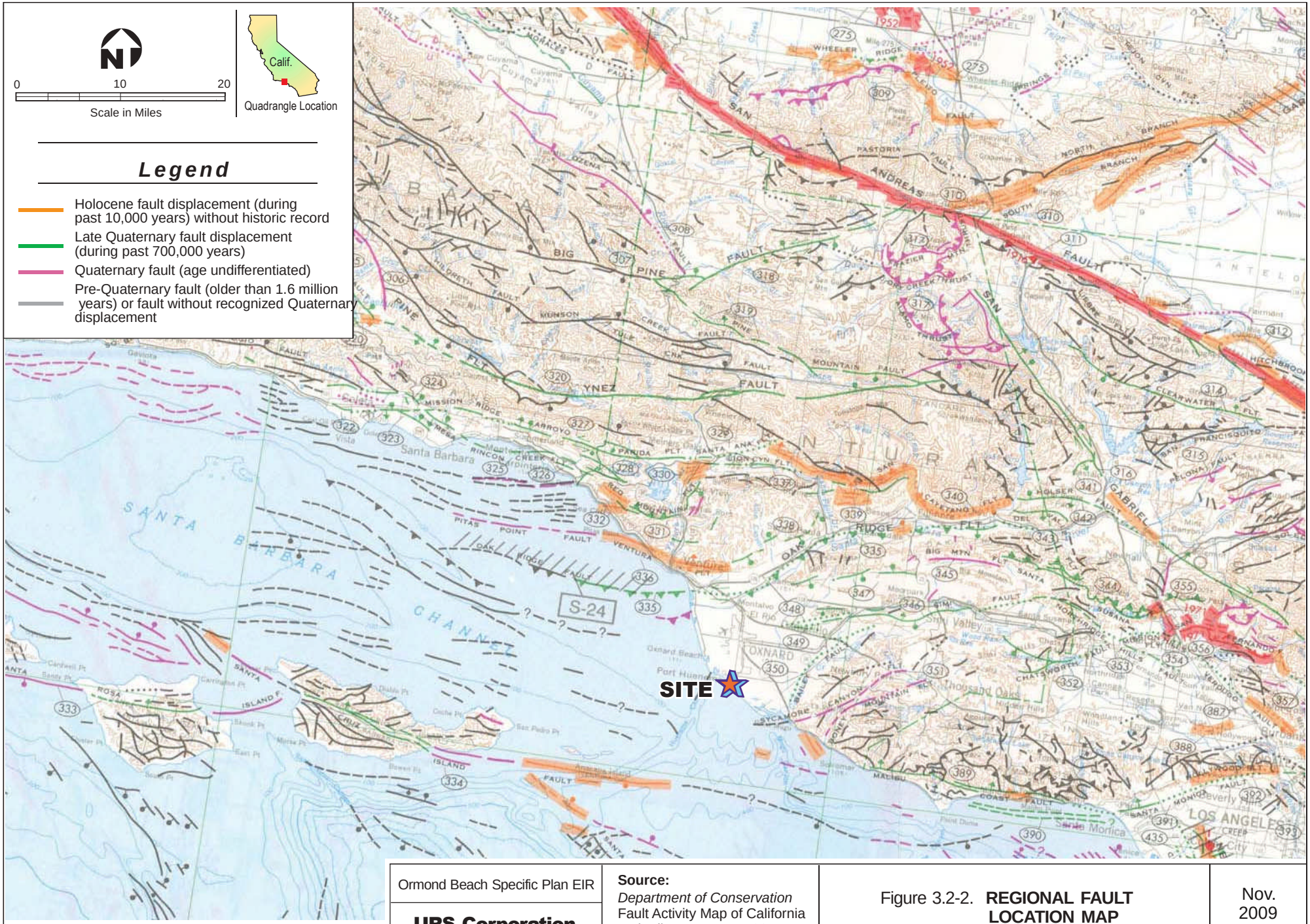
California straddles the transform margin of Western North America. Ventura County is located to the southwest of the San Andreas Fault, which is generally considered the primary structural boundary between the Pacific and North American tectonic plates. The Pacific Plate moves towards the northwest at a rate of about 45 mm/year as the result of seafloor spreading, colliding with and sliding laterally along the North American Plate. Transpressional (oblique-convergent) forces are created in the "Big Bend" of the plate boundary zone where the San Andreas Fault deviates to the west from its predominant northwest trend, creating the Transverse Ranges. The Santa Ynez-Topatopa Mountains and northern Channel Islands form the westernmost expression of the Transverse Ranges and are actively rising as a result of the oblique plate collision process.

A series of active, subparallel faults and folds are the manifestation of intense regional north-south compression (CGS, 1994). The east trending folds are broken by several major thrust faults (low angle reverse faults with the upblock moving up relative to the downblock) that dip to either the north or south. The locations of regional faults are depicted on Figure 3.2-2.



Source:
U.S. Geological Survey, 24K Digital Raster Graphic (DRG) Images - Trimmed Versions: Camarillo, USGS Code 34119B1, 1967.
Oxnard, USGS Code 34119B2, 1967.
Point Mugu, USGS code 34119A1, 1974.
National Geographic Seamless USGS Topographic Maps on CD-ROM, Powered by TOPO!

Ormond Beach Specific Plan EIR **URS Corporation**	Figure 3.2-1. **TOPOGRAPHIC MAP OF SITE AND SURROUNDING VICINITY**	Nov. 2009



Ormond Beach Specific Plan EIR **URS Corporation**	**Source:** *Department of Conservation* Fault Activity Map of California and Adjacent Areas; 1994	Figure 3.2-2. **REGIONAL FAULT LOCATION MAP**	Nov. 2009

The intense north-south compression experienced in the Transverse Range Provenance formed the Santa Ynez-Topatopa and Santa Monica Mountains and has also been responsible for rapid downwarping of basins such as the Ventura Basin. Sedimentary and volcanic rocks of Cretaceous to Miocene age have been uplifted and eroded, creating the scenic, steep ridges on the south flank of the Santa Ynez-Topatopa range and the western Santa Monica Mountains. The Ventura Basin, a structural trough formed by the north-south regional compression, is filled with over 35,000 feet of rocks and deposits of the Cretaceous through Recent periods (Dibblee, 1982).

3.2.1.2.2 Stratigraphy

Regional stratigraphy consists of Cretaceous to Recent rocks, primarily sedimentary in origin. As depicted on Figure 3.2-3, the general geology of the Oxnard Coastal Plain consists of unconsolidated alluvial and fluvial deposits of Holocene age, unconsolidated to partly consolidated alluvial and marine deposits, and unconsolidated and consolidated continental and marine deposits of Pleistocene age. Based on information obtained from oil exploration wells, Tertiary to Cretaceous age consolidated continental and marine rocks underlie the unconsolidated deposits throughout most of the basin (Dibblee, 1988; USGS, 2003).

Cretaceous through Tertiary consolidated bedrock are basal units in the Ventura Basin and are sedimentary, intrusive and extrusive igneous, and metamorphic in origin (Dibblee, 1988). Unconsolidated Quaternary deposits consist of Pleistocene epoch Pico Formation, Santa Barbara Formation, Las Posas Sand, San Pedro Formation, Saugus Formation, and unnamed and unconsolidated alluvial and fluvial deposits of the late Pleistocene to Holocene epochs (Dibblee, 1988; CH2MHill, 2004). Table 3.2-1 summarizes the description of lithologic units and formations present in the Oxnard Coastal Plain.

3.2.1.2.3 Paleontology

Fossils have been identified in formations and sediments of all ages in the Ventura Basin. However, obtaining fossils in sediments that are from the fossils' respective original place of deposition is typically restricted to the margins of the basin where bedrock exposures are located. Both megascopic and microscopic fossils have been documented in the formations mentioned above and are at depths unlikely to be encountered during construction of the project. Holocene to Recent sediments, which are estimated to extend to depths of at least 200 feet in the region of the Study Area, are noted to have microscopic fossils such as species of *foraminifera* that are both native to the sediments as well as non-native and derived from formations exposed along the margins of the basin (CGS, 2002; USGS, 1962). No known type locality fossil site, a location where only a particular fossil is located, is present within the Study Area.

TABLE 3.2-1
GENERALIZED STRATIGRAPHY OF THE OXNARD COASTAL PLAIN, VENTURA COUNTY, CA

Geologic Era	Geologic System	Geologic Series (Epoch)	Weber and Others (1976)	Dibblee
			Lithologic Units and Formations	
Cenozoic	Quaternary	Holocene	***Artificial Fill Recent Alluvium-*** Lagoonal, beach, river and flood plain deposits, and alluvial fan deposits	
			Recent Alluvium- Lagoonal, beach, river and flood plain deposits, and alluvial fan deposits	
		Late (Upper) Pleistocene	***Older Alluvium-*** Lagoonal, beach, river and flood plain, alluvial fan, terrace, and marine terrace deposits	
			Saugus Formation- Terrestrial fluvial sediments	Saugus Formation
			San Pedro Formation- Marine clays and sands and terrestrial fluvial sediments	Las Posas Sand- Marine shallow regressive sands
		Early (Lower) Pleistocene	***Santa Barbara Formation-*** Marine shallow regressive sands	
			Pico Formation- (Marine siltstones, sandstones, and conglomerates)	
	Tertiary	Pliocene	***Repetto Formation-*** Terrestrial conglomerates, sandstones, and shales	
		Miocene	***Santa Margarita Formation, Monterey Shale, Rincon Mudstone, Towsley Formation-*** Terrestrial fluvial sandstones and fine-grained lake deposits	
			Conejo Volcanics Terrestrial and marine extrusive and intrusive, felsic-andesites to basalts	
			Lower Topanga Formation, Topanga-Vaqueros Sandstones, Modelo Formation, Sisquoc Formation- Marine transgressive sands and siltstones	
		Oligocene	***Sespe Formation-*** Terrestrial fluvial claystones and sandstones	
		Eocene	***Llajas Formation, Coldwater Sandstone, Cozy Dell Shale, Matilija Sandstone, Juncal Formation, Santa Susana Formation-*** Marine sandstones, mudstones, and claystones	
		Paleocene	***Martinez Formation-*** Terrestrial conglomerate, sandstones, and marine shales	
Mesozoic	Upper Cretaceous		***Chico Formation-*** Sandstones with shales	

(Modified from USGS, 2003)

T:\Ladd\OrmondBeach\205-033

LEGEND

SURFICIAL SEDIMENTS

Qg *stream channel sand and gravel*
Qds *dune sand*
Qf *alluvial fan gravel and sand, locally slightly indurated*
Qa *alluvium; gravel, sand and clay of flatlands*
Qls *landslide debris*

OLDER SURFICIAL SEDIMENTS

Qoa *dissected, weakly indurated alluvial gravel, sand and clay*

- UNCONFORMITY -

CONEJO VOLCANICS

EXTRUSIVE VOLCANIC ROCKS

basaltic and andesitic flows interbedded with basaltic to dacitic fragmental (volcaniclastic) rocks, and reworked volcanic (epiclastic) sedimentary rocks

Tcvbb *basaltic flow breccias: dark gray to reddish-brown, porphyritic, dense to scoriaceous basalt; contains small phenocrysts of plagioclase feldspar and hypersthene: moderately coherent, erosion-resistant*

Tcvab *andesitic breccias: gray to brown breccias and conglomerates of angular to subrounded andesitic detritus in andesitic detrital matrix; moderately bedded, conherent and erosion-resistant; probably deposited subaerially as volcanic debris-flows (lahars) and fanglomerates (epiclasitic breccias and conglomerates)*

Tcvdb *dacitic breccias: light pinkish gray, or gray-white to tan, unsorted angular fragments of fine grained dacite-andesite in hard volcanic detrital matrix of same rock; crudely stratified to unstratified, hard, very coherent and erosion-resistant; erupted and probably depostied subaerially as volcanic talus breccias and debris-flows (lahars)*

Tcvb *basaltic rocks: brown-weathering, gray-black to dark olive-brown; fine grained; composed of plagioclase feldspar and mafic minerals, including olivine; ranges from basalt to andesite(?); massive to locally vaguely bedded; mostly flows and flow-breccias; basaltic facies include vesicular, locally amygdaloidal, and reddish scoriaceous flows, submarine pillowed flows and associated hyaloclastic breccias, mostly in lower part of sequence; north of Broome Ranch, lower part includes beds of tan arkosic sandstone; incoherent, crumbly where weathered, weakly resistant to erosion*

INTRUSIVE VOLCANIC ROCKS

plug, pods, dikes and sills of volcanic rocks of inferred middle Miocene age, related to, and intrusive into Conejo Volcanics and older formations

di *dacite: light gray to tan-weathering aphanitic to fine grained, microgranitic dacite to andesite, composed of feldspar and minor quartz (?), hornblende, and/or biotite; massive to vaguely flow-banded or brecciated along margins; hard, coherent where fine grained to somewhat incoherent where microgranitic; forms plugs, pods and dikes, intrusive into Conejo Volcanics, and rarely into Lower Topanga Formation; forms large plug/ dome of Conejo Mountain, possibly in part extrusive*

ai *andesite: gray to brown, aphanitic to very fine grained andesitic rocks; locally slightly porphyritic, massive; large intrusive(?) mass near Lake Sherwood contains pyrite, disseminated and in fractures; elsewhere forms thin dikes intrusive in other volcanic rocks; may include some basaltic dikes; moderately coherent and erosion-resistant*

db *diabase or ophitic basalt: dark to medium olive-gray, fine to locally coarse grained, massive, composed of lathy feldspar (calcic plagioclase) and ferromagnesian minerals, mostly augite and minor olivine (?); weakly coherent where weathered; intrusive as lenticular sills in lower Topanga Formation, in places complexly injected or sheared along margins*

LOWER TOPANGA FORMATION

Ttic *gray to gray-black micaceous clay shale; contains few thin layers of hard yellowish dolomitic shale and others of tan fine grained sandstone*

Ttis *tan arkosic sandstone and some interbedded gray micaceous shale*

? QUATERNARY — ? Pleistocene — ? Holocene

TERTIARY — Miocene

SYMBOLS
(not all symbols present on each map)

FORMATION CONTACT
dashed where inferred or indefinite

MEMBER CONTACT
between units of a formation

CONTACT BETWEEN SURFICIAL SEDIMENTS
located only approximately in places

FAULT
Dashed where indefinite or inferred, dotted where concealed, queried where existence is doubtful. Parallel arrows indicate inferred relative lateral movement. Relative vertical movement is shown by U/D (and U=upthrown side, D=downthrown side). Short arrow indicates dip of fault plane. Sawteeth are on upper plate of low angle thrust fault.

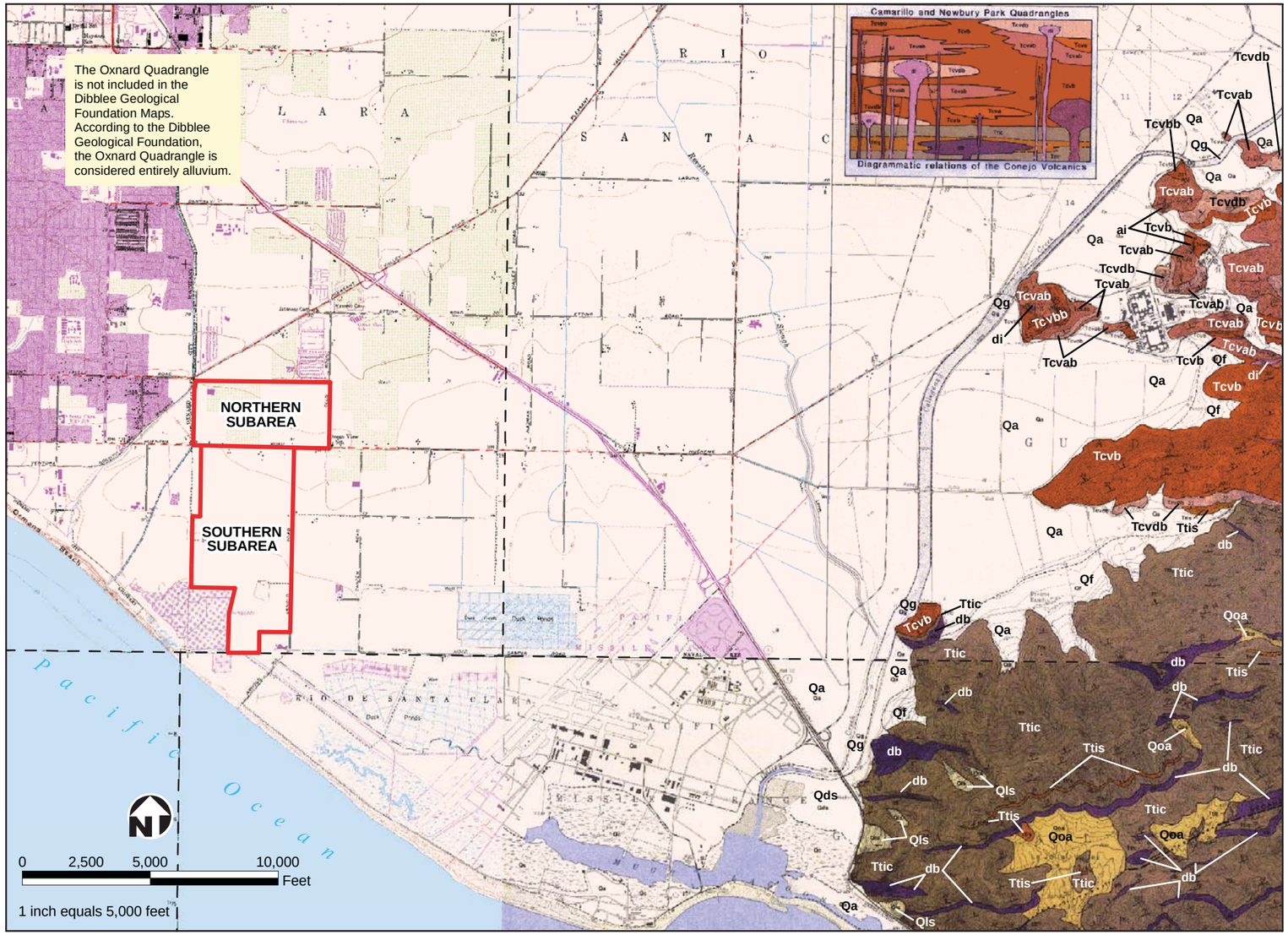
SYMBOLS
(continued)

ANTICLINE
SYNCLINE
arrow on axial trace indicates direction of plunge; dotted where concealed by surficial sediments

horizontal · inclined · inclined (approx.) · vertical · overturned · inclined metamorphic or igneous rock foliation or flow banding

STRIKE AND DIP OF STRATIFIED ROCKS

SANDSTONE MARKER BED
CONGLOMERATE MARKER BED
MARKER BED IN VOLCANICS
ABANDONED EXPLORATORY OIL (OR GAS) WELL
OIL WELL
TAR SEEP
SPRING
FOSSIL LOCALITY
HYDROTHERMAL ALTERATION AREA
DIRECTION OF LAND-SLIDE MOVEMENT
THIN DACITE DIKE
THIN ANDESITE DIKE
THIN BASALTIC DIKE
TRAVERTINE DEPOSIT



Reference:

Dibblee, T.W. Jr., 1990, Geologic map of the Camarillo and Newbury quadrangles, Ventura County, California: Diblee Geological Foundation, Map DF-28 (Ehrenspeck, H.E., ed.), scale 1:24,000.

Dibblee, T.W. Jr., 1990, Geologic map of the Point Mugu and Triunfo Pass quadrangles, Ventura and Los Angeles Counties, California: Diblee Geological Foundation, Map DF-29 (Ehrenspeck, H.E., ed.), scale 1:24,000.

U.S. Geological Survey, 24K Digital Raster Graphic (DRG) Images - Trimmed Versions:
Camarillo, USGS Code 34119B1, 1967.
Oxnard, USGS Code 34119B2, 1967.
Point Mugu, USGS code 34119A1, 1974.

Ormond Beach Specific Plan EIR **URS Corporation**	Figure 3.2-3. **GEOLOGIC MAP OF A PORTION OF THE VENTURA BASIN** **Ventura County, California**	Nov. 2009

3.2.1.3 Geologic Hazards

3.2.1.3.1 Faulting

For the purpose of evaluating potential for surface fault rupture, fault activity is classified as active or potentially active by the State of California (CGS, 1997). An active fault is defined as having experienced surface displacement within the last 11,000 years (Holocene epoch), while a potentially active fault evidences surface displacement within the last 2 million years (Quaternary Period).

As depicted in Figure 3.2-4, active and potentially active faults are located regionally proximal to the Study Area (CGS, 2002a), although no known active or potentially active faults are documented traversing the Study Area. Local faults zoned or considered active by regulatory agencies include the Simi fault system, Oak Ridge fault, the Malibu Coast Oak Ridge fault, the Malibu Coast fault, Wright Road fault, Anacapa-Dume fault, and the Ventura fault (CH2MHill, 2004; CGS, 2002a) (Figures 3.2-2 and 3.2-4). The Bailey and Sycamore Canyon faults are local potentially active faults (CH2MHill, 2004; CGS, 2002a). No known traces or zones of an Alquist-Priolo Fault Act-zoned fault are located within the Study Area. The nearest Alquist-Priolo Fault zone is associated with the Camarillo and Springville fault zones, which are located 5.5 and 6.3 miles from the site, respectively (Figure 3.2-4).

3.2.1.3.2 Seismicity

The historical earthquake record for Southern California spans over the last 200 years, although the availability of earthquake reporting diminishes with the age of the record. As a result, the impacts or intensity of future seismicity is not limited by known historical seismicity. The Study Area is located in a known seismically active region and has experienced the effects of historic seismic events, some of which are described below (Weber and Kiessling, 1978; USGS, 2004).

In 1812, an earthquake with an estimated magnitude M>7.1 (Toppozada et al., 1981) occurred. The earthquake may have originated offshore in the Santa Barbara Channel, on the San Cayetano fault to the east (Dolan and Rockwell, 2001), or the Santa Ynez River fault to the northwest of the Study Area (Sylvester, 2003; Sylvester and Darrow, 1979). Wherever located, the 1812 earthquake caused damage, via seismic shaking and a resultant tsunami, throughout the Ventura region (USGS, 2004). Weber and Kiessling (1978) report that in 1963, even a low-intensity M 3.7 earthquake originating in Camarillo caused local damage. In addition, shaking and damage were reported in Oxnard from the 1927 M 7.1 Point Arguello, 1933 M 6.4 Long Beach, and the 1952 M 5.2 Avin-Techachapi earthquakes (Weber and Kiessling, 1978).

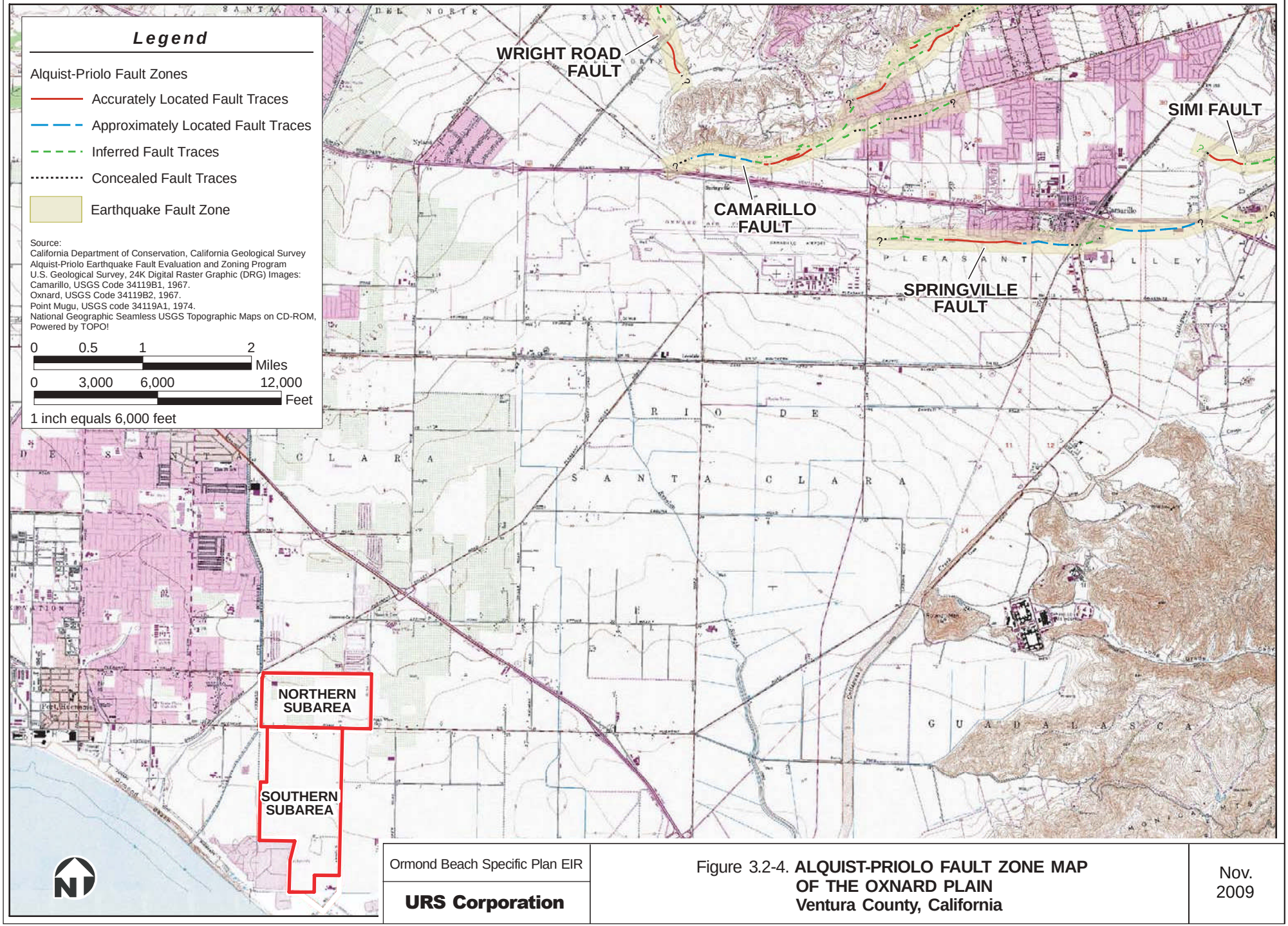
The 1971 M 6.7 San Fernando earthquake caused ground shaking and resulted in damage to structures. In 1973, widespread damage, in excess of 1 million dollars, throughout the Oxnard area was caused by seismic shaking resulting from an earthquake offshore of Point Mugu (M 5.2) (USGS, 2004). The 1994 M 6.7 Northridge earthquake caused strong ground shaking and moderate damage in the Oxnard area (CH2MHill, 2004).

Regional onshore faults that can be expected to cause seismic shaking in the Study Area during an earthquake include the San Andreas Fault (approximately 80 miles away) and the Santa Ynez Fault and Santa Ynez River Fault (approximately 21 miles away) (CGS, 1994). These three faults are considered active (CGS, 2002a). The offshore Pitas Point/North Channel and Red Mountain faults (12 and 28 miles from the site, respectively) also are considered active and could cause seismic shaking in the Study Area during an earthquake (Foxall et al., 1995). Finally, the Oak Ridge fault and the Channel Islands thrust pose significant offshore seismic sources (Shaw and Suppe, 1994; Sorlein et al., 2000).

The two most significant factors in determining the intensity of ground shaking are magnitude and distance from the epicenter of an earthquake. However, strong ground motions have been documented some distance from an earthquake epicenter. For example, strong ground motions resulting in severe damage were experienced over 40 miles away in Oakland, California, from the 1989 M 6.9 Loma Prieta earthquake. Local amplification of seismic shaking can be experienced due to local sediment conditions. The amplitude of a seismic wave increases when traveling from consolidated into unconsolidated materials. Therefore, unconsolidated alluvial sediments tend to amplify seismic waves and hence, experience stronger seismic shaking. The United States Geological Survey (USGS) calculates that the Study Area is likely to experience seismic amplification of 3 times stronger ground accelerations relative to consolidated bedrock locations (USGS, 2001).

In addition, geologic structures and topographic features also can affect amplification of seismic waves, and produce stronger ground shaking. Seismic amplification resulting from the constructive interference of reflected seismic waves at medium interfaces caused by topography and geologic structures were documented to cause increased localized damage from the 1994 M 6.7 Northridge earthquake (CGS, 1995a). Though the quantified contribution is not known, there is a potential for seismic amplification within the Ventura Basin resulting from constructive interference of seismic waves reflected along the basin margins that may increase ground shaking in the Study Area.

The maximum probable moment magnitude of an earthquake along an active, or potentially active, fault may be calculated as a function of the fault's total length or as a function of the fault surface area (Wells and Coppersmith, 1994). Damage from an earthquake would occur from ground shaking created by seismic waves traveling through rock and soil.



Ormond Beach Specific Plan EIR

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Figure 3.2-4. **ALQUIST-PRIOLO FAULT ZONE MAP OF THE OXNARD PLAIN**
Ventura County, California

Nov. 2009

The amount of shaking is measured as ground acceleration at the rate of gravity (g). Ground acceleration is a function of earthquake magnitude, distance from the earthquake source, and rock and soil types encountered during seismic wave propagation. The California Geological Survey (CGS) estimates the greatest contribution of seismic hazard (probability of 10 percent exceedance in 50 years) to the Study Area is from an M 7.3 earthquake within 2 km of the site (CGS, 2002b). Ground accelerations of 0.59g, with a probability of 10 percent exceedance in 50 years, are calculated for the alluvial site conditions by the CGS (CGS, 2002b). Damage to wood-frame structures and underground utilities can be expected to be considerable with these ground accelerations.

Table 3.2-2 lists significant regional faults and their maximum probable moment magnitude.

TABLE 3.2-2
REGIONAL SIGNIFICANT FAULTS AND FAULT PARAMETERS

Fault	Style of Faulting	Length (km)	Slip Rate (mm/yr)	Maximum Moment Magnitude
Significant Local Faults				
Oak Ridge (onshore)	R	50	4	6.9
Ventura-Pitas Point	R-LL	41	1	6.8
Malibu Coast	LL-R	37	0.3	6.7
Simi-Santa Rosa	R	30	1	6.7
Transverse Ranges-Los Angeles Basin				
Santa Susana	R	27	5	6.6
Point Dume-Anacapa	R-LL	75	3	7.3
San Andreas-Mojave	RL-SS	99	30	7.1
San Gabriel	RL-SS	72	1	7
Santa Ynez (east)	LL-SS	68	2	7
Santa Ynez (west)	LL-SS	65	2	6.9
Northridge Blind Thrust	R	31	1.5	6.9
Red Mountain	R	39	2	6.8
San Cayetano	R	44	6	6.8
Holser	R	20	0.4	6.5
Big Pine	LL-SS	41	0.8	6.7
Sierra Madre (San Fernando)	R	18	2	6.7
Elysian Park Blind Thrust	R	34	1.5	6.7
Newport-Inglewood	RL-SS	64	1	6.9
Santa Monica	R-LL	28	1	6.6
Hollywood	LL-R	17	1	6.4
Santa Barbara Channel				
Channel Islands Thrust (eastern)	R	65	1.5	7.4
Montalvo-Oakridge Trend	R	37	1	6.6
North Channel Slope	R	60	2	7.1
Oakridge (blind thrust offshore)	R	37	3	6.9
Santa Cruz Island	R	50	1	6.8
Santa Rosa Island	R	57	1	6.9

Source: CGS Open-File Report 96-08 and CGS On-Line Interactive Fault Parameters Map, 2002
Km = kilometer LL = Left Lateral
mm/yr = millimeter per year RL = Right Lateral
R = Reverse SS = Strike Slip

3.2.1.3.3 Liquefaction

Liquefaction is a rapid loss of shear strength in water-saturated granular sediments or cohesive sediments, meeting the "Chinese Criteria" (Seed et al., 1985), produced by ground shaking during an earthquake. Seismic waves can increase intergranular pore pressure and cause a rapid loss of bearing strength. Because of the typical sediments encountered in these geologic settings, low coastal areas and alluvial valleys with high groundwater elevations are most susceptible to liquefaction.

Both the State of California and City of Oxnard recognize liquefaction potential within their respective jurisdictional boundaries. As depicted on Figure 3.2-5, the California Geological Survey Seismic Hazard Map for the Oxnard Quadrangle indicates that the Study Area is located in a liquefaction hazard zone and is, therefore, likely susceptible to liquefaction potential (CGS, 2002b). The City of Oxnard Safety Element Liquefaction Potential Map depicts the Study Area to be located within an area with high to moderate liquefaction potential (City of Oxnard, 1984).

Lawson & Associates (LGC) reported in a geotechnical investigation of the Northern Subarea that the sediments approximately 30 feet below the ground surface (bgs) at the site are liquefiable based on low density granular sediments and groundwater encountered at a depth of 3 to 8 feet bgs (LGC, 2004). Based on the overall geologic setting of the Study Area, it is anticipated that liquefiable sediments are present in the Southern Subarea as well.

Liquefaction of sediments can produce secondary hazards such as boils, fissure, and lateral spreading. Boils, the expulsion of subsurface sediments to the ground surface, and fissures can be generated as secondary effects of liquefaction. A geotechnical investigation of the Northern Subarea identified sediments located within this area as susceptible to producing boils and fissures (LGC, 2004). It is anticipated that the potential for liquefaction secondary effects such as boils and fissures extends into the Southern Subarea. Liquefaction of sediments also can yield lateral spreading. Lateral spreading is the process of sediments spreading horizontally, typically in the direction of a free face (an unconfined slope or excavation). Based on the liquefaction potential in the Study Area, it is estimated that the potential for lateral spreading is present as well. The northwestern part of the Northern Subarea is estimated to have an increased potential for lateral spreading since the Oxnard Industrial Drain presents a free face.

3.2.1.3.4 Coastal Flooding, Tsunami, and Sea Level Rise

Parts of Oxnard's coastline are subject to tidal flooding, storm surge, and wave action, which usually occurs during winter storms. The effects of coastal flooding are generally confined to a narrow area immediately adjacent to the tidal zone. However, the effects of coastal flooding can be severe – in addition to wave action, beach and bluff erosion can cause significant

damage to coast-side homes and infrastructure. Coastal flooding may also occur as the result of tsunamis, which are extreme tidal surges caused by distant earthquakes or massive undersea landslides. The extent of flooding depends on the probability that a storm of a certain magnitude will occur and the topography of the coastline. In addition to flooding due to storm surge, coastal storms may be accompanied by the additional hazards associated with wave action. There is also an increasing body of research that indicates sea level rise could exacerbate coastal flooding and coastal erosion in areas that are susceptible to such problems.

Flooding

The magnitude of flood used as the standard for floodplain management in the United States is a flood having a probability of occurrence of 1 percent in any given year. This flood is also known as the 100-year flood or base flood. The most readily available source of information regarding the 100-year flood is the system of Flood Insurance Rate Maps (FIRMs) prepared by FEMA. These maps are used to support the National Flood Insurance Program (NFIP). FEMA has prepared FIRMs for the unincorporated areas of Ventura County and for each of the incorporated cities in the county. The FIRMs show 100-year floodplain boundaries for most flooding sources in the county, as well as for coastal areas. The FIRMs also show floodplain boundaries for the 500-year flood, which is the flood having a 0.2 percent chance of occurrence in any given year. Rivers and streams where FEMA has prepared detailed engineering studies may also have designated floodways. A designated floodway is the channel of a watercourse and portion of the adjacent floodplain that is needed to convey the base or 100-year flood event without increasing flood levels by more than 1 foot and without increasing velocities of flood water.

The Ormond Beach Specific Plan Study Area is covered by two FIRM panels (Ventura County 918 and 920). According to these maps, the entire Study Area is designated as Zone X, which means that it falls outside of both the 100- and 500-year floodplain. In other words, according to FEMA, there is “moderate or minimal hazard from the principal source of flood in the area.”

Tsunami

A tsunami (seismic sea wave, tidal wave) is a series of waves most commonly caused by an earthquake beneath the sea floor or by a large undersea landslide. In the open ocean, tsunami waves travel at speeds of up to 600 miles per hour but are too small to be observed. As the waves enter shallow water, they slow down and may rise to several feet or, in rare cases, tens of feet. Tsunamis can cause great loss of life and property damage where they come ashore. The first wave is almost never the largest; successive waves may be spaced tens of minutes apart and continue arriving for many hours. Since 1812, the California coast has had 14 tsunamis with wave heights higher than three feet; six of these were destructive. The Channel

Islands were hit by a damaging tsunami in the early 1800s. The worst tsunami resulted from the 1964 Alaskan earthquake and caused 12 deaths and at least $17 million in damage to northern California. The April 25, 1992 Cape Mendocino earthquake produced a one-foot tsunami that reached Humboldt Bay in about 20 minutes after the shaking. Although not damaging, this tsunami demonstrated that a wave could reach our coastline quickly.

In 1995, the U.S. Congress created the National Tsunami Hazard Mitigation Program (NTHMP), which directed National Oceanic and Atmospheric Administration (NOAA) to form and lead a working group with federal and state members. In 1996, this group recommended the preparation of inundation maps for the five U.S. states that border the Pacific. Aiding with the preparation of these maps is the Tsunami Research Center (TRC) at the University of Southern California (USC). TRC developed a computational code called MOST (Method of Splitting Tsunami), which calculates tsunami evolution and computes runup and inundation values, thus allowing the production of inundation maps.

The California Emergency Management Agency (Cal EMA) and its scientific technical advisor, the California Geological Survey (CGS), have collaborated with TRC/USC to create new tsunami inundation maps for statewide coverage of populated areas using MOST. This project uses 35 separate modeled areas that cover the most significant ports, harbors, coastal urban centers, and popular recreational areas in California, including Ventura County. In addition, TRC/USC has also evaluated several potential local and distant tsunami sources. Local tsunami sources included offshore reverse-thrust faults, restraining bends on strike-slip fault zones, and large submarine landslides. Distant tsunami sources included all great subduction zone events that are known to have struck California historically, such as the 1700 Cascadia earthquake, the 1960 Great Chilean Earthquake, and the 1964 Great Alaska Earthquake, as well as others that can occur around the Pacific Ring of Fire. To enhance the resolution from inundation results, CGS developed a method to use higher-resolution digital topographic data, which are able to resolve features as small as three meters, to provide a possible way of checking the location of the maximum inundation line.

In February 2009, the new Tsunami Inundation Map for Emergency Planning for the Oxnard area was published (see Figure 3.2-5). As the map shows, while much of Oxnard's and Port Hueneme's coastal area would be subject to inundation, the Ormond Beach Specific Plan Study Area is not.

Sea Level Rise

Over the 20th century, sea level has risen by about seven inches along the California coast as a result of global climate change. In response to the effects of climate change that are already evident and in the interest of avoiding further negative consequences, the California Natural Resources Agency (CNRA) took the lead in developing the 2009 California Climate Adaptation Strategy, working through the Climate Action Team (CAT). Seven sector-

specific working groups led by 12 state agencies, boards and commissions, and numerous stakeholders were convened for this effort. The strategy proposes a comprehensive set of recommendations designed to inform and guide California decision makers as they begin to develop policies that will protect the state, its residents and its resources from a range of climate change impacts. As the basis for the strategy's recommendations, the 2009 Scenarios Project examined future projections for changes in average temperatures, precipitation patterns, sea-level rise, and extreme events, as well as resulting impacts on particularly climate-sensitive sectors. The Scenarios Project built on scientific findings that became available in the last two years to produce estimates of up to 55 inches (1.4 meters) of sea-level rise by the end of the 21st century. This projection accounts for the global growth of dams and reservoirs and how they can affect surface runoff into the oceans, but it does not account for the possibility of substantial ice melting from Greenland or the West Antarctic Ice Sheet, which would drive sea levels along the California coast even higher. The projections assume a stringent "policy scenario" in which global emissions would be drastically reduced, which suggests that while mitigation will be important to minimize many climatic and ecological impacts, adaptation is the only way to deal with the impacts of sea-level rise during the 21st century. In short, even on a lower emissions trajectory and without the addition of meltwater from the major continental ice sheets, sea levels in the 21st century can be expected to be much higher than sea levels in the 20th century.

To date, there are very few studies providing thorough, comprehensive economic or physical assessments of where California is most vulnerable from future climate change. Several recent studies shine light on the potential scale of the economic and social impacts from climate change. One recent study from the Pacific Institute estimates that a 1.4 meter sea-level rise over the next century will "put 480,000 people at risk of a 100-year flood" which would become a common event and cost $100 billion to replace flooded property assuming current levels of development. Another study by Next10 and UC Berkeley estimates that over $2.5 trillion of the state's real estate assets (of $4 trillion) are "at risk from extreme weather events, sea-level rise, and wildfires, with a projected annual price tag of $300 million to $3.9 billion."

The Pacific Institute's report, *The Impacts of Sea Level Rise on the California Coast*, was released in draft form in March 2009. As part its study, the Pacific Institute prepared a series of maps depicting potential flood risk associated with sea-level rise. The map for the Oxnard area indicates that all of the Southern Subarea and part of the Northern Subarea would be in a 100-year floodplain in the year 2100. As noted above, neither FEMA's maps for the Ormond Beach area nor the tsunami inundation maps prepared by Cal EMA indicate such risk. The Pacific Institute study also includes recommendations for practices and policies that could avert such effects. The report also includes recommendations for additional research and analysis that would provide a better understanding of sea-level rise and a more solid foundation for development of strategies to address its consequences. Recognizing the

absence of such a foundation, the study includes a disclaimer that states, "This work shall not be used to assess actual coastal hazards, insurance requirements or property values, and specifically shall not be used in lieu of Flood Insurance Studies and Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA)."

3.2.1.3.5 Slope Stability

Various types and degrees of slope instability are part of the natural weathering and erosional cycles. Factors contributing to slope instability include topography, bedrock and soil types, bedrock orientation, precipitation, vegetation, seismic shaking, and human-induced topographic alteration. Slope stability covers a series of mass-movement phenomena such as large landslides, rockfalls, mudflows, and shallow soil failure. These mass movements may be triggered by seismic activity, rainfall, undercutting of seacliffs by wave erosion, and other factors. The Study Area is not located in a CGS seismically induced landslide hazard zone (CGS, 2002b). The relatively low topographic relief in the vicinity of the Study Area precludes significant mass movement hazard in this area.

3.2.1.3.6 Expansive Soils

Expansive soils have the characteristic of expanding when wet and shrinking when dry. Soils with expansive qualities can cause damage to structures such as foundations and buried utilities due to the expansion and contraction of the soil during wetting and drying periods. The US Department of Agriculture (USDA) Soil Maps for Ventura County includes mapped locations of soils and classifies the expansion potential of a soil according to the shrink-swell potential.

Within the Study Area, the potential for encountering moderately expansive soils is predominantly in the Southern Subarea, although there is potential for moderately expansive soils in the northwest and south-central areas of the Northern Subarea. These moderately expansive soils consist of Pacheco silty clay loam (USDA soil mapping unit Pa), Camarillo Series soils (USDA mapping units: Cc, Cd, and Ce) (see Figure 3.2-6). Although the USDA does not rate the shrink-swell potential for Tidal Flats (Ts) soils, it is anticipated that soils developing in this geologic setting will have shrink-swell potential. Tidal Flat (Ts) soils are present at the southern portion of the Southern Subarea (see Figure 3.2-6).

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Figure 3.2-5. **TSUNAMI INUNDATION MAP FOR EMERGENCY PLANNING**

Source: California Emergency Management Agency, February 15, 2009

Nov. 2009

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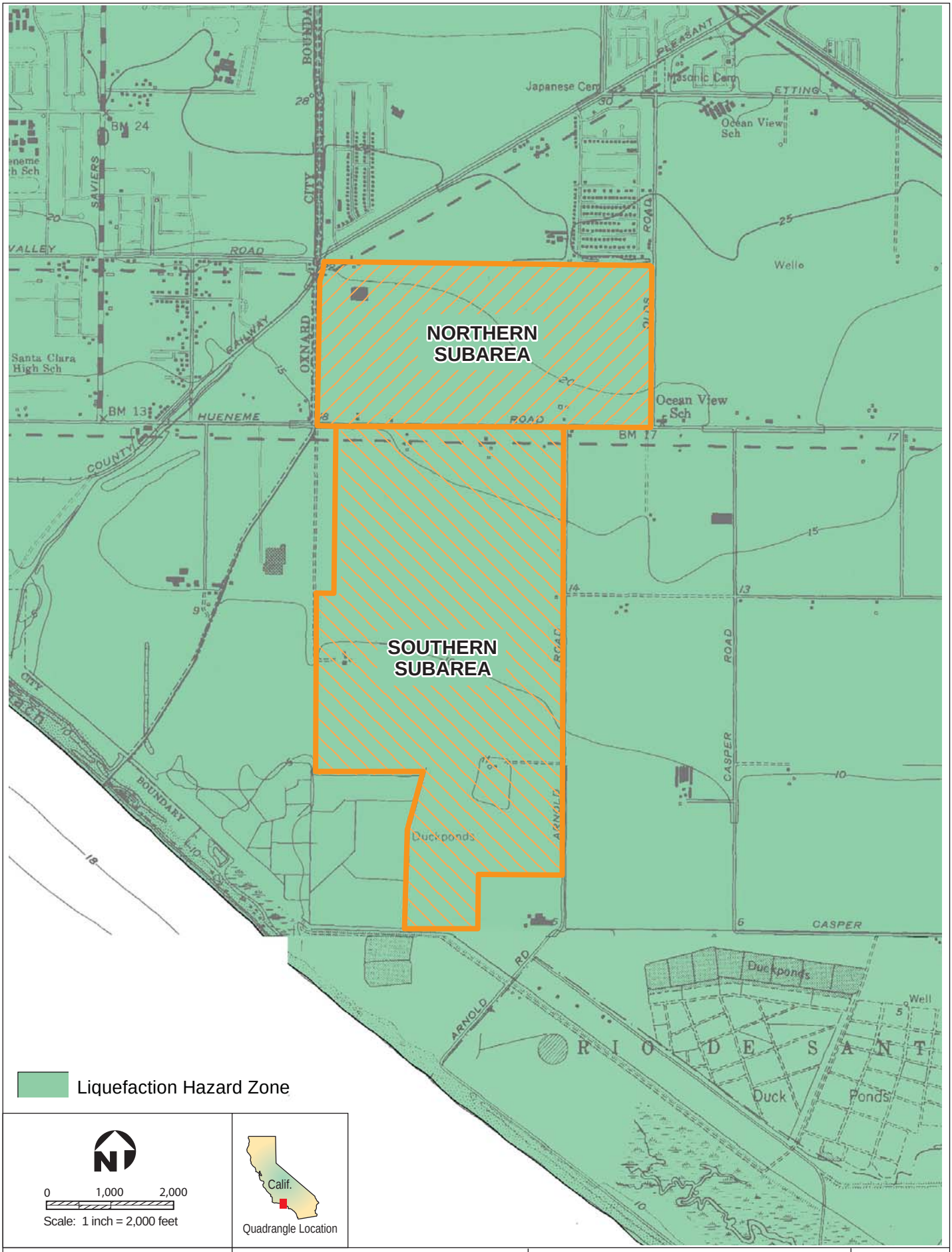

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *California Geological Survey Seismic Hazard Zones* *Oxnard Quadrangle-Released 12/20,02;* *Point Mugu Quadrangle-Released 2-7-02*	Figure 3.2-6. **SEISMIC HAZARD ZONE MAP**	Nov. 2009

3.2.1.3.7 Collapsible Soils

Collapsible sediments and soils are typically angular and granular deposits, including wind blown sediments such as loess or dune sands, and have the characteristic of exhibiting a high degree of shear strength when dry but decreased shear strength when moistened or wetted. Collapsible soils can cause damage to structures such as foundations and buried utilities. They can also cause the rapid failure in excavations due to the rapid loss of shear strength during wetting periods. The Study Area is located in a geologic setting that may have experienced the deposition of dune sands from the nearby Ormond Beach.

3.2.1.3.8 Differential Settlement

Differential settlement often affects foundations placed on varying soils or fill materials, where the varying soils or fills settle at different rates. Soils throughout the Study Area are anticipated to be relatively horizontally stratified and laterally continuous over broad areas based on the USDA Soil Survey maps. However, it is anticipated that some foundations and/or utilities may be placed over varying soil types. In addition, undocumented fills may have been placed throughout the Study Area to level the ground for agricultural operations.

3.2.1.3.9 Land Subsidence

Subsidence is the displacement of the ground surface vertically over a broad region or at localized areas. Land subsidence is typically caused by groundwater extraction, oil field production, or by tectonic processes. Adverse effects of land subsidence include changes in hydraulic gradient, increased potential for flooding, distress to foundations and structures, and the collapse of wells (Ventura County, 2000). In the Ventura Basin, three causes of land subsidence are known to occur: groundwater extraction, oil field production, and tectonic processes. A maximum of 2.6 feet subsidence was documented from 1936 to 1978 (USGS, 2003; Ventura County, 2000; City of Oxnard, 1984). The main causes of subsidence in the Ventura Basin are believed to be groundwater extraction and oilfield production, although the relative contribution of each cause is not known (USGS, 2003).

Both Ventura County and the City of Oxnard identify three subsidence hazard zones within the county: 1) negligible land subsidence; 2) probable subsidence less than 0.05-ft/yr; and 3) probable subsidence of 0.05 ft/yr (2000). The Study Area is located within both the Ventura County and City of Oxnard zones of probable land subsidence of 0.05 ft/yr.

3.2.1.3.10 Other Geologic Hazards

Natural gas and oil are expelled from both onshore and offshore rocks in Ventura County. Some of the largest known natural oil and gas seeps in the world occur offshore in the Ventura Basin (Quigley et al., 1999). Tar seeps do not present a geohazard, although methane

(including hydrogen sulfide [H_2S]) seeps and oil wells that have not been properly abandoned may be toxic, are flammable, and present a potential hazard to the public. According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), historical oilfield production has not been located at the Study Area and, therefore, associated hazards are not present (DOGGR, 2003).

3.2.1.4 Soils – Regional Overview

The majority of the information presented in this section was obtained from the USDA's Soil Survey of Ventura County, California (NRCS, 2005). Soils present in the Study Area can be grouped into associations that have formed on alluvial fans, plains, and basins. Approximately five mapped soil units have been identified within the Study Area. These soils are shown on Figure 3.2-7 and are listed in Table 3.2-3.

Camarillo soils form on alluvial fans and plains in stratified alluvium and Pacheco soils formed in basins or on alluvial plains. Both the Camarillo and Pacheco soils form on slopes ranging from 0 to 2 percent, derived predominantly from sedimentary rocks. Both the Camarillo and Pacheco series have moderate shrink-swell potential, which can be a limitation for urban development. Permeability is moderate for the Camarillo and moderately slow for the Pacheco series. The Camarillo series has slow and the Pacheco series has very slow runoff. Both soil series are noted by the USDA to have a no erosion hazard. The Hueneme Series forms in basins and alluvial plains from highly stratified alluvium derived from sedimentary rocks. The slopes range from 0 to 2 percent in basins. Hueneme soils have low shrink-swell potential, moderately rapid permeability, very slow surface runoff, and no erosion hazard. Tidal Flat soils form in tidal flats, coastal beaches, and river wash sediments on slopes ranging from 0 to 2 percent. The USDA estimates that Tidal Flat soils have very slow runoff with soils experiencing ponding throughout the year, but does not describe the shrink-swell potential, permeability, or erosion hazard.

The Xerorthents cut and fill areas (XA) consist of mechanically manipulated soils where the original soil profile is no longer discernible. Though not depicted on Figure 3.2-6, it is anticipated that some unengineered fill materials are distributed throughout the Study Area as a result of past agricultural operations. Some areas may have been mechanically cut, either to supply fill material or to remove uneven high spots. Other areas may have been covered by fill to grade drainage for agricultural purposes. Permeability, ability to drain, runoff, and hazard of erosion are typically variable for fill materials.

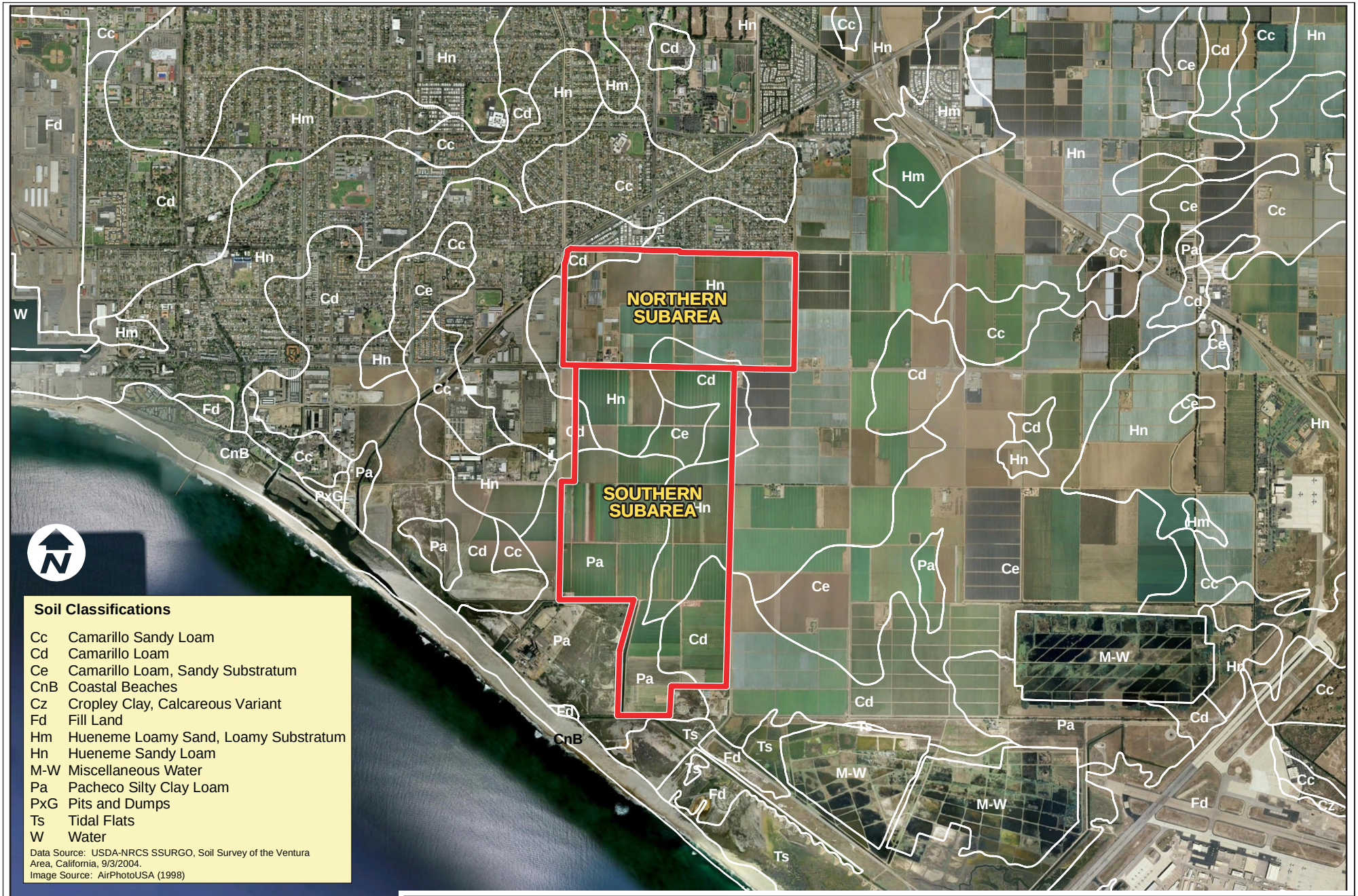

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Figure 3.2-7. **USDA SOIL SURVEY MAP OF A PORTION OF THE OXNARD PLAIN Ventura County, California**

Nov. 2009

3.2.1.4.1 Site-specific Soils by Subarea

The Northern Subarea is located on Camarillo loam (Cd) and Hueneme sandy loam (Hn). The Southern Subarea is located on Camarillo loam (Cd), Camarillo loam, sandy substratum (Ce), and Hueneme sandy loam (Hn). The southernmost portion of the Southern Subarea is located on Tidal Flat (Ts) soil.

3.2.1.5 Inland and Coastal Erosion – Regional Overview

Study Area topography is discussed in Section 3.2.1.1 and local topography is shown in Figure 3.2-1. For classification purposes, slopes of less than 5 percent are generally considered to have low erosion potential. Slopes of 5 to 10 percent are considered to have moderate erosion potential. Slopes of 10 to 15 percent are considered to have high erosion potential and slopes of greater than 15 percent are considered to have very high erosion potential. However, there are many exceptions to this general erosion potential classification, as erosion potential is affected by many factors including vegetation, exposure to erosive forces of rain water, topsoil development, runoff, agricultural wastewater, and land use. Based on the USDA soil mapping and soil classification, soils throughout the Study Area are considered to have no erosion hazard.

3.2.2 Regulatory Framework

3.2.2.1 Federal Authorities and Administering Agencies

No known federal authorities or administering agencies are known to have regulatory jurisdiction over geologic issues pertaining to the project.

3.2.2.2 California State Authorities and Administering Agencies

3.2.2.2.1 CEQA, Public Resources Code §21000 et seq.

The basic goal of the California Environmental Quality Act (CEQA) is to develop and maintain a high-quality environment now and in the future. The State CEQA Guidelines require that the CEQA Lead Agency (i.e., City) evaluate whether the proposed project would have a significant effect on the environment, including geologic hazards and soil erosion. Potential impacts that need to be considered include exposure of people or structures to major geologic hazards and causation of substantial erosion or siltation. Regulations related to soil erosion and siltation are addressed in Section 3.3.2.

TABLE 3.2-3
STUDY AREA SOIL CHARACTERISTICS[1]

Soil Designation[2]	Name/Texture	Slope (%)	SCS Capability Class[3]	Erosion Hazard	Runoff	Shrink Swell Potential	Flood Hazard	Water Table Depth (feet)
Cd	Camarillo loam	0-2	IIw-2	None	Very slow to ponded	Moderate	Infrequent	<2
Ce	Camarillo loam, sandy substratum	0-2	IIw-2	None	Very slow to ponded	Moderate	Infrequent	<2
Hn	Hueneme sandy loam	0-2	IIw-2	None	Very Slow	Low	Infrequent	2-5
Pa	Pacheco silty clay loam	0-2	IIw-2	None	Very Slow	Moderate	Infrequent	2-3
Ts	Tidal Flats	0-2	NR[4]	NR[4] - None	Very Slow	NR[4]	Frequent	0-0.5

1 Source: U. S. Department of Agriculture, National Resource Conservation Service, SSURGO GIS database.

2 Refer to Figure 3.2-6 for locations.

3 Class IIw-2 soils – Class II soils have moderate limitations that reduce the choice of plants or require special conservation practices, or both. The "w" indicates that water in or on the soil interferes with plant growth or cultivation and the "2" indicates the limitation is a result of poor drainage or overflow hazard.

4 NR – Soil characteristic not rated by the USDA National Resource Conservation Service, SSURGO GIS database.

3.2.2.2.2 California Coastal Act §30000 et seq.

The California Coastal Act Coastal Resources Planning and Management Policies include provisions requiring minimization of risks to life and property in areas of high geologic hazard (30253[1]), bluff stability and shoreline protection (302[5]), minimization of geologic instability and erosion along bluffs and cliffs (30253[2]), and safe construction of fill (30706). Approximately 5 acres of the southern edge of the Study Area falls within the Coastal Zone, all of which is proposed for continued agricultural production.

3.2.2.2.3 California Code of Regulations

Title 24 of the California Code of Regulations is the California Building Code. The State of California provides a minimum standard for building design through the 2007 California Building Code (CBC). With adoption of Ordinance 2760, the City adopted the 2007 CBC by reference subject to the amendments, additions, and deletions that address Oxnard's unique circumstances.

Chapter 23 of the CBC contains specific requirements for seismic safety. The Study Area is located in Seismic Zone 4, the highest zone in terms of seismic risk in California. Chapter 29 of the CBC regulates excavation, foundations, and retaining walls. Chapter 33 of the CBC contains specific requirements pertaining to site demolition, excavation, and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials. Chapter 70 of the CBC regulates grading activities, including drainage and erosion control. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in Cal-OSHA regulations (Title 8 of the CCR) and in Section A33 of the CBC.

Title 22 of the California Code of Regulations is the California Education Code. The California Education Code specifies specific requirements regarding the investigation of environmental conditions and potential hazards for proposed school sites. With respect to regulatory oversight pertaining to environmental evaluation of a proposed school site, the Department of Toxic Substances Control (DTSC) provides technical review of investigations. The DTSC has made particular recommendations regarding the environmental investigation of proposed school sites and, in particular, for former agricultural sites. In addition, the California Code of Regulations, Title 24, California Building Code initiates plan checking of public schools by the Office of Statewide Health Planning and Development and the Division of the State Architect. With respect to environmental and engineering geology conditions for public school sites, the CGS provides technical review of reports for the Division of the State Architect. The CGS utilizes CGS Note 48 Checklist for the Review of Engineering Geology and Seismology Reports for Public Schools, Hospitals, and Essential Services Buildings as part of the Division of the State Architect's plan check review process.

3.2.2.2.4 California Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Fault Zoning Act of 1972 prohibits the construction of buildings used for human occupancy on active surface faults, which are faults that have ruptured the ground surface in the past 11,000 years (Holocene Epoch). It specifies, in part, that new habitable building structures maintain a minimum 50-foot setback from all known active faults. California Geological Survey (CGS) Special Publication 42 (updated 1999) describes Alquist-Priolo Earthquake Fault hazard zones in California. None of the Study Area is within an Alquist-Priolo Earthquake Fault Zone designated by the State of California (see Figure 3.2.4).

3.2.2.2.5 Seismic Hazards Mapping Act

CGS also provides guidance with regard to seismic hazards. Under CGS's Seismic Hazards Mapping Act, seismic hazard zones are to be identified and mapped to assist local governments for planning and development purposes. The intent of this publication is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes. CGS's Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS, 1997b), provides guidance for evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations. The Study Area is located within a CGS-designated liquefaction seismic hazard zone. Appropriate evaluation and mitigation of liquefaction hazard must be evaluated in site-specific geotechnical investigations.

3.2.2.3 Local Ordinances and Administering Agencies

3.2.2.3.1 City of Oxnard

As part of the proposed specific plans, most of the Ormond Beach Specific Plan Study Area will be annexed to the City of Oxnard. Conformance with the City's Grading and Building Codes are considered generally satisfactory (by the City) to address geologic hazards and development grading activities. The City of Oxnard General Plan Safety Element recommends an adequate site-specific investigation be performed where the possibility of soil or geologic problems exist.

3.2.3 Project Impacts and Mitigation

3.2.3.1 Thresholds of Significance

The State CEQA Guidelines (Appendix G) and the City of Oxnard Threshold Guidelines (February 1995) define a Geologic Problem as one that will:

1. Cause substantial flooding, erosion, or siltation

2. Expose people or structures to major geologic hazards

3.2.3.1.1 Site or Project Characteristics that Require Detailed Geologic Study

Impacts related to geology have the potential to be significant if the proposed project involves any of the following characteristics:

- The project site or any part of the project is located on land having substantial geologic constraints, as determined by the City of Oxnard. Areas constrained by geology include parcels and property underlain by sediment types associated with compressible/ collapsible soils, expansive soils, liquefiable soils, or erosion.
- The project results in potentially hazardous geologic conditions such as the construction of cut slopes or excavations exceeding a grade of 1.5 horizontal to 1 vertical.
- The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.
- The project is located on slopes exceeding 20 percent grade.

Mitigation measures may reduce impacts to a less than significant level. These measures would include minor project redesign and engineering steps recommended by licensed geologists and engineers subsequent to detailed investigation of the site. A geotechnical investigation of the Northern Subarea was performed by Lawson & Associates (2004) and describes preliminary foundations and earthwork recommendations for assumed shallow (less than 5 feet) foundation elements and planned improvements. However, deeper foundations or improvements may be required, for example for the proposed Lake SouthShore, and geologic hazards identified in this report may affect these project elements. Detailed geotechnical investigations of both the Northern and Southern subareas will be necessary to fulfill the City's Building and Planning Department requirements for satisfactorily mitigating these geologic hazards affecting project elements.

3.2.3.2 Project Impacts

3.2.3.2.1 Applicable to Northern and Southern Subareas

The following discussion of project impacts and associated mitigation measures applies to both the Northern Subarea and Southern Subarea because geologic conditions are effectively consistent throughout the Study Area for the purpose of potential impacts, except for Impact GEO-6 and Mitigation Measure GEO-5, which focus on the Southern Subarea.

Impact GEO-1: Erosion. The proposed projects would result in development of residential housing and mixed uses in the Northern Subarea and light industrial development in portions of the Southern Subarea. Development of residential, mixed use and light industrial

structures and improvements to open space could result in substantial soil erosion or the loss of topsoil.

Construction of the projects will require some grading of the site which would result in removal of existing vegetative cover, as well as disturbance of the soils and subsequent exposure to wind and water erosion. It is anticipated that substantial amounts of import fill materials will be required to improve surface runoff conditions for drainage in the area of improvements. In conjunction with residential and light industrial development, the City of Oxnard will continue to implement relevant policies that would reduce potential impacts associated with grading and/or excavation for construction of the proposed project through erosion control measures.

As discussed in Section 3.3, Water Resources, prior to the start of construction, a construction Stormwater Pollution Prevention Plan (SWPPP) will be prepared that describes the site, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. A post-construction Erosion and Sediment Control Plan will also be prepared to address post-construction impacts erosion and sediment controls and will be reviewed and approved by the City of Oxnard.

Currently, the Study Area is mostly undeveloped, but heavily disturbed by previous agricultural activities. Though the parent native soils have no erosion potential based on USDA Soil Survey mapping and classification, the mechanically altered soils from agricultural operations may have variable erosion potential. In addition, import materials utilized to construct improvements pads and grade drainage will have erosion potential respective to the import material(s).

Proposed development will require the removal and stockpiling of soils onsite and grading, followed by importation of other fill, recompaction of onsite materials, construction of foundations and buildings, and landscaping of open spaces. Both the Northern and the Southern Subarea projects will require substantial import of fill material. The Northern Subarea project will require import of approximately 450,000 cubic yards of fill. The Southern Subarea project is estimated to require between 800,000 and 1,100,000 cubic yards of fill. Trenching, grading, and compacting associated with construction of structures; modification/relocation of underground utility lines; and landscape/hardscape installation could expose areas of soil to erosion by wind or water. This exposure would occur over a considerable period of time covering various seasons. It is anticipated that the erosion potential of the Study Area will experience an interim increased potential during grading activities. However, the addition of paved and landscaped areas will, over the long term, reduce the potential for erosion onsite because fewer exposed soils would remain.

Earth-disturbing activities associated with construction would be temporary and would not result in a permanent or significant alteration of significant natural topographic features that could increase or exacerbate erosion. Specific erosion impacts would depend largely on the areas affected and the length of time soils are subject to conditions that would be affected by erosion processes. Although the potential for erosion would be limited, exposure of soil to wind and water during construction would still occur. During construction, erosion potential would be further minimized by following the recommendations regarding erosion potential outlined in geotechnical and soil analyses to be performed for each of the residential and industrial developments per City Grading Plan requirements.

Project grading during construction would potentially cause substantially increased erosion and sedimentation. Project construction would result in temporary exposure of ground surfaces until proposed vegetation could stabilize these areas. Increased erosion during grading activities could lead to increased sedimentation into the nearby Oxnard Industrial Drain. Impacts associated with short-term exposure of graded soils and potential for sedimentation into the Oxnard Industrial Drain is considered *significant but feasibly mitigated (Class II) to less than significant (Class III).*

Impact GEO-2: Slope Stability. Project grading is not likely to include the placement of cut and fill slopes. Given the gently sloping nature of the site, any final slopes included in the project would not be anticipated to create an unstable slope. However, though not thought of as a "slope" in the traditional sense of the word, excavations have many similarities to slopes when evaluating stability of excavation sidewalls. Some deep excavations may be necessary for the installation of improvements such as the proposed Lake SouthShore in the Northern Subarea, and deep excavations may be susceptible to failure. The presence of high groundwater conditions and potential for encountering collapsible soils are two contributing factors to excavation instability. In any case, engineered slopes or excavations included in the project would be required to meet established standards in the CBC and City Grading Ordinance. With adherence to established standards, impacts would be *significant but feasibly mitigated (Class II)* to *less than significant (Class III).*

***Impact GEO-3: Seismic Hazards*.** An earthquake on a nearby fault could result in strong ground shaking. Ground shaking has the potential to cause fill material to settle, instigate liquefaction, and cause physical damage to structures, property, utilities, and road access. Ground shaking has the potential to cause injury and death to humans.

Ground motions caused by seismic waves are measured as ground acceleration (g). According to CGS, the estimated peak ground acceleration at the site is approximately 0.59 g. Proposed structures and underground utilities could suffer considerable damage from strong ground motions, and must be designed accordingly.

Several design measures are required by the CBC to minimize the potential earthquake damage resulting from strong ground motions. A 50-foot setback is typically required from all known active faults with surface rupture potential, and engineering designs must incorporate reinforcement and materials that can withstand seismic activity effects related to known credible ground acceleration factors.

No faults are known to traverse the Study Area, so no project elements are located within 50 feet of the surface trace of a mapped fault. All proposed project elements will be required to incorporate designs consistent with the CBC for the anticipated ground accelerations. The proposed project would result in development of residential housing and mixed uses in the Northern Subarea and industrial development in the Southern Subarea. The development of residential structures and improvements to open space could expose people and structures to potentially substantial adverse effects resulting from seismic activity, as the Study Area is located in a seismically active region. The Study Area is located on saturated granular and fine grained materials and is susceptible to seismic-induced liquefaction and settlement. These seismic hazards will need to be accommodated in seismic design for the project.

A geotechnical engineering study has been performed to determine soil conditions in the Northern Subarea and to make preliminary building foundation design recommendations to address seismic hazards (LGC, 2004).

Given that these measures are regulated by ordinance (Title 24 of the California Code of Regulations and City of Oxnard), they will be required as part of standard plan check review by the City. Implementation of these regulations should reduce the potential impacts of earthquake ground shaking and liquefaction to *significant but feasibly mitigated (Class II) to less than significant.*

Impact GEO-4: Expansive Soils. Soils with moderate shrink-swell (expansive) potential have been identified in the Study Area. Soils with expansion potential contain clay minerals that expand when wet and shrink when dry. Repeated shrinking and swelling of the soil can result in damage to foundations, fill slopes, utilities, and other associated facilities, as well as such structures as Lake SouthShore in the Northern Subarea. Site-specific geotechnical studies will be required to identify areas underlain by expansive soils and provide appropriate mitigation measures. The soil expansion potential is considered *significant but feasibly mitigated (Class II) to less than significant*.

Impact GEO-5: Collapsible and Sensitive Soils. The surface soils may be dry and porous to depths of 12 to 24 inches below existing grade, and may be susceptible to collapse, compression, and settlement with increasing moisture content. Sensitive soils that are subject to changes in physical properties upon disturbance were identified as part of the geotechnical study for the Northern Subarea and, based on the geologic environment, are presumed to extend into the Southern Subarea. Site-specific geotechnical studies will be required to

identify the extent of collapsible and sensitive soils. Potential impacts associated with sensitive, compressible and collapsible soils such as foundation settling are *significant but feasibly mitigated (Class II) to less than significant*.

Impact GEO-6: Coastal Flooding, Tsunami, and Sea-Level Rise. Coastal flooding associated with tsunamis and/or sea level rise could affect the coastal areas of Oxnard. According to FEMA and Cal EMA, the Study Area is not within 100- or 500-year floodplain and is not expected to be inundated by a tsunami. While there is research suggesting that sea-level rise could exacerbate the probability of coastal flooding in the Study Area by the end of the 21st century, additional local research and analysis are required to more fully understand how local circumstances would affect such probability. In the meantime, the City will continue to enforce development standards concerning the placement of structures in areas prone to flooding, based on the best available information published by FEMA or Cal EMA. In addition, the City will continue to implement the recommendations of the Operational Area Tsunami Evacuation Plan and "Tsunami Emergency Information: How to Prepare, React, and Survive," a brochure that identifies evacuation routes and reunification areas for evacuees. With the application of the City's development standards and continued focus on effective emergency management planning, the potential for coastal flooding is deemed to be *less than significant (Class III)*.

3.2.3.3 Cumulative Impacts

Impact GEO-7: Cumulative Impacts. The potential cumulative impacts for geology do not generally extend far beyond a project's boundaries, since geological impacts are confined to discrete spatial locations and do not combine to create an extensive cumulative impact condition. The cumulative impacts related to geologic processes resulting from buildout of proposed projects located within the Oxnard Industrial Drain and/or Ormond Beach wetlands watersheds (including soil erosion) could be significant due to the potential for short-term (construction-phase) and long-term increased erosion and sedimentation into the Oxnard Industrial Drain and/or Ormond Beach wetlands. The project's contribution to this cumulative impact would be potentially *significant but feasibly mitigated (Class II) to less than significant.*

3.2.3.4 Mitigation Measures

The mitigation measures listed below reflect established standards included in the CBC and City Grading Ordinance as applicable to the proposed project. In addition to these measures, the City has additional standard conditions which are required by ordinance that are imposed on grading and building permits issued by the City. These standard conditions will be imposed on the project during the grading and building permit process.

Mitigation Measure GEO-1: Erosion Control Measures. In order to mitigate potential soil erosion and loss of topsoil, grading and drainage plans, construction plans, including the Grading and Drainage Plan, Construction SWPPP, and/or Post-Construction Erosion and Sediment Control Plan for development projects in the Northern Subarea or the Southern Subarea shall incorporate, but not be limited to, the following measures, as appropriate, to minimize erosion (addresses impacts GEO-1 and GEO-2):

- The City shall require that construction-level soils and geologic evaluation reports consistent with City standards be prepared by registered soils engineers and engineering geologists, respectively. Such reports shall adequately address erosion and erosion control measures and be reviewed by a registered soils engineer and engineering geologist.
- Temporary berms and sedimentation traps shall be installed in association with project grading to minimize erosion of soils into the Oxnard Industrial Drain and nearby wetland areas. The sedimentation basins shall be cleaned after large rain events, and as further directed by the City, and the silt shall be removed and disposed of in an appropriate location.
- Revegetation or restoration shall be completed, including measures to minimize erosion and to reestablish soil structure and fertility, as appropriate. Revegetation shall include native, fast-growing vined plants that shall quickly cover drainage features. Local native species shall be emphasized. A landscape revegetation plan shall be included as part of the Development Plan submittal.
- Graded areas shall be revegetated, as appropriate, immediately after completion of installation of improvements with deep-rooted, native, drought-tolerant species, as specified in a landscape revegetation plan to minimize slope failure and erosion potential. Geotextile binding fabrics shall be used as necessary to hold soils until vegetation is established.
- Drains shall be designed to cause exiting flow of water to enter sub-parallel downstream (60 degrees or less) to existing drainage flow to avoid eddy currents that would cause opposite erosion.
- An energy dissipater or similar device such as trash racks or baffles shall be installed at the base end of drainage outlets to minimize erosion during storm events.
- Hand equipment shall be utilized during any ground disturbances adjacent to drainages, and wetlands.
- Excavation and grading shall be restricted to the dry season (April 15th to October 15th) unless a Building and Safety-approved erosion control plan is in place and all measures therein are in effect.

- Storm drains shall be designed to minimize environmental damage and shall be shown on drainage plans.
- With the exception of limited ground disturbance in association with construction of the proposed walls, grading shall be prohibited within 50 feet of the Oxnard Industrial Drain or adjacent wetland buffer areas. Hand equipment shall be utilized during any ground disturbances adjacent to creeks, wetlands, and beach areas.
- The applicant shall limit excavation and grading to the dry season (April 15th to October 15th) unless a Building and Safety-approved erosion control plan is in place and all measures therein are in effect.
- Best Management Practices (BMPs) will be employed to control erosion, including temporary siltation protection devices such as silt fencing, straw bales, and sand bags. These shall be placed at the base of all cut and fill slopes and soil stockpile areas where potential erosion may occur. The final grading plan will include erosion control measures including types and locations of BMPs. The plan shall be approved by the City prior to the commencement of grading operations.
- If improvements are planned near the Oxnard Industrial Drain or nearby wetlands, improvements shall be designed to minimize erosion or siltation to these areas. Construction shall take place in the dry season. Construction methods shall include appropriate BMPs to prevent erosion and sedimentation. Structures shall be periodically inspected during the wet season to ensure structural integrity and avoidance of flood hazards or scouring. Maintenance and repairs shall be performed as needed.
- If boardwalks, stairs, or other public access improvements are constructed in or across wetland areas, these structures shall be designed so as to avoid impacts related to erosion and sedimentation to wetland areas. Construction shall take place in the dry season. Construction methods shall include appropriate Best Management Practices to prevent erosion and sedimentation. Structures shall be periodically inspected during the wet season to ensure structural integrity and avoidance of flood hazards or scouring. Maintenance and repairs shall be performed as needed. Project plans shall include provisions for construction in wetlands in consultation with appropriate State, federal, and local agencies, including the California Department of Fish and Game, Regional Water Quality Control Board, U.S. Fish and Wildlife Service, and U.S. Army Corps of Engineers (ACOE). Work plans and project design details shall minimize the footprint of structures in the creek bed, as feasible for public safe access.

Refer to Section 3.3, Water Resources, for additional requirements related to stormwater and non-stormwater pollution prevention and control.

***Plan Requirements and Timing*.** Construction plans shall be submitted for review and approval by the City prior to approval of Land Use Permits/Coastal Development Permits. Grading and design plans for improvements shall be submitted for approval by the City. The qualifications of the designated registered Civil or Geotechnical Engineer shall be provided to the City prior to approval of Grading Permits.

***Monitoring*.** The City, or their designated agent, shall inspect construction sites and monitor effectiveness of all erosion control BMPs and other requirements on a routine basis.

Mitigation Measure GEO-2: Excavation Oversight. In order to avoid slope stability hazards, all temporary excavations shall be designed according to CBC, OSHA, and City standards for temporary construction excavations and slopes. All plans submitted for approval of a Development Permit for development projects in the Northern Subarea and the Southern Subarea shall incorporate design recommendations for mitigation of unstable temporary construction slopes and excavations as investigation by registered soils engineers and engineering geologists (addresses impact GEO-2):

***Plan Requirements and Timing*.** A construction-level, site-specific geotechnical report(s) will be required to identify soil conditions and present appropriate mitigation measures for slopes and excavations. All grading plans for development projects in the Northern Subarea and the Southern Subarea shall incorporate the recommendations of the geotechnical report(s) and be submitted for review and approval by the City prior to approval of Land Use Permits. The plans shall indicate that all slopes and excavations and their respective mitigation measures, as necessary, are designed for the appropriate soil conditions.

***Monitoring*.** The City shall review and approve plans and shall inspect for compliance with all slopes and excavation requirements. Prior to approval of Land Use Permits, Planning and Development staff shall review project plans and verify that appropriate geotechnical recommendations are incorporated on the plans. Building Division staff shall verify that appropriate regulatory standards, (OSHA, CBC, and City), are met prior to issuance of Building Permits. Building inspectors shall conduct site inspections to assure that construction occurs consistent with approved plans.

Mitigation Measure GEO-3: Seismic Design. In order to avoid seismic hazards, all structures shall be designed to earthquake standards for CBC Seismic Zone 4, and appropriate building setbacks from active and potentially active faults shall be applied. All plans submitted for approval of a Development Permit shall incorporate design recommendations contained in the geotechnical and geological studies for mitigation of seismic hazards.

Design-level geotechnical and geological studies shall be performed as part of the final design effort for the project. Significant soil improvement measures may be needed to

mitigate potential for liquefaction and ground settlement, as determined by the design-level geotechnical studies. Seismic design criteria will be refined by the applicant's geotechnical consultant. All grading and earthwork recommendations shall be incorporated into the final project design, including the Final Grading Plan. A Registered Civil Engineer or Certified Engineering Geologist shall supervise all grading activities. The project shall be designed and constructed in compliance with all applicable codes and regulations (addresses impact GEO-3).

Plan Requirements and Timing. All grading and structural plans for development projects in the Northern Subarea and the Southern Subarea shall be submitted for review and approval by the City prior to issuance of a building permit. . The plans shall indicate that all structures are designed to earthquake standards for CBC Seismic Zone 4 for all above-ground structures, and that appropriate CBC seismic design parameters are identified for the respective types and distance to pertinent faults. Building plans consistent with City building standards and which meet CBC Zone 4 standards shall be provided to the Building Division prior to issuance of Building Permits.

Monitoring. The City shall review and approve plans and shall inspect for compliance with all seismic hazard requirements. Prior to issuance of a building permit, Development Services staff shall review project plans and verify that CBC Seismic Zone 4 requirements are printed on the plans. Building Division staff shall verify that CBC standards are met prior to issuance of Building Permits. A foundation report addressing liquefaction will be verified prior to issuance of a Building Permit. Building inspectors shall conduct site inspections to assure that construction occurs consistent with approved plans.

Mitigation Measure GEO-4: Detailed Soils Analysis. In order to avoid soil-related hazards, the project applicant shall investigate and implement recommendations set forth by the applicant's geotechnical engineer and refine the project design through detailed soils analysis. The design of the proposed foundation systems and floor slabs of the proposed structures, and Lake SouthShore shall consider the likely presence of expansive soil conditions, as well as collapsible and compressible soil conditions that have a high potential for both short- and long-term settlement and compression (addresses impacts GEO-4 and GEO-5).

Plan Requirements and Timing. The final building foundation plans shall incorporate and accommodate soil engineering recommendations made by the geotechnical consultant. All grading and structural plans for the Ormond Beach Specific Plan Study Area, shall be submitted for review and approval by Development Services Department prior to issuance of a building permit..

Monitoring. All earthwork and foundation construction shall be monitored by a qualified engineer/technician under the supervision of the Geotechnical Engineer of Record, including:

- Site preparation including site stripping, removal of subsurface structures, overexcavation, bottom observation, and recompaction
- Temporary excavation
- All foundation excavations
- Placement of all compacted fills and backfills
- Construction of slab and pavement subgrades

A representative of the Geotechnical Engineer of Record shall be present to observe the soil conditions encountered during construction, to evaluate the applicability of the recommendations presented in this report to the soil conditions encountered, and to recommend appropriate changes in design or construction if conditions differ from those anticipated.

The City shall review and approve plans and shall inspect for compliance with all requirements. Prior to issuance of a building permit, Development Services staff shall review project plans and verify that that soil grading and preparation requirements are printed on the plans. Building Division staff shall verify that CBC standards are met prior to issuance of Building Permits. Building inspectors shall conduct site inspections to assure that construction occurs consistent with approved plans.

3.2.3.5 Residual Impacts

Impacts GEO-1 through GEO-7 would be mitigated to less than significant levels via implementation of Mitigation Measures GEO-1 through GEO-4.

3.3
WATER RESOURCES

3.3 WATER RESOURCES

The Ormond Beach Specific Plan Study Area is located on the Oxnard Plain in unincorporated Ventura County, California. The boundaries of the Study Area are the easterly extension of West Pleasant Valley Drive on the north, an irregular line extending parallel to the Pacific Ocean on the south, the Olds Road and Arnold Road alignments on the east, and an irregular line that includes the Edison Drive alignment on the west. The Study Area is further divided by Hueneme Road into two subareas: the Northern Subarea and the Southern Subarea. For purposes of this discussion, the Northern and Southern Subareas are referred to collectively as the Study Area. The two subareas are located within the same watershed and groundwater basin (Figure 3.3-1).

3.3.1 Existing Conditions

3.3.1.1 Hydrology

3.3.1.1.1 Rainfall

A network of rain gauges is maintained by the Ventura County Watershed Protection District (VCWPD) near the Study Area, providing detailed information on the historic rainfall totals and expected rainfall intensities within the Study Area. The average annual rainfall in the Study Area is 14 inches. Storms that produce 2 to 3 inches of rainfall within a 24 hour period are also typical annual occurrences. Table 3.3-1 presents 6-hour and 24-hour rainfall depths for different recurrence intervals for VCWPD precipitation gauge #17c at Port Hueneme Harbor (Figure 3.3-2).

TABLE 3.3-1
RAINFALL INTENSITIES – ORMOND BEACH AREA

Recurrence Interval (years)	6-Hour Rainfall (inches)	24-Hour Rainfall (inches)
2	1.6	2.5
5	2.0	3.5
10	2.2	4.0
25	2.8	5.0
50	3.0	5.5
100	3.5	6.0

Ref: VCWPD, 2005

3.3.1.1.2 Surface Water

The Study Area watershed is located in the Oxnard Hydrologic Subarea, which is part of the Oxnard Plain Hydrologic Area of the Santa Clara-Calleguas Hydrologic Unit according to the Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan (LARWQCB, 1994) The Oxnard Plain has a total area of approximately 100 square miles and is divided into 17 major watersheds (The City of Oxnard Master Plan of Drainage, Hawks and Associates, 2003). The Ormond Beach drainage basin is situated between the Calleguas Creek and Santa Clara River drainage basins. Of this total area, approximately 16 square miles drain to the Ormond Beach area.

Ormond Beach is located in one of the RWQCB-designated watershed management areas (WMA) identified as "Miscellaneous Ventura County Coastal Streams." The Basin Plan (LARWQCB, 1994) does not list any specific water quality objectives for Miscellaneous Ventura Coastal Streams or drainage canals, such as those found in and near the Study Area.

Coastal features (downgradient of the Study Area) identified in the Basin Plan include Ormond Beach and the Ormond Beach wetland. Beneficial uses designated for Ormond Beach include Industrial, Naval, Power, Recreation, Marine, Wildlife, Migratory/Endangered Species, and Shellfish. The Ormond Beach wetland beneficial uses are Recreation, Estuary, Wildlife, Migratory/Endangered species, and Wetlands.

3.3.1.1.3 Groundwater

The City of Oxnard is located in the Oxnard Plain Hydrographic sub-unit. It includes the Oxnard and Pleasant Valley Hydrographic subareas, both of which receive natural recharge from a system of nine groundwater basins along the Santa Clara River Basin. The Oxnard Hydrographic Subarea is located in the southwest corner of the Santa Clara River Basin and consists of the Montalvo, Mound and Oxnard Plain Basins (Kennedy/Jenks, 2003).

The Oxnard Forebay Basin (also known as the Montalvo Basin) is the main unconfined aquifer and recharge area in the Oxnard Plain. Groundwater is stored in both the shallow (Upper Aquifer System (UAS)) and in the deep aquifer system known as the Lower Aquifer System (LAS). Within the Oxnard Forebay Basin, groundwater flows southwesterly into the Oxnard Plain Basin (USGS, 2003). Recharge to the Oxnard Forebay Basin is provided by percolation from the Santa Clara River flows, artificial recharge from UWCD's spreading grounds, irrigation return flows, percolation of rainfall, and lesser amounts of underflow from adjacent basins. The U.S. Geological Survey estimates that about 20 percent of the water recharged to the Oxnard Forebay Basin reaches the Lower Aquifer System, with the remainder recharging the Upper Aquifer System (United Water Conservation District, 1999).

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Ormond Beach Specific Plan EIR URS Corporation	Figure 3.3-1. **WATER RESOURCE JURISDICTIONAL BOUNDARIES**	Nov. 2009

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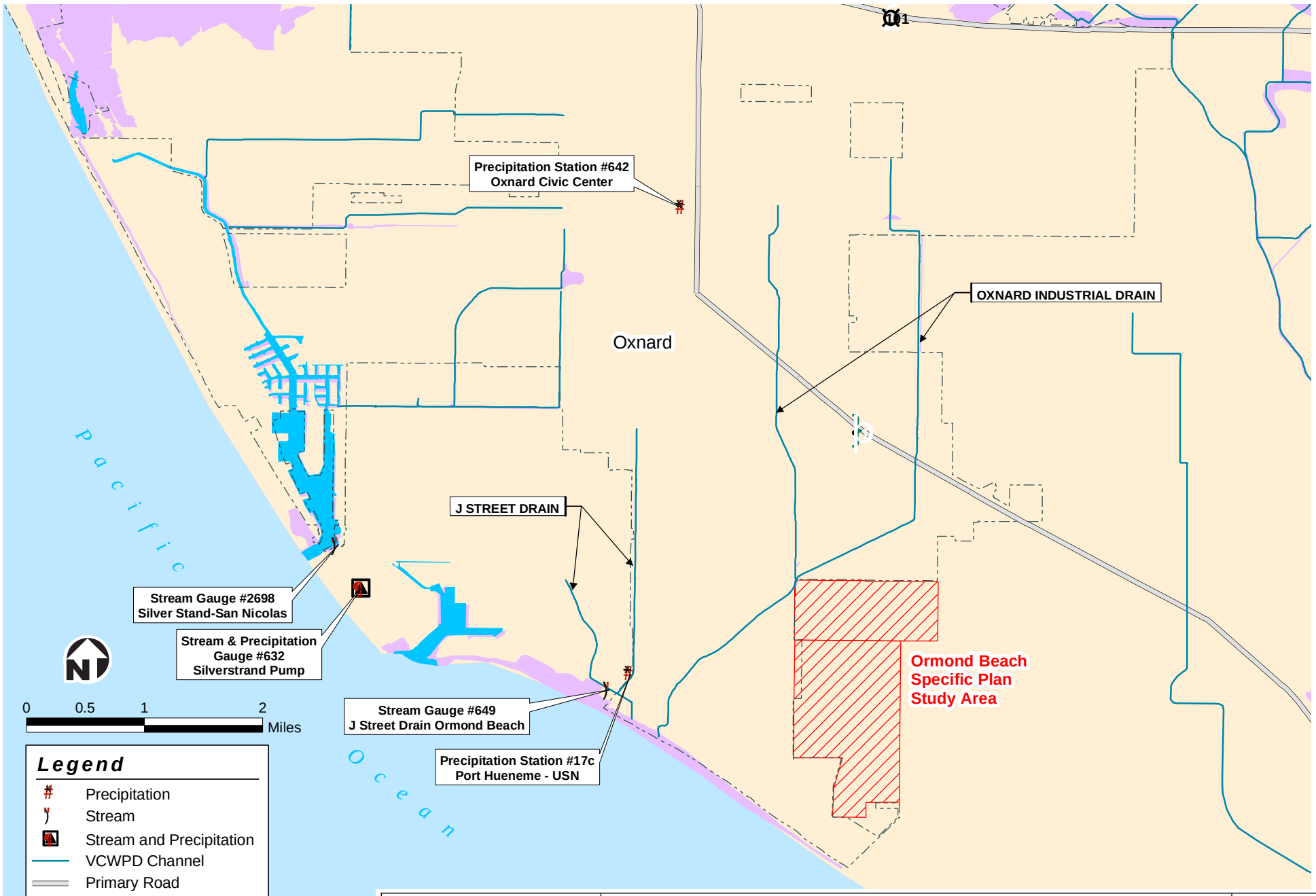

Ormond Beach Specific Plan EIR URS Corporation	Figure 3.3-2. **FLOODPLAIN AND STREAM GAUGES**	Nov. 2009

The Oxnard Forebay Basin is hydraulically connected to the other aquifers in the Oxnard Plain Groundwater Basin. Thus the primary recharge to the Oxnard Plain Groundwater Basin is from the underflow from the Forebay rather than from deep percolation of water from surface sources on the Oxnard Plain (Kennedy/Jenks, 2005).

The Oxnard Plain Groundwater Basin underlies the Study Area and is generally made up of the two aquifer systems known as the UAS and LAS. Within the Oxnard Plain Groundwater Basin, the UAS consists of the semiperched zone, the Oxnard Aquifer, and the Mugu Aquifer. The LAS in the Oxnard Plain Basin is comprised of the Hueneme, Fox Canyon, and Grimes Canyon aquifers. Offshore, submarine canyons have dissected these regional aquifers, providing a hydraulic connection to the ocean through the submarine outcrops of the aquifer systems. Coastal landward flow (seawater intrusion) occurs within both the UAS and LAS (USGS, 2003).

The Oxnard aquifer, about 180 feet below ground surface, is the primary water-yielding zone in the UAS. The Oxnard Aquifer is underlain by the Mugu Aquifer and overlain by a thick, areally extensive clay deposit. This clay deposit separates the Oxnard Aquifer from a shallow unconfined aquifer that previous researchers have referred to as the “perched” aquifer. The Oxnard and Mugu aquifers crop out in the Hueneme and Mugu submarine canyons less than one-quarter mile offshore. The perched aquifer crops out immediately offshore along the coast south of the Study Area.

Native water in the Oxnard and Mugu aquifers is generally fresh, and chloride concentrations are about 40 mg/l. However, in some areas (especially near Mugu submarine canyon), interbedded fine-grained deposits in the Oxnard and Mugu aquifers contain saline water. The Oxnard and Mugu aquifers were extensively pumped for water supply. The perched aquifer contains fresh and saline water, but it is not used as a source of water supply. Saline water in the perched aquifer results from a combination of (1) seawater that recharged the aquifer through offshore outcrops or infiltrated into the aquifer through coastal wetlands or during coastal flooding [in some cases this water was partly evaporated prior to recharge]; (2) concentration of dissolved minerals resulting from the evaporative discharge of groundwater; and (3) infiltration of irrigation return water (USGS, 2003).

Native water in the LAS is generally fresh, and chloride concentrations range from 40 to 100 mg/l. The LAS is surrounded and underlain by partly consolidated marine and volcanic rocks that contain saline water. Chloride concentrations are as high as 3,400 mg/l in the partly consolidated marine rocks and can exceed 1,000 mg/l in the volcanic rocks (USGS, 2003).

Groundwater pumping has caused water levels in parts of the Oxnard and Mugu aquifers to decline below sea level, and below the water level in the perched aquifer. Seawater entered aquifers through outcrop areas in Hueneme and Mugu submarine canyons in the mid-1950s and advanced inland in response to changes in the amount and distribution of pumping. By

1989, approximately 23 square miles of the UAS was believed to be intruded by seawater. Because of increasing chloride concentrations, pumping was shifted from the UAS to the LAS; subsequently, water levels in the LAS declined to below sea level. Increasing chloride concentrations were observed in the LAS near Mugu submarine canyon as early as 1985, and high-chloride water in the LAS near Hueneme submarine canyon was discovered in 1989 (Izbicki, 1991).

After 1993, a combination of groundwater management strategies and increased availability of water from the Santa Clara River for groundwater recharge caused water levels in wells near the coast to rise above sea level and above water levels in the perched aquifer. Water levels in parts of the LAS near Hueneme submarine canyon also rose above sea level at that time, but water levels in the LAS near Mugu submarine canyon were still below sea level as late as 1996. As of 2003, annual monitoring and the findings of the United States Geological Survey's Regional Aquifer-System Analysis (RASA) study indicate that the UAS is now balanced with respect to seawater intrusion and overdraft impacts (Kennedy/Jenks 2003). However, the LAS remains subject to seawater intrusion in some areas, but not as severe as the conditions which existed in the late 1980's and early 1990's.

The Basin Plan (LARWQCB, 1994) objectives for groundwater quality from the perched aquifer are: 3,000 mg/l for TDS; 1,000 mg/l for sulfate; and 500 mg/l for chloride. TDS levels in the perched aquifer groundwater generally exceed 2,000 mg/l (Jones and Stokes, 2004). Because perched groundwater is not generally used for municipal or industrial purposes, there appears to be little data characterizing the water quality of groundwater in the perched zone underlying the project area.

3.3.1.2 Water Supply

The primary legal standards for assessing the sufficiency of water supplies for new developments were established in Senate Bill 901 (1995), Senate Bill 610 (2001) and Senate Bill 221 (2001). Those statutes require as part of the environmental review of certain land development projects, the preparation of a "water supply assessment." As the land use planning agency, the City must then analyze within the CEQA context the environmental impacts of providing water to the project based upon the water supplies identified in the water supply assessment. Because of their size, both Ormond Beach projects require the preparation of water supply assessments. Kennedy/Jenks Consultants prepared project-specific water supply assessments (WSAs), titled *North Ormond Water Supply Assessment and Verification* and *South Ormond Water Supply Assessment and Verification*, both dated July 2008. In November 2009, addenda to each the WSAs were prepared in recognition of changed circumstances which may have an impact on the City's water supply programs and long-term demand projections, including changes in the availability of imported and local groundwater sources, and some changes in anticipated future development within the City

which impacts the City's water demand projections. These documents form the basis of the water supply analysis for this EIR and relevant findings from them are summarized below. The WSAs, their addenda, and their references are incorporated in their entirety by reference and are included as Appendix E to this document. They are also available for review at the City of Oxnard Planning and Environmental Services Division located at 214 South C Street Oxnard, California.

The WSAs analyze the sufficiency of the City's water supplies to serve the proposed projects, in addition to the demands of the City's existing and planned future customers. Pursuant to all applicable legal standards, the WSAs conclude that, with certain reasonable assumptions, there will be sufficient water supplies for the projects under all hydrologic conditions, including normal, single dry, and multiple dry years, for at least the next 20 years.

As has been described in the original and recirculated environmental review documents, along with the City's Urban Water Management Plan and the original and addendum Water Supply Assessments for this project, regulatory conditions involving water supplies and water policy occurring throughout the state have been in flux in recent years. Given this changing conditions, the City Council has adopted what might be considered an ultra-conservative approach to evaluating the impacts associated with providing water service to proposed new development. While the City remains confident in its finding that it has available sufficient and reliable supplies for the projects considered in this evaluation, along with existing and planned future customers, the City now imposes additional water supply-related mitigation requirements. That is, each project provide to the City sources of water rights or water supplies (as detailed below) sufficient to offset the entirety of the projected demand associated with the project – the project must be water supply neutral to the City.

This section contains a description of the City's current and planned future water supplies, along with an evaluation of the adequacy and environmental impacts of providing water to the project based upon the water supplies identified in the WSAs.

The City uses two sources of water to serve its customers: (1) imported surface water and (2) local groundwater. With very few exceptions, all City customers receive a blend of these two supplies through a combination of (1) City-owned groundwater wells; (2) groundwater purchased through a long-term contract with the United Water Conservation District (UWCD); and (3) imported surface water purchased through a contract with the Calleguas Municipal Water District (CMWD). Over the course of the next two decades, the City is projected to rely more heavily on local resources, including groundwater and highly treated recycled water. Table 3.3-2 shows the distribution of past deliveries to City customers according to the source of water delivered.

TABLE 3.3-2
SUMMARY OF HISTORIC WATER USE (AF)

Year	City Wells (Ground)	UWCD (Ground)	CMWD (Surface)	Total
1995	2,800	2,200	16,860	21,860
1999	-	10,200	14,250	24,450
2000	5,320	6,420	14,752	26,492
2001	7,021	5,853	13,215	26,089
2002	6,971	7,067	13,170	27,208
2003	8,878	8,834	11,303	29,015
2004	12,743	3,823	11,717	28,283
2005	12,933	3,159	13,472	29,564
2006	14,056	4,001	12,027	30,084
2007	440	16,630	11,420	28,490

Source: Kennedy/Jenks Consultants, Final Water Supply Assessment and Verification-North Ormond and South Ormond, July 2008. See Appendix E.

3.3.1.2.1 Imported Surface Water

Calleguas Municipal Water District (CMWD)

CMWD is a municipal water district formed in 1953 to import and distribute water in northwestern Los Angeles County and southern Ventura County. CMWD became a member agency of Metropolitan Water District of Southern California (MWD) in 1960. CMWD is largely a pass-through, wholesale water agency and obtains most of its potable water supplies from MWD. It purchases imported water from MWD, operates a groundwater bank within eastern Ventura County, and provides wholesale water service to cities, public districts, investor-owned utilities, and other customers within its service area, including the City. CMWD published an urban water management plan in 2005 (the CMWD 2005 UWMP) which sets forth the agency's historical, current, and projected water demands and supplies.

Effective January 1, 2003, the City entered into a ten-year Purchase Agreement for Imported Water (Purchase Agreement) with CMWD. Pursuant to that agreement, the City has a base allocation of 17,379.4 AFY and an unlimited right to purchase additional water at the CMWD Tier 2 (higher) price. If the City and CMWD do not enter into a new or extended water purchase agreement after the ten-year term of the existing agreement, it is anticipated that CMWD will deliver water under its prior practice of providing water without a contract based on the CMWD's statutory obligation to deliver water to qualified customers located within the CMWD service area. That practice was in place from the formation of CMWD through the end of 2002 and resulted in the delivery of fully reliable water supplies to the City. Therefore, based on historical experience, it is substantially likely that the reliability of

CMWD supplies will be the same whether the City purchases water from CMWD with or without a contract.

Regardless of the basis for the purchase of water from CMWD, the agency is planning to supply the City with the quantity of water included in the City's 2005 UWMP and as presented in the WSAs for the Ormond Beach projects. In other words, the City's current and projected future water demand was included in the regional demands analyzed in the CMWD 2005 UWMP.

According to CMWD's UWMP, based on the District's current water supply portfolio, it will have a supply surplus ranging from 2 to 30 percent for the normal water year, single dry-water year, and multiple dry-water year scenarios. Thus, CMWD has indicated that it will have sufficient water supplies to meet all water demands in its service area, including those of the City and the Ormond Beach projects, through 2030. The following sections summarize the basis for CMWD's assertion that it controls adequate water supplies through the relevant period and analyze whether events occurring after adoption of the CMWD 2005 UWMP have affected the reliability of that statement. As described below, CMWD's assertion was and continues to be reasonable and supported by substantial evidence, and no subsequent events would require that conclusion to be changed.

CMWD purchases essentially all of its potable supply from MWD. To meet overall water demands for the region, CMWD has developed a local groundwater banking program and also participates in several local reclaimed water projects and conservation programs. Like the City, many of CMWD customers extract groundwater from the local groundwater basins. Each of these sources of supply is discussed below.

MWD of Southern California

MWD is a consortium of cities and wholesale water districts that is responsible for importing drinking water for approximately 18 million people in Los Angeles, Orange, San Diego, Riverside, San Bernardino and Ventura counties. MWD obtains the water that it imports from two major sources: the Colorado River and the State Water Project (SWP) operated by the California Department of Water Resources (DWR). Each of these sources is described below, as are efforts by MWD to diversify its sources of supply and increase storage of water within its service area to enhance the reliability of its two main sources.

CMWD purchases water from MWD based on its status as a member agency. Currently, MWD delivers water to its member agencies based on a purchase order system, which MWD adopted as part of a new rate structure in 2002 to ensure the development of reliable water supplies for the future and support its vision of being the dominant regional water supplier. To achieve this, MWD called for its member agencies to enter into voluntary purchase orders, according to which member agencies agree to purchase a minimum amount of non-

interruptible water for 10 years. The water does not need to be purchased in any single year, but only as a cumulative amount over the entire ten-year period.

MWD benefits from the purchase order system because the agency can use those orders as the basis for its water supply planning efforts. In exchange for committing to purchase a minimum amount of water, MWD allows member agencies to purchase water up to 90 percent of their highest historical purchases at MWD's Tier 1 rate. The Tier 1 rate reflects the average supply cost of water from the SWP and Colorado River, but excludes MWD's costs for the development of new supplies (these costs are included in a Tier 2 rate that MWD imposes for purchases in excess of the 90 percent mark). This price differential incentivizes member agencies to reduce their historical imported water purchases by at least 10 percent. The benefit to a member agency from submitting a purchase order is that it is able to acquire water supplies from MWD at a lower cost than if it did not submit a purchase order. The submission of a purchase order does not, however, guarantee the delivery by MWD of the amount of water ordered. Water deliveries depend upon the availability of water in MWD's supply portfolio during the relevant period. The reliability of those supplies is analyzed below.

Pursuant to the MWD program, CMWD has submitted a purchase order for the period from January 1, 2003, through December 31, 2013, that allows for the purchase of up to 103,801 AFY at Tier 1 rates and requires minimum purchases over the ten-year period of a total of 692,003 AF, an average of 69,200 AFY. According to MWD's Draft 2005 UWMP, CMWD has reported that its purchases have remained below its annual maximum, and it is on track to meet its minimum purchase obligation.

MWD practice of employing purchase orders is a change from the longstanding historical practice by which MWD and its member agencies, such as CMWD, had no contracts for the purchase and sale of water. Under that historical approach, CMWD would purchase water from MWD as needed to meet its demands and then re-sell that water to its respective customers, including the City, on a similar basis. In a drought or similar situation, MWD has the ability, but has never historically acted, to distribute available supplies based on "preferential rights," which would be determined based on each member agency's relative portion of property tax assessments cumulatively paid to MWD. Under the Municipal Water District Act (Cal. Water Code §§ 71000-73001), neither the City nor any other CMWD customer has a preferential right to any specific amount of water held by CMWD. As under the current purchase order system, a member agency's ultimate ability to purchase water of sufficient quantities for its demands depended on MWD's overall supply reliability. Thus, the relationship between CMWD and MWD is parallel to that between the City and CMWD. Also similar, as described in the following sections, is that MWD has declared its water supplies to be reliable regardless of the specific mechanism for delivering water to its member agencies.

Overview of MWD Water Supplies. Based on the water supply planning requirements imposed on its member agencies and ultimate customers (e.g., urban water management plans, water supply assessments, written verifications), MWD has adopted a series of official reports on the state of its water supplies. As described below, MWD has consistently stated that its water supplies are fully reliable to meet the demands of its customers, under all hydrologic conditions, through at least 2030.

In March 2003, MWD published a document entitled the Report on Metropolitan's Water Supplies: A Blueprint for Water Reliability (Blueprint Report). The objective of the Blueprint Report was to provide member agencies, retail water utilities, and cities and counties within the MWD service area with information to assist in the preparation of their urban water management plans, water supply assessments, and written verifications. The Blueprint Report stated that the approach taken to evaluate water supplies and demands was consistent with MWD's 2000 Regional UWMP. MWD utilized SCAG's regional growth forecast in calculating regional water demands for its service area. Thus, MWD considered the City's water demands, including the project, in the Blueprint Report.

The Blueprint Report fully discusses MWD's historical and projected deliveries of Colorado River and SWP water. It is incorporated by this reference and provides a summary of the water supplies available from MWD to serve projected water demands. This document also includes supplemental information to reflect changes in MWD's water supply planning and circumstances since publication of the Blueprint Report. The conclusion of the Blueprint and supplemental information published by MWD, such as its Integrated Resources Plan Update and annual Implementation Reports, is that with its current water supply portfolio and planned actions, MWD will have sufficient water to deliver to CMWD (and the City) to meet all of the water demands within the CMWD service area, for the next 20 years.

By comparing total projected water demands and conservatively estimating water supplies over the next 20 years, MWD has found that if its supply programs were implemented under its Integrated Resources Plan, "[b]ased on water supplies that are currently available, [MWD] already has in place the existing capability to … [m]eet 100 percent of its member agencies' projected supplemental demands (consumptive and replenishment) over the next 20 years" in average, wet, multiple dry and single dry years. In multiple dry years, MWD reports that it will "[m]eet 100 percent of its member agencies' projected supplemental demands (consumptive and replenishment) even under the repeat of the worst multiple-year drought event over the next 15 years," while in a single dry-year it can "[m]eet 100 percent of its member agencies' projected supplemental demands (consumptive and replenishment) even under the repeat of the worst single-year drought event over the next 15 years." MWD's additional reserve supplies will provide a "'margin of safety' to guard against uncertainties in demand projections and risks in fully implementing all supply programs under development."

Summaries of MWD's individual supplies, along with the challenges facing each supply, are presented in the following sections. These sections also include specific actions that MWD is taking to meet each of the challenges facing its water supplies. Over the past several decades, MWD has demonstrated that it can adapt to continuous change and address uncertainties in supply by developing a diverse portfolio, setting supply targets, monitoring its progress on a regular basis, and adapting its strategy to meet its targets.

The Colorado River. MWD diverts water from the Colorado River at Lake Havasu on the California/Arizona border and conveys it across the Mojave Desert via the agency's Colorado River Aqueduct to Lake Mathews near Riverside. From there, MWD pumps the water into its feeder pipeline distribution system for delivery to its member agencies throughout Southern California.

MWD possesses the right to divert water from the Colorado River pursuant to a contract with the U.S. Secretary of the Interior under Section 5 of the federal Boulder Canyon Project Act. The Blueprint Report includes a description of MWD's 550,000 AFY base apportionment water right, along with the Colorado River supply projects that MWD is implementing to maximize the reliability of Colorado River supplies. Following distribution of the Blueprint Report, the Quantification Settlement Agreement (QSA) and other related agreements were approved on October 10, 2003, related to the supplies of all the California users of the Colorado River, including MWD. Signing of the QSA and related agreements will allow implementation of the Colorado River supply projects identified in the Blueprint Report, as well as other projects. MWD described the QSA and related agreements and their impact on the reliability of MWD's supplies in its 2006 Integrated Water Resources Plan Implementation Report.

According to MWD, it is expected that its fourth priority apportionment of 550,000 AF of Colorado River water will be available every year for the next 20 years. This supply is "expected to be available during all year types, including wet, average, single dry-year, and multiple dry-year weather."

Current challenges facing MWD's Colorado River supply include risk of continued drought in the Colorado River Basin and pending litigation that may threaten implementation of part or all of the QSA. MWD has been aggressively preparing for these two risks to its Colorado River supply for many years. Its responses to these challenges are described in the following paragraphs.

As documented in MWD's 2006 Integrated Water Resources Plan Implementation Report, the Colorado River Basin has experienced below-normal runoff for the past seven years. During 2006, Lake Mead was at its lowest level in 41 years. A Draft Environmental Impact Statement on Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead, Particularly Under Lower Reservoir Conditions was released

by the U.S. Bureau of Reclamation, which operates the Colorado River reservoirs, in February 2007. That study analyzed various alternatives to manage the Colorado River in light of the current extended dry period for enhanced reliability in water allocations for all the users of the Colorado River, including MWD. For example, one of the alternatives would introduce new operating and accounting procedures to address the ability of MWD and others to store water in Lake Mead. According to the Draft EIS, despite the challenges of recent Colorado River Basin hydrology, MWD "does not anticipate adverse water supply impacts resulting from the implementation of [the] shortage guidelines because California's 4.4 million acre-foot apportionment has a higher priority than a portion of Arizona and Nevada's apportionments during shortage conditions."

Programs that will help to implement the QSA and meet Colorado River water supply targets, and that are either currently in operation, close to completion, or in progress include the following:

- The Imperial Irrigation District ("IID") and MWD water conservation and transfer program;
- The Coachella and All-American Canal lining projects;
- The IID and San Diego County Water Authority ("SDCWA") water transfer;
- The Palo Verde Irrigation District land management and crop rotation program; and
- The Interim Surplus Guidelines adopted by the U.S. Secretary of the Interior.

MWD is actively working to implement several of these QSA-related programs. In addition, MWD is participating in the Intentional Created Surplus program to store water in Lake Mead for withdrawal during dry years. During 2006 and 2007, MWD stored 50,000 AF of water in Lake Mead that it had saved under the Palo Verde Irrigation District Land Management and Crop Rotation Program. Collectively, these programs are expected to maintain the reliability of MWD's Colorado River supplies.

MWD's fourth priority apportionment of Colorado River water has been delivered to MWD every year since 1939, in all hydrologic year types. By existing contract, this supply "will continue to be available in perpetuity" due to California's senior rights on the Colorado River. MWD has affirmed that "[t]he historical record for available Colorado River water indicates that Metropolitan's fourth priority supply has been available in every year and can reasonably be expected to be available over the next 20 years." Thus, according to MWD, its Colorado River supply is secure through at least 2025. Pursuant to the analysis in more recent MWD assessments of its water supplies and this WSA, there are no substantial challenges that are currently predicted to arise between 2025 and 2030. Therefore, the same reliability that MWD declared through 2025 is also applicable through 2030, the time period covered by this document.

The second challenge to MWD's Colorado River supplies is the pending litigation concerning the QSA and related agreements. That litigation has taken two forms: (1) a series of lawsuits against the lining of the All-American Canal and (2) a series of lawsuits which challenge the IID/SDCWA transfer. The All-American Canal litigation has been litigated and resolved in favor of the QSA parties, thus increasing the certainty of MWD's Colorado River supplies since the publication of the Blueprint Report.

Several lawsuits against the IID/SDCWA transfer were brought by the County of Imperial, various landowners within IID, and environmental advocacy groups. These suits have been consolidated in Sacramento County Superior Court. In two of those lawsuits, the County of Imperial sued the State Water Resources Control Board ("SWRCB"), IID, and SDCWA regarding the legitimacy of the QSA approvals. In November 2004, the Superior Court dismissed those cases with prejudice on the ground that the County had failed to name MWD and the Coachella Valley Water District as necessary and indispensable parties to the actions on a timely basis. Thereafter, the County appealed that decision and the Court of Appeal affirmed the dismissal in 2007, which lifted a stay on the other QSA cases. In addition, several demurrers have been filed and sustained in the consolidated cases, reducing the number of causes of action pending in the litigation. As of the date of this document, the water transfer challengers' motions for preliminary injunction have been denied, and thus, the parties are free to implement the provisions of the QSA, as appropriate. The full cases are expected to reach the court for decision during 2009.

While all significant issues in the QSA litigations have been resolved in favor of MWD and the other QSA parties to date, including the entire All-American Canal case, it is impossible to predict with absolute certainty how the remaining litigation will be resolved. MWD is actively involved in the litigation, however, and plans to defend the QSA fully to prevent any impacts to its Colorado River supplies.

State Water Project. MWD possesses a contract with DWR that entitles it to water from the SWP. MWD's share of the total SWP supply is approximately 46 percent based on its contracted Table A amount of 1,911,500 AFY. This supply is diverted from the Feather River at Lake Oroville, released and conveyed through the Sacramento-San Joaquin River Delta ("Delta"), and rediverted at the Harvey O. Banks Delta Pumping Plant for conveyance through the California Aqueduct to Southern California and MWD. MWD described and analyzed the reliability of its SWP supplies in the Blueprint Report. MWD estimated the availability of SWP supplies "according to the historical record of hydrologic conditions, existing system capabilities, requests of the state water contractors and SWP contract provisions for allocating Table A, Article 21 and other SWP deliveries to each contractor." MWD estimated that in 2025, it will have 794,700 AF available in multiple dry years, 418,000 AF in a single dry year, 1,523,300 AF in an average year, and 1,741,000 AF in a wet

year. MWD's contract with DWR expires in 2035, at which time MWD has an option to renew under the same basic conditions.

Following publication of the Blueprint Report, SWP supplies have been challenged through environmental litigation concerning the Delta. In addition, MWD has acknowledged that conveyance of water through the Delta can present challenges for SWP supplies due to water quality and environmental issues that can affect pumping operations. Risks to this supply also include potential levee failure. Actions being taken by DWR and MWD to avoid or mitigate these risks are described below.

Environmental Litigation. Specific threats to the SWP include litigation concerning the Delta. In 2007, two courts ruled that California's major water delivery systems—the SWP and the Central Valley Project ("CVP")—were violating state and federal environmental laws regarding a threatened fish species, the Delta smelt. First, Alameda County Superior Court Judge Roesch concluded that the SWP had failed to obtain a permit required under the California Endangered Species Act ("CESA") that would provide protections for Delta smelt, salmon, and steelhead from the effects of water pumping for activities at the Harvey O. Banks Delta Pumping Plant in Tracy, California. Accordingly, Judge Roesch ordered the SWP pumps to be turned off unless appropriate permits were obtained within 60 days. DWR appealed that decision, automatically staying the decision pending the outcome of the appeal. The earliest that a decision from the appellate court is expected would be during in the latter part of 2008.

As a practical response to the pending litigation in state and federal courts, DWR shut down the Harvey O. Banks Delta Pumping Plant from May 31 to June 10, 2007, to protect the Delta smelt. DWR resumed pumping on June 10, 2007, and pumping has remained at normal operating levels.

In May 2007, U.S. District Court Judge Oliver Wanger ruled that a federal Endangered Species Act ("ESA") take permit that had been issued to protect Delta smelt at both the SWP pumps and the federal Jones Pumping Plant was not legally sufficient. At issue was a 2005 biological opinion ("BiOp") that was issued by the U.S. Fish and Wildlife Service ("USFWS") pursuant to the ESA, and concluded that current project operations and certain planned future actions would not jeopardize the continued existence of the Delta smelt or adversely modify its critical habitat based on certain actions being taken by the CVP and SWP. The court found that the BiOp was legally inadequate because it did not provide a reasonable degree of certainty that mitigation measures will take place, use the best available science, address climate change, or address the impacts of joint project operations on the continued survival of the Delta smelt.

By the time this decision was released, the SWP and CVP water agencies were aware that the incidental take permit was not preventing take of Delta smelt and had requested a new permit. The consultation process with USFWS is expected to result in a new BiOp and take permit in late 2008. On August 31, 2007, Judge Wanger issued an interim oral decision that allowed the SWP and CVP to continue operating under the prior take permit as long as they complied with a USFWS-proposed five-point action matrix, as modified slightly, plus certain increased monitoring plans requested by the plaintiffs and other actions that do not have a water cost.

At the remedy proceeding before Judge Wanger, the Chief of the SWP Operations Planning Branch testified that in an average year, when combined deliveries of the CVP and SWP would be 5.9 million AF, reductions in deliveries due to compliance with the USFWS matrix will range from 820,000 to 2.17 million AF, which represent 14 and 37 percent of baseline deliveries, respectively. In a dry year, when combined deliveries would be 3.2 million AF, reductions will range from 183,000 to 814,000 AF, which represent reductions from baseline deliveries of 6 and 25 percent, respectively. The modifications to the USFWS matrix by Judge Wanger will increase the delivery reductions by an amount that was not modeled by DWR, but it is expected that the actual impacts of Judge Wanger's order may be slightly greater than those figures.

Judge Wanger's order will impact diversions from December 25, 2007, until the new USFWS BiOp is issued in late 2008. However, it should be expected that the USFWS will include similar restrictions in the final BiOp to those that were in its action matrix adopted by Judge Wanger. Thus, the SWP and CVP will likely see long-term reductions in deliveries based on this litigation. Among other results, the decision likely will increase the political pressure for construction of the Peripheral Canal to avoid use of the south Delta pumping plants. In response to this decision and other water supply and quality issues, MWD issued a press release in September 2007 stating that "[i]n the short and long term, continued investment in regional and local resources will help ensure and diversify reliable water supplies to meet Southern California's future needs."

In light of the circumstances described above, MWD has embarked on many proactive programs to deal with potential future delivery restrictions, should they occur. For example, MWD is one of the parties that are drafting the Bay-Delta Conservation Plan (BDCP) to provide state and federal ESA coverage for the SWP operations. The BDCP allows water contractors, who must comply with the federal and state ESAs, to work cooperatively to attain incidental take coverage via a habitat conservation plan and natural community conservation plan. Development of this plan is now underway under the aegis of the California Resources Agency, and a draft

report is due in 2008, with the appropriate permits and completion of an environmental impact statement/impact report expected in late 2009.

MWD is also focusing on voluntary Central Valley storage and transfer programs to bank MWD's SWP water supplies. In its 2006 Integrated Water Resources Plan Implementation Report, MWD reported that "492,000 AF of dry-year yield has been developed in Central Valley storage and transfer programs," and "[p]otential partners and programs have been identified to meet IRP targets." This flexibility will assist MWD in addressing shortages due to drought or court-imposed cutbacks to protect Delta smelt. Further, MWD has employed conjunctive use programs which utilize groundwater basins to store water during wet seasons, which provides a buffer supply that MWD can extract during dry periods. In 2006, MWD developed groundwater storage capable of providing 135,000 AF of dry year supply. MWD continues to seek additional opportunities in Southern California to expand groundwater conjunctive use storage programs.

Delta Levees. The state is actively studying the risk of levee failure and potential impacts to SWP supplies and developing a plan to protect the Delta. There are several concurrent processes for resolving these challenges. In the spring of 2006, at the recommendation of CALFED, an interagency effort that includes 23 state and federal agencies that have management or regulatory responsibility for the Delta, DWR began a two-year Delta Risk Management Study ("DRMS") to analyze risks to the levee system. The Stage I analysis will include a discussion of the region's assets, existing problems with the system, the degree of risk that exists and the potential consequences of multiple levee failures. Stage II will address levee risk reductions. The DRMS reports will be a part of the Delta Vision Report to be submitted to the State Legislature and Governor in 2008.

Following completion of the Delta Vision Report, the panel established by Governor Schwarzenegger will begin studying long-term strategic solutions for the conflicts in the Delta. That process, which will take place during 2008, is a strategic planning stage that will assess alternative implementing measures and management practices to implement the Delta Vision recommendations. The final recommendations will include modifications to existing land uses and services in the Delta, and will assess governance, funding mechanisms, water resource uses and ecosystem management practices. The Delta Vision Committee will publish a public review draft of its Delta Strategic Plan by October 31, 2008, and submit the final plan to the Governor and Legislature by December 31, 2008.

In response to concerns over the integrity of the levee system, the state significantly increased the budget for levee repairs in 2006, and a $5.4 billion natural resources

bond was approved by voters in November 2006 (Proposition 84), which assigns additional funds for flood control in the Delta and to plan for future water supplies.

At the state, regional, and local levels, numerous water decision-makers are actively addressing the threats facing the Delta. A review of MWD's resource development programs demonstrates that although SWP supplies are facing challenges and may become more expensive based on the cost of ultimately adopted solutions, MWD's adaptive planning framework, which includes conservation, in-region surface water storage, groundwater storage programs, and local water production within the MWD service area, will allow MWD to adapt to changing conditions and ensure a reliable, diverse water supply to its members agencies that supply water to municipal customers. MWD has spent the past decade increasing the capacity of its reservoirs, and its overall water reserve is several times larger than it was during the 1991-1992 drought. Further, actions that are being taken by the CALFED process and the State should enhance reliability of the SWP supplies in the future. Both MWD and state agencies are aware of changing conditions that may impact the SWP and are planning accordingly to ensure a safe, reliable supply of SWP water.

Additional Actions to Mitigate Supply Risks. In addition to the actions described in the previous sections that seek to avoid or mitigate risks facing the Colorado River or SWP individually, MWD also has several programs that address its overall supply reliability. Several of those programs are described below.

Water Surplus and Drought Management Plan (WSDM). In 1999, MWD incorporated the water shortage contingency analysis that is required as part of any urban water management plan into a separate, more detailed plan, called the WSDM. That plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in the agency's Integrated Resources Plan. The WSDM also "identifies the expected sequence of resource management actions that [MWD] will execute during surpluses and shortages to minimize the probability of severe shortages and eliminate the possibility of extreme shortages and shortages allocations." MWD's ten-year WSDM categorizes its ability to deliver water to its customers by distinguishing between surpluses, shortages, severe shortages, and extreme shortages. The WSDM's integration of management actions taken during times of surplus and shortages reflects MWD's belief that these actions are interrelated.

For example, MWD's regional storage facilities, such as Lake Skinner, Lake Mathews, and Diamond Valley Lake, along with storage capacity available to MWD in Castaic Lake and Lake Perris, provide MWD with flexibility in managing its supplies. MWD's storage supplies and existing management practices allow MWD to mitigate shortages without having to impact retail municipal and industrial demands, except in severe or extreme shortages. MWD's 2005 UWMP shows its expected ability to meet demands in single dry

years by water supply source. For example, in 2010 MWD expects to have 831,000 AF in potential reserve and replenishment supplies, primarily through in-basin storage. In 2030, MWD estimates that it will have 716,000 AF in potential reserve and replenishment supplies. Anytime MWD withdraws from storage to meet demands, it is considered to be in a shortage stage. MWD has spent decades building up its storage reserves and groundwater management programs in order to prepare for a variety of shortage conditions. According to MWD's UWMP, "Each [shortage] stage is associated with specific resource management actions designed to (1) avoid an Extreme Shortage to the maximum extent possible and (2) minimize adverse impacts to retail customers if an Extreme Shortage occurs." MWD notes that the "overriding goal of the WSDM Plan is to never reach Shortage Stage 7, an Extreme Shortage."

In an actual shortage, MWD will take one or more of the following actions:

(1) Draw on storage out of reservoirs;
(2) Draw on out-of-region storage in the Semitropic and Arvin-Edison groundwater banks;
(3) Reduce or suspend long-term seasonal and groundwater replenishment deliveries;
(4) Draw on groundwater storage programs;
(5) Draw on SWP terminal reservoir storage;
(6) Reduce Interruptible Agricultural Water Program (IAWP) deliveries;
(7) Call on water transfer options contracts;
(8) Purchase additional water; and
(9) Reduce imported supplies to its member agencies by an allocation method.

MWD clarifies that this list is not in any particular order, "although it is clear that the last action [taken] will be the curtailment of firm deliveries to the member agencies." If MWD were obligated to curtail firm deliveries, it would enforce these shortage allocations using rate surcharges. For example, if deliveries exceed 102 percent of a customer's allotment, the customer will be assessed a surcharge. MWD's actions in 2007 are instructive in demonstrating how the WSDM Plan is implemented in practice.

Prior to the start of calendar year 2007, MWD estimated that water demands would exceed annual supplies (not including stored water) by approximately 300,000 AF. In response, MWD took the following actions:

(1) Called for water stored in its Central Valley storage programs;
(2) Initiated replenishment cuts and notified participating agencies with in-basin groundwater storage programs;
(3) Embarked on a public outreach and media conservation campaign; and
(4) Announced reductions in IAWP agricultural supplies.

Regarding reductions in agricultural water deliveries, before MWD imposes any restrictions on the CMWD's Tier 1 water, it will reduce deliveries of discounted agricultural supplies. In 1994, MWD established the IAWP to deliver surplus water for irrigation purposes at a reduced rate that is more affordable for certain sectors of the agricultural industry. In exchange for the discounted rate, the MWD General Manager has the authority to reduce IAWP deliveries up to 30 percent before it imposes mandatory allocations to municipal and industrial retail customers under its WSDM.

Due to dry conditions and the pending Delta smelt litigation that may affect MWD's supplies, MWD decided to implement the water shortage actions that it outlined in its WSDM, including a 30 percent reduction in IAWP deliveries. On October 9, 2007, MWD's Board of Directors announced that it would reduce IAWP deliveries over a 12-month calendar year beginning in January 2008. At this time, MWD has stated that it will not reduce water purchased by its member agencies at the full service rate. CMWD's supplies are currently secure as it purchases non-discounted non-interruptible supplies from MWD.

MWD has announced a strategic approach for 2008 regarding its WSDM Plan. Besides exercising interruptions to the IAWP, MWD's major strategies are as follows:

(1) Continue conservation campaign;
(2) Maximize recovery of water from Central Valley storage and banking programs;
(3) Purchase additional supplies to augment existing supplies; and
(4) Develop and implement a shortage allocation plan.

MWD is presently developing a long-term Drought Allocation Plan that may include reductions of full service deliveries. MWD has used several of these types of initiatives in the past (e.g., during the droughts of 1977-78 and 1989-92), which allowed the agency to meet the needs of its member agencies. Past experience demonstrates that MWD has always provided its members agencies with sufficient supplies in the face of variable weather conditions, new environmental and water quality regulations, and evolving political and legal challenges. For example, MWD successfully dealt with disruptions to supply caused by the 2004 Jones Tract flooding and operational constraints such as the rehabilitation of the Colorado River Aqueduct in 2003.

Integrated Resources Plan. MWD first adopted its Integrated Resources Plan (IRP) in 1996. The most updated IRP, which was adopted in 2004, discussed local water supply initiatives (e.g., local groundwater conjunctive use programs) and established a buffer supply to mitigate against the risks associated with implementation of local and imported water supply programs. The 2004 IRP noted that future water supply reliability depends not only upon actions by MWD to secure reliable imported supplies, but also further development of local projects by local agencies such as CMWD.

On October 10, 2006, MWD released its 2006 Integrated Water Resources Plan Implementation Report ("2006 Implementation Report") to report on progress toward implementing the targets from the 2004 IRP Update. The 2006 Implementation Report included a summary of each of MWD's water resource development categories:

(1) Conservation;
(2) Local Resources;
(3) Colorado River Aqueduct;
(4) SWP Supplies;
(5) Central Valley Storage And Transfer Programs;
(6) In-Region Groundwater Conjunctive Use Storage; And
(7) In-Region Surface Water Storage.

This recent report concluded that "while changes occur in all resource areas, Metropolitan is able to maintain supply reliability through its diversified water resources portfolio." MWD supported this conclusion by providing detailed updates for each of its resource categories, restating dry-year IRP targets and examining current considerations, changed conditions, implementation strategies and identified programs, implementation challenges, and cost information. A brief summary of each of MWD's water resource development categories (other than the Colorado River and SWP supplies, which were discussed in detail in previous sections of this WSA) is provided below:

- **Conservation:** In 2006, MWD invested $10.6 million in conservation programs and initiatives, including executing a ten-year residential master conservation funding agreement with member agencies, encouraging the use of high-efficiency toilets, strengthening outdoor conservation programs and introducing new Industrial Process Improvement programs. In 2005-2006, MWD programs conserved approximately 762,000 AF, which was an increase of approximately 30,000 AF over the previous fiscal year. MWD's 2010 target for conservation savings is 865,000 AF.

- **Local Resources—Recycling, Groundwater Recovery and Seawater Desalination:** MWD has invested $213 million with its member agencies to develop local resource programs. MWD contributed approximately $24.5 million toward the production of 127,000 AF of local resource production supplies in 2006, which is an increase of 16,000 AF from 2005. MWD's 2010 target for regional water recycling and groundwater recovery is 410,000 AF. Further, three desalination project agreements have been signed

- **Central Valley Storage and Transfer Programs:** MWD has developed significant water storage and transfer program partnerships in the Central Valley and has witnessed increased cooperation with DWR and federal agencies to facilitate water

transfers. MWD continues to pursue transfers with Central Valley parties and has worked to improve existing storage programs with existing SWP storage partners. For 2008, MWD is currently seeking to acquire up to 250,000 AF by temporary transfer from the Central Valley.

- **In-Region Groundwater Storage:** The 2006 Implementation Report identified that components of MWD's in-region groundwater storage program may not meet its 2010 dry-yield target of 275,000 AF. As of October 2006, groundwater storage had been developed to provide about 135,000 AF. In response, MWD conducted a groundwater basin assessment to explore other groundwater storage opportunities. MWD's recent Groundwater Basin Assessment Study provided new information to focus on meeting this goal. MWD will continue to develop new strategies for groundwater storage.

MWD's 2007 Implementation Report demonstrates that the agency has continued to react aggressively to address challenges facing water resources. By amending existing strategies, MWD has made significant progress in most resource areas toward meeting the IRP targets. For example, in fiscal year 2006-2007, MWD saved approximately 812,000 AF through conservation efforts and is expected to meet its 2010 target. Local resource production is expected to exceed the 2010 target of 426,000 AF based on current production and expansion of existing programs. Existing supplies in Central Valley storage programs are also expected to exceed the 2010 target of 300,000 AF. While in-region groundwater storage programs are currently falling short of MWD's 2010 IRP target, MWD is actively working to find new ways to meet this goal, and the success of other programs, such as Central Valley storage, can avoid any negative impacts from failure to meet this single goal. For example, MWD has already exceeded its 2010 IRP target for dry-year surface water storage. While SWP supplies are not projected to meet the 2010 or longer-term targets, MWD is actively seeking to resolve the risks associated with that supply, as discussed in Section 3.3.1.3 above.

MWD is currently planning to fully update the 2004 IRP beginning in 2008. The updated IRP will address existing and new challenges, such as the Delta smelt litigation and climate change. As can be seen by these ongoing studies, MWD is continually updating its plans to meet ever-changing challenges to its water supplies.

Summary of MWD Water Supply Reliability. MWD has engaged in significant water supply projection and planning efforts. As noted above, those efforts have included the water demands of the CMWD service area, including the City and the Ormond Beach projects, in their projections. In its 2003 Blueprint Report and 2005 Regional Urban Water Management Plan, MWD has consistently found that its existing water supplies, when managed according to its water resource plans, such as the WSDM and IRP, are and will be 100 percent reliable for at least a 20-year planning period. Since publication of those reports, MWD has

continued to implement its water supply programs, as reported in its 2006 and 2007 Implementation Reports, the latter of which was published on October 9, 2007. Although water supply conditions are always subject to uncertainties, MWD has maintained its supply reliability in the face of such uncertainties in the past and is actively managing its supplies to ensure the same 100 percent reliability for the future.

Other CMWD Supplies

Along with MWD, CMWD has focused its planning efforts on more efficient use of local water resources. CMWD is working with its customers and other local agencies to support a number of local projects to increase the overall reliability of regional water supplies. These projects include wastewater reclamation, brackish groundwater recovery, and regional salinity management programs. These projects are described in detail in the 2005 CMWD UWMP. Each of these projects adds local supply sources that offset or reduce the demand for imported water and provide additional supplies to accommodate growth within the CMWD service area. The most important of these projects, the Las Posas Basin groundwater storage program, is described below.

Las Posas Basin Groundwater Storage Program. In a cooperative effort with MWD, CMWD has developed the Las Posas Basin Aquifer Storage and Recovery (ASR) project in the Las Posas Groundwater Basin. This project is designed to provide for subsurface storage of up to 300,000 AF of imported water to meet emergency, drought, and peak demands of CMWD's member agencies. ASR technology includes dual-purpose, injection/extraction groundwater wells that can store water and subsequently produce the stored water as needed. The project will enable pre-delivery and storage of large volumes of SWP water in the CMWD service area during periods of availability. The stored water will later be "recovered" (extracted) by CMWD to meet seasonal, drought, and emergency demands.

The Las Posas ASR project will provide the following benefits to the City:

- Increases the reliability of CMWD's drinking water supply by storing large volumes of SWP water available for later use.
- Increases the water storage capacity for the CMWD service area. The available storage capacity in the Las Posas Basin is 30 times the capacity of Lake Bard.
- Increases operational flexibility in the event of a severe drought or emergency.

If the SWP water supply is reduced or disrupted entirely, the stored water will be retrieved, treated, and delivered to meet demands in the CMWD's service area.

Reliability of CMWD Supplies

As discussed above, along with MWD's reliability initiatives, CMWD has also taken significant steps to reduce its vulnerability to drought or other potential supply limitations. In accord with MWD's water management actions, CMWD also has a water shortage contingency analysis in its 2005 UWMP. CMWD's stages of action to reduce imported deliveries mirrors MWD's shortage approach by first encouraging voluntary behavioral changes before imposing mandatory reductions on its customers. Voluntary changes are expected to be sufficient to handle significant supply reductions, while mandatory actions would allow CMWD to weather reductions up to 50 percent.

It is clear that the reliability of CMWD's water supplies is linked directly to deliveries from MWD, with additional mitigation of supply risks from local groundwater storage and recycling programs. CMWD projections provided in its 2005 UWMP show that it has flexibility between its MWD supplies, its local projects, demand control measures, and available reserves to adequately meet service area demands in normal, single dry and multiple dry-year scenarios.

Notwithstanding the above measures CMWD and MWD have undertaken to protect and preserve the integrity of their water supply commitments, in late 2009 MWD requested all of its retail water purveyors to implement a 23% reduction on water use. This drought response measure will persist for as long as the extraordinary water supply constraints continue to impact MWD and CMWD supplies. The City has evaluated this restrictions, along with other relevant changed conditions involving its water supply and demand projections in the 2009 Addendum to the WSA. The results of this evaluation are presented in the 2009 Addendum to the WSA and presented below.

3.3.1.2.2 Local Groundwater Supplies

The groundwater supplies upon which the City relies are regulated through the Fox Canyon Groundwater Management Agency (FCGMA), which is an independent special district created by the California Legislature in 1983 to manage the groundwater resources within the groundwater basins underlying southwestern Ventura County. The FCGMA has jurisdiction over an area of approximately 185 square miles, including the City of Oxnard's main groundwater supply aquifers, the Oxnard Forebay and the Oxnard Plain basins.

As described below, the FCGMA has established a series of water management policies and programs that are intended to protect the long-term integrity and reliability of the local groundwater resources within its jurisdiction. The primary FCGMA regulatory tool is Ordinance 8.1. In meeting its goals in managing the local groundwater basins, the FCGMA has also adopted several resolutions and recently updated its Groundwater Management Plan, as discussed below.

The FCGMA's primary groundwater preservation program is embodied in Ordinance 8.1, which a) requires all groundwater wells to be registered with the agency, b) requires all groundwater use to be reported to the agency, and c) limits the amount of groundwater that may be pumped from within the agency's jurisdiction without the payment of a significant pumping surcharge (financial payment set at a rate roughly equivalent to the cost of purchasing a similar quantity of imported water).

The FCGMA controls groundwater pumping through an allocation system. Each municipal and industrial groundwater user within the FCGMA, including the City of Oxnard, has an established groundwater pumping allocation, which the FCGMA monitors. The FCGMA imposes a nominal (currently $4 per acre foot) pump charge for all pumping within the established allocation. As noted, any pumping above the allocation is subject to the pumping surcharge.

FCGMA policy also allows groundwater users to "bank" any unused groundwater allocation in the form of credits. For example, if the City limits its groundwater use to less than its annual allocation, it earns a conservation credit. Similarly, if "foreign water" (including recycled water) is used in-lieu of groundwater pumping and/or recharged into the local aquifers, additional credits (either conservation or storage) may be accrued. These credits may be used to offset any pumping in subsequent years to avoid payment of the GMA surcharge.

In addition to its own groundwater allocation, the City holds a water supply contract (the Oxnard Hueneme Pipeline Water Supply Contract) with the United Water Conservation District (UWCD). Pursuant to this contract, UWCD holds FCGMA allocations and credits for the benefit of the City. UWCD exercises this allocation when it delivers groundwater to the City from UWCD wells in the Forebay Basin.

Several other features of the FCGMA allocation and credit regulatory program are also important to the overall water supply and reliability assessment for the City. First, the FCGMA grants the City additional groundwater allocation when the City takes over water service responsibility for newly developed lands. For example, when agricultural lands are converted to municipal uses (e.g., commercial, industrial, or residential uses), the City obtains additional allocation. When the City takes over service responsibility to property already committed to municipal uses, the City takes over the existing allocation and credits previously dedicated to those lands.

As a method of reducing overall demands on local groundwater supplies, the GMA has implemented a staged "cutback" policy, through which it has reduced M&I allocation in increments of 5 percent, over a period of 25 years. As of July 1, 2009, municipal and industrial (M&I) pumpers have had a total of 20 percent cutback in their historical allocations. A final 5 percent cutback (for a total of 25 percent) is likely to be implemented

on January 1, 2010. The GMA does not prohibit pumping beyond the M&I allocations, however extractions beyond the pumping allocations are subject to a surcharge.

The City has managed its total GMA allocation to establish and maintain approximately 30,000 acre feet (AF) in GMA groundwater conservation credits associated with its own wells and an additional 7,000 AF of credits held with UWCD. The City uses its groundwater credit "bank" conjunctively with its imported supplies. During periods when imported supplies are restricted or when other operational considerations warrant it, the City relies more heavily on local groundwater, using a portion of its accumulated credits. During other periods, the City will reduce its groundwater use below its historical allocation to replenish its credit "bank."

Table 3.3-3 shows the City's allocation and credit balance as of 2009.

TABLE 3.3-3
FCGMA ALLOCATIONS AND CREDITS (AFY)

	Allocation[(a)]	Credits[(b)]
Baseline Allocation	822.468	---
Historical Allocation	8,415.984	---
Transferred Allocation	1,487.798	---
Credits	---	30,000
Total	10,726.25	30,000

Source: Hopkins Groundwater Consultants 2007 Report.
Notes: (a) Allocations shown are after the 15 % reduction imposed by the FCGMA.
(b) Credits as of November 2009. This table does not include additional City groundwater pumping allocation and credits held through the City's water supply contract with UWCD, described below.

FCGMA Groundwater Management Plan

Along with the regulatory tools described above, the FCGMA also promotes responsible groundwater management through the implementation of its Groundwater Management Plan. The FCGMA updated its operative Groundwater Management Plan in May 2007. Although the Management Plan contains a wide variety of programs that will further the FCGMA's goals of preserving the local groundwater basin resources, there are two cornerstone strategies articulated in the Plan: a) aggressive development and use of recycled water in lieu of groundwater and b) reduction in local groundwater pumping in certain areas that are difficult to recharge and are prone to localized over-pumping. These strategies call for these stressed areas to be supplied with alternative sources (e.g., recycled water, surface water, or groundwater obtained from areas easily recharged). In turn, the conservation credits developed from the reduced pumping in the stressed areas will be transferred for use in and around the Oxnard Forebay Basin because the Forebay is easily recharged.

The City is a primary participant in implementing these strategies. The City's Groundwater Recovery Enhancement and Treatment (GREAT) Program and the M&I Supplemental Water Program, both discussed below, are examples of these strategies. The GREAT Program will

ultimately provide over 20,000 acre feet per year of highly treated recycled water for regional use. The M&I Supplemental Water program currently offsets approximately 4,000 AFY of groundwater pumping in locally stressed areas.

3.3.1.2.3 M&I Supplemental Water Program

The M&I Supplemental Water Supply Program provides surface water originally derived from outside the FCGMA, diverted from the Conejo Creek Diversion, to the Pleasant Valley County Water District (PVCWD) for agricultural irrigation. The PVCWD then transfers the groundwater conservation credits it earns from reducing its groundwater pumping to CMWD, which then transfers them UWCD. UWCD then pumps groundwater from the Oxnard Forebay Basin and provides it to its retail water purveyors, primarily the City of Oxnard. By virtue of this program, the City is able to access additional low cost groundwater supplies while also participating in a program that helps optimize groundwater recharge in key areas within the GMA. The current program yields approximately 4,000 acre feet per year on average.

It should be noted that the FCGMA and UWCD have safeguards in place to limit the pumping in the Oxnard Forebay Basin so that this portion of the aquifer is not stressed beyond its capability. For example, the M&I Supplemental Water Program allows UWCD to temporarily suspend deliveries when groundwater levels have dropped below a certain threshold. During these periods, the City can obtain its needed groundwater by shifting its pumping to wells in the Oxnard Plain outside of the Forebay (FCGMA, 2007).

Recent modeling work performed in conjunction with the M&I Supplemental Water program demonstrates that it is highly unlikely that any restrictions on use of the credits generated through the program will be required. In other words, the shifting of pumping from the Pleasant Valley Basin to the Forebay and surrounding Oxnard Plain has proven to be a very effective method of improving the overall reliability and integrity of local groundwater resources.

Given the very limited uncertainties in the future management of the M&I Supplemental Water Supply Program, the City has incorporated it into its future planning as a fixed, firm water supply. As noted in the 2009 Addendum to the WSA and incorporated in the tables below, the yield of the M&I Supplemental Water Program is anticipated to decline over the next 10-15 years.

3.3.1.2.4 GREAT Program

Implementation of the GREAT Program will provide over 20,000 AFY of additional assured water supplies to the City. The GREAT Program will be implemented in phases, with the first phase (at least 5,000 AFY) to be operational by 2011. The major components of the

GREAT Program are modular, thus the remaining phase(s) may be made operational relatively quickly, as the City's water demand increases. A program EIR that addressed the environmental effects of this program was prepared and certified in 2004. That EIR documented that, with the exception of a small but finite safety risk associated with project elements within an identified tsunami hazard area, all of the project impacts can be mitigated to a less than significant level. Potentially significant but mitigable impacts were identified in the areas of land use, geology, cultural and paleontological resources, water resources, biological resources, air quality, traffic, noise, visual resources, public services and utilities, and hazardous materials and waste. As part of the GREAT Program approval, a Mitigation Monitoring and Reporting Plan (MMRP) was adopted to ensure that project-specific impacts of the program components are effectively mitigated. The GREAT Program elements are further described in the following sections.

GREAT Program Elements

The existing Oxnard Wastewater Treatment Plant (OWTP) currently produces approximately 20 million gallons per day (mgd) of secondary treated wastewater and discharges the effluent to the Pacific Ocean through its ocean outfall. The GREAT Program makes beneficial use of these water resources through advanced treatment and subsequent reuse through a number of mechanisms, as described in the Advanced Planning Study (Kennedy/Jenks, 2002) and the GREAT Program EIR and summarized below:

- **Advanced Water Treatment.** The City will construct an Advanced Water Purification Facility (AWPF) at the existing OWTP, to produce a high quality recycled water product which will meet the California Department of Public Health (CDPH) criteria for groundwater recharge, agricultural and municipal uses. Treatment will include microfiltration/ultrafiltration, reverse osmosis, and advanced oxidation. The City expects to start construction in December 2009, and have the AWPF operational in by 2012.

- **Recycled Water Backbone Pipeline, Phase I.** This pipeline and distribution project will deliver recycled water to customers along the Hueneme Road and Ventura Road corridors within the City, substituting recycled water for use of potable water where appropriate. The City expects to complete design work within the next few months and to start construction in early 2010. To meet the terms of the US Bureau of Reclamation grant, the Recycled Water Backbone Pipeline must also be completed by September 30, 2011. Additional details on the City's proposed recycled water system are described in the City's Recycled Water Masterplan Phase I.

- **Groundwater Injection.** Injection wells will provide a mechanism to store recycled water during periods when irrigation demand is low. Groundwater injection would

serve as a mechanism to prevent seawater intrusion in the coastal LAS as part of the Seawater Intrusion Barrier Project. The City will likely partner with UWCD on this aspect of the GREAT Program.

- **Groundwater Desalination.** Groundwater will become a larger percentage of the City's water supply, due to the transfer of groundwater credits to the City from agricultural pumpers who use recycled water or from FCGMA groundwater pumping credits granted to the City from injecting recycled water into coastal aquifers. Local groundwater contains higher levels of total dissolved solids (TDS) than does imported water purchased from CMWD. To maintain the current water quality provided to City customers, the GREAT Program includes the construction of desalters to remove the dissolved minerals from the local groundwater. This would allow the City to increase the overall percentage of groundwater compared to surface water in its potable water supplies. The desalter at the City's Blending Station No. 1 is now fully operational. The City has begun design for its second desalter at the Blending Station No. 3. It is considering a third desalter at its Blending Station No. 4.

- **Concentrate Collection System.** Although not an essential element of the GREAT Program, the concentrate collection system would divert some portion of the highly degraded water entering the OWTP. Instead, this waste stream would bypass the treatment system and be disposed directly through the City's ocean outfall. This system would improve the efficiency of operation of both the OWTP and the AWPF. The City is currently studying needed piping sizes and potential alignments for the concentrate collection system.

GREAT Program Effect on Available Water Supply

The City will receive groundwater credits from the FCGMA for GREAT Program recycled water that is either injected into coastal aquifers or provided to agricultural irrigators who subsequently reduce their groundwater pumping. Based on similar programs in place within the FCGMA area, it is expected the City will receive groundwater credits on a 1:1 (one AF to one AF) ratio. The groundwater credits can then be used by the City to support its groundwater pumping. The City may also use the recycled water directly for approved municipal uses, thus displacing the need for potable water delivery for these uses.

The FCGMA Management Plan presents the GREAT Program as the most important aspect of its anticipated management strategies. As a result, the City expects the FCGMA will offer significant regulatory support in helping the City implement the Program. The City has identified a number of agricultural irrigators along Hueneme Road, east of the AWPF, who could potentially utilize recycled water and reduce their groundwater pumping from the LAS. The City and UWCD are also working to secure several sites along Hueneme Road for potential recycled water injection wells. Additionally, the City has identified a number of

existing facilities such as parks, schools, and golf courses that will have proximity to the main recycled water line and are good potential candidates for recycled water use (Kennedy/Jenks, May 2007). Serving recycled water to these existing facilities for their non-potable water needs will reduce the overall demand for potable water.

Using recycled water for groundwater injection for subsequent domestic water pumping (ASR program) or to combat seawater intrusion in coastal aquifers (Seawater Intrusion Barrier Project) would create a steady demand for recycled water that would translate into a fixed groundwater credit allocation from FCGMA.

As a conservative measure, the City has not incorporated projections of groundwater credits associated with the Seawater Injection Barrier in its water supply strategies (Kennedy/Jenks, June 2007). However, the City has included a projection of a 1:1 groundwater credit for either the direct use of recycled water when offsetting a groundwater use, or the direct injection of recycled water (Kennedy/Jenks, June 2007).

GREAT Construction Phasing

Based on the recommendations of the 2005 UWMP, the capacity of the Phase 1 AWPF facility was expanded from 5.0 MGD to 6.25 MGD. The initial phase of the AWPF is planned for completion in 2012 (Thien Ng pers. corres., September 2009)). It is anticipated that recycled water infrastructure will serve 2,450 AFY of M&I demands by year 2012; approximately 2,700 AFY of recycled water supply would be delivered to City M&I by year 2013; 3,150 AFY by 2016; and 5,050 AFY by year 2020 (Recycled Water Master Plan 2009

The initial Phase 1 construction of the AWPF includes the completion of the main facility and infrastructure required for the future expansion of the facility's capacity. Additional treatment trains, or modules, can be added as needed, with significantly less comparative investment, to address future changes in water supply. The AWPF Phase 2A could be built as early as year 2015 and would supply an additional 7,000 AFY. AWPF Phase 2B is estimated to be complete by 2020, producing an additional 7,000 AFY. Dates for these AWPF expansions may be modified as water supply conditions change or circumstances require. AWPF Phase 2A and 2B may provide recycled water to M&I, agriculture, and groundwater recharge projects. Funding for AWPF Phase 2A and 2B will primarily be generated from fees paid by projects that increase water demands beyond the Phase I capacity of the GREAT Program. Future expansions of the AWPF, up to 25 mgd, will be undertaken by the City as needed.

Desalters at Blending Station 3 (BS3) Phase 1 are anticipated to be operating by 2013 (7.5 mgd product water capacity) and an additional desalter at Blending Station 1 (BS1) Phase 2 (15 mgd product water capacity) are projected to be operating by 2017 (according to the City's Fiscal Year 2008-2009 Capital Improvement Plan). BS3 Phase 2 (15 mgd product

water capacity) anticipated to be operating by 2021 (personal communication with City Water Division, Tony Emmert, August 2009). However, these dates may be modified as conditions change.

GREAT Program Financing

The City Council has approved the GREAT Program in its entirety and certified the City of Oxnard's Project EIR/EIS. In addition, the GREAT Program is a cornerstone strategy of the FCGMA Management Plan to ensure the ongoing integrity of the local groundwater basins. Some portions of the GREAT Program are fully funded and operational (i.e., the Desalter located at Blending Station #1) and other portions of the Program are in various stages of design and implementation.

GREAT Program funding will derive from a combination of customers rates and charges, bond financing, grant funding and water resource development and connection fees imposed on new development. For example, in conjunction with the approval of the GREAT Program EIR/EIS, the City raised its customer connection fees significantly, in part to raise funds to construct the GREAT Program. The City has also received federal grant funding for a substantial portion of the Phase 1 GREAT Program and the Recycled Water Backbone System.

The only remaining contingency for the construction of the GREAT Program Phase 1 is the completion of the final design and award of a construction contract.. The Recycled Water Facilities Plan (Kennedy/Jenks, May 2007) includes estimates for capital costs for the BRWS and the additional recycled water systems (portions of the GREAT Program infrastructure). An additional authorization of $26,674,000 (in 2006 dollars) will be needed to complete the BRWS that includes construction of Phase I of the AWPF. The capital costs needed to create the infrastructure to support the projected 17,500 AFY of recycled water demand in 2006 dollars is $60,219,000.

In 2004 and 2006, the City Council approved and appropriated over $59 million in bonds, a portion of which are dedicated to the GREAT Program and the recycling projects discussed in this analysis. In late 2009, the City Council approved a two year budget and rate program (based upon an up-to-date Water Wastewater Rate and Fee Studies) and master funding schedule for the completion of the GREAT Program, Phase 1. Given the City Council's historical commitment to the GREAT Program and its regional importance, it is reasonable to expect this Council will authorize the funding of future components of the GREAT Program elements as required to meet the City's water demands.

GREAT Program Contingencies

As noted above, the GREAT Program is an important element of the City's long-term water supply portfolio. While its actions to date demonstrate the City's full commitment to the GREAT Program, certain future actions must be undertaken to ensure the timely implementation of the Program. GREAT Program, Phase 1 is essentially fully approved and reliable. Subsequent phases of the GREAT Program, while considered a reliable future supply, do present a relatively small contingent element to the City's overall water supply reliability. The GREAT Program is reasonably considered a reliable future supply based on the following considerations:

As a part of the City Council's formal adoption of the GREAT Program, the following activities have occurred:

A. **The GREAT Program Advanced Planning Study** was completed and approved in 2002.

B. **GREAT Program Final EIR/EIS.** This document was certified in September 2004. The GREAT Program, Phase 1 was evaluated at the project level and Phase 2 was evaluated at the programmatic level. The EIR/EIS also included the construction of Blending Station No. 5.

C. **Bonds and Rate Adjustments.** The City issued over $48.6 million in municipal bonds in February 2004 and another $50.0 million in 2006 to fund a significant portion of the GREAT Program. The City has established GREAT Program Finance, Steering and Capital Projects Committees to guide the financing programs necessary to implement the remaining elements of the GREAT Program. In late 2009, the City Council approved a two year budget and rate program (based upon an up-to-date Water and Wastewater Rate and Fee Studies) and master funding schedule for the completion of the GREAT Program, Phase 1The City has completed the necessary rate models and received approval to implement adjustments to the City's water and wastewater rates, along with its water resource development and connection fees, to support the next increment of bond financing for the GREAT Program. Subsequent financing needs for the phase 2 and phase 3 increments of the GREAT Program are relatively minor in comparison to the phase 1 costs and will be implemented consistent with the timing appropriate for those GREAT Program elements. The City has received federal and local grants funds for both the GREAT Program, Phase 1 and the Recycled Water Backbone System.

D. **Acquisition of Property for AWPF.** The City has purchased the property on which the AWPF will be sited.

E. **Recycled Water Backbone System.** The City Council considered and approved the "Recycled Water Backbone System Study" (October 2005), which evaluated the technical feasibility of using the abandoned Redwood Trunk Sewer (which was replaced with a new wastewater line) for a pipeline to serve recycled water to areas generally located in the northwest portion of the City. In November 2006, the City Council approved this project (along with certification of the associated environmental review), and adopted the City's mandatory recycled water use ordinance discussed separately in this document. This project will provide up to 1,275 AFY of recycled water to M&I customers. At this time, approximately 1,250 AFY of in-City recycled water demand has been identified.

F. **Recycled Water Program Management.** The City is preparing a "Recycled Water Master Plan." This plan will address the institutional issues related to recycled water uses throughout the City. The Recycled Water Master Plan includes the following:

(1) Public outreach strategy.
(2) Mandatory recycled water use ordinance and administrative code implementation programs.
(3) Grant funding identification.
(4) Site supervision and training.
(5) Standard drawings and details.
(6) Cost-sharing for system retrofits.

In addition, the City is actively pursuing the following interim strategies to reduce the potential for water supply shortages should there be any delay in implementation of the GREAT Program:

1. Accumulate groundwater credits for use while the GREAT Program implementation and expansion is underway.
2. Maximize the access to M&I Supplemental Water Supply Program.
3. Maximize the use of CMWD water to help bank groundwater conservation credits.
4. As necessary, purchase un-used O-H water from other O-H system contractors that under utilize their allocation.
5. Implement the initial phase of the GREAT Program (for 6.25 MGD) by 2012.
6. Plan for the first expansion of the GREAT Program to be an additional 5.2 MGD (to 11.45 MGD).
7. Plan for the second expansion of the GREAT Program to be an additional 5.0 MGD (to 16.45 MGD). Before designing the second expansion, in particular, the demand and surplus projections should be re-visited.

8. The City could implement additional temporary water demand control measures for periods when supply is not sufficient to meet demand as outlined in City Ordinance No. 2729, "City of Oxnard Water Conservation and Water Shortage Response Ordinance."
9. The City also has the option to pump additional groundwater from City wells above their allocation. However, this may result in the imposition of a GMA surcharge.

The status and next steps for the implementation of the GREAT Program are discussed in detail above and in the updated water supply assessments for the Ormond Beach projects. While there are additional permits and regulatory approvals required for the GREAT Program, recycled water systems of this nature are common in Southern California. The permit and regulatory processes are relatively routine and well understood. The use of recycled water meets both regional and state goals for maximizing water supply efficiency and reliability, adding confidence to the success of the approval process.

3.3.1.2.5 Recycled Water

The City intends to make expansive use of recycled water for various municipal purposes, which will free-up potable water sources for other, more appropriate uses within the city. The City's Recycled Water Backbone Study (Kennedy/Jenks, 2006) confirmed the efficiency of the construction of a Backbone Recycled Water System (BRWS) that will deliver water from the AWPF to M&I customers along the alignment of the backbone pipeline through the City, extending into the northwest portion of the City. The BRWS will take advantage of the replacement of the Redwood Trunk Sewer (RTS) that extends from the intersection of Gonzales Road and Ventura Road to the OWTP. This project has made an empty conduit available for use as a recycled water line to serve M&I customers in the vicinity of the RTS. Use of the existing RTS would reduce the construction impacts of the 42,000 foot recycled water pipeline.

The BRWS is a priority system for the City and will be the first M&I distribution system constructed for the GREAT Program. Since BRWS will serve existing City M&I customers, the recycled water will displace the use of potable water to meet these demands (irrigation of large landscapes and industrial processes, etc.). The potable water will then be available for existing water needs, the true domestic uses. This will also allow more flexibility for the City to fund, design, and construct the GREAT Program facilities that will generate FCGMA groundwater credits.

Additionally, the City is requiring all new development projects to design and construct dual piping systems within their project areas to facilitate the delivery of recycled water for non-potable uses within their project areas. The City is currently designing the BRWS to accommodate the planned 1,250 AFY of non-potable water demand discussed in the Recycled Water Backbone Study and the projected additional recycled water demands of

proposed development projects. The result will be a Phase I system designed for approximately 3,225 AFY, which is more than the earlier estimate of 1,250 AFY.

Recycled Water Facilities Plan

The Final Report Oxnard Recycled Water Facilities Plan (Recycled Water Facilities Plan) confirmed and identified users and uses totaling over 17,500 AFY of demand for recycled water. This demand would either be converted by the FCGMA to groundwater credits or would directly offset existing potable water demands. The 17,500 AFY was identified by the 2005 Urban Water Management Program (UWMP) as the additional groundwater allocation needed to meet demands through 2030 which is considered as a buildout or near buildout condition. The City has identified existing groundwater users that may be good candidates for use of recycled water in its Recycled Water Facilities Plan (Kennedy/Jenks May 2007). Figure 5-2 of the Recycled Water Facility Plan illustrates the proposed recycled water system. The amount of potential recycled water use in AFY for each user has been identified and used to calculate an estimate of the total potential recycled water demand for each year. Table 3.3-4 (Table ES-2 from the Recycled Water Facilities Plan) shows the identified potential demands for GREAT recycled water.

Groundwater injection, either for domestic water purposes or to address seawater intrusion is important in that it will allow the AWPF to operate at more or less a constant output. It also will provide a relatively constant demand for recycled water throughout the year when seasonal weather conditions reduce M&I and agricultural demands.

TABLE 3.3-4
SUMMARY OF IDENTIFIED RECYCLED WATER DEMANDS

Project and Description	Demand (AFY)	Comment
Alt. A – Backbone Recycled Water System (BRWS) – Recommended Project	1,389	Slightly higher than the earlier Recycled Water Backbone Study – 1,500 to 2,000 AFY
Alt. B1 – Southeastern System	309	
Alt. B2 – NCBC System	245	Institutional issue of coordination with Navy
Alt. B3 – Northeastern System	284	
Alt. C – Ocean View Area	4,000	Part of ag demand. City owns and operates the supply infrastructure to the Ocean View area.
Alt. D – Pleasant Valley Area	4,000	Overall water use is well above 20,000 AFY
Alt. E – Groundwater Injection	7,300	This demand is needed during rainy periods when irrigation demands for recycled water are low, to balance the system and achieve the overall delivery objective of about 17,500 AFY
Alt. F – Seawater Barrier Injection	0	While of great regional benefit, at this time the economics are more favorable for groundwater injection for domestic purposes
Total	17,530	
Total for Recommended Projects (All except B3 and F)	17,280	

Source: Table ES-2, Final Report Oxnard Recycled Water Facilities Plan, May 2007.

3.3.1.2.6 UWCD Water Facilities

United Water Conservation District is a local, special district that owns and operates local water supply facilities that directly and indirectly impact the reliability of the City's water supplies. First, UWCD owns and operates the El Rio Wellfield and the Oxnard-Hueneme Pipeline, components of a potable water supply facility for which the City holds a long-term water supply contract. Second, UWCD owns the Freeman Diversion on the Santa Clara River and a series of percolation ponds, which UWCD operates to augment the recharge of the Oxnard Forebay and Oxnard Plain basins.

OH System Contract

The City holds a long-term water supply contract with UWCD. UWCD relies on a group of wells located in the Oxnard Forebay basin to supply the City local groundwater pursuant to this contract. Because UWCD's wells are within the jurisdiction of the FCGMA, UWCD's holds a FCGMA pumping allocation for each of its contractors on the OH System, including the City. Until 2006, the City's groundwater suballocation of UWCD groundwater was 9,070 AFY. In 2006, it was reduced to 7,709 AFY as a result of planned cutbacks pursuant to FCGMA Ordinance No. 8.1. The final FCGMA cutback scheduled for January 2010 will reduce the City's suballocation from UWCD to 6,800 AFY.

UWCD also holds conservation credits accrued by the O-H contractors, including the City. Currently the City has approximately 7,000 AF of stored credits with UWCD (personal communication, Curtis Hopkins, August 2009).

Because the reductions in allocation are designed to protect and preserve the long-term integrity of the local groundwater basins, the City's groundwater suballocations are considered to be a reliable future water source.

UWCD Freeman Diversion

In addition to its water supply facilities, UWCD also operates facilities which provide significant groundwater recharge to the local groundwater basins. These facilities are the Freeman Diversion on the Santa Clara River and several off-stream percolation basins (also referred to as spreading grounds). UWCD diverts Santa Clara River water at the Freeman Diversion and delivers a portion of the water to the spreading grounds. The balance of the surface diversions are supplied to agricultural users in the region. The operation of UWCD facilities are funded through user water rates and a series of groundwater pump charges imposed on all local groundwater users. Through the operation of these facilities, UWCD has augmented over 1,000,000 acre-feet of recharge to the local groundwater basins beyond that which would occur without these recharge facilities. The overall integrity of the local

groundwater basins are, in part, dependent on the continued augmented recharge obtained through Freeman Diversion operations.

The Santa Clara River is designated critical habitat for the endangered steelhead salmon. UWCD has operated the Freeman Diversion consistent with a biological opinion issued by the National Marine Fisheries Service. Among other operational considerations, the Freeman Diversion contains a fish ladder that provides physical passage for migrating fish on the Santa Clara River. Currently, UWCD is consulting with the National Marine Fisheries Service over potential changes to the operation of the Freeman Diversion. The scope of these discussions includes increasing the amount of water flowing through the fish ladder to augment the ability for fish passage through the diversion structure. Depending on the timing and magnitude of these changes, there could be an impact on the overall quantity of water diverted through the Freeman Diversion. This, in turn, could impact the efficiency of the augmented recharge obtained through the percolation basins, and the amount of surface water supplied to local agricultural users. These discussions have not yet yielded any specific result which could then be analyzed in this document.

3.3.1.2.7 Other Projected City Water Supplies

The City has identified other potential water supplies in addition to those described above:

Ferro Property Program

UWCD has approved, and is in the process of completing, the purchase of certain property located in the Oxnard Plain Forebay, which UWCD will convert into additional spreading basins. UWCD has approved a transfer agreement with the City through which the City will access additional local groundwater supplies. The FCGMA has also approved the transfers necessary to allow the City and United to collaborate on this water supply program. (FCGMA Resolution 2009-07.) The City Council will consider this transfer agreement in December 2009. Through this program, the City will obtain 11,000 AF of groundwater credits. The City plans to use these transferred credits within the period 2010-2011. This program also provides the City with an additional access to 1,000 acre-feet per year of groundwater, through 2019 (a total of an additional 8,000 acre-feet) (personal communication, Tony Emmert, September 2009). The groundwater obtained through this program will be delivered through City wells and the O-H pipeline.

Transferred Allocations

It is estimated that the City will acquire 1.5 acre-feet per acre per year for agricultural lands that convert to M&I uses. The City has identified several areas that are in agriculture that are anticipated to undergo urban development including the Teal Club Specific Plan (SP) area, Sakioka Farms SP area, Camino Real Business Park, Jones Ranch SP, Ormond Beach North

SP, and Ormond Beach South SP. Based on the potential conversion area and timing of development the City Planning Division has developed projections of transferred allocations. Water supply projections assume transfers of allocation of 525 AF per year from the Teal Club SP; 219 AF per year from the Sakioka Farms SP; 69 AF per year from the Camino Real SP; 145 AF per year from the Ormond Beach North SP; and 98 AF per year from the Jones Ranch SP by year 2015. This projection also assumes the transfer of an additional 260 AF per year from the Sakioka Farms SP; an additional 150 AF per year from the Jones Ranch SP; an additional 338 AF per year from the North Ormond Beach SP; and 231 AF per year from the Ormond Beach South SP by year 2020. This projection also assumes the transfer of an additional 332 AF per year from the Ormond Beach South SP and an additional 148 AF per year from the Sakioka Farms SP by year 2030.

GMA Groundwater Credit Transfer

Transfer of 700 AF of GMA groundwater credits from PHWA to the City as part of the Three Party Water Supply Agreement, December 2002 (personal communication, Tony Emmert, August 2009, Calleguas Municipal Water District "Three Party Agreement" dated December 10, 2002 and "Purchase Order" dated January 1, 2003).

3.3.1.2.8 Climate Change Effects on Water Supplies

The City has conducted a survey of current literature on climate change and has summarized the potential impacts on water resources in California. To address uncertainties in the water supplies, the City has reviewed the most recent reports that address the potential effects of climate change on the Delta drainage area and the Colorado River Basin. The City has also summarized recommendations offered by state agencies, policy groups, and non-governmental organizations, and has compared them to MWD's existing programs and climate change policies.

Recent climate change reports recognize that impacts on water resources largely depend on the degree of warming and concede there are significant uncertainties regarding the impact of climate change on local and regional climates. There is a great deal of uncertainty surrounding temperature rise predictions and the resulting impacts on local and regional climates because it is difficult to predict future greenhouse gas emissions and the resulting feedback processes in the climate system and hydrological cycle. Further, existing climate change models are imperfect and become increasingly imprecise when used to predict changes on a watershed level. Therefore, it is not possible to quantify the impacts of climate change on water supplies in the Western United States, let alone those available to the City.

Although climate change impacts are uncertain and cannot be precisely modeled, existing evidence, including the effects of warming in the West over the last century, demonstrate that climate change will likely affect future snowpack accumulation, water supply, runoff

patterns, sea level, incidents of flooding and droughts, evapotranspiration rates, water requirements and water temperature. Water supplies will be directly affected by temperature changes, precipitation, humidity and wind speed. The current climate change reports are largely in agreement in concluding that climate change will produce hydrologic conditions and variations of a different nature than current systems were designed to manage.

DWR is at the forefront of climate change in California and to date has conducted the most comprehensive study of the impacts of climate change on the SWP, one of two primary sources of water for MWD and, consequently, the City and the Project. DWR used the results of existing models of the Intergovernmental Panel on Climate Change ("IPCC") and applied them to a computer model that it jointly developed with the U.S. Bureau of Reclamation to study flow into the Delta. DWR quantified impacts for four scenarios predicted by two global climate models at two carbon dioxide emission rates. It found that climate change "resulted in considerable impacts to SWP and CVP delivery capabilities, especially in the drier scenarios." DWR's model showed that under one climate change scenario, average yearly SWP Table A deliveries at 2050 would be reduced by 10.2 percent. DWR recognized that there were limitations to its analysis as the models did not capture many variables, and therefore the results were preliminary and not sufficient to be used to make policy decisions. Instead, DWR stressed that these studies were just the starting point and could help identify future areas of study.

A survey of recent research on the effects of climate change on the Colorado River reveals that runoff reductions range from a decrease of 11 percent in 2100 to a decrease of 45 percent in about 2050. Both of these studies used the latest temperature and precipitation results from the IPCC General Circulation Models, but applied varying techniques to model flow. The survey noted the huge variations in predictions and pointed out that all of the studies suffer from limitations relating to the models used or hydrology and operational model assumptions. In light of these conclusions, both governmental agencies and non-governmental organizations recommend that water decision-makers operate existing water systems to allow for increased flexibility. Other recommendations include incorporating climate change research into infrastructure design, conjunctively managing surface water and groundwater supplies, and integrating water and land use practices.

Policymakers and water suppliers in California, including MWD, are currently addressing climate change impacts and developing new ways to cope with the types of variability which are outside the design range of existing infrastructure. MWD recognizes that climate change will require water suppliers to develop new, alternative water supplies and to focus on water use efficiency. In March 2002, MWD's Board of Directors adopted climate change policy principles that relate to water resources. These principles are reflected in MWD's water supply planning efforts, including the IRP. Further, in response to climate change and uncertainty, MWD's 2005 Regional Urban Water Management Plan incorporated three basic

elements to promote adaptability and flexibility, important in addressing impacts of climate change: conservation, groundwater recharge and water recycling.

MWD has been recognized for its positive approach by the IPCC in its recent 2007 Report on Climate Change: Climate Change Impacts, Adaptation and Vulnerability. The IPCC's climate change projections and adaptation options are internationally recognized by both governmental and non-governmental agencies, and its use of MWD as an example of how to manage climate change shows the professional wisdom of its programs.

Most recently, MWD approved criteria to further explain its position on the conveyance options that are currently being discussed to remedy the Delta, which include addressing projected sea level rise and change in inflows due to climate change. MWD's criteria provide that, whatever option is chosen, it should provide water supply reliability, improve export water quality, allow flexible pumping operations in a dynamic fishery environment, enhance the Delta ecosystem, reduce seismic risks and reduce climate change risks. MWD has demonstrated a commitment to addressing climate change by evaluating the vulnerability of its water systems to global warming impacts and has developed appropriate response strategies and management tools that account for the impacts of climate change on water supplies.

3.3.1.2.9 Total Water Supply Summary

Table 3.3-5 summarizes how the City's projected imported and local water supplies and groundwater credits from FCGMA, UWCD, and the GREAT Program will change between 2010 and 2030.

TABLE 3.3-5
PROJECTED ANNUAL WATER SUPPLIES AND CREDITS

	2010	2015	2020	2025	2030
ANNUAL SUPPLIES (Acre Feet Per Year)					
Groundwater-City Wells[a]	8,380	8,380	8,380	8,380	8,380
Brine Water Loss[b]	(2,100)	(4,200)	(6,300)	(8,400)	(8,400)
UWCD Allocation[c]	6,800	6,800	6,800	6,800	6,800
CMWD Allocation[d]	11,840	11,840	11,840	11,840	11,840
M&I Supplemental Water[e]	5,000	3,000	1,000	1,000	1,000
GREAT Program Recycled Water Phase 1 M&I[f]	0	2,700	5,050	5,050	5,050
GREAT Program Recycled Water Phase 1 Agriculture Use[f]	0	4,300	1,950	1,950	1,950
GREAT Program Recycled Water Phase 2[g]	0	7,000	14,000	14,000	14,000
Ferro Pit Program[h]	5,500	1,000	0	0	0
Transferred Allocations[i]	0	1,060	2,290	2,220	2,420
PHWA Program[j]	700	700	700	700	700
Total Annual Supplies	**36,120**	**42,580**	**45,710**	**43,540**	**43,740**
Groundwater Banked Credits					
Fox Canyon GMA credits (k)	30,000	AF			
UWCD credits (k)	7,000	AF			
GREAT Program credits at 2,500 AFY minimum X 20 years (l)	50,000	AF			
Subtotal	**87,000**	**AF**			

Notes: Values are rounded to the nearest 10 acre-feet.

a) Projection includes the existing cutbacks (Fox Canyon Groundwater Management Agency-GMA, up to 25 %) and no anticipated future cutbacks in City's allocation. Source: City Water Resources (personal communication, Curtis Hopkins, August 2009).

b) Brine Water Loss is the amount of brine reject water (approximately 20 % loss) associated with the City's potable water Desalters at Blending Stations No. 1 (BS1) (currently operating at 7.5 mgd product water capacity - 8,400 AFY) and future BS3. BS3 Phase 1 anticipated to be operating by 2013 (7.5 mgd product water capacity) and BS1 Phase 2 (15 mgd product water capacity) projected to be operating by 2017 (according to the City's Fiscal Year 2008-2009 Capital Improvement Plan). BS3 Phase 2 (15 mgd product water capacity) anticipated to be operating by 2021 (personal communication with City Water Division, Tony Emmert, August 2009). However, these dates may be modified as conditions change.

c) This assumes the most conservative availability of City's allocation from UWCD which includes a total of 6,800 AFY. Also assumes that the GMA implements the full 25% cutback by 2010; and no anticipated future GMA cutbacks. The City had approximately 7,000 AF of credits banked with UWCD (personal communication, Curtis Hopkins, August 2009).

d) MWD applied the 23% reduction to the assumed base supply, using a baseline period between 2004 and 2006, and calculated City supply at 11,385 AFY. However, the City's entitlement also includes sub allocations for P&G (2,800 AFY) and PHWA (3,262.5 AFY). The City is free to use any unused P&G and CMWD sub allocations. Program details provided by City Water Resources (2005 UWMP; personal communication, Tony Emmert, September 2009).

e) Through the M&I Supplemental Water Program, the City has received a total of 15,886.7 AF between the years 2005-2008 – approximately 4,000 AFY. However, UWCD may temporarily reduce or suspend deliveries of M&I Supplemental Water when Forebay groundwater levels drop below a certain threshold. For example, UWCD has tentatively suspended deliveries of M&I Supplemental water given the current conditions in the Forebay as of late 2009. Even though deliveries are suspended, M&I Supplemental water credits continue to accumulate. Once the suspended deliveries are reinitiated, it is expected that the accumulated credits will be made available in full in subsequent years. Based on current information, the City anticipates 5,000 AF of M&I Supplemental Water will be available in 2010 and 0 AF in year 2011. As a conservative assumption, the City assumes that on average only 3,000 AFY of M&I Supplemental water credits will be available between the years 2012-2015. As the Camrosa Water District has a contractual first right of refusal of the Conejo Creek Diversion Project water, and has expressed plans to utilize most of this water within its district, the M&I Supplemental Water credits available will reduce to 1,000 AFY as the Camrosa non-potable water system infrastructure continues to develop. Based on the expected future expansion phases of the Camrosa system, this is projected to occur after year 2015.

f) GREAT AWPF Phase 1 (anticipated startup in 2010-2012) would produce a maximum of 6.25 mgd (7,000 AFY net production) (Source: UWMP, 2005; personal communication, Thien Ng, September 2009). Combined uses of recycled water from AWPF Phase 1 (M&I and agriculture) does not exceed 7,000 AFY from 2012-2030. City anticipates that recycled water infrastructure will serve 2,450 AFY M&I demands by year 2012; approximately 2,700 AFY of recycled water supply would be delivered to City M&I uses by 2013; 3,150 AFY by 2016;

and 5,050 AFY by year 2020 (Recycled Water Master Plan 2009). City assumes water produced in excess of M&I recycled water demands will be used for agricultural uses and groundwater recharge. City assumes GMA will allow credits for 100% of recycled water used directly or for injection (groundwater recharge) (personal communication, Steve Bachman, August 2009). It is assumed infrastructure to allow groundwater recharge will be in place by year 2015.

g) This is a projected supply not previously utilized by the City. AWPF Phase 2A (anticipated 2015; based on 2009 Avoided Cost Model) would produce a maximum of an additional 7,000 AFY (net production). AWPF Phase 2B is anticipated to be operating by 2020 and produce a maximum of an additional 7,000 AFY (net production). Dates for these AWPF expansions may be modified as conditions change. AWPF Phase 2A and 2B may provide recycled water to M&I, agriculture, injection barrier, and groundwater recharge projects.

h) This is a projected supply not previously utilized by the City. Includes one-time transfer of 11,000 AF of groundwater credits to the City. City plans to use these transferred credits within the period 2010-2011. City will also obtain 1,000 AFY of credits from 2012-2019. Program details provided by City Water Resources (personal communication, Tony Emmert, September, 2009).

i) For agricultural property conversion - assume 1.5 acre-feet per acre per year. The credits depicted here are those used to meet demand and are not representative of the City's cumulative credit balance with the GMA. Transferred allocation values developed by City Planning Department (personal communication, Chris Williamson October 2009). Assumes transfers of 525 AF Teal Club SP; 219 AF Sakioka Farms SP; 69 AF Camino Real SP; 145 AF from the Ormond Beach North SP; and 98 AF Jones Ranch SP by year 2015. Assumes transfer of additional 260 AF Sakioka Farms SP; and additional 150 AF Jones Ranch SP; an additional 338 AF from the North Ormond Beach SP; and 231 AF Ormond Beach South SP by year 2020. Assumes additional 332 AF from Ormond Beach South SP and an additional 148 AF Sakioka Farms SP by year 2030.

j) Transfer of 700 AF of GMA groundwater Credits from PHWA to the City as part of the Three Party Water Supply Agreement, December 2002. Program details provided by City Water Resources (personal communication, Tony Emmert, August 2009).

k) The Credits depicted here are those used to meet demand and are not representative of the City's cumulative credit balance. Deliveries from the groundwater credits are shown only when there is insufficient supply to meet demand. At the end of 2008, the City had approximately 30,000 AF of groundwater credits with the GMA and 7,000 AF with UWCD. The groundwater credits are intended to be used to offset any reduced availability of imported water, or to mitigate unforeseen cutbacks, catastrophic events, facility failure, etc. The City can use these credits without GMA penalty. Program details provided by City Water Resources, personal communication, Tony Emmert, November 2009; personal communication, Curtis Hopkins, September 2009.

l) It is assumed future GREAT Program deliveries will be credited a minimum of 2,500 AFY starting in year 2015.

3.3.1.3 Water Demand

Table 3.3-6 shows the City of Oxnard Planning Division projections of total growth that is anticipated to occur between 2008 and 2030. The estimate is considered to represent the maximum level of development that could be expected to occur between 2008 and 2030.

TABLE 3.3-6
CITY OF OXNARD PLANNING DIVISION
TOTAL GROWTH PROJECTIONS 2008 – 2020

Land Use Type	Quantity
Residential	22,591 units
High-rise	1,574 units (approximately 10 acres)
Commercial	9.9 million sq. ft.
Industrial	11.8 million sq. ft.
Parks	208 acres
Hotels	143 rooms
Schools	7 schools
Public	3 to 5 fire stations

A detailed water demand model was developed as part of the 2005 UWMP and includes existing demand, demand from proposed buildout of the 2020 General Plan, unaccounted-for water loss, potential increase in per-unit demand, and a contingency. The model also

accounts for reductions in demand due to the increased use of recycled water and water conservation. This model has been updated for buildout of the proposed 2030 General Plan Alternative B and to reflect recent changes in water supply and consumption, as accurately and as reasonably possible.

Components of demand are shown in Table 3.3-7 and discussed below:

- **2009 Baseline Demand.** This is an estimate of total demand for the calendar year 2009. As a conservative basis, water demand by existing customers is anticipated to remain fairly stable through 2030. In all likelihood current customers will continue to implement best management practices, which should reduce overall per capita water consumption.

- **Non-Revenue Water (i.e., Water Loss).** Water losses come from authorized, unmetered sources such as fire fighting and main flushing, or unauthorized sources such as leakage, illegal connections, and inaccurate flow meters. Non-Revenue water is estimated to be about 6% of water demand.

- **Ocean View System** (formerly Ocean View Municipal Water District [OVMWD]) primarily serves agricultural customers along East Hueneme Road. As part of a Local Agency Formation Commission action, the OVMWD district dissolved and the existing customers were added to the City of Oxnard water service area as the Ocean View System (OVS). Existing users in the OVS service area along East Hueneme Road receive water from the City through the UWCD O-H Pipeline System and the OVS system. Parcels within the former OVMWD service area also obtain water from private wells and from the UWCD PTP System. OVS customers use approximately 1,337 AFY of UWCD O-H water delivered via the City, according to UWCD data (average calculated for fiscal years 1999-2008).

- **PHWA Suballocation**. PHWA purchases water from the City per the Three Party Agreement which specifies a PHWA suballocation of CMWD water of 3,262.5 AFY. PHWA's mean annual purchase from the City was 1,911 AF for period 1999-2008 (personal communication, Steve Hickox, September 2009; personal communication, David Birch, September 2009). The City of Port Hueneme, the largest PHWA member agency, has implemented a meter retrofit program which should substantially reduce water demand within the City. PHWA is also implementing other water management programs which may decrease its per capita water demands.

- **Procter & Gamble.** Procter & Gamble is a private user within the City of Oxnard which receives unblended imported water from the City through a special water service agreement. Current annual water demand for Procter & Gamble is approximately 2,300 AFY for the period 2001-2008. Procter & Gamble estimated

future water demands are approximately 2,800 AFY, assumed to occur after year 2015 (personal communication, Dakota Corey, August 2009). Procter & Gamble has also indicated its intent to implement certain water reuse and conservation practices, and consider the use of recycled water to offset some of its demands. For the purpose of this analysis, the City assumes Procter & Gamble's overall water use will increase from 2,300 AFY to 2,800 AFY after 2015.

- **Projected New Demand Increase for Development Projects Under Review.** Annual increase in water demand has been based on development applications received and under review and/or permitted. New 2010 to 2030 water demand is based on the buildout of the 2030 General Plan, Alternative B. Year to year projected new development demand based on the July 2009 City Project List, 2030 General Plan Background Report (2006), Ventura Council of Governments Decapolis Report, and UCSB Forecast.

- **Projected New Demand Increase of Unknown Projects**. It is assumed that for any given timeframe, water demand could be 10% higher due to approved amendments to the 2030 General Plan.

- **Demand Management Programs.** In February 2008, Governor Schwarzenegger called for a 20 percent reduction in per capita water use statewide by 2020. The State Water Resources Control Board has released a draft statewide implementation plan for achieving this goal (Draft 20x2020 Water Conservation Plan, April 2009) which establishes regional baseline and target per capita water use values by State hydrologic region. The 2020 targeted daily per capita water use value established for the South Coast hydrologic region is 149 gallons per capita per day. The draft plan proposes a series of enforcement mechanisms and financial incentives to facilitate water conservation at the local level. The City is preparing a Conservation Master Plan, due by the end of 2009, which will identify potential demand management measures and potential demand reductions which will help the City meet the gallons per capita per day goals of the 20x2020 plan. The City anticipates a reduction in City-wide water demands of approximately 500 AFY for period 2010-2012, ramping up to 5% of demand from 2016-2020, and 10% reduction for period 2021-2030. Demand reductions recommended by City staff (personal communication, Tony Emmert and Dakota Corey, August-September 2009).

Table 3.3-7 shows the estimated annual water demand projections through the year 2030. On a day-to-day basis there will be variations, with higher demands typically during the summer and lower demands during the winter.

The water demand projections in Table 3.3-7 are conservative and likely overestimate demand. General Plans rarely reach buildout and are rarely amended so often as to produce a gain of 10 percent. Nevertheless, as noted above, water supply constraints throughout the State have persisted. Out of an abundance of caution, the City Council, at its January 15, 2008, and October 19, 2009, meetings, directed staff to require that all new projects defined as discretionary and not exempt from CEQA be water demand neutral to the City's water system. Project proponents are required to contribute water rights, water supplies, or financial or physical offsets to achieve water neutrality. Typical options open to project proponents include transfers of FCGMA groundwater allocations to the City through agricultural conversion or otherwise, participation in expansions of the City's GREAT Program recycled water system through physical or financial contributions, and participation in water conservation projects that produce quantifiable, sustainable water savings. Several projects have already complied with this requirement and several others are currently working with the City to implement such programs. Projects that are ministerial and/or exempt from CEQA, such as single family residential projects or business tenant improvements, are not subject to the water demand neutral requirement.

At the October 27, 2009, meeting the City Council directed that the following components be incorporated into a written City water demand neutral policy:

- Proposed projects should either contribute new water supplies or the financial or physical equivalent to offset the estimated project demand.

- The City staff is to work with developers on quantifiable, implementable mitigation options that may be unique for each project, that may include financial contributions toward the GREAT Program's recycled water facilities, financial contribution toward a City controlled water conservation project or program that would generate verifiable long-term water savings, and implementation of developer initiated water conservation project or program that would generate verifiable long-term water savings.

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TABLE 3.3-7
2007 CUMULATIVE WATER DEMAND PROJECTION THROUGH 2030 (AFY)

Water Demands	2010	2015	2020	2025	2030
Known Demands					
2009 Baseline Demand[a]	28,900	28,900	28,900	28,900	28,900
2009 Non-Revenue Water[b]	2,150	2,150	2,150	2,150	2,150
OVS (formerly OVMWD)	1,340	1,340	1,340	1,340	1,340
PHWA[d]	1,910	1,910	1,910	1,910	1,910
Proctor & Gamble[e]	2,300	2,800	2,800	2,800	2,800
Subtotal	36,600	37,100	37,100	37,100	37,100
Potential Demands					
Projected New Demand Increase for Known Projects[f]	550	3,040	5,440	6,600	7,750
Projected New Demand Increase for Unknown Projects[g]	50	300	550	650	750
Subtotal[H]	600	3,340	5,990	7,250	8,500
Demand Reduction Programs					
Demand Management Programs Reduction[i]	(500)	(1,620)	(2,150)	(4,440)	(4,560)
Subtotal	(500)	(1,620)	(2,150)	(4,440)	(4,560)
Total Demand	**36,700**	**38,820**	**40,940**	**39,910**	**41,040**

Source: Kennedy/Jenks Consultants, Final Water Supply Assessment and Verification-North Ormond and South Ormond, July 2008, and WSA Addenda, November 2009. See Appendix E.

a) Baseline water demand for fiscal year 2009. Water demand by existing customers is anticipated to remain fairly stable through 2030. Baseline demand excludes annual demands for Proctor & Gamble, agricultural water for OVSA, and annual demands for PHWA. These three demands are summarized separately in this table. Data provided by City Planning Department (personal communication, Chris Williamson, August 2009) and City Water Resources (personal communication, Dakota Corey and Tony Emmert, September 2009).

b) Non-revenue water = unaccounted-for water. Estimated at 6% of total demand (approximately 35,600 AFY x 6%). Source: personal communication, Dakota Corey, September 2009.

c) Based on available billing data, OVSA customers have used approximately 1,337 AFY of UWCD O-H water delivered via the City.

d) PHWA purchases water from the City per the Three Party Agreement; Agreement specifies PHWA suballocation of CMWD water of 3,262.5 AFY. PHWA mean annual purchases from the City was 1,911 AF for period 1999-2008 (source: personal communication, Steve Hickox, September 2009; personal communication, David Birch, September 2009). PHWA will begin water demand management programs in 2009 which may decrease water demands.

e) Current annual water demand for Proctor & Gamble is approximately 2,300 AFY for the period 2001-2008. Proctor and Gamble estimated future water demands are approximately 2,800 AFY, assumed to occur after year 2015. Source: personal communication, Dakota Corey, August 2009.

f) Annual increase in water demand based on development applications received for known projects. New water demands also include 2030 General Plan buildout, infill, redevelopment, and densification. Values provided by City Planning Department (personal communication, Chris Williamson and Kathleen Mallory, August 2009) and based on the following sources: July 2009 City Project List, CA Department of Finance, 2030 General Plan Background Report (2006), Ventura Council of Government data, and UCSB Forecast.

g) Annual increase in water demand for unknown projects. Source: personal communication, Ken Ortega, September 2009.

h) Cumulative total new demand based on the annual values for known and unknown projects.

i) City anticipates the reduction in City-wide water demands via implementing several demand management programs. Estimated reduction is approximately 500 AFY for period 2010-2012, 2% of demand in 2013, 3% of demand in 2014, 4% of demand in 2015, 5% of demand from 2016-2020, and 10 percent reduction for period 2021-2030. City is preparing a Conservation Master Plan, due by the end of 2009, which will identify potential demand management measures and potential demand reductions. Demand reductions recommended by City staff (personal communication, Tony Emmert and Dakota Corey, August-September 2009).

3.3.1.4 Projected Water Supply Balance

Tables 3.3-8 through 3.3-13 compare water supply and demands for a normal, single dry, and multiple dry water years as presented in the WSAs for the Ormond Beach projects. They show that for all water years from 2010 to 2030, the City's supplies are sufficient to meet projected demand. However, until the GREAT Program is operational (i.e., 2011 or 2012), the City may rely on a portion of its FCGMA groundwater credits to meet demand in multiple dry water years. It should also be noted that estimates of water demand are highly conservative and include a contingency factor. The WSAs also make the following recommendations to improve the margin of supply:

- Build up City Groundwater Credits between 2008 and 2010 for use in 2011 through 2016 until the GREAT Program expansion is operational.
- Obtain final approval from the City Council for access to the supplemental water associated with UWCD's acquisition of the Ferro property.
- The City also has the option to pump additional groundwater from City wells above their allocation. However, this may result in additional surcharges from the GMA.
- The tables above are predicated on the City's utilizing its full entitlement of CMWD water, less the PHWA water use and reservation as discussed above. However, in 2007 PHWA only used 2,220 AFY of its 3,262.5 AFY of reservation. Thus the City could potentially purchase an additional 1,040 AFY of CMWD in times of need.
- Implement the initial phase of the GREAT Program (for 6.25 MGD) by 2011 when demand starts to increase. If the facility is delayed, then other sources of water would be needed. A portion or all could be from the rest of the CMWD Tier 1 rate or even Tier 2 water.
- The City also has options of purchasing un-used O-H water from other water purveyors.
- Plan for the first expansion of the GREAT Program to be an additional 5.2 MGD (to 11.45 MGD).
- Plan for the second expansion of the GREAT Program to be an additional 5.0 MGD (to 16.45 MGD). Before designing the second expansion, in particular, the demand and surplus projections should be revisited.
- The City could also implement additional temporary water demand measures for periods when supply is not sufficient to meet demand as outlined in City Ordinance No. 2729, "City of Oxnard Water Conservation and Water Shortage Response Ordinance."

TABLE 3.3-8
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: NORMAL YEAR (AFY)

	2010	2015	2020	2025	2030
Supply Totals	36,110	42,570	45,930	44,090	44,300
Demand Totals	36,700	38,800	40,920	39,920	41,080
Net Difference Supply vs. Demand	(590)	3,770	5,010	4,170	3,220
Groundwater Debit/Credit	(590)	0	0	0	0
Net Difference to Annual Supply	-2%	9%	11%	9%	7%
Net Difference to Annual Demand	-2%	10%	12%	10%	8%
Draw on Credit Bank	2%	0%	0%	0%	0%
Supply vs. Demand with Credits	0	3,770	5,010	4,170	3,220

Source: Kennedy/Jenks Consultants, Final Water Supply Assessment and Verification-North Ormond and South Ormond, July 2008, and WSA Addenda, November 2009. See Appendix E.

TABLE 3.3-9
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: SINGLE DRY YEAR (AFY)

	2010	2015	2020	2025	2030
Supply Totals	36,110	42,570	45,930	44,090	44,300
Demand Totals	36,700	38,800	40,920	39,920	41,080
Net Difference Supply vs. Demand	(590)	3,770	5,010	4,170	3,220
Groundwater Debit/Credit	(590)	0	0	0	0
Net Difference to Annual Supply	-2%	9%	11%	9%	7%
Net Difference to Annual Demand	-2%	10%	12%	10%	8%
Draw on Credit Bank	2%	0%	0%	0%	0%
Supply vs. Demand with Credits	0	3,770	5,010	4,170	3,220

Source: Kennedy/Jenks Consultants, Final Water Supply Assessment and Verification-North Ormond and South Ormond, July 2008, and WSA Addenda, November 2009. See Appendix E.

TABLE 3.3-10
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: MULTIPLE DRY YEARS (2011 – 2015) (AFY)

	2011	2012	2013	2014	2015
Supply Totals	29,730	30,810	29,220	29,390	42,570
Demand Totals	37,240	37,780	38,540	38,680	38,800
Net Difference Supply vs. Demand	(7,510)	(6,970)	(9,320)	(9,290)	3,770
Groundwater Debit/Credit	7510	6970	9320	9290	0
Net Difference to Annual Supply	-25%	-23%	-32%	-32%	9%
Net Difference to Annual Demand	-20%	-18%	-24%	-24%	10%
Draw on Credit Bank	22%	26%	46%	86%	0%
Supply vs Demand with Credits	0	0	0	0	3,770

Source: Kennedy/Jenks Consultants, Final Water Supply Assessment and Verification-North Ormond and South Ormond, July 2008, and WSA Addenda, November 2009. See Appendix E.

TABLE 3.3-11
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: MULTIPLE DRY YEARS (2016-2020) (AFY)

	2016	2017	2018	2019	2020
Supply Totals	41,130	39,260	39,480	39,710	45,930
Demand Totals	38,900	39,410	39,910	40,420	40,920
Net Difference Supply vs. Demand	2,230	(150)	(430)	(710)	5,010
Groundwater Debit/Credit	0	150	430	710	0
Net Difference to Annual Supply	5%	0%	-1%	-2%	11%
Net Difference to Annual Demand	6%	0%	-1%	-2%	12%
Draw on Credit Bank	0%	1%	4%	8%	0%
Supply vs Demand with Credits	2,230	0	0	0	5,010

Source: Kennedy/Jenks Consultants, Final Water Supply Assessment and Verification-North Ormond and South Ormond, July 2008, and WSA Addenda, November 2009. See Appendix E.

TABLE 3.3-12
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: MULTIPLE DRY YEARS (2021-2025) (AFY)

	2021	2022	2023	2024	2025
Supply Totals	43,400	43,450	43,500	43,560	44,090
Demand Totals	39,000	39,230	39,460	39,690	39,920
Net Difference Supply vs. Demand	4,400	4,220	4,040	3,870	4,170
Groundwater Debit/Credit	0	0	0	0	0
Net Difference to Annual Supply	10.14%	9.71%	9.29%	8.88%	9%
Net Difference to Annual Demand	11.28%	10.76%	10.24%	9.75%	10%
Draw on Credit Bank	0.00%	0.00%	0.00%	0.00%	0%
Supply vs Demand with Credits	4,400	4,220	4,040	3,870	4,170

Source: Kennedy/Jenks Consultants, Final Water Supply Assessment and Verification-North Ormond and South Ormond, July 2008, and WSA Addenda, November 2009. See Appendix E.

TABLE 3.3-13
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: MULTIPLE DRY YEARS (2026-2030) (AFY)

	2026	2027	2028	2029	2030
Supply Totals	43,660	43,710	43,760	43,820	44,300
Demand Totals	40,150	40,380	40,610	40,850	41,080
Net Difference Supply vs. Demand	3,510	3,330	3,150	2,970	3,220
Groundwater Debit/Credit	0	0	0	0	0
Net Difference to Annual Supply	8%	8%	7%	7%	7%
Net Difference to Annual Demand	9%	8%	8%	7%	8%
Draw on Credit Bank	0%	0%	0%	0%	0%
Supply vs Demand with Credits	3,510	3,330	3,150	2,970	3,220

Source: Kennedy/Jenks Consultants, Final Water Supply Assessment and Verification-North Ormond and South Ormond, July 2008, and WSA Addenda, November 2009. See Appendix E.

3.3.1.4.1 Water Demand Control Measures

As discussed in some detail in the 2005 City UWMP, the City has several tools in place to control demand. These tools can be employed in response to any water supply constraint, whether a result of drought, an emergency, or other unusual conditions. These tools are summarized below.

Diversity of Supply Sources

Most importantly, but perhaps not an obvious tool, the City's water portfolio is quite diverse compared to most public water suppliers of its size. First, the City has some flexibility to shift its reliance between its local sources and its purchase of imported water. In California, it is relatively common for the northern region of the state to experience differing amounts of rainfall than the southern regions. In other words, the northern part of the state may have a series of very wet years, while the southern portion may have very dry years. In other years, the reverse may be true. Since the City's imported water derives primarily from Lake Oroville, which is dependent on hydrologic conditions in the northern part of the state, this source is "immune" from the conditions in the south. In contrast, the City's local supplies (groundwater) are dependent on the hydrologic conditions in the southern portion of the state. The City has the capability to alter its proportional reliance on these two sources based on hydrologic conditions. This same diversity of sources allows the City to respond to emergency conditions as well. For example, in prior years, the City's access to imported water has been temporarily suspended either for maintenance or as a result of earthquake damage. Between the City's groundwater wells and its access to local water through UWCD, the City has local infrastructure capable of meeting the entirety of the City's supply needs. Locally, the City's access to groundwater through both the UWCD and City facilities creates redundancy should a local emergency impact one system or the other. Certainly, the City could dramatically increase its reliance on imported water for temporary periods, should local conditions warrant.

Water Shortage Emergencies: Reductions in Water Use. The Oxnard Municipal Code grants the City Council the authority to impose voluntary or mandatory reductions on water use throughout the City. These Code provisions provide a high degree of flexibility to control customer demand based on emergency water shortage conditions.

City Council Policy Regarding Development Approval

At its January 15, 2008, and October 19, 2009, meetings, the Oxnard City Council directed City staff to require that all new projects defined as discretionary and not exempt from CEQA be water demand neutral to the City's water system. To achieve neutrality, project proponents are required to contribute water rights, water supplies, or financial or physical offsets that will ensure sufficient supply to address project demands. Options available to

project proponents include transfers of FCGMA groundwater allocations to the City through agricultural conversion, participation in expansions of the City's recycled water system through physical or financial contributions, and participation in water conservation projects that produce measurable sustainable water savings. This policy and the manner in which the applicants are approaching their projects ensure that development approval will take place at the pace anticipated in the 2005 UWMP (and likewise, the analysis within this document) so that the growth in water demand does not exceed available supply. The net result of this policy will ensure that project approvals include conditions that a) control the pace of construction of any given project (and thus controls the pace at which water demand increases); b) allows participation in the contribution toward the development of additional water supplies that offsets the demand associated with the project; or c) suspends project approval until sufficient supplies are available to support the anticipated project demand.

Water Supply Reliability

Based on the detailed analysis contained in the Ormond Beach WSAs as summarized above, the facts are sufficient for the City to conclude that it will have a reliable portfolio of water supplies to meet anticipated demand for both the project and the presumed cumulative development anticipated under the City's current General Plan. Based on the facts and analysis included in the WSAs, there is a reasonable likelihood these supplies will be available within the timeframe necessary to meet projected demands through 2030.

If completion of the GREAT Program facilities is delayed or if development proceeds more quickly than is reasonably anticipated, short-term demand could exceed supply. The City has anticipated this potential impact on water supply reliability and adopted the "water neutral" policy referenced above that is to be included as a condition in every project approval. The City has also secured commitments from project applicants, through language incorporated in the specific plans and/or development agreements that will ensure that development proceeds in a manner that will ensure supply will be available to serve future demands. These and other water supply conditions are described below.

3.3.1.5 Water Distribution

Oxnard's water distribution system consists of a wide variety of pipe types and sizes comprising over 500 miles of pipeline, 11,000 valves, and 4,000 fire hydrants throughout the city. Distribution lines are located 3 to 15 feet below ground and range in size from ¾ inch to 12 inches in diameter (Oxnard Water Services Department, 2004) (see Figure 3.3-3).

The Study Area is currently used for agricultural production. In addition to onsite wells, there are a number of existing water lines in and surrounding the property. Currently a 14-inch (Mugu Line) and a 16-inch (Ocean View) water distribution line cross the site. These lines serve as distribution infrastructure for private water districts. Entering the site from the north,

these lines run parallel, west of Rose Avenue, along the north edge of the Reliant/SCE ownership, south through the site to Hueneme Road. At Hueneme Road, these lines continue away from the site to the south and east. As part of the citywide domestic water system, the following water mains exist in the perimeter streets surrounding the Study Area:

- 27-inch water line in Edison Drive
- 16-inch water line in Hueneme Road
- 8-inch water stub at the end of existing Rose Avenue
- 8-inch water stub at the end of existing Tulsa Avenue
- 8-inch water stub at the end of existing Beaumont Avenue
- 12-inch water stub at the intersection of Olds Road and Sanford Street
- 54-inch (BWRDF) line in Hueneme Road

3.3.1.6 Stormwater Drainage and Water Quality

Stormwater runoff occurs when precipitation flows over the ground. Impervious surfaces such as driveways, parking lots, and streets prevent stormwater runoff from naturally soaking into the ground. Stormwater flows over both impermeable and permeable surfaces, collecting and transporting pollutants including pesticides, fertilizers, automobile fluids, yard waste, and soil, into streams, rivers, ponds, wetlands, and – along the California coast – ultimately into the Pacific Ocean. These pollutants pose numerous environmental concerns, because the various substances can cause serious deterioration and degradation of natural resources and habitats. Providing adequate facilities for the collection and distribution of stormwater is a concern for both existing and potential development, and is highly regulated.

The main drainages for the Ormond Beach area are two manmade stormwater channels: the J Street Drain and the Oxnard Industrial Drain (Figure 3.3-2 and Figure 3.3-4). East of the Ormond Beach Drainage Basin, surface flows drain to Mugu Lagoon primarily via agricultural drainage channels. Figure 3.3-4 shows drainage facilities within and near the Study Area. Limited stream gauge data are available to document the drains' inflow of surface water. Data are, however, available for a gauge located west of the Study Area that documents the surface water elevations in the Ormond Beach Lagoon (Jones and Stokes, 1994).

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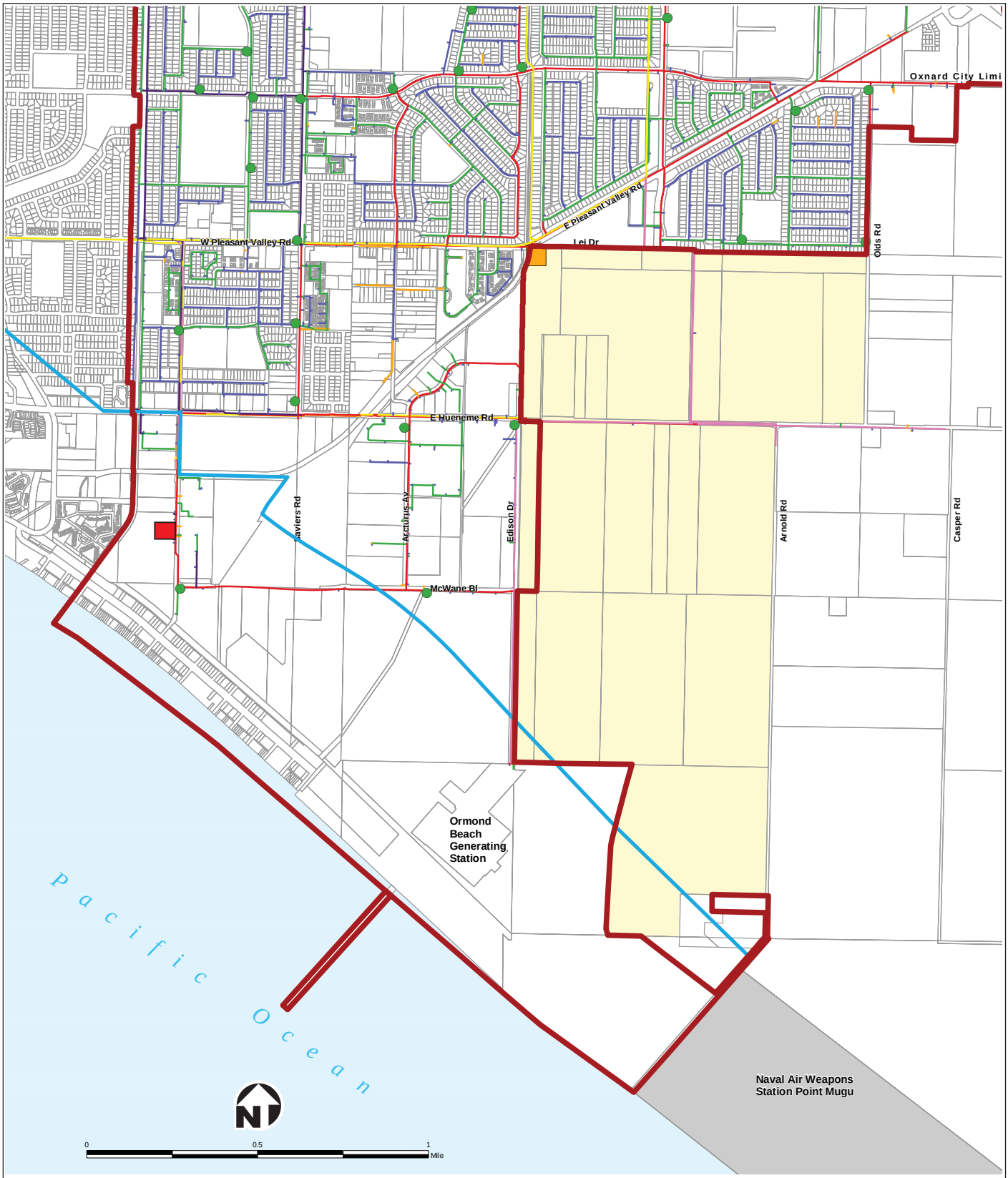

Legend

Water Line
- <6" Diameter
- 6" Diameter
- 8" Diameter
- 10" Diameter
- 12" Diameter
- 14" - 18" Diameter
- >24" Diameter
- City Water Pressure Point
- Blending Station
- City Limits
- Ormond Beach Specific Plan Project Area
- Naval Air Weapons Station Station Point Mugu
- Coastal Zone Boundary Line
- Oxnard Waste Water Treatment Plant

Ormond Beach Specific Plan EIR	Figure 3.3-3. **EXISTING WATER FACILITIES**	Nov. 2009
URS Corporation		

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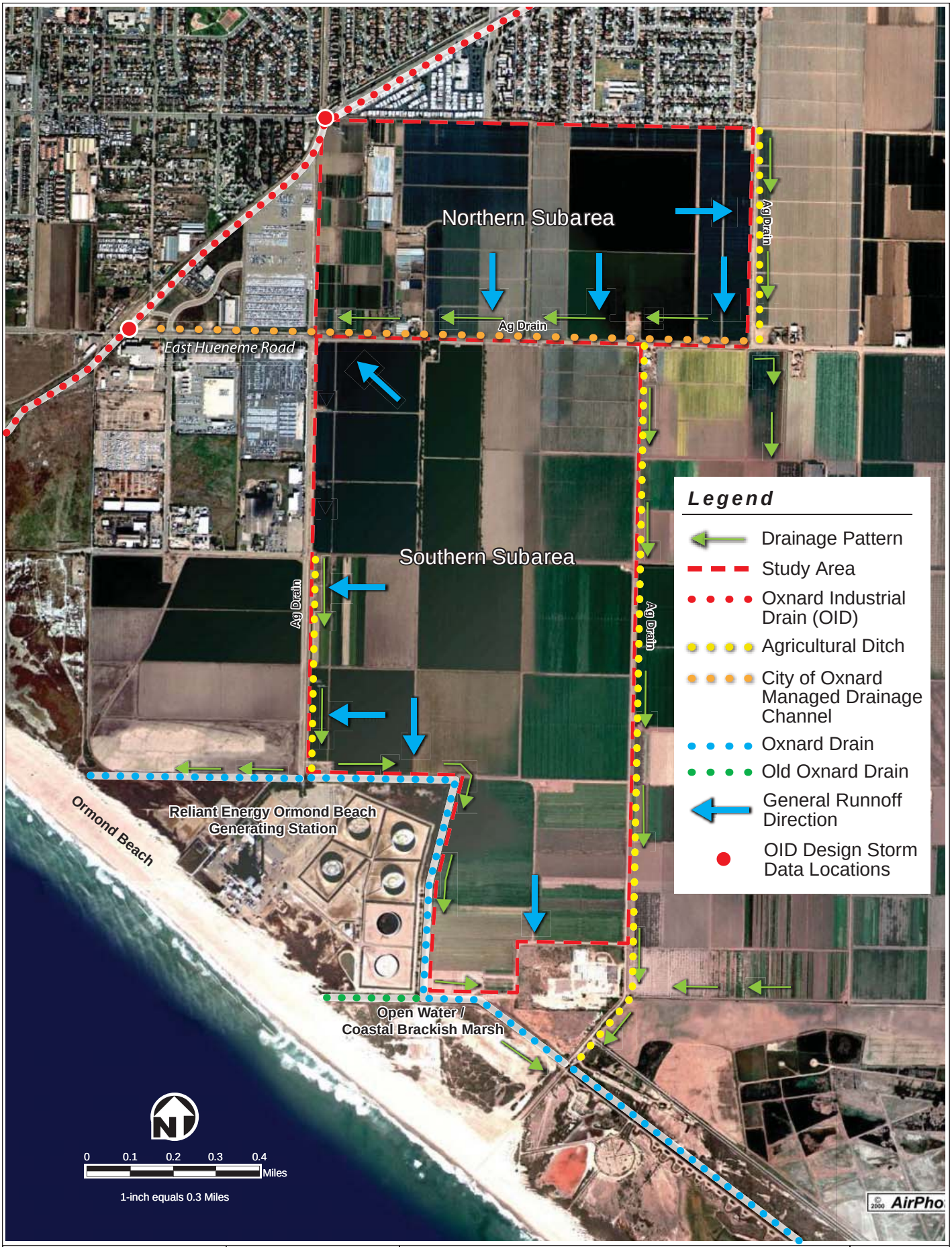

Ormond Beach Specific Plan EIR URS Corporation	**Aerial Source:** AirPhotoUSA	Figure 3.3-4. **MAJOR DRAINAGE FACILITIES**	July 2008

3.3.1.6.1 Oxnard Industrial Drain (OID)

The OID is a manmade rectangular channel that extends several miles northeast of the Ormond Lagoon (Figure 3.3-4) through the City of Oxnard. One other major stormwater channel, the Rice Drain, is a tributary to the OID. The OID was originally built by the Oxnard brothers to drain industrial effluent and sewage. Current inputs to the OID consist of urban and agricultural runoff with some groundwater seepage near the coast where the channel bottom lies below the water table. The VCWPD maintains the OID and regulates discharges to the OID. The OID watershed totals approximately 5,935 acres. The OID channel is currently rated by the VCWPD as having an approximate flow capacity of 2,900 cubic feet per second (cfs). There are no flow gauges on the OID to provide historic flow data, although in 2004 the VCWPD conducted a hydrologic study of existing flow conditions in the OID using the modified rational method (VCRAT). The VCRAT was used to estimate the flowrates based on the area of the OID watershed, runoff characteristics, and historic rainfall. The estimated design storm flowrates for locations along the OID are shown in Table 3.3-14.

TABLE 3.3-14
OXNARD INDUSTRIAL DRAIN FLOW CONDITIONS

Current Capacity	Location	Q100[1]	Q50[2]	Q25[3]	Q2[4]
2,900 cfs[5]	E. Pleasant Valley Rd.	3,744 cfs	3,120 cfs	2,589 cfs	499 cfs
	E. Hueneme Road	4,148 cfs	3,454 cfs	2,867 cfs	553 cfs
	Ocean Street	4,159 cfs	3,466 cfs	2,876 cfs	554 cfs
	J Street	5,462 cfs	4,552 cfs	3,778 cfs	728 cfs

Ref: VCWPD, 2004

1 Q100 = Flow from a 100-year recurrence interval or 1 percent probability storm event.

2 Q50 = Flow from a 50-year recurrence interval or 2 percent probability storm event.

3 Q25 = Flow from a 25-year recurrence interval or 4 percent probability storm event.

4 Q2 = Flow from a two year recurrence interval or 50 percent probability storm event

5 Cubic feet per second

A drainage channel called Hueneme Canal historically ran north to south along the coast and connected the outlets of the J Street and OID channels (Figure 3.3-4). A historic extension of the Hueneme Canal known as the "Perkins Drain" channeled water down the coast from the OID to the agricultural channel known as the Oxnard Drain. The Perkins Drain is in disrepair and no longer hydrologically connected to Oxnard Drain. Water from the OID now flows directly into Ormond Lagoon. A flap gate in a remnant portion of the Perkins Drain east of the OID allows runoff from the Ormond Lagoon to flow down the coast and ultimately to a wetland area east of the Halaco dump site (Impact Sciences, 1996).

Planned OID Drainage Improvements. The City of Oxnard and the County of Ventura are aware of the deficiencies in the OID and J Street drainages. The 2003 Oxnard Master Plan of Drainage prioritizes potential flood control drainage improvements throughout the City of Oxnard. Improvements to facilities in the Master Plan are prioritized on a basis of need. Facilities assessed to have a current flooding problem are given a No. 1 priority. A No. 2 priority is assigned to facilities in the remaining developed area of Oxnard where existing facilities are deficient but existing development does not currently experience serious flooding. The rehabilitation of the OID is included as a potential project and has been assigned a No. 2 priority. Mitigation of flooding problems at the J Street Drain has been designated as a No. 1 priority due to the threat to existing structures.

The Study Area is located within VCWPD Zone 2. Zone 2 generally follows the boundaries of the Santa Clara River and local coastal drainages. The VCWPD has established a long-range capital expenditure plan to alleviate existing flooding, water quality concerns, and flooding expected from development. The Ventura County Integrated Watershed Protection Plan, Fiscal Year 2005 – Zone 2 (VCWPD, 2005) identifies and ranks proposed capital improvements. The OID/Hueneme Drain Improvement Project included in the VC Integrated Watershed Protection Plan would assess channel capacity deficiencies, conduct a two-dimensional flow analysis utilizing the FLO-2D model to evaluate the system deficiency, delineate the floodplain, and provide recommendations. As of October 2005, the VCWPD has funded an initial alternatives analysis and deficiency study of the OID. At the present time, the capital improvement projects proposed by the City of Oxnard and the VCWPD are not being coordinated.

3.3.1.6.2 Ormond Lagoon

The Ormond Beach Estuary (Ormond Lagoon) can be characterized as a "backshore barrier dune" lagoon system which has a seasonally open tidal inlet to the Pacific Ocean. The approximately 15-acre Ormond Lagoon is oriented parallel to the beach and is approximately 2,500 feet long and 250 feet wide (at a surface elevation of 5 feet above mean sea level). The Ormond Lagoon currently receives flows from the J Street Drain, the OID, and East Hueneme Drain.

Starting in the spring, wave energy along the coast decreases. The decrease in wave energy allows the deposition of sand onto the upper portion of Ormond Beach. This deposition forms a high, wide berm between the beach and Ormond Lagoon. This seasonal berm and semi-permanent dune system form a barrier preventing the ocean discharge of runoff from the Hueneme Drain, the J Street Drain, and the OID. This runoff continues to flow into the Ormond Lagoon, resulting in an increase in surface water elevation. The VCWPD operates Stream Gauge #649 at the J Street Drain, Ormond Beach, located southwest of the Study Area. This gauge shows the backwater depths developing in Ormond Lagoon due to the sand

berm formation during dry weather periods. When sufficient storm flows occur and/or wave energy increases in the winter, the berm is breached and the lagoon discharges to the ocean under tidal influence. During the winter, higher energy waves increase the long-shore transport of sand. The movement of sand keeps the berm from forming and the lagoon breach stays open for most of the winter season.

Prior to 1992, the Ventura County Flood Control District (District) mechanically breached the sand berm in order to allow drainage to the ocean from Ormond Lagoon. In 1992, regulatory agencies requested that the District cease the mechanical breaching of the sand berm between April and October to prevent disturbance to sensitive biological resources. Since 1992, the lagoon has functioned without District intervention and breaching of the sand berm has occurred naturally during the winter months.

During the summers of 1994 and 1995, water levels in Ormond Lagoon rose to 6.5 feet (NVGD) while the sand berm was at a height of 7 feet (NVGD). In September 1994, the lagoon water elevation reached a maximum of 7.0 feet (NVGD). Drainage waters backed up into the stormwater channels and created several adverse conditions: 1) the OID overtopped its banks resulting in the flooding of adjacent properties; 2) channels at this water level could not safely convey flood waters in the event of even a moderate rainstorm and had the potential to result in a severe flood hazard; 3) soils became saturated and created unstable conditions for the nearby land uses. Localized flooding was observed at the terminus of Perkins Road and the adjacent wetlands due to the overtopping of the OID in 1994 and 1995 (Impact Sciences, 1996).

In 1994, water backed up in the OID elevated water levels at the OID box culvert located on Hueneme Road (approximately 5,000 feet upstream) to within 6 inches of the top. Since the culverts are not designed to operate full or under pressure, this raised VCFCD concerns about potential damage to their facilities (VCFCD, 1994).

Correspondence from the County of Ventura Environmental Health Division to the Ventura County Department of Public Works in 1994 and 1995 described the problem of mosquitoes breeding in overflow from the OID. Correspondence from 1995 described water from the OID flowing into the field next to McWane Boulevard and the area next to the generating facility then owned by Southern California Edison (currently Reliant Energy) (Impact Sciences, 1996).

In response to these flooding events, the VCWPD installed a stream gauge at the junction of the J Street Drain and Ormond Lagoon (Stream Gauge #649) to measure the Ormond lagoon elevation. Data from Stream Gauge #649 was used to determine the impact of Ormond Lagoon water levels on the OID. The data collected show that when the water elevation in the lagoon exceeds 4.5 feet (NGVD), water backs up into the OID and J Street Drain (Impact Sciences, April 1996). During high water-level conditions in the lagoon and with the drains

full, there is no reserve flow capacity for stormwater. Consequently, any additional discharge to the OID or J Street Drain during a storm would exceed the flow capacity of the channel and would result in flooding of adjacent properties.

3.3.1.6.3 Drainage Water and Sediment Quality

VCWPD water quality monitoring stations include the OID at Perkins Road, the OID at McWane Road, and Oxnard Drainage District Canal #3. Samples taken from the OID at the Ormond Lagoon in 1994 were below detection for chlorinated pesticides and petroleum products (Impact Sciences, 1996). The water in the Oxnard Drain is slightly brackish. Salinity measured by EMCON Associates at Arnold Road measured 9 parts per million (ppm) on May 31, 1994 (Jones and Stokes, 1994).

The State Water Resources Control Board conducted testing of fish tissue and sediments as part of the Toxic Substances Monitoring Program (Jones and Stokes, 1994). Significant quantities of contaminants were found in both fish and sediment samples taken from the OID, as shown in Table 3.3-15.

TABLE 3.3-15
OID RESULTS: TOXIC SUBSTANCE MONITORING

Constituent	Fish Tissue/ Species	Fish Tissue Conc. (ppb[8])	Sediment Conc. (ppb)	Freshwater Sediment Criteria (ppb)[1]			National Maximum Fish Tissue Conc. (ppb)[2]
				TEL[3]	PEL[4]	UET[5]	
Total DDT	Goldfish	2,264	19,270			<50	1,481
Total PCB	Mosquito fish	858	No Data	31.6	34.1	277	705
Toxaphene	Goldfish Mosquito fish	6,800 1,200	No Data		[6]		[7]
Total Chlordane	Goldfish Mosquito fish	1,916 334	263	4.5	8.9	30	100

Jones and Stokes, 1994: Rasmussen and Blethrow 1991; Rasmusssen 1992, 1993.

1 National Oceanic Atmospheric Administration Sediment Quality Guidelines Developed for the National Status and Trends Program.

2 U.S. Environmental Protection Agency – Results of National Fish Tissue Study. Values are based on the maximum concentrations No sediment guideline published.

3 TEL – effects level in ppb.

4 PEL – Probable effects level in ppb.

5 UET – Upper concentration not measured.

6 Threshold effects level in ppb.

7 Fish tissue found in freshwater fish tissue taken from 500 lake sample sites nationwide.

8 Parts per Billions (ppb).

Due to the high levels of contaminants in fish and sediments, water from the OID was not recommended for use for habitat restoration purposes at South Ormond Beach (Jones and Stokes, 1996).

The Ormond Beach Lagoon, wetlands, and drainage channels are not included on the LARWQCB's CWA Section 303(d) list of impaired waterbodies.

As part of the evaluation of wetlands restoration options at South Ormond Beach (Bren School, 2001) 28 sediment samples were collected from seven locations along the Oxnard Drain at South Ormond Beach. Laboratory test results for the sediment samples are shown in Table 3.3-18. The samples were tested for organochlorine pesticides including dichlorodiphenyltrichloroethane (DDT) and polychlorinate biphenyls (PCB). The sampling showed trends of DDT contamination in the Oxnard Drain along with DDT metabolites dichlorodiphyldichloroethylene (DDE) and dichlorodiphyldichloroethylane (DDD). No other organochlorine chemicals were detected in the sediment samples. Geographically, the highest levels of DDT and its derivatives (43 micrograms per kilogram) were found at sample location OD #4, approximately 100 feet east of the junction with the old Oxnard Drain (Figure 3.3-3). This location corresponds to the southernmost boundary of the Southern Subarea. However, the preliminary remediation goal (PRG) levels established by the USEPA for residential soils set the limit for DDT at 2.4×10^3 micrograms per kilogram. All sediment samples taken within the Oxnard Drain were found to meet the PRG for DDT and its metabolites by a factor of 10 or more.

Trace amounts of barium, beryllium, copper, lead, vanadium, and zinc were present in a sediment sample from location OD#3, located at the junction of the Oxnard Drain and Old Oxnard Drain. Beryllium is a potential carcinogen that enters the environment principally from coal combustion. Potential sources of beryllium at South Ormond Beach are ash and wastewater from the adjacent Reliant Energy Ormand Beach Generating Station or the Halaco Engineering Company slag pile. However, levels of contaminant concentrations in the Oxnard Drain were found to be below PRGs by a factor of 10 or more as shown in Table 3.3-16.

TABLE 3.3-16
LABORATORY ANALYTICAL RESULTS FOR SEDIMENT SAMPLES FROM OXNARD DRAIN JUNCTION WITH OLD OXNARD DRAIN

Station	Sample Location OD #3 mg/kg	Preliminary Remediation Goals (Residential Soil) for Detected Metals[1] mg/kg [2]
Sample matrix	Sediment	
Sample type	Surface	
Date	10/20/2000	
Barium	33.00	$5.4x10^3$
Beryllium	1.50	$1.5x10^2$
Copper	15.00	$2.9x10^3$
Lead	4.70	$4.0x10^2$
Vanadium	17.00	$5.5x10^2$
Zinc	36.00	$2.3x10^4$
DDT	8.30	$2.4x10^3$
DDD	9.80	$1.7x10^3$
DDE	8.20	$1.7x10^3$

[1] USEPA, 2001

[2] Milligrams per kilogram (mg/kg)

3.3.1.6.4 Northern Subarea Drainage

Most of the stormwater and agricultural runoff from the Northern Subarea flows west along a City of Oxnard-maintained drainage channel along Hueneme Road to the Oxnard Industrial Drain (OID) (Figure 3.3-3). Two other storm drain channels are located at the intersection of Hueneme Road and Arnold Road and Hueneme Road and Olds Road. The storm drains at the Arnold Road intersection flow to an unlined drainage ditch (Arnold Road Drain) along the east side of Arnold Road (RBF Consulting, 2003).

The culverts on Hueneme Road and Olds Road discharge stormwater south of Hueneme Road. Runoff from this area is pumped to the Arnold Road Drain. The existing culverts are sized to carry agricultural runoff, and are in poor condition due to erosion and the entrapment of sediment. The culvert on the northeast corner of Olds Road and Hueneme Road is likely to be overwhelmed during intense storm events, resulting in sheet flow flooding across the intersection.

3.3.1.6.5 Southern Subarea Drainage

Drainage from the Southern Subarea flows via a series of drainage ditches to an agricultural drainage channel (Oxnard Drain), which was part of the OID until sediment build-up and construction of the Reliant Energy Ormond Beach Generating Station (previously Southern California Edison) blocked the hydraulic connection. The Oxnard Drain originates along

Edison Drive and is directed around the perimeter of the Study Area to the southwest and then south to the western arm of Mugu Lagoon. When the Ormond Beach generating station was built in the 1970s, the Oxnard Drain was constructed around the property to drain the upland agricultural lands into Mugu Lagoon. The portion of the OID routed along the Ormond Beach area is, thus, known as the "Oxnard Drain" or "Edison Road Drain" (Gay et al, 2001). Sections along the northern and eastern perimeter of the Reliant/SCE property are referred to in various studies related to the Southland Sod Farms (SSF) purchase of lands for sod production from Southern California Edison in 2001. Included in that sale was an agreement that SSF would assume maintenance responsibilities for more than 6,000 feet of the Oxnard Drain from the entrance to the Generating Station on Edison Drive southward to where the Oxnard Drain intersects Arnold Road. The rest of the drainage system in this area is maintained by the Oxnard Drainage District No. 2. In compliance with maintenance and dredging responsibility, a resource assessment was prepared for SSF for the Oxnard Drain (BioResource Consultants, 2002).

Immediately south of the Southern Subarea is an area proposed by local advocates, the State Coastal Conservancy, and others for wetland restoration. Groundwater elevation data was collected as part of an evaluation of potential restoration scenarios (Bren School, 2001). Four piezometers were installed in a northeast to southwest line running from the Oxnard Drain intersection with Arnold Road to the start of the coastal dunes. Depth to groundwater measurements were taken at regular intervals from August 28, 1999, to April 20, 2000. During the rainy season, surface water was observed to pond at the piezometer locations closest to the coastal dunes. The piezometers indicated that the water table was very close to the surface in the ponded areas. This observation is consistent with observed winter ponding in the low backdune swale areas of South Ormond Beach in previous studies (Jones and Stokes, 1995, and McClelland Engineers, 1985). The data also showed that the direction of shallow groundwater flow in the South Ormond Beach wetland is variable, indicating that groundwater is not a major contributor to flow in the Oxnard Drain.

3.3.1.7 Flooding/Floodplain

The Ormond Beach area is located within a relatively flat coastal plain, with high groundwater levels and a relatively slow natural drainage towards the southwest (Impact Sciences, 1996). The lack of infiltration capacity in the Ormond Beach area contributes to large areas of shallow flooding when the capacity of existing flood control structures is exceeded (Jones and Stokes, 1994).

The Study Area is not included in the 100-year floodplain as shown on the Flood Insurance Rate Map (FIRM) developed by Federal Emergency Management Agency (FEMA) for the Oxnard plain. The FIRM (Map ID 060413089SB) indicates that the OID can contain the 100-year flood within the channel. A roughly triangular area bounded by Pleasant Valley Road on

the north and Edison Drive on the West is shown on the FIRM as Zone B, subject to either moderate flooding or located between the 100-year and 500-year floodplain boundaries. The approximately 6-acre area shown as Zone B corresponds to the northwestern corner of the Northern Subarea.

The now-superseded 1979 Oxnard Master Plan of Drainage Constraint Map identifies areas within the Study Area that could experience significant flood problems. The Flood Hazard Map for the 1985 Ormond Specific Plan Area (McClelland, 1985) showed potential flooding areas at the intersection of Olds Road and Hueneme Road, and along Edison Drive extending east to McWane Blvd. Due to the low profile of the Study Area, flooding could have occurred during severe storm as sheet flow to a depth of 1 to 3 feet. Deeper flooding could have occurred if the drainage of the OID was blocked and flood waters backed up and overflowed (McClelland Engineers, 1985).

The updated 2003 City of Oxnard Master Plan of Drainage supersedes the 1979 Drainage Constraint Map. The updated Plan does not show any areas within the Study Area to be subject to flooding.

3.3.1.6 Wastewater Service

Oxnard's sanitary sewage collection and treatment services accommodate the City of Oxnard, City of Port Hueneme, the U.S. Navy Construction Battalion Station, the Point Mugu Naval Air Station, as well as smaller adjacent areas serving approximately 225,000 persons. Serviced by 400 miles of sewer pipelines and 16 wastewater pumping stations, the collection system conveys its flow to the OWWTP. Located in the southwest portion of the City, the existing lines range in size from 6 to 48 inches in diameter, with the largest trunk lines located in the Ventura Road, Rose Avenue, Redwood, Western, Central and Eastern roadway rights of way. (Oxnard Wastewater Services, 2004).

The OWWTP (Figure 3.3-4) is a secondary facility designed to treat an average dry weather flow (ADWF) of 31.7 mgd with provisions for an ultimate ADWF design capacity of 39.7 mgd. Treated effluent from the OWWTP is transported to the Pacific Ocean through pipelines and discharged to an ocean outfall at a depth of approximately 55 feet.

Improvements to the wastewater system are made through a Wastewater Conveyance Fund established by the City. This fund pays for costs associated with the operation, maintenance, and capital outlay for the wastewater collection system. Improvements and operations of the OWWTP are made through the Wastewater Treatment Plant Fund. The City requires new developments to build and/or fund improvements to the wastewater system and/or expand the existing system to accommodate new users.

The City of Oxnard completed a Wastewater Master Plan study in 2003 (Kennedy/Jenks, 2003) and updated it in 2005 to incorporate projected wastewater flows from seven specific plan areas including Ormond Beach (Kennedy/Jenks, January 2006). Analysis of future wastewater flows from planned new development showed that the existing OWWTP has adequate treatment capacity for both wet and dry weather flows. However, hydraulic deficiencies in the existing sewer pipeline infrastructure will need to be addressed to handle projected wastewater flows from future development.

An initial analysis (Brown and Caldwell, 2002) identified 25 specific capital improvement projects (CIPs) to mitigate hydraulic deficiencies in the City of Oxnard wastewater collection system. The CIPs included improvements to sewer pumping stations and replacement and repair of sewer pipelines. Implementation of these CIPs was proposed in three phases starting in the year 2000 and ending in the year 2020.

In the subsequent Wastewater Master Plan update (Kennedy Jenks, January 2006) potential sewer pipeline replacement and repair CIPs were classified as having "near-term improvement" or "long-term improvement" status. The purpose of this CIP prioritization was to assist the City in budgeting for potential improvements that may be needed in the next 20 years.

The 2002 City Master Plan of Sewage (Brown and Caldwell, 2002) identified the Eastern Trunk Main at 91 percent of its available capacity. The existing downstream wastewater system will need to be upgraded to convey the sewage generated by the development allowed in the proposed development and in the City's General Plan. A downstream sewer study will be required to determine the extent of improvement to the existing downstream sewer system that will be required as a result of the proposed project.

Funding for sewer system improvements shall be derived from a combination of general fund monies and sewer connection fees. Sewer connection fees will be assessed for the new development, and consist of two components: 1) treatment plant expansion; and 2) conveyance system improvements. The developer is also required to provide onsite sewer lines, and to extend or improve offsite sewer lines where necessary to serve that particular proposed development. Offsite improvement costs borne by the developer are credited toward their connection fees. These requirements are expected to reduce impacts to the existing wastewater discharge system.

3.3.2 Regulatory Framework

3.3.2.1 Federal Regulations

3.3.2.1.1 Section 404 of the Clean Water Act

Under Section 10 of the Rivers and Harbors Act, the U.S. Army Corps of Engineers (ACOE) is authorized to regulate the construction of structures and excavation/deposition of material into navigable waters. Under section 404 of the Clean Water Act, the ACOE is authorized to permit the discharge of dredged or fill materials to "Waters of the U.S." "Waters of the U.S." under Section 404 includes both wetland and non-wetland aquatic habitats with the jurisdictional extent of rivers and streams defined by the ordinary high water mark (OHWM). Section 404 permits can be issued as individual, general or nationwide permits. Consultation with the ACOE and 401 certification is required for all individual permits. Nationwide permits are applicable to specific activities judged to have minimal impact and may or may not require a pre-construction notice (PCI).

Although areas adjacent to the Study Area have been delineated for wetlands, the Study Area itself has not been subject to delineation. A section 404 permit would be required if development within the Study Area required extensive modification or excavation of existing watercourses. A 404 permit may also be required if jurisdictional wetlands are identified within the development footprint of the Study Area.

3.3.2.1.2 Section 401 of the Clean Water Act

Section 401 of the Clean Water Act requires applicants for a federal license or permit that may result in discharges into jurisdictional "Waters of the U.S." to acquire a certification that the discharge will comply with the state's water quality plan. For the Study Area, a Section 401 certification would be required if the Proposed Project required a Section 404 permit from the ACOE.

3.3.2.1.3 Sections 301 and 402 of the Clean Water Act

Sections 301 and 402 of the Clean Water Act prohibit the discharge of pollutants to "Waters of the U.S.", unless authorized under a National Pollutant Discharge Elimination Program (NPDES) permit. The federal NPDES program was delegated to the State of California on May 14, 1973. Responsibility for implementing the NPDES program rests with the State Water Resources Control Board and the nine Regional Water Quality Control Boards. Most individual NPDES permits are issued by the applicable Regional Water Quality Control Board. The stormwater permitting program was developed to address the discharge of pollutants from non-point discharges of stormwater. The State Board and Regional Boards have issued two types of stormwater permits: municipal stormwater permits for urban areas

of greater than 100,000 people and statewide general permits applicable to industrial activities and construction.

The new development within the Study Area and the construction activities associated with the development will require coverage under municipal and construction general stormwater permits.

3.3.2.1.4 Section 303 of the Clean Water Act

Section 303 of the Clean Water Act requires States to make a list of "impaired" waters. Section 303 requires the development of total maximum daily loads (TMDL) for pollutants identified as contributing to impairment of a waterbody. Facilities discharging to Section 303 waters or tributaries may be required to additionally limit discharges of pollutants contributing to the listed impairment. The Study Area is not located within the watershed of a Section 303 listed "impaired" waterbody.

3.3.2.1.5 National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP). In 1985, FEMA completed a flood insurance rate map (FIRM) for Ventura County which identified Special Flood Hazard Areas including the extent of the floodways for the 100-year flood. To comply with the NFIP, communities must adopt a floodplain management ordinance addressing construction and habitation in flood zones. In California, the California Department of Water Resources provides and encourages communities to adopt the California Model Floodplain Management Ordinance. The Study Area does not lie in the 100-year floodplain.

3.3.2.1.6 Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells.

3.3.2.2 State Regulations

3.3.2.2.1 Streambed Alteration Agreements, California Department of Fish and Game

Sections 1600-1616 of the California Fish and Game Code (effective January 1, 2004) provide the statutes and guidance for the regulation and permitting of impacts to identified categories of State waters under the Lake and Streambed Alteration Program administered by the California Department of Fish and Game.

Categories of State waters and the types of regulated activities are described in Section 1602 of the Code. In general, the streambed alteration agreement is intended to protect fish and wildlife resources associated with riparian wetland habitat. A permit fee is assessed for each project and is tied to total project costs. A Streambed Alteration Agreement may be needed if development of the Study Area requires substantial modification to riparian habitat or waterway channels.

3.3.2.2.2 California Environmental Quality Act

The basic goal of the California Environmental Quality Act (CEQA) is to develop and maintain a high-quality environment now and in the future. The CEQA Guidelines provide a framework for the analysis of impacts to hydrology and water quality. The CEQA Environmental Checklist (Appendix G) states that a project would have significant impacts on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation onsite or offsite.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- Inundation by seiche, tsunami, or mudflow.

Appendix G states that a project would have significant impacts to public utilities if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

3.3.2.2.3 Urban Water Management Planning Act

California State Assembly Bill 797 (California Water Code Section 10610, et seq.) was adopted in 1983. It requires urban water suppliers that provide water for municipal purposes to more than 3,000 customers, or more than 3,000 AF of water, on an annual basis to prepare an Urban Water Management Plan (UWMP). The intent of the UWMP is to assist water supply agencies in water resource planning given their existing and anticipated future demands. The UWMP must include a water supply and demand assessment comparing the total water supply available to the water supplier with the total projected water use over a 20-year period. The management plans must also be updated every 5 years. The California Department of Water Resources has approved the City's 2005 UWMP.

3.3.2.2.4 The Drinking Water Program

The California Department of Health Services' Division of Drinking Water and Environmental Management (DDWEM) is responsible for managing the Drinking Water Program for the State of California. The Drinking Water Program regulates public water systems; oversees water recycling projects; permits water treatment devices; certifies drinking water treatment and distribution operators; supports and promotes water system security; provides support for small water systems and for improving technical, managerial, and financial (TMF) capacity; oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates; and provides for water system improvements, including bond funding under Proposition 84, Proposition 50 and the Safe Drinking Water State Revolving Fund.

3.3.2.3 Ventura County

3.3.2.3.1 Ventura County Watershed Protection District

The Ventura County Watershed Protection District (VCWPD) was formed on September 12, 1944, when the California State Legislature approved the Ventura County Flood Control Act. On January 1, 2003, the name was changed to the VCWPD to emphasize integrated watershed management. Within Ventura County, the VCWPD maintains a network of stream and rain gauges, debris/detention basins and jurisdictional stormwater channels. The VCWPD is the floodplain manager for unincorporated areas within the county, oversees the NPDES stormwater program and issues encroachment permits for construction projects. The Oxnard Industrial Drain is a VCWPD facility.

***Ventura County Stormwater Permit and Management Plan*.** The Ventura Countywide Stormwater Quality Management Program (SQMP) was established in 1994 to satisfy the requirements of Section 402(p) of the Clean Water Act. Implementation of the Ventura Countywide SQMP was established under the Ventura County Municipal Stormwater permit (NPDES Permit No. CAS004002 issued July 27, 2000). The VCWPD serves as the Principal Co-Permittee for the permit and coordinates countywide permit activities; the development of materials; and the planning and implementation of plans, including conducting water quality sampling, analysis, and data evaluation on behalf of all of the co-permittees. Other co-permittees, include Ventura County and the other 10 incorporated cities within Ventura County including the City of Oxnard.

The Ventura County Stormwater Management Plan (SMP) represents and defines the requirements of the Ventura Countywide SQMP. The SMP contains nine programs for the management of stormwater. Programs applicable to the proposed project include; Section 3, Industrial Commercial Businesses, Section 4, Land Development, and Section 5, Construction Sites.

***Stormwater Requirements for New Development*.** For new developments the SMP requires the co-permittee to implement the Stormwater Quality Urban Impact Mitigation Plan (SQUIMP). The SQUIMP lists the minimum required BMPs that must be implemented for new private development. NPDES Permit CAS004002 requires the Ventura County co-permittees to implement the SQUIMP as part of the urban planning and permitting process no later than January 27, 2001. The SQUIMP requires Ventura County's co-permittees to include watershed and stormwater management considerations in the appropriate elements of the permittee's General Plan whenever said elements are significantly rewritten. In addition to complying with the requirements in the SQUIMP, the SMP requires new development projects to comply with the Ventura Countywide SQMP Land Development Guidelines and the SMP Construction Program.

The SQUIMP requires that new development incorporate post-construction structural or treatment BMPs adequate to reduce stormwater pollutants of concern (POCs). Treatment BMPs can either be volume based or flow based as follows:

- Volume Based: Post-construction BMPS must be adequate to treat the 85th percentile 24-hour runoff event determined as either the maximized capture stormwater volume for the area (as defined by the Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, 1998) or the volume of runoff produced from a 0.75-inch storm event, prior to its discharge to a stormwater conveyance system.
- Flow Based: Post-construction BMPs shall be sized to handle the flow generated from either 10 percent of the 50-year design flowrate or a rain event equal to at least 0.2 inches per hour intensity.

***Stormwater Requirements for Construction*.** The SMP requires that Stormwater Pollution Control Plans (SWPCPs) be prepared for certain construction projects prior to issuance of a county building or grading permit. Projects meeting the following criteria must prepare a SWPCP: disturbance of one acre or more in size, is within or discharges to an environmentally sensitive area, or is located in a hillside area. The SWPCP must be implemented throughout the duration of construction and remain in effect until the construction site is stabilized and all construction activity is complete.

3.3.2.3.2 Ventura County Stormwater Ordinance.

The Ventura County Stormwater Ordinance (Ordinance No. 4142) prohibits the discharge of non-stormwater discharges to County stormwater facilities and seeks to reduce pollutants in stormwater to the maximum extent practicable. Portions of the project discharging to the Oxnard Industrial Drain, including the developments in the Northern Subarea, will be required to comply with the requirements of this ordinance.

***Stormwater Ordinance Requirements for Construction*.** This ordinance requires owners to apply for a State construction general stormwater permit prior to being issued a grading permit for construction activity. The construction general stormwater permit will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP). For new development with the potential to discharge significant pollutants, the ordinance also requires the development of a SPCP. The SPCP must be developed in accordance with the Ventura Countywide Stormwater Quality Management Program and must be submitted and approved prior to discretionary land use approval.

3.3.2.3.3 Ventura County Floodplain Management Ordinance.

The Ventura County Board of Supervisors adopted the Ventura County Flood Plain Management Ordinance (Ordinance 3741) on September 3, 1985. That ordinance was

amended, then repealed and replaced with the current Floodplain Management Ordinance (Ordinance 3841) on February 2, 1988. Ordinance 3481 was subsequently amended on March 21, 1989 (Ordinance 3890), June 27, 1989 (Ordinance 3902), and October 9, 1990 (Ordinance 3954).

The VCWPD implements the Flood Plain Management Ordinance on behalf of Ventura County to ensure compliance with NFIP. The Ordinance addresses the risks of development within the floodplain and includes a list of prohibited discharges, exemption procedures and requirements for construction and permitting. The Study Area is not currently identified as being within the 100-year floodplain or within a jurisdictional floodway.

***Encroachment Permit*.** The VCWPD authority over jurisdictional channels is established by Ordinance FC-18 ("An Ordinance Relating to the Protection and Regulation of Flood Control Facilities and Watercourses") as amended by subsequent ordinances FC-20, FC-21, FC-22, FC-23, and FC-27. Additional policies have adopted the VCWPD Hydrology and Design manuals which designate the requirements for flood control facility design. Ordinance FC-18 grants the VCWPD authority over channels that have a peak flowrate of more than 500 cfs during the 100-year storm and are included in the VCWPD's "Comprehensive Plan for Channel Jurisdictional Limits."

Laterals and side-drains contributing runoff to the jurisdictional channels (redline channels) are under the jurisdiction of the appropriate city or county departments or state agency (typically the California Department of Transportation). However, the agency having jurisdiction over the affected lateral or side-drain connections to jurisdictional channels must obtain a VCWPD Encroachment and/or Watercourse Permit (encroachment permit) and provide sufficient information and engineering studies to show that the connection does not negatively impact the conveyance capacity of the jurisdictional channel. Ventura County informally limits the discharge of stormwater into existing jurisdictional runoff channels to the 10-year return interval storm. However, if an existing runoff channel has limited capacity, the VCWPD may act to limit discharges of stormwater from new development to less than the 10-year return interval.

An encroachment permit will be needed for development in the Study Area, because stormwater facilities will convey stormwater to a jurisdictional channel.

3.3.2.3.4 Integrated Watershed Protection Plan

The VCWPD identifies spending for projects to reduce flood risks in the Capital Improvement Plan (CIP). Through the CIP process, the VCWPD identifies and evaluates potential capital projects for funding over a five-year period and allocates funding from available sources of revenue according to identified priorities. The current CIP funding period ends in 2009. To identify projected priorities and spending beyond the end of the CIP

funding period, the VCWPD has prepared the Integrated Watershed Protection Plan (IWPP). The IWPP analyzes capital projects within each Zone and ranks them according to established project ranking criteria. Improvements to the OID have been proposed under the IWPP.

3.3.2.4 City of Oxnard

Although the Study Area is in unincorporated Ventura County, it is under the sphere of Influence of the City of Oxnard. The City of Oxnard guidelines will govern specific development concerns such as storm sewers and drainage. The City of Oxnard also retains responsibility for the following:

- Maintains storm drain system with channel capacities less than 500 cfs
- Collects water quality data
- Provides potable water to inhabitants
- Provides wastewater services to inhabitants
- Acts as floodplain manager for areas inside City boundaries

3.3.2.4.1 Master Plan of Drainage

To mitigate flood hazards, the City of Oxnard in 1979 adopted a Master Plan of Drainage and became a member of the National Flood Insurance Program (NFIP). Chapter 35 of the Oxnard City Code contains the Floodplain Management Ordinance for the City of Oxnard. The Floodplain Management Ordinance states the requirements for development in areas subject to flooding. Any new development is required, through conditions of approval, to eliminate flooding problems as identified by the NFIP.

The City of Oxnard Department of Public Works is responsible for developing the City of Oxnard Master Plan of Drainage. The original Master Plan of Drainage was developed and implemented in 1979. The Oxnard Master Plan of Drainage was revised and re-issued in October 2003. The Oxnard Master Plan of Drainage contains criteria for street drainage and construction. Storm drain systems must be designed with adequate capacity to convey a 10-year 24-hour frequency storm. Sumps must be designed for a 50-year 24-hour storm event and provided with an emergency overflow escape path. Building finish elevations must be above the 100-year flood level. The City requires developers to contribute drainage system fees, and to convey project-specific and upstream runoff to a City drainage facility.

3.3.2.4.2 City of Oxnard 2020 General Plan – Open Space/Conservation Element

The City of Oxnard General Plan Open Space/Conservation Element contains the following policies applicable to stormwater and groundwater resources in Section C – Natural Resources:

11. The City shall support updating the "208" Wastewater Control Plan to control urban and nonurban runoff.

12. The City should endeavor to maintain a minimal dependence on Basin 4A groundwater and support the policies of the local groundwater management agency (FCGMA) to protect, enhance, and replenish the aquifers underlying the Oxnard Plain.

3.3.2.4.3 City of Oxnard 2020 General Plan – Safety Element

The City of Oxnard General Plan Safety Element contains the following policies applicable to flood hazards in Section C – Flooding:

13. As a condition of approval, the City shall continue to require any new development to mitigate flooding problems identified by the National Flood Insurance Program.

14. The Flood Control District should require subdividers to dispose of drainage water originating within their subdivisions and all drainage water originating above their subdivisions that is concentrated by the construction of the subdivision by: 1) conducting the water to the natural water course draining the subdivision; or 2) discharging the water at the edge of their subdivisions and obtaining easements from downstream owners of the land over which the water will flow to the water course. Subdividers are required to construct the above works and such other works as will protect their subdivisions from damage by water and dedicate them to the County of Ventura Flood Control District for red line channels.

15. The City shall continue to provide information to the Federal Emergency Management Agency to ensure that Flood Insurance Rate Maps which cover Oxnard are updated periodically to address changing flood conditions brought about by urban developments.

16. The City shall continue to review proposed developments to ensure that they would not impact the capacity or ability of any natural drainages to conduct stormwater.

3.3.2.4.4 City of Oxnard 2020 General Plan – Public Facilities Element.

The Public Facilities Element of the City of Oxnard 2020 General Plan includes the Goals, Objectives, and Policies necessary to provide public facilities and services adequate to serve existing and future development within the City's Urban Service Area. The following objectives are stated as part of this Element:

1. Ensure a water distribution and storage system adequate for existing and future development.
2. Ensure adequate sanitary sewer and wastewater treatment plant capacity to accommodate existing and future development.
3. Provide adequately sized storm drain systems to accommodate existing and future needs.

Water System

19. The City should review water supply and demand as part of the development process. If the City determines that water demand may exceed supply:

    a. The City should formulate and adopt a contingency plan for supplying water to Oxnard water users in the event that current supplies (i.e., purchases from other water districts) are reduced; and

    b. The City should actively pursue available entitlements, contracts, or legal agreements that guarantee a definite quantity of water to the City. If a firm "supply" figure is identified for the City, the City may proceed to approve new developments commensurate with the guaranteed supply, and should not approve development that would exceed this supply figure.

21. The City shall continue the current policy of providing for the upgrading of the water transmission and distribution system in a timely manner to meet anticipated demands.

Storm Drains

22. New development shall be designed to avoid impacts to Ventura County Flood Control District (VCFCD) (now the Ventura County Watershed Protection District [VCWPD]) facilities.

23. New development shall meet adopted standards to avoid impacts from 100-year storm runoff.

3.3.2.4.5 City of Oxnard Urban Water Management Plan

UWMPs are required by the Urban Water Management Plan Act (AB 797; Water Code, Division 6, Part 2.6, Section 10610-10656). The California Department of Water Resources (DWR) requires these updates in years ending in 5 or 0. A final draft UWMP was prepared by the City of Oxnard in 2005 (Kennedy/Jenks, 2005). The UWMP included an overview of projected water demands through 2030 and the water supplies that will meet those demands.

In accordance with comments provided on the 2000 UWMP from the DWR, the 2005 UWMP included a more comprehensive Water Demand Management/Conservation Program. In addition, the 2005 UWMP includes more than 50 tables of water information requested by the DWR.

3.3.2.4.7 City of Oxnard Wastewater Collection System Master Plan

The City of Oxnard Wastewater Collection System Master Plan (Kennedy/Jenks, 2005) outlines the general location and sizing of existing and planned sewage lines in the City. The

existing and planned sewage collection and conveyance system as presented in the Master Plan is based upon known and calculated wastewater flows generated by existing and future development in the City, as allowed by the City's 2020 General Plan. The City of Oxnard is currently updating the Wastewater Master Plan.

3.3.2.4.6 Special Districts

Oxnard Drainage District No. 2.

The Study Area is located within Oxnard Drainage District No. 2. The Oxnard Drainage District No. 2 operates and maintains some of the drainage channels (e.g., Edison Drain) south and west of the Study Area. Oxnard Drainage Districts No. 1 and No. 2 are single-purpose, independent landowner-voter districts formed under the Drainage District Act of 1903. The Oxnard Drainage District No. 2 was formed in 1926. Both drainage districts were formed to install and operate sub-surface drains to lower the water table in the Oxnard Plain so the surface lands could be tilled for agricultural purposes. Today the primary function of the districts is to maintain the drainage systems. The Local Agency Formation Commission (LAFCO) is required to conduct municipal service reviews (MSRs) prior to or in conjunction with the mandated five-year revision schedule for updating sphere of influence maps (SOIs). The service review report must include an analysis of the issues and written determinations for a number of issues including infrastructure deficiencies and growth. The latest service review process for the drainage districts was completed in February 2005. The 2005 service review stated that increasing runoff from urbanizing areas and associated impervious surfaces can overwhelm the existing drainage facilities of the districts, which were sized for draining agricultural land only. Due to ongoing lack of coordination between the City of Oxnard and the districts, areas have been annexed into the City of Oxnard and developed, but remain within the boundaries of each district even though district services are no longer being provided. The 2005 MSR recommended that each district should pursue detachment of developed territory within their respective boundaries and pay for all costs relating to detachments.

In addition to the issue of district boundaries, it has been more than twenty years since the SOIs for each district have been updated. The current SOIs for the districts were adopted in 1982 based on the City of Oxnard's General plan, and currently do not reflect changes to the district boundaries. The Study Area is located within the boundary of Oxnard Drainage District No. 2, but outside its SOI boundary.

3.3.3 Project Impacts and Mitigation

3.3.3.1 Project Conditions

3.3.3.1.1 Northern Subarea

Water Supply and Demand

The North Ormond Beach Draft Water Supply Assessment & Verification (June 2008) and its Addendum (November 2009) estimated the water demand associated with development under the SouthShore Specific Plan (see Table 3.3-17). The City has accounted for the total estimated demand of approximately 833 acre-feet per year (AFY) in its water supply planning (see page 3.3-44). Assuming a 2009 citywide demand of approximately 28,900 AFY and the projected 2030 demand of approximately 41,040 AFY for the City's total service area, the SouthShore development project represents approximately 2.0 percent of the projected demand and approximately 6.7 percent of the anticipated increased demand in the City.

Potable Water Distribution

The proposed water distribution system for the Northern Subarea will make multiple connection points at Hueneme Road, Edison Drive, SouthShore Drive, and Olds Road. Multiple connection points will ensure an adequately "looped system." Internal distribution will be via a hierarchy of 8- to 16-inch water mains (see Figure 3.3-5).

The existing water lines that bisect the interior of the project (Mugu and Ocean View Water District) will be re-routed through the proposed development to maintain water service to existing customers. The perimeter water systems to support the Study Area will be sized by City staff to provide adequate flow and pressure demands.

It is anticipated that water service will be provided by lateral connections to the SCE-owned commercial/incubator property from the main water lines in Rose Avenue/SouthShore Drive.

The City of Oxnard is constructing a new blending station (Blending Station No. 5) at the northwest corner of the Northern Subarea. This blending station will provide blended water from CMWD and UWCD. The Northern Subarea will be fed via this blended line that will traverse from Blending Station 5 through the Edison property to SouthShore Drive to connect to the looping system in Hueneme Road and several other existing domestic water mains located at Olds Road.

TABLE 3.3-17
WATER DEMAND ESTIMATE FOR THE NORTHERN SUBAREA

Sector	Unit Measure	Demand[a]	Demand Total (AFY)
Single Family Residential – Low	56.5 ac	2,100 gpad	85
Single Family Residential – Low Medium	37.3 ac	2,100 gpad	59
Multi-Family Residential - Medium–	40.9 ac	2,800 gpad	85
Mixed use (Residential)	20 DU		
Mixed use (Commercial)	62,726 sq. ft./ 4.2 acres	1,500 gpad	10
Light Industrial	568,052 sq. ft/ 37.2 acres	2,800 gpad	120
School-Elementary	650 students	20 gpd/student	15
School-High School	2,400 students	25 gpd/student	70
Total Potable Demand			**443**
Parks and Open Space	41.9	3.5 AF/ac/yr[c]	147
Lake SouthShore/Surrounding Open Space			
On-site Lake Demand[e]			40
Open Space	23.1 acres	3.5 AF/ac/yr[d]	81
Other (Arterial Roadways)	17.5 acres		
Single Family & Multi-Family Residential Landscaping	90.2 ac		123
Total Landscaping Demand[b]			**390**
Total Project Water Demand (AFY)[f]			**833**
Transferred Allocation/Supply(g)			**483**
Difference			***-350***
Difference with Recycled Water			***40***

Source: North Ormond Beach Water Supply Assessment & Verification, June 2008, and Addenda, November 2009.

(a) Unit demand factors from the 2005 Master Plan

(b) A shift in demand from potable water to recycled water for irrigation of single-family and multi-family front lawns. Outdoor urban applied water was assumed to be 70 percent of total urban applied water.

(c) Recycled water will not be available until mid 2010 at the earliest. Therefore, the developer will need to plan for landscaping to be served by domestic water up to the time when recycled water is available.

(d) The Water Supply Assessment uses 3.5 AFY/acre for supply evaluation.

(e) On-site Lake demand based on "Lake Water Supply, Demand and Irrigation Reservoir Memorandum- No. 8233E" by Pace.

(f) Rounded to the nearest whole number.

(g) Per Fox Canyon GMA Ordinance Code 8.1, the North Ormond Beach development will result in the conversion of 322 acres of agricultural land to urban uses. The present conversion rate is 1.5 AFY per acre of converted land. This conversion will yield 483 AFY of potable water supply to the development

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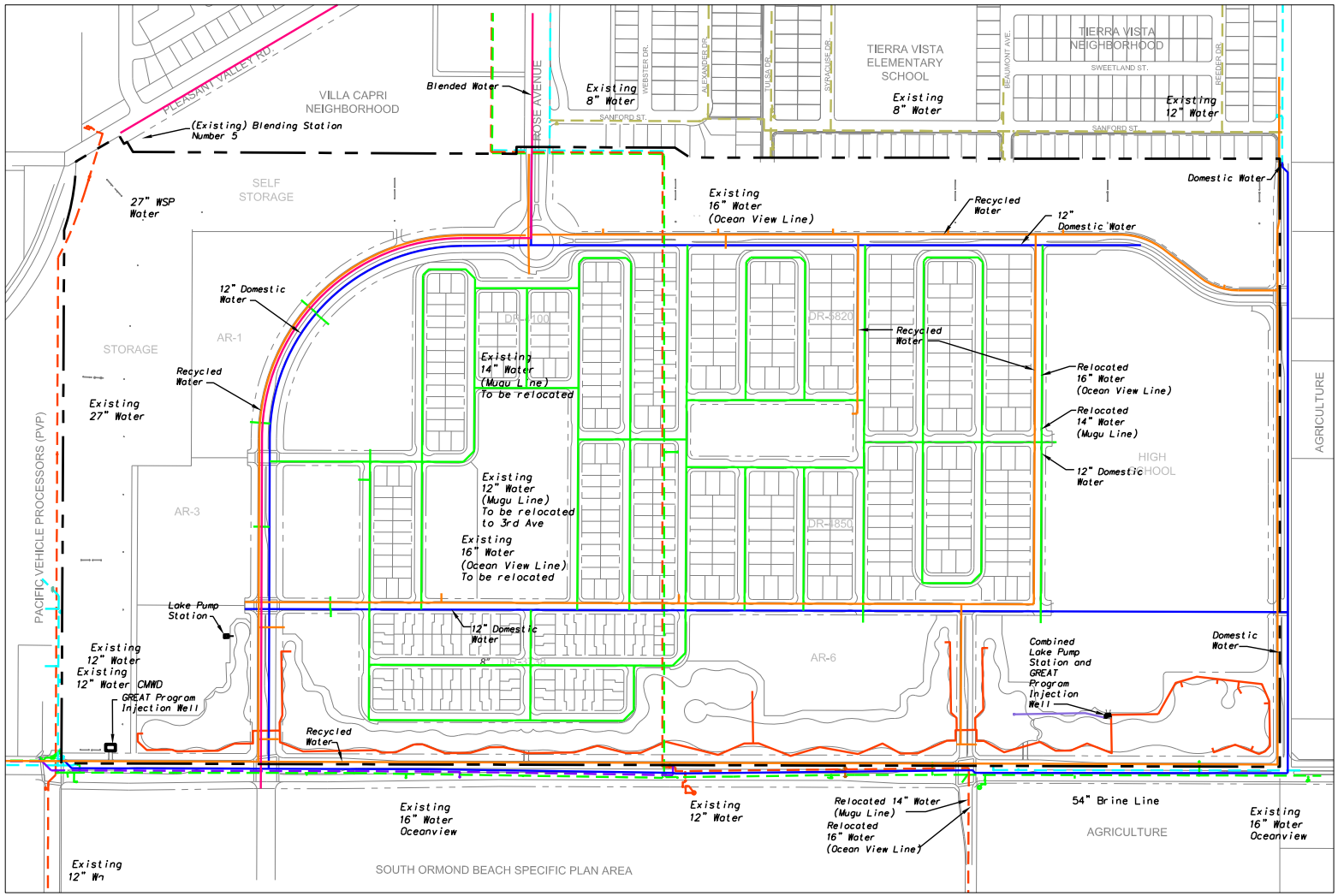

LEGEND

EXISTING

- 8" Water
- 12" Water
- 12" Water (CMWD)
- 12" Water (PHWA)
- 14" Water (Mugu)
- 16" Water (OceanView)
- 27" Water
- 54" Brine

PROPOSED

- Domestic Water Size to be Determined
- Blended Water - Size to be Determined
- Domestic Water - Size to be Determined
- Reclaimed Water - Size to be Determined
- Relocated Ocean View/ Mugu Water Size to be Determined
- Lake Recirculation Lines
- Lake Suction Line

Ormond Beach Specific Plan EIR URS Corporation	**Source:** Southshore Specific Plan Dated July 2008	Figure 3.3-5. **NORTHERN SUBAREA CONCEPTUAL WATER PLAN**	Nov. 2009

Stormwater Management and Drainage

The specific plan for the Northern Subarea proposes to discharge stormwater at a rate no greater than the current discharge from the site. Onsite storm drain facilities will be designed to direct storm flows to an onsite manmade lake (Lake SouthShore) (see Figure 3.3-6). The lake will provide necessary stormwater storage for post-development runoff, and will also meter outlet flow amounts to the Oxnard Industrial Drain. Design requirements and a preliminary water balance for the Northern Subarea incorporate the lake for management of stormwater (PACE, March 2006; PACE, May 2005; PACE, October 2005; PACE March 2005). The analysis provides information regarding the possible water supply sources to meet lake evaporation and irrigation demands, determination of lake and irrigation water demands, and discussion of the lake as an irrigation reservoir. Water quality modeling was performed to determine the effectiveness of BMP to reduce the pollutants from stormwater runoff (PACE, December 2006).

The water balance analysis for Lake SouthShore was accomplished by comparing flows entering and exiting the lake. The water exiting the lake includes evaporation and irrigation of adjacent City-maintained landscaped areas. The water entering the lake includes nuisance and stormwater runoff and direct precipitation. Makeup water supply will be used to maintain water levels in the lake, and irrigation will be provided based on landscaping needs. The water balance for the lake was calculated by comparing monthly total water outputs (direct evaporation plus irrigation demand) with total water inputs (direct precipitation and runoff). The months where the inputs to the lake were greater than the outputs, the net effect was overflow from the lake. For the months where outputs from the lake were greater than lake inputs, the system demand (makeup source water needed) was calculated.

Based on the water balance analysis developed for the lake, July is the peak makeup water demand month (Oxnard has a peak month evapotranspiration rate [ET] of 5.4 inches in July). Considering a drought year in which precipitation and subsequent stormwater runoff was 25 percent of average, approximately 161 AFY and 44 AF/mo is necessary for irrigation requirements and to sustain the lake level (205 AFY total demand). This is considered the peak water demand on the system. Under average precipitation conditions, the result of the water balance study considering nuisance flows was that the lake would need to be supplemented with approximately 22 AF annually. Considering drought conditions without the addition of nuisance flows, the lake would need to be supplemented with 44 AF annually.

Runoff Treatment and Water Quality Management

The specific plan for the Northern Subarea proposes a system of BMPs that employ multiple layers of water quality management to facilitate water quality improvement, including lake water quality measures (biofilters and aeration), urban stormwater runoff controls (water quality filters and wetland planter areas), lake retention of dry weather runoff, and detention

of stormwater runoff. These elements will ensure that the water within the lake, including any discharge from the development to the storm drain outlet, is of the same or better quality than pre-development discharge conditions. The 18-acre Lake SouthShore will receive 100 percent of the runoff from the residential watershed area within the Northern Subarea, with a combined estimated normal operating volume of 108 AF. The lake is designed to accommodate temporary storage through surcharging or rising of the lake level for the 100-year, 24-hour storm runoff volume, with overflow to the Oxnard Industrial Drain. With a surcharge depth of approximately three feet (54 AF) the maximum 100-year lake volume will be approximately 170 AF. Discharge from the lake will be through a 42-inch storm drain at a maximum of 49 cfs which is equal to the 10-year 24-hour storm event. This will comply with the VCWPD requirement that limits peak flow discharges to the OID to a maximum of the 10-year 24 hour storm event (PACE, May 2006).

Lake Operations and Management

After the lake is constructed and fully operational, the City of Oxnard Public Works Department will assume responsibility for lake operations and maintenance, with funding from a community facilities district to be formed as part of the project.

***Physical and Design Properties of the Lake*.** The lake will be lined with 30-mil PVC and will have a constructed lake edge system designed specifically to provide a natural appearance and non-erodible shoreline. The need for a permanent groundwater collection system in addition to the temporary lake construction dewatering system will be evaluated prior to the final lake design.

Table 3.3-18 summarizes Lake SouthShore's properties. An average operating depth of eight feet will eliminate light penetration, maintain lower average temperature, and allow temperature stratification. In addition, a proposed submerged concrete lining to a depth of 39 inches below the normal operating water surface level (Pace, October 2006) would be installed around the perimeter that extends out approximately 13 feet from the lake edge to address safety concerns and provide protection for the PVC liner in the shallow areas. The steepened shoreline edge treatment extends 9 inches above the normal operating water surface elevation and then to the submerged concrete ledge. The steepened shoreline edge is proposed to be constructed at a 2:1 slope with the concrete ledge at a 5:1 slope. The lake bottom will average a 20:1 slope.

Treatment of runoff and management of water quality relies on re-creation of natural chemical and biological processes within the lake system, resulting from a combination of layers of treatment. Treatment and water quality management will consist of water quality filters, biofilters, aeration, and wetland planter areas. Operations and maintenance requirements include debris removal, algae control, aquatic weed control, pump maintenance, biofilter maintenance, water quality filter maintenance, and aeration system maintenance.

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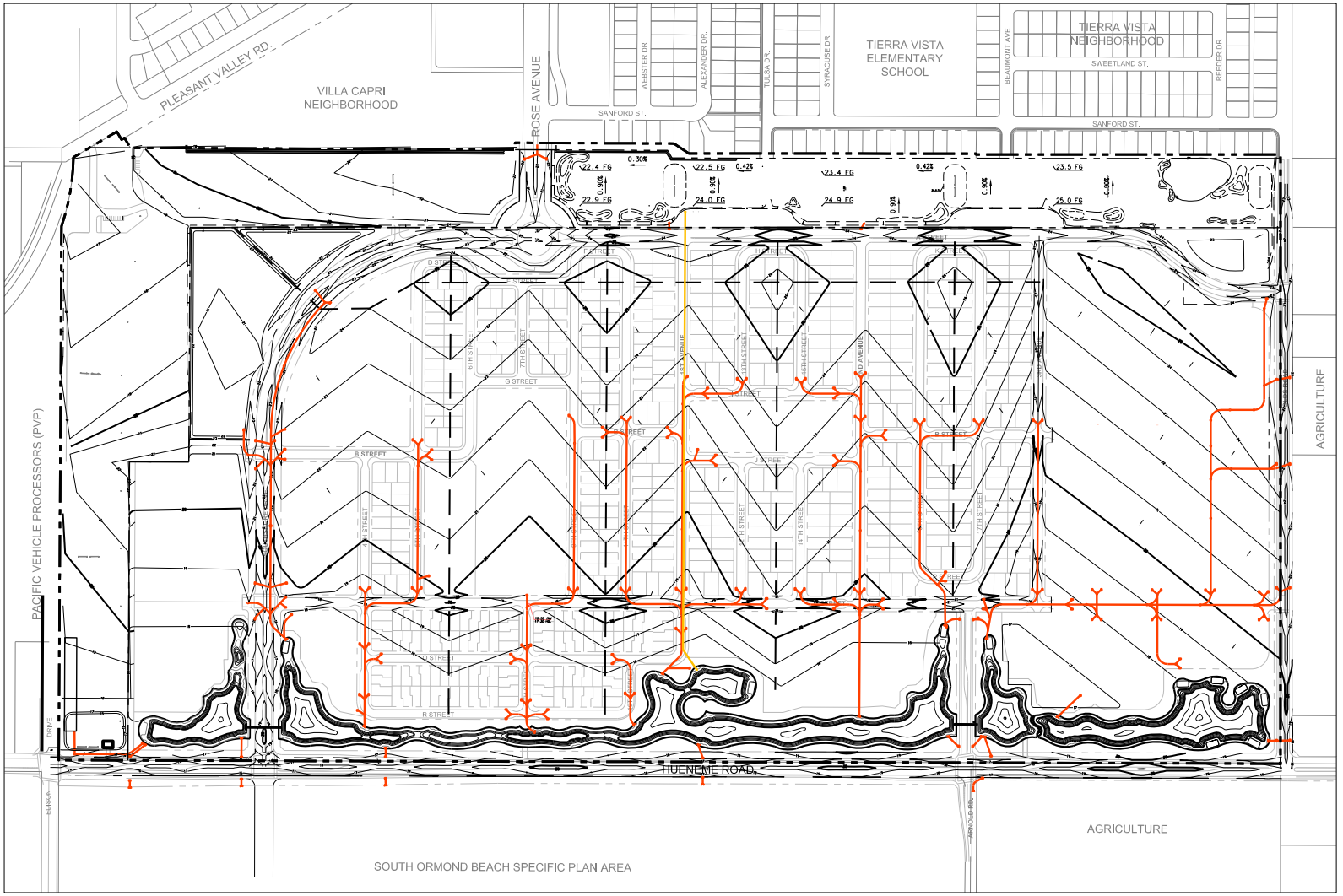

LEGEND

- 19 — MINOR CONTOUR
- 20 — MAJOR CONTOUR
- RIDGE LINE
- PROPOSED STORM DRAIN
- 100 YEAR BYPASS STORM DRAIN

ABBREVIATIONS:

EOHL	EDISON OVER HEAD LINE
FG	FINISHED GRADE
FL	FLOW LINE
FS	FINISHED SURFACE
HGL	HYDRAULIC GRADE LINE
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
RCP	REINFORCED CONCRETE PIPE
TC	TOP OF CURB
TR	TOP OF RISER

Ormond Beach Specific Plan EIR URS Corporation	**Source:** Southshore Specific Plan Dated July 2008	Figure 3.3-6. **NORTHERN SUBAREA GRADING AND DRAINAGE PLAN**	Nov. 2009

Water quality modeling was performed to predict the potential pollutant concentrations in the discharge from the proposed lake as a result of the 85th percentile storm (PACE, December 2006). The pollutants modeled included total suspended solids, total phosphorus, total nitrogen, copper, lead, zinc, total petroleum hydrocarbons, oil/grease and total dissolved solids. Existing stormwater pollutant concentrations were compared to the predicted pollutant concentrations in lake water after dilution and BMP treatment. The results from the water quality modeling based on the proposed lake properties indicated that concentrations of all pollutants modeled would be reduced with the exception of zinc.

TABLE 3.3-18
LAKE SOUTHSHORE PROPERTIES

Operating Volume	108 AF
Average Depth	8 feet
Shoreline Slope	1:2
Shoreline Depth	15 inches
Surface Area	18 acres
Liner	30 mil PVC
Biofilters	7- to 10-Day Turnover Rate
Wetland Water Quality Filters	Min 18-hour HRT for Nuisance Flow[1]
Aeration	6- to 8-hour Turnover Rate

[1] The hydraulic retention time (HRT) is a measure of the average length of time that a soluble compound remains in a constructed reactor.

[2] Reference: Pace, October 2006

Storm Drains. New storm drains will be required to convey drainage to the lake. Pipe sizes will range from 18 inches to 60 inches and will meet City storm drain standards. The storm drains will be sized using an estimated runoff of 2 cfs acre. Preliminary storm drain pipes were sized using Water Surface Pressure Gradient Software (WSPG). The volume of lake storage was based on the projected runoff volumes. An overall starting water surface elevation was then determined for the storm drain design. Pipelines were modeled using the calculated water elevations assuming that the starting water surface occurred during peak storage of stormwater runoff from a 10-year storm. Catch basins will be used to regulate the amount of surface water on the Northern Subarea street system. The lake level will allow for streets to be designed with minimal grades and slopes in accordance with City standards.

Lake Water Quality. Lake source water will achieve applicable water quality standards for recreational use and aquatic and wildlife support. Discharge of recycled water to the municipal stormwater system will require an NPDES permit from the LARWQCB.

Wastewater

The Study Area is adjacent to the Eastern Trunk Sewer which runs south along Edison Drive from Pleasant Valley Road. The pipeline turns west from Edison Road and follows McWane Blvd to the OWWTP. The Eastern Trunk Sewer adjacent to the Study Area is a 42 inch

HDPE pipeline (Kennedy/Jenks, January 2006). The City's GIS maps show that a section of the pipe just north of the intersection of Edison Road and McWane Blvd is composed of 8 inch vitrified clay pipe (VCP) (Kennedy/Jenks, January 2006). Replacement of the existing Eastern Trunk Sewer pipeline from Edison Road to the OWWTP with 60 inch pipe was recommended.

The Conceptual Wastewater Plan for the Northern Subarea is shown in Figure 3.3-7. Table 3.3-19 shows the estimated wastewater that would be generated by the development of the Northern Subarea. The proposed wastewater system will include a series of 8- to 21-inch wastewater pipelines servicing the project. These sewer lines will ultimately collect in a new wastewater line in "C" Street, and ultimately drain to the Eastern Trunk Main in Edison Avenue. The Northern Subarea Conceptual Wastewater Plan does not include wastewater specifications for the SCE-owned commercial/incubator property west of Rose Avenue. It is anticipated that wastewater service will be provided by lateral connections to the SCE-owned property from the main sewer lines in SouthShore Drive. Sewage generation projections for the Edison property have been accounted for in the sewage generation projections for the onsite utility sewer study.

TABLE 3.3-19
ESTIMATED WASTEWATER GENERATION – NORTHERN SUBAREA

Use	Units (acres)	Unit Flowrate (gpad)[1]	Basic Sanitary Flow (mgd)[2]
Single Family Residential	91.8	1,230	0.11
Multi-Family Residential[3]	44.5	4,525	0.20
Commercial (includes schools and public facilities)	125.9	1,300	0.16
Open Space/Roadways	59.7	N/A	-
Total	**321.9**		**0.47**

Source: City of Oxnard Wastewater Collection System Master Plan, 2001.

1 gpad: gallons per acre per day.

2 mgd: million gallons per day.

3 The number of units included in the Medium Density Residential category for the Northern Subarea was considered multi-family residential development. If some or all of these units were developed as single-family homes, the total amount of wastewater generated per year would decrease.

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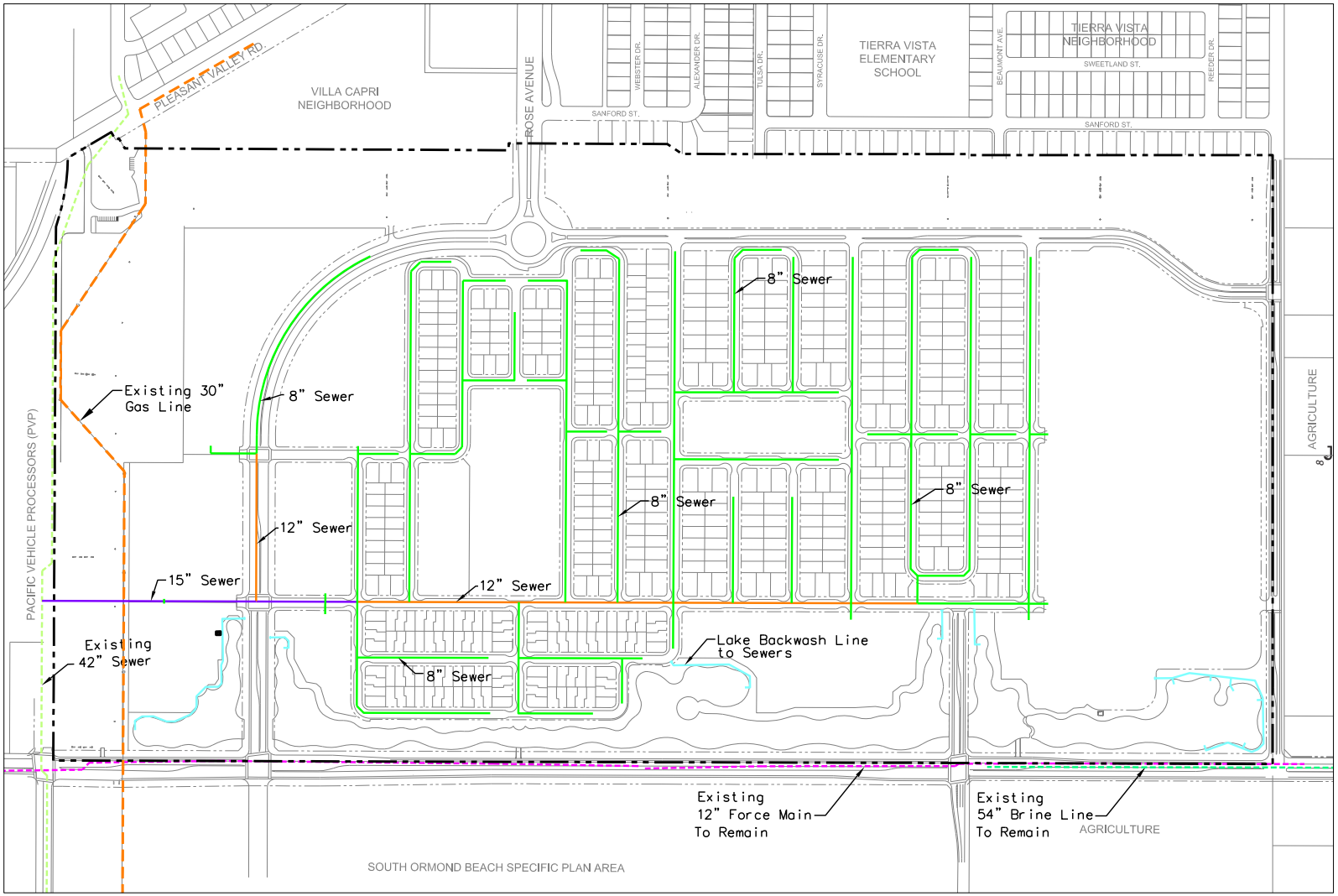

LEGEND

EXISTING

- 12" Sewer
- 42" Sewer
- 54" Brine Line
- 30" Gas Line

PROPOSED

- 8" Sewer
- 12" Sewer
- 15" Sewer
- Lake Backwash Line to Sewer

Ormond Beach Specific Plan EIR URS Corporation	**Source:** Southshore Specific Plan Dated July 2008	Figure 3.3-7. **NORTHERN SUBAREA CONCEPTUAL WASTEWATER PLAN**	Nov. 2009

3.3.3.1.2 Southern Subarea

Water Supply and Demand

The South Ormond Beach Draft Water Supply Assessment & Verification (June 2008) and its Addendum (November 2009) estimated the water demand associated with development under the South Ormond Beach Specific Plan (see Table 3.3-20). The City has accounted for the total estimated demand of approximately 965 acre-feet per year (AFY) in its water supply planning (see page 3.3-44). Assuming a 2007 citywide demand of approximately 28,900 AFY and the projected 2030 demand of approximately 41,400 AFY for the City's total service area, the South Ormond Beach development project represents approximately 2.3 percent of the projected demand and approximately 7.7 percent of the anticipated increased demand in the City.

TABLE 3.3-20
WATER DEMAND ESTIMATE FOR SOUTHERN SUBAREA

Sector	Unit Measure	Demand[a]	Demand Total (AFY)
Business/Research Park	61.3 acres	1,500 gpad	105
Light Industrial	217.5 acres	2,800 gpad	680
Total Potable Demand w/o Landscaping			**785**
Misc. Open Space	51.0 acres	3.5 AF/ac/yr (c)	180
Agriculture	228.6 acres		0
Other	36.4 acres		0
Total Recycled Water Demand[b]			**180**
Total Project Demand			**965**
Transferred Allocation/Supply[c]			**563**
Difference			**(402)**
Difference with Recycled Water			**(222)**

Source: South Ormond Water Supply Assessment & Verification, June 2008, and Addendum, November 2009.
Notes:
(a) Unit demand factors from the 2005 Master Plan.
(b) Recycled water will not be available until mid 2010 at the earliest. Therefore, the developer will need to plan for landscaping to be served by domestic water up to the time when recycled water is available.
(c) Per Fox Canyon GMA Ordinance Code 8.1, the South Ormond Beach development will result in the conversion of 375 acres of agricultural land to urban uses. The present conversion rate is 1.5 AFY per acre of converted land. This conversion will yield 563 AFY of potable water supply to the development..

Potable Water Distribution

A system of water mains will be contained in all the roadways on the project and connect to existing water lines in Hueneme Road. Water mains shall be sized in accordance with calculations for the worst-case water demand. The proposed water distribution system would make multiple connection points at Hueneme Road, Edison Drive, Rose Avenue, and Arnold Road. Multiple connection points will ensure an adequately "looped system." The "looped" water system shall provide adequate water pressure and fire flow for proposed structures.

Should fire-protection needs exceed the capacity of the proposed system, additional system upgrades would be completed by the facility or parcel requiring such upgrades to accommodate these increased requirements.

The Schematic Water Plan for the Southern Subarea is shown in Figure 3.3-8 and the Southern Subarea Grading and Drainage Plan is shown in Figure 3.3-9. A Water Supply Assessment (Kennedy/Jenks, 2006) was prepared for the Southern Subarea, addressing the requirements of Section 10910 of the California Water Code (SB 610 and 221). The WSA concludes that with the existing water system and addition of facilities and programs, mostly as part of the GREAT program, there would be adequate supply for the projected 20-year period including contingency allowances in the projected demands.

Stormwater Management and Drainage

At this time the stormwater flows generated from the Southern Subarea currently flow into a farm channel located along the western boundary which flows to the Oxnard Drain. The Oxnard Drain is a large channel running along the southern of Southern Subarea. It flows south to the western leg of Mugu Lagoon.

Stormwater detention in the Southern Subarea is proposed to be accommodated by a combination of bioswales along three north-south roadways and a detention basin along the southern edge of the developed area. Total acreage for offsite drainage to the channel adjacent the project is approximately 584.6 acres. In its current condition, the existing channel has the capacity to contain the undeveloped, offsite flows. According to the Oxnard Master Plan of Drainage (January 2001), the flow from the undeveloped condition is approximately 690 cfs. In the developed condition the flow increases to approximately 1,400 cfs. The developed flow (Q) was calculated using the area corresponding to the Southern Subarea identified in the Master Plan and the city of Oxnard's modified Cook's method.

All flows will be contained in the detention areas within the onsite bioswales and detention basin, with peak excess flows being handled through box culverts under the streets (see Figure 3.3-9). Table 3.3-21 shows the estimated detention requirements for onsite and offsite flows.

TABLE 3.3-21
SOUTHERN SUBAREA REQUIRED DETENTION FOR ONSITE AND OFFSITE FLOWS

	Undeveloped Q (cfs)	Developed Q (cfs)	Required Detention (AF)
Onsite	235	691	3.28
Offsite	690	1,367	3.71

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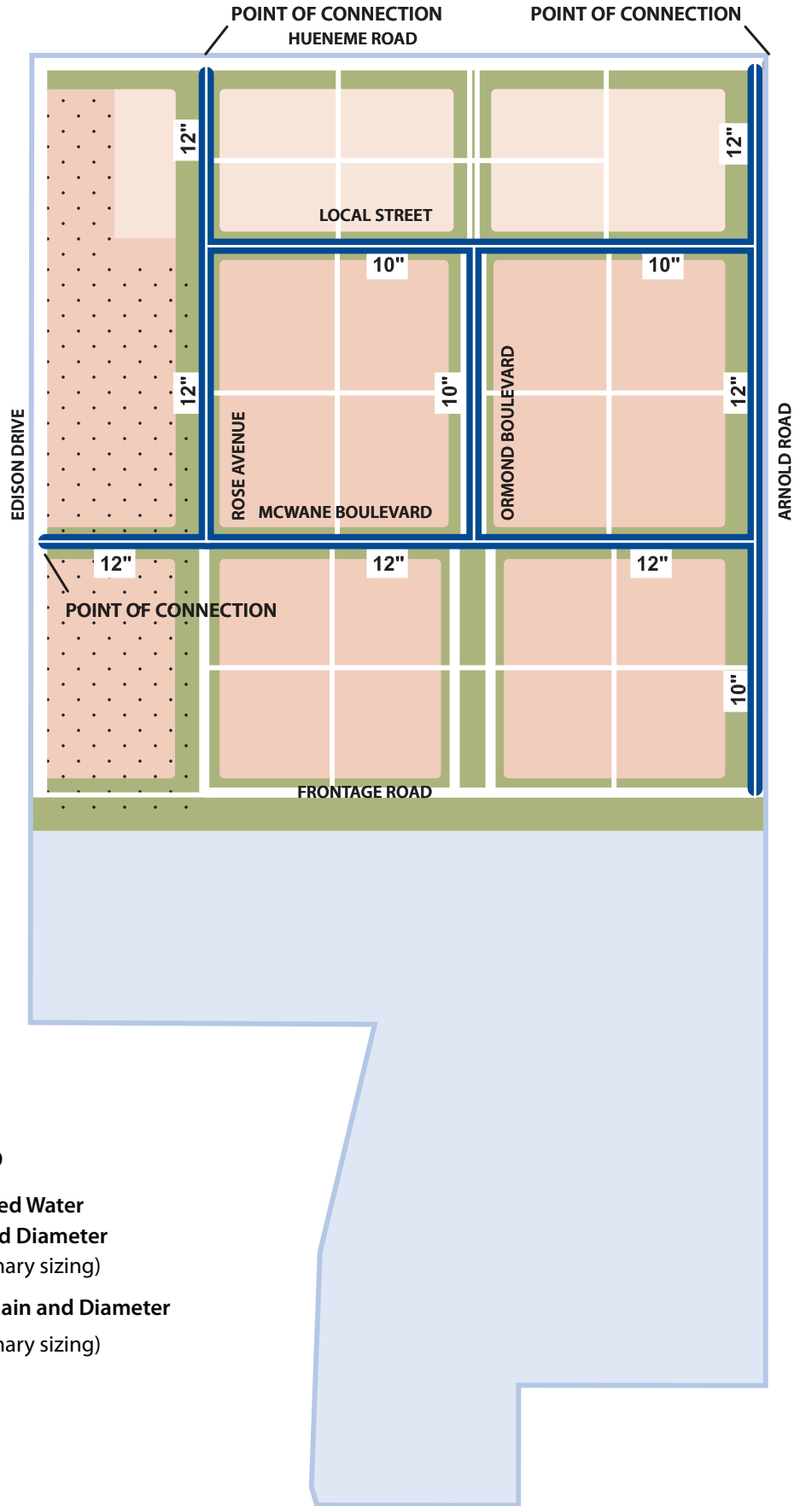

Ormond Beach Specific Plan EIR URS Corporation	**Source:** City of Oxnard South Ormond Beach Specific Plan	Figure 3.3-8. **SOUTHERN SUBAREA SCHEMATIC WATER PLAN**	Nov. 2009

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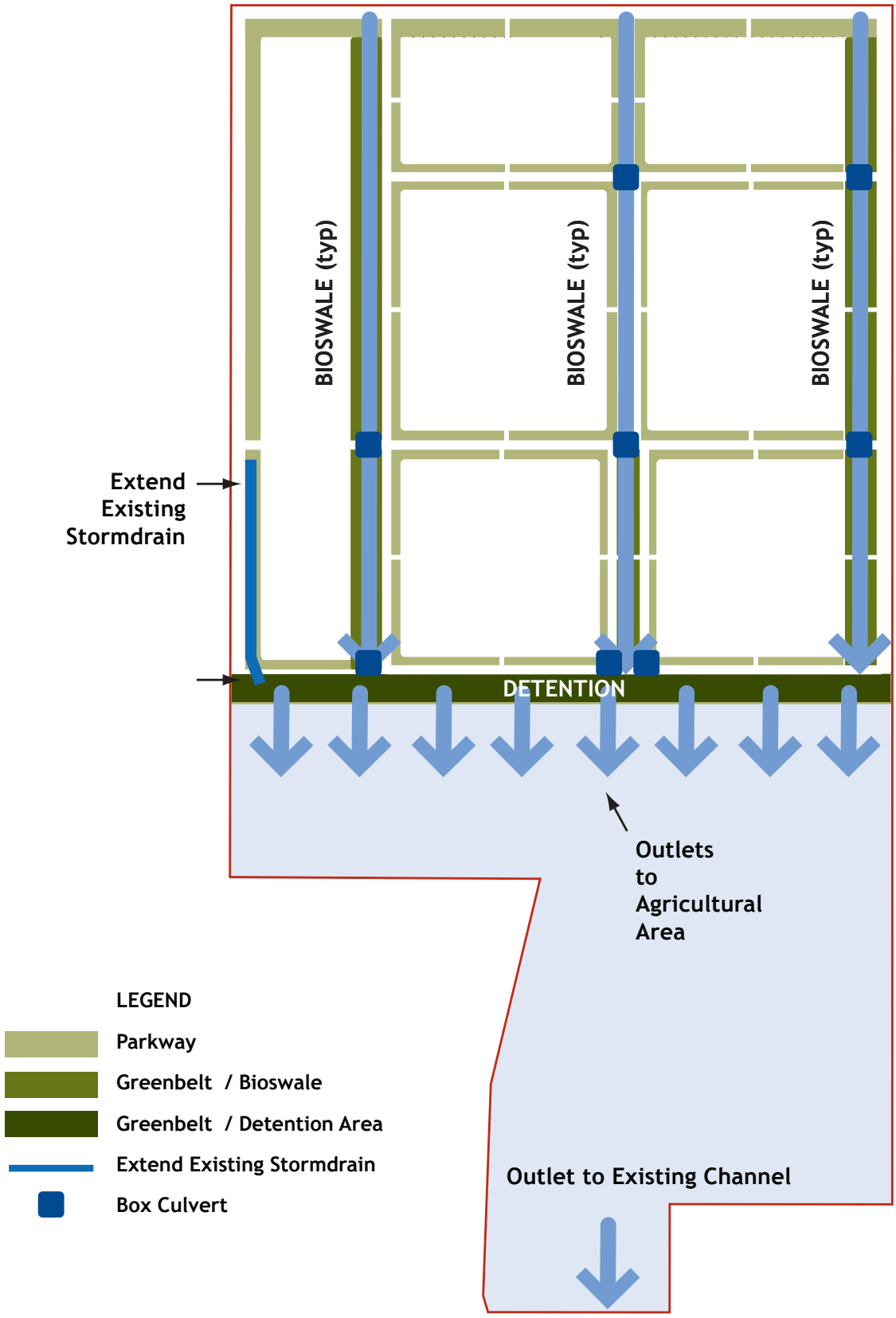

Ormond Beach Specific Plan EIR URS Corporation	**Source:** City of Oxnard South Ormond Beach Specific Plan	Figure 3.3-9. **SOUTHERN SUBAREA GRADING AND DRAINAGE PLAN**	Nov. 2009

The minimum detention requirements are based on the ability to release a large Q into the channel. Due to restrictions in grade, it is unlikely that the entire undeveloped Q can successfully be released, thus a larger detention area would be utilized as the outflow is decreased.

Treatment will be provided through bio-filtration and an extended detention basin. The treatment basin will be separated from the wetland areas in order to ensure clean water is being released to the wetland area. The use of extended detention for treatment will require approximately 40 AF of storage for the project site. It is assumed that offsite areas would treat their storm flows before releasing into the system. The drainage analysis has determined that the site design will adequately handle a 100-year 24-hour storm event.

Wastewater

The Study Area is located in close to the OWWTP. A 42-inch trunk line (the Eastern Trunk Sewer) located along Edison Drive would connect the Study Area to the OWWTF. The City of Oxnard 2005 Wastewater Master Plan Update includes the proposed project in its wastewater flow projections. Funding for sewer system improvements will be derived from a combination of general fund monies and sewer connection fees. Sewer connection fees will be assessed for the new development, and consist of two components: 1) treatment plant expansion; and 2) conveyance system improvements. The developer is also required to provide onsite sewer lines, and to extend or improve offsite sewer lines where necessary to serve that particular proposed development. Offsite improvements costs borne by the developer are credited toward their connection fees. These requirements are expected to reduce impacts to the wastewater discharge system.

The Sewer Master Plan for the Southern Subarea is shown in Figure 3.3-10. The planned wastewater facilities for the Southern Subarea industrial park include a gravity sewer pipeline system extending along the southern boundary of the industrial development at McWane Road. Sewer pipelines shall be sized in accordance with a sewer study for worst-case sewage generation. These lines will ultimately connect to a new wastewater system, and drain to the Eastern Trunk Main on Edison Drive. Industrial waste monitoring devices shall be installed where private drains connect to the public drainage facilities. Table 3.3-22 shows the estimated wastewater that would be generated at the Southern Subarea, using commercial wastewater generation figures for the Industrial Park.

TABLE 3.3-22
ESTIMATED WASTEWATER GENERATION – SOUTHERN SUBAREA

Use	Units (acres)	Unit Flowrate (gpad)	Basic Sanitary Flow (mgd)
Commercial	287	1,300	0.37
Open Space/Non-Developable Area	307	N/A	-
Total	594.8		0.37

Source: City of Oxnard Wastewater Collection System Master Plan, 2001
gpad=gallons per acre per day; mgd=million gallons per day

3.3.3.2 Thresholds of Significance

Appendix G of the CEQA Guidelines addresses potential impacts to water resources under its discussions of Hydrology and Water Quality (VIII) and Utilities and Service Systems (XVI). These discussions, as well as the City's Threshold Guidelines (February 1995), provide the basis for the following thresholds of significance. Note that the thresholds are stated in terms of conditions that would result in a conclusion of significance.

3.3.3.2.1 Water Supply and Distribution

- Water Supply Availability: Not have sufficient water supplies available to serve the project from existing entitlements and resources, and new or expanded entitlements would be needed
- Water Facility Construction: Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Wasteful Use of Water: A project would use water in a wasteful manner
- Water Flow and Pressure: The City's water distribution system would be unable to serve the Specific Plan area with adequate flow and pressure per applicable City standards

3.3.3.2.2 Water Quality

- Water Quality: Water resource impacts would be identified as significant if they degrade surface or groundwater quality in violation of the LARWQCB Basin Plan objectives or water quality regulations, and result in substantial degradation of water quality conditions that could affect beneficial uses of receiving waters, including sensitive estuary and marine environments.

3.3.3.2.3 Flood Control and Stormwater Drainage

- Flood Control: Flood control impacts would be identified as significant if they result in the exceedance of jurisdictional VCWPD stormwater channel capacity and increase the potential for overflow during design storm conditions. For stormwater facilities operated by the City of Oxnard, impacts would be considered to be significant if they resulted in the obstruction of stormwater channels with sediment or debris. Discharges which exceed the capacity of existing stormwater channels would also be considered a significant impact.
- Erosion: Potential drainage impacts resulting from short-term increases in erosion during construction and operation.

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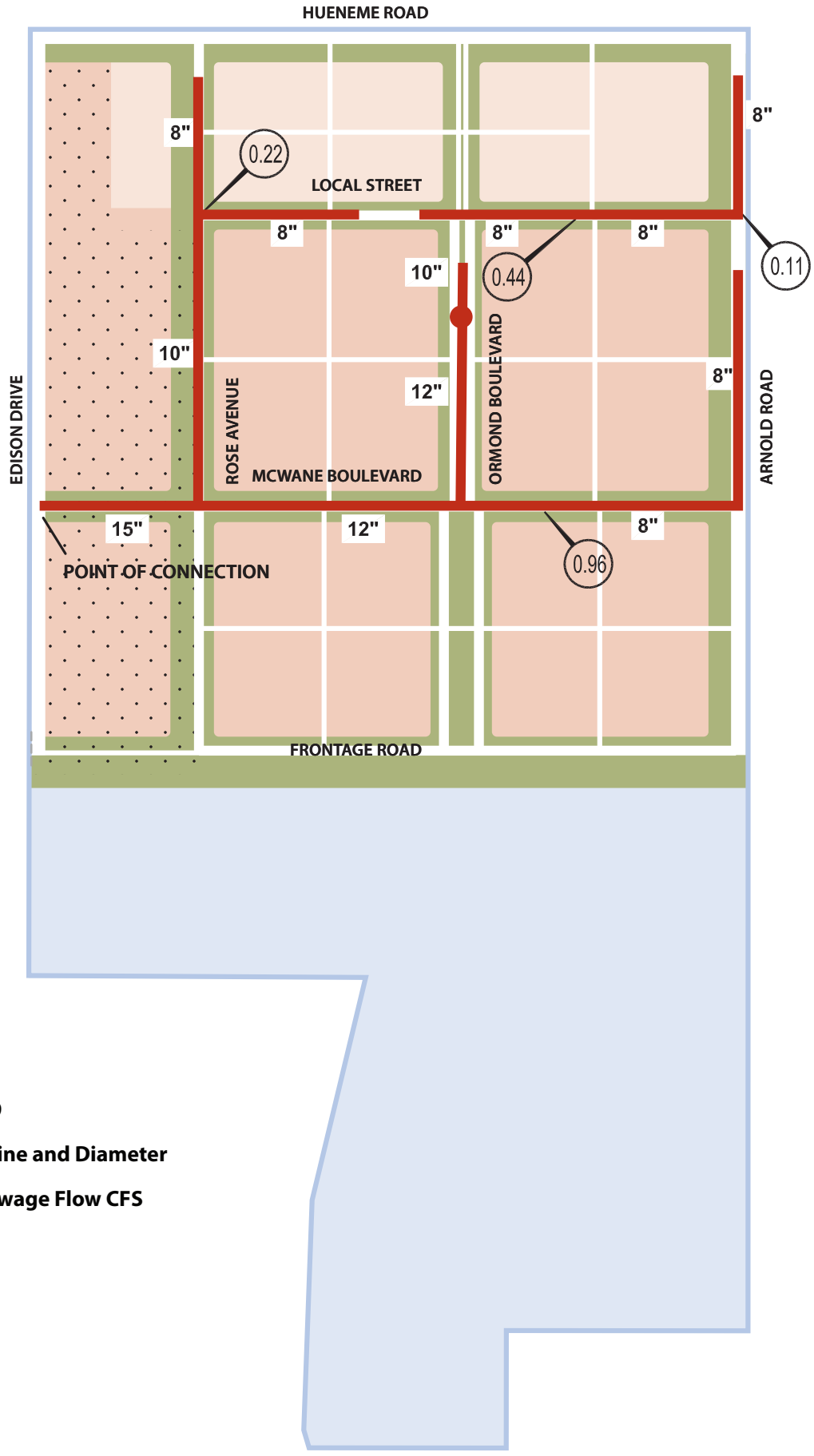


Ormond Beach Specific Plan EIR URS Corporation	**Source:** City of Oxnard South Ormond Beach Specific Plan	Figure 3.3-10. **SOUTHERN SUBAREA SEWER MASTER PLAN**	Nov. 2009

- Changes in Flow Directions: Potential changes in flow directions of peak stormwater runoff flows resulting from loss of precipitation infiltration areas and increases in impervious surfaces such as roads, driveways, patios, and rooftops.

3.3.3.2.4 Wastewater Collection and Treatment

- Wastewater Capacity: Existing wastewater collection and conveyance lines do not have sufficient capacity to accommodate wastewater from the project. Proposed wastewater flows would exceed the present capacity of the City of Oxnard Waste Water Treatment Plant (OWWTP)
- Exceedance of RWQCB Requirements: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB) or result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
- Wastewater Facility Construction: Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

3.3.3.3 Project Impacts

3.3.3.3.1 Northern Subarea

Water Supply and Demand

Impact Water-1: Water Supply Availability (Northern Subarea). As detailed in Table 3.3-17 and as described in the North Ormond Beach Water Supply Assessment & Verification (July 2008) and its Addendum (November 2009), development of the Northern Subarea (in accord with the SouthShore Specific Plan) would generate estimated water demand of about 833 acre feet per year (AFY). Of this total, 443 AFY would be for potable needs and the balance (390 AFY) would be for landscaping and other non-potable needs. Assuming a 2009 citywide demand of approximately 28,900 AFY and the projected 2030 demand of approximately 41,040 AFY for the City's total service area, the SouthShore development project represents approximately 2.0 percent of the projected demand and approximately 6.7 percent of the anticipated increased demand in the City. The project's demand for potable water would be offset by a transfer of approximately 483 AFY of FCGMA allocation associated with the conversion of agricultural lands to urban uses.

Mitigation measures are provided below to help further reduce project specific water demands and to provide additional assurance that planned new water supplies would be available in advance of project-specific and other planned cumulative development.

As described in Section 3.3.1 (Water Resources Existing Setting) of this report, the City has comprehensive multifaceted Water Management Program that outlines how the City plans to provide an adequate water supply to meet forecasted water demands well into the future. In addition to its internal water management program, the City is working cooperatively with local groundwater managers such as the FCGMA, UWCD, and CMWD (Las Posas) on local groundwater management programs as well as CMWD and MWD on regional imported water supply issues. Together, these programs are intended to provide a high degree of flexibility to provide a reliable long term water supply under a broad range of known (i.e. projected growth and planned water supply projects) and unknown scenarios (i.e. global climate change). The availability of local groundwater as augmented by existing groundwater management programs (including groundwater recharge through the Freeman Diversion project and the Las Posas Aquifer Storage Project), imported State water, and the City's planned water recycling effort through it's GREAT and the M&I Supplemental Water Program, and the transfer of allocation and credits associated with UCWD acquisition of the Ferro Property will help to ensure that the City will be able to meet long term water demands.

As thoroughly documented in the WSA, there is some degree of uncertainty with regard to the timing of both the demand coming on line as well as the continued availability of existing sources and the planned new supply sources. This is not atypical for a long range planning program that attempts to address future conditions that may be affected by a broad range of variables many of which are unknown at this time (such as economic conditions, technological advances, environmental and social change, etc.). Nevertheless, the City has attempted to anticipate and have in place contingency plans to respond to these issues as described in the WSA and this document. Overall, the findings of this WSA (SB 610) and Water Supply Verification (SB 221) are that:

- The WSA considers water demands of the North Ormond Beach development project as well as water demands from other proposed or anticipated developments for the period 2010 to 2030.

- Water supplies as identified herein from CMWD, UWCD, and the City are considered as firm for the period 2010 to 2030.

- During the period 2010 to 2014, the City may draw on a portion of its groundwater credit bank of approximately 37,000 AF as an interim supply until the GREAT Program Phase 1 is completed as planned. Further, under extended dry and multiple dry year conditions, it is possible that during the years 2010 to 2014, the cumulative draw on the groundwater credits could nearly exhaust the City's currently available credits. However, the City has developed this credit bank for use during these types of extended drought or water supply restricted conditions.

- Once the GREAT Program Phase 1 is in full production, the City will restore its groundwater credit bank as a buffer against future supply constraints.

- Under the current estimated schedule, the production, use, and recharge of recycled water will be available for use in, or to offset, the potential demands from the North Ormond Beach by approximately 2015. Thus the North Ormond project must be implemented in a manner to expedite the production, use and recharge of recycled water.

- The GREAT Program continues to be an important element in providing water supply to the North Ormond Beach development project, along with other proposed or anticipated development.

Based on the facts cited and analysis above, the WSA concludes and verifies that the City's total, reasonably projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection are sufficient to meet the water demand associated with the project, in addition to the City's existing and planned future uses. In addition, it is assumed the project will be water neutral; that is the project will present to the City sufficient water rights or water supplies to offset the full estimated demand associated with the project. Thus, the project proponent must develop a program to offset a minimum of 350 AFY of demand through some combination of additional water supply contributions through extraordinary facilities development, extraordinary conservation measures, in-City retrofits, contributions to the development of recycled water facilities, or similar measures.

Based on these conclusions, the impact of proposed development within the Northern Subarea in accord with the SouthShore Specific Plan and the associated development agreement is, thus, considered *significant but feasibly mitigated (Class II).* Mitigation measures: Water-1, Water-2, Water-3, Water-4, Water-5.

Impact Water-2: Water Facility Construction (Northern Subarea). The Northern Subarea will require the construction of facilities associated with Phase 1 of the GREAT program to ensure a 20-year supply of potable and recycled water. The City of Oxnard has adopted a project level EIR/EIS for the GREAT program. Most of the infrastructure for Phase 1 and Phase 2 of the GREAT program is proposed for construction at existing water facilities or involves replacement and expansion of existing water service pipelines within existing right-of-ways. Preliminary review of the GREAT program under the EIR/EIS has indicated that, with the exception of the wetlands element, there are no identifiable issues that could represent significant permitting challenges. The wetlands element could be covered under the environmental document for the GREAT program at a program level and developed to a project-specific level as that element is developed more substantially. The GREAT EIR/EIS includes a Monitoring, Mitigation, and Reporting Plan (MMRP) which addresses the

construction impacts of Phase 1 and Phase 2. Potential construction-related effects associated with onsite water infrastructure within the Northern Subarea is covered on a subject-by-subject basis elsewhere throughout this EIR. The construction of the offsite water facilities associated with the City's ongoing GREAT Program will have a *less than significant impact (Class III)*.

Impact Water-3: Wasteful Use of Water (Northern Subarea). Individual building projects within the Northern Subarea would be required to meet standard requirements of the City, State, and Uniform Building Code. These requirements act to conserve potable water, ensure adequate water flow, and pay for the construction of improvements to the water distribution system as outlined in the City's Water Master Plan. In addition, the SouthShore Specific Plan, which will govern development in the Northern Subarea, calls for the development of separate pipeline systems for potable and reclaimed water. The potential for wasteful use of water as a result of development in the Southern Subarea is, therefore, considered *less-than-significant (Class III).*

Water Quality

Impact Water-4: Construction-Related Surface Water Quality (Northern Subarea). A Phase I Environmental Site Assessment (ESA) was completed in 2003 for the Northern Subarea. The ESA stated the possibility that asbestos-containing material; lead-based paints, and pesticides/herbicides are likely to be found onsite. According to the ESA, at least two adjoining offsite properties (5601 Edison Drive and 1790 Pleasant Valley Road) have reported subsurface petroleum releases and contamination. It is likely that construction/demolition will require dewatering and that groundwater will be encountered. Dewatering could result in the discharge of groundwater contaminated with petroleum products. Pesticide contaminants from agricultural runoff have been found in samples obtained from sediment and wildlife in the Oxnard Drain. Indications are that the contaminant levels are decreasing due to changes in agricultural practices, but contaminant levels remain a concern. Another concern would be increased mobilization of contaminated sediments due to increased runoff to the Oxnard Drain from the new development, ultimately impacting Mugu or Ormond Beach lagoons.

On December 7, 2006, a shallow groundwater sample was taken from the Northern Subarea. Microbac Laboratories analyzed the sample for a full suite of metals, pesticides, and organic compounds. All applicable water quality criteria were met by the sample with the exception of antimony, where the sample result of 13 micrograms per liter exceeded the USEPA human health criteria of 5.6 micrograms per liter. Although total oil and grease in the sample measured less than 5 micrograms per liter, the sample contained 200 micrograms per liter of gasoline. There are no applicable USEPA criteria for gasoline. However, the secondary

drinking water criteria limitation for Total Petroleum Hydrocarbons (TPH) is 200 micrograms per liter.

A technical memorandum was prepared that provided additional lake construction dewatering information (PACE, October 2006). Several alternatives were proposed including onsite dewatering storage, pumping to a local irrigation water user or discharge to the storm drain system. Discharge of dewatering to the storm drain system during construction would require that the water be treated prior to discharge. A proposal has been submitted for water quality treatment of the potential Northern Subarea dewatering discharge (Clear Creek Systems, January 2007). The treatment addresses sediment and gasoline removal, but the reduction in sediment would also reduce concentrations of metals such as antimony. Water from the dewatering site would be pumped to two 21,000 gallon settling tanks and then through two in-parallel cartridge filter vessels for filtration of solids. Influent will then pass through granular activated carbon (GAC) vessels, in series, for adsorption of hydrocarbons. Treated effluent would then be discharged from the system to an outfall specified under either a general NPDES dewatering permit or individual NPDES discharge permit.

Impact to surface water quality is considered *significant but feasibly mitigated (Class II).* Mitigation measures: Water-7, Water-8, Water-9.

Impact Water-5: Post-Construction Surface Water Quality (Northern Subarea). The impact of development of the Northern Subarea on water quality has been addressed in the Hydrology Report (RBF Consulting, 2004) and Project Description (Hearthside Homes, 2004) for the Northern Subarea project. The hydrology report utilized the guidelines provided in the County of Ventura Technical Manual for Stormwater Runoff as the basis for evaluating stormwater treatment options. The Northern Subarea would incorporate an 18-acre lake for water retention. Stormwater from within the Northern Subarea will be routed by internal stormwater culverts and drains to the lake. The lake would retain all dry-weather non-stormwater runoff and temporary storage for up to a 100-year storm event. The lake will retain the 25-year storm event and discharge it slowly to the Oxnard Industrial Drain. Based on a meeting between the RWQCB and the City of Oxnard on January 22, 2007, the lake would be required to retain the runoff of any storm event up to a 25-year storm event without discharging. If this is done, a discharge permit would not be required. However, the lake surcharge capacity of 54 AF may not be adequate to retain the runoff from a 25-year storm without discharge. The discharge from the lake to the OID of any stormwater resulting from runoff up to the 25-year storm event would require an individual stormwater discharge permit.

The design of the lake incorporates aeration, lake biofilters, wetland planters, and vegetated pretreatment basins or wetland filters to improve water quality. The water quality treatment features of the lake will serve to improve stormwater substantially prior to discharge. A draft

stormwater quality and lake BMP analysis has been developed, incorporating water quality modeling of stormwater pollutant loads and BMP treatment effectiveness for Lake SouthShore (PACE, December 2006). As required by the Ventura County SMP, the 85th percentile design storm was used as the basis for the lake water quality modeling. Model results show that all concentrations of pollutants modeled will be reduced with the exception of zinc and total petroleum hydrocarbons (TPH).

Existing land use in the Northern Subarea consists of agricultural production crops which require significant water. The 321 acres of farmland are approximately 90 to 100 percent permeable. When the Northern Subarea is built out, approximately 74 acres of park area will be irrigated. Additionally, residential lawns will also be irrigated, but the overall acreage of proposed irrigation in the developed condition is significantly less than existing conditions. Since the irrigated area will be reduced from approximately 321 acres to approximately 74 acres, the development of the Northern Subarea would reduce the amount of infiltration into the groundwater table (RBF Consultants, November 2006). Because infiltration will be reduced, it is unlikely that contaminants from historic agricultural activities would leach into the shallow groundwater or migrate to the downstream lagoons. Impact to surface water quality is considered *significant but feasibly mitigated (Class II).* Mitigation measures: Water-10.

Flood Control and Stormwater Drainage

Impact Water-6: Flood Control and Stormwater Drainage (Northern Subarea). Existing drainage facilities consist of three storm drain inlets. The largest inlet is the Hueneme Road Drain which discharges to the OID. Other storm drain inlets are located at the intersection of Hueneme and Arnold roads and the intersection of Hueneme and Olds roads. It is likely that in a period of intense rainfall, the intersection of Hueneme and Olds roads would overwhelm the culvert capacity and sheetflow across the road. If not managed correctly, sediment originating from the Study Area would further reduce the capacity of the culverts and increase the problem of sheet flow flooding during storm events.

During construction, the proposed lake (Lake SouthShore) would function as an interim water quality management system reducing silts from plugging existing downstream drainage facilities. The proposed bottom of lake is elevation 5 feet; the breakout elevation on Hueneme Road is approximately elevation 17 feet. As the lake would be approximately 8 feet deep upon completion of grading, it would function as a low point for the entire site including the Edison property (during construction). The lake volume would be sufficient to contain the first ¾ inch of runoff during a storm event as required by the Ventura County SMP. Since the lake would collect and subsequently treat runoff, it would reduce the amount of sediment running off from the site in comparison to existing conditions. At the onset of rough grading, interim water quality basins (used prior to lake completion) would be required

in the event rainfall occurs prior to completion of the lake grading. The interim water quality basins would be sized appropriately to mitigate any potential release of sediment to downstream drainage facilities (RBF Consultants, November 2006). Implementation of additional erosion and sediment control BMPs during construction would also serve to reduce the levels of sediment discharged to the lake.

The project would not release flow at a greater rate than currently leaves the site in the existing condition based on the 10-year, 24-hour storm event. This will be accomplished by providing onsite detention of runoff through the lake. Although the OID is currently operating beyond its capacity, construction of the Northern Subarea project will not increase the 10-year, 24-hour storm event runoff rate to the OID and will, therefore, not add to the currently non-mitigable condition of the OID and the J Street Drain.

Additionally, the project will not increase the runoff rate to the Arnold Road Drain. Flow to the Arnold Road Drain would be reduced in the built-out condition because the elevation of the Arnold Road Drain is at elevation 16.3 feet, which is higher than the peak 10-year water surface in the lake. The project will also reduce the amount of runoff to the culvert at Hueneme and Olds roads which is at elevation 16.1 feet. Catch basins and storm drain pipe will be installed in Hueneme and Olds roads and onsite. Runoff from a 10-year storm will be captured in the storm drain system and directed to the lake, thereby reducing any overflow of runoff that currently exist today at these intersections (RBF Consulting, November 2006).

The hydrology study for the Northern Subarea includes a drainage plan based on the hydrology models developed by the VCWPD (VDHYDRO and VCRATIONAL). Results of hydrologic modeling were used to develop a site drainage plan that would limit discharges to the pre-development levels with a maximum discharge equal to the 10-year 24-hour event during any storm. Onsite detention (via the lake) was modeled based on the need to provide temporary retention capacity for the 100-year 24-hour storm event.

Localized flooding outside the Northern Subarea occurs under existing conditions as a result of the inadequate capacity of the existing storm sewers and the OID. This localized flooding is likely to continue outside of the Northern Subarea during the 10- and 100-year events. Localized flooding in the Northern Subarea during a 10- or 100-year event will not flood building pads in the development as building pads will be constructed above the peak 100-year water surface elevation. The project will not increase localized flooding within the Northern Subarea as runoff will be limited to pre-development levels (RBF Consulting, November 2006).

Lake SouthShore will discharge to the OID which is under the jurisdiction of the VCWPD. The VCWPD informally limits discharges to its regulated waterways to the 10-year 24-hour event.

Based on the above considerations, the impact to localized flooding during construction and after construction is considered to be *less than significant (Class III)*.

Impact Water-7: Surface Runoff Erosion (Northern Subarea). Increased surface runoff from the Study Area during construction and occupation could result in short-term and long-term erosion and sedimentation impacts to the watercourses and waterbodies in the Study Area. Also, stormwater discharged from the Lake SouthShore will have undergone water treatment designed to limit the discharge of sediment. The incorporation of onsite detention and treatment of stormwater runoff would reduce the potential impact to drainage to *significant but feasibly mitigated (Class II).* Mitigation measures: Water-11, Water-12.

Impact Water-8: Changes in Flow Directions (Northern Subarea). Construction activities within the Northern Subarea have the potential for increasing the runoff flowrate of stormwater from the site. Depending on the phase of construction, the flow directions and volume of stormwater flow could change, exceeding the capacity of existing drainage channels. This could result in sheetflow flooding on adjacent streets. However, the Northern Subarea will incorporate onsite retention and detention and would not increase runoff during the construction period of this project.

The hydrology report for the Northern Subarea used hydrologic modeling to assess current runoff quantities associated with 10-year and 100-year 24-hour storm events. The development would use the Lake SouthShore as a retention basin for all onsite storm flows. Discharges from the Northern Subarea post-development would be controlled to pre-development levels and a maximum discharge rate equal to the 10-year 24-hour storm event during any storm event. The 100-year 24-hour storm event containment capacity of the Lake SouthShore would reduce the impact from significant storm events resulting in peak runoff flowrates. The following is a summary of the potential changes in the flow directions of onsite and offsite stormwater runoff (RBF Consulting, November 2006).

1. In the developed condition runoff from the site would not be directed to the Arnold Road Drain or the existing shallow 1-foot-high by 4-feet-wide box culvert at Hueneme and Olds roads. This will be accomplished by installing a storm drain system and catch basins in Olds and Hueneme roads. As stated previously, the project incorporates retention and detention, limiting runoff to downstream facilities.
2. Runoff from the Sanford Tract north of the Northern Subarea in a 100-year storm currently overflows the northern tract boundary and flows onto the Northern Subarea and further onto Hueneme Road. Runoff in the developed condition would be detained in the park area (north of A Street, east of Rose) on the surface. This runoff will be routed through the 66-inch storm drain (Sanford Street Storm Drain).
3. Runoff from the fields east of Olds Road (the Taylor Drain, currently an interim connection to the Sanford Storm Drain) will be relocated. Currently, this storm drain

collects runoff east of Olds Road and north to Highway 1 and conveys it to the 66-inch Sanford Storm Drain and further to the OID. Ten-year flows will be re-directed in a pipe or open channel south on Olds Road, west on Hueneme Road, and then south on Arnold Road.

Based on the above, the Project will result in a net reduction in stormwater discharges during significant storm events so impacts would be considered *less-than-significant (Class III).*

Wastewater Collection and Treatment

Impact Water-9: Wastewater Collection and Treatment (Northern Subarea). The 2005 Wastewater Master Plan Update for the City of Oxnard includes the proposed South Ormond Study Area in its wastewater flow projections. Therefore, build out of the Study Area has been accounted for in the analysis of future wastewater infrastructure needs. Additional studies are, however, needed to assess the impact to the existing sewer and wastewater treatment infrastructure. The impact to existing wastewater collection and conveyance lines, capacity of the OWWTP, wastewater treatment requirements and construction of wastewater infrastructure is considered *significant but feasibly mitigated (Class II) to less than significant (Class III)*. Mitigation measures: Water-15.

3.3.3.3.2 Southern Subarea

Water Supply and Demand

Impact Water-10: Water Supply Availability (Southern Subarea). As detailed in Table 3.3-20 and as detailed in the South Ormond Beach Water Supply Assessment & Verification (June 2008) and its Addendum (November 2009), development of the Northern Subarea (in accord with the SouthShore Specific Plan) would generate estimated water demand of about 965 acre feet per year (AFY). Of this total, 785 AFY would be for potable needs and the balance (180 AFY) would be for landscaping and other non-potable needs. Assuming a 2007 citywide demand of approximately 28,900 AFY and the projected 2030 demand of approximately 41,400 AFY for the City's total service area, the South Ormond Beach project represents approximately 2.3 percent of the projected demand and approximately 7.7 percent of the anticipated increased demand in the City. The project's demand for potable water would be offset by a transfer of approximately 563 AFY of FCGMA allocation associated with the conversion of agricultural land to urban uses. Accounting for this transfer and the use of recycled water to address non-potable demand, the project-level water balance results in an overall deficit of approximately 220 AFY in 2030. Therefore, in order to be water neutral, the South Ormond Beach project will need to fund the construction of necessary recycled water infrastructure on site to serve the 180 AFY demand for recycled water and fund the construction of necessary recycled water infrastructure to serve potential recycled

water customers to offset 222 AFY potable demand, or otherwise implement mitigation measures consistent with City policy as discussed in this document above.

Mitigation measures are provided below to help further reduce project specific water demands and to provide additional assurance that planned new water supplies would be available in advance of project-specific and other planned cumulative development.

As described in Section 3.3.1 (Water Resources Existing Setting) of this report, the City has comprehensive multifaceted Water Management Program that outlines how the City plans to provide an adequate water supply to meet forecasted water demands well into the future. In addition to its internal water management program, the City is working cooperatively with local groundwater managers such as the FCGMA, UWCD, and CMWD (Las Posas) on local groundwater management programs as well as CMWD and MWD on regional imported water supply issues. Together, these programs are intended to provide a high degree of flexibility to provide a reliable long term water supply under a broad range of known (i.e. projected growth and planned water supply projects) and unknown scenarios (i.e. global climate change). The availability of local groundwater as augmented by existing groundwater management programs (including groundwater recharge through the Freeman Diversion project and the Las Posas Aquifer Storage Project), imported State water, and the City's planned water recycling effort through it's GREAT and M&I Supplemental Water Programs, along with the access to allocation and credits associated with UWCD acquisition of the Ferro Property, will help to ensure that the City will be able to meet long term water demands.

The City's existing and ongoing water management programs provided about 28,490 AFY to serve the water needs of the City in 2007. The City's projected water supplies include water from both the City's Augmented M&I Supplemental Water and GREAT Programs. With the City's combination of State Water provided through CMWD, groundwater provided by UWCD and existing City wells, and the M&I Supplemental water programs, the City will have a 2010 water supply of about 40,625 AFY. This supply is projected to grow to 54,900 AFY in 2030 with the implementation of the GREAT Program (recycled water system). This projection assumes a 2030 production capacity of 17,100 AFY (16.95 mgd) for the GREAT AWPF facility. The initial phases of the GREAT Program and the related Recycled Water Backbone System have been approved by the City, are substantially funded and the City otherwise has plans in place to arrange for the remaining funding, and are pending implementation. In addition, the City is in the process of developing its Recycled Water Master Plan which will address implementation of the City's recycled water management program.

As thoroughly documented in the WSA and its addendum, there is some degree of uncertainty with regard to the timing of both the demand coming on line as well as the

continued availability of existing sources and the planned new supply sources. This is not atypical for a long range planning program that attempts to address future conditions that may be affected by a broad range of variables many of which are unknown at this time (such as economic conditions, technological advances, environmental and social change, etc.). Nevertheless, the City has attempted to anticipate and have in place contingency plans to respond to these issues as described in the WSA and this document. After careful consideration of these factors, the WSA and addendum concludes and verifies the following:

- The water demands of the South Ormond Beach development project as well as water demands from other proposed or anticipated developments for the period 2010 to 2030 are considered reliable.

- Water supplies as identified herein from CMWD, UWCD, and the City are considered as firm for the period 2010 to 2030.

- During the period 2010 to 2014, the City may draw on a portion of its groundwater credit bank of approximately 37,000 AF as an interim supply until the GREAT Program Phase 1 is completed as planned. Further, under extended dry and multiple dry year conditions, it is possible that during the years 2010 to 2014, the cumulative draw on the groundwater credits could nearly exhaust the City's currently available credits. However, the City has developed this credit bank for use during these types of extended drought or water supply restricted conditions.

- Once the GREAT Program Phase 1 is in full production, the City will restore its groundwater credit bank as a buffer against future supply constraints.

- Under the current estimated schedule, the production, use, and recharge of recycled water will be available for use in, and/or to offset, the potential demands from the South Ormond Beach project by approximately 2015. Thus the South Ormond project must be implemented in a manner to expedite the production, use and recharge of recycled water.

- The GREAT Program continues to be an important element in providing water supply to the South Ormond Beach development project, along with other proposed or anticipated development.

Based on the facts cited and analysis above, the WSA concludes and verifies that the City's total, reasonably projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection are sufficient to meet the water demand associated with the project, in addition to the City's existing and planned future uses. In addition, it is assumed that the project will be water neutral; that is, the project will present to the City sufficient water rights or water supplies to offset the full estimated demand

associated with the project. Thus, the project proponent must develop a program to offset a minimum of 402 AFY of demand through some combination of additional water supply contributions through extraordinary facilities development, extraordinary conservation measures, in-City retrofits, contributions to the development of recycled water facilities, or similar measures.

Based on these conclusions, the impact of proposed development within the Southern Subarea in accord with the South Ormond Beach Specific Plan and the associated development agreement is, thus, considered *significant but feasibly mitigated (Class II).* Mitigation measures: Water-1, Water-2, Water-3, Water-4, Water-5.

Impact Water-11: Water Facility Construction (Southern Subarea). The Southern Subarea will require the construction of facilities associated with Phase 1 of the GREAT program to ensure a 20-year supply of potable and recycled water. The City of Oxnard has adopted a project level EIR/EIS for the GREAT program. Most of the infrastructure for Phase 1 and Phase 2 of the GREAT program is proposed for construction at existing water facilities or involves replacement and expansion of existing water service pipelines within existing right-of-ways. Preliminary review of the GREAT program under the EIR/EIS has indicated that, with the exception of the wetlands element, there are no identifiable issues that could represent significant permitting challenges. The wetlands element could be covered under the environmental document for the GREAT program at a program level and developed to a project-specific level as that element is developed more substantially. The GREAT EIR/EIS includes a Monitoring, Mitigation, and Reporting Plan (MMRP) which addresses the construction impacts of Phase 1 and Phase 2. Potential construction-related effects associated with onsite water infrastructure within the Northern Subarea is covered on a subject-by-subject basis elsewhere throughout this EIR. The construction of the offsite water facilities associated with the City's ongoing GREAT Program will have a *less-than-significant impact (Class III).*

Impact Water-12: Wasteful Use of Water (Southern Subarea). Individual building projects within the Study Area would be required to meet standard requirements of the City, the State, and the Uniform Building Code. These requirements act to conserve potable water, ensure adequate water flow, and pay for the construction of improvements to the water distribution system as outlined in the City's Water System Master Plan. In addition, the South Ormond Beach Specific Plan, which will govern development in the Southern Subarea, calls for the installation of separate pipeline systems for potable and reclaimed water. The potential for wasteful use of water as a result of development in the Southern Subarea is, therefore, considered *less-than-significant (Class III).*

Water Quality

Impact Water-13: Construction-Related Surface Water Quality (Southern Subarea). The Southern Subarea has been cultivated for several decades, although the specifics of these operations are unknown. The Phase I ESA (RBF, 2005) prepared for the Southern Subarea identified superficial stains and odor which may be indicative of soil contamination in several locations. Pesticides, herbicides, fuels and other chemicals used in various agricultural operations could be present onsite. During construction these contaminants (if present) could be transported into the agricultural drain system and eventually to Mugu Lagoon. This impact is considered *significant but feasibly mitigated (Class II).* Mitigation measures: Water-7, Water-8, Water-9.

Impact Water-14: Post-Construction Surface Water Quality (Southern Subarea). The land use plan for the Southern Subarea shows a total project acreage of 595 acres. Of this area, 220 acres at the southern edge of the subarea are designated open space/agriculture with a detention basin/biofilter buffer zone separating the open space/agriculture area from the developed area. Another series of bioswales is shown along the southern side of Hueneme Road and along the north-south roadways within the subarea. Approximately 37 percent of the proposed Southern Subarea is designated as open space. The detention/ biofilter buffer zone will separate the open space area from the industrial uses. These bioswales may be acceptable to address post-construction water quality issues. However, the design, capacity, and layout of the bioswales have not been provided. The specific plan for the Southern Subarea commits to complying with the BMPs. *This impact would be significant but feasibly mitigated (Class II).* Mitigation measures: Water-10.

Flood Control and Stormwater Drainage

Impact Water-15: Flood Control and Stormwater Drainage (Southern Subarea). A preliminary drainage plan incorporating hydrologic modeling of stormwater runoff from current conditions of the site has been developed for the Southern Subarea. It is known that the southern portion of the Southern Subarea drains to the Oxnard Drain, but it is not clear if this is the drainage for the entire site. Southwest Sod Farms has current plans for maintenance and dredging of the Oxnard Drain which would improve its flow capacity. Because this is a waterway within unincorporated Ventura County, improvement to the Oxnard Drain will need to meet the requirements of the Ventura County Stormwater Ordinance. Construction activities at the Southern Subarea could result in discharges of sediment which would compromise the flow capacity of the Oxnard Drain and other agricultural drains servicing the Study Area. Agricultural drainage channels operated and maintained by the Oxnard Drainage District No. 2 may not have the capacity to handle the increased runoff associated with construction. At the present time, potential impacts due to flooding during construction cannot be fully assessed.

The South Ormond Beach Specific Plan, which will govern the development of the Southern Subarea, calls for the design and sizing of the drainage channels and detention facilities based on a 100-year storm event. Stormwater collection and treatment will begin with a series of bioswales located along public rights-of-way that will accommodate water depth not exceed five (5) inches pursuant to Ventura County SQUIMP permit standards. To meet peak flow treatment requirements, box culverts under streets will be used to contain excess flows. In addition, the development will include a detention basin designed to meet NPDES permit standards by holding and biologically treating the stormwater. After storm events, stormwater will be released at the undeveloped flow rate back into the Oxnard Drainage District #2. The detention basin will be designed to SQUIMP and/or NPDES permit standards including the use of grasses to naturally treat storm water pollutants. All drainage channels and detention basins shall be maintained through a community financing district (CFD). No detailed plan for the proposed stormwater drainage system for the Southern Subarea development has been submitted and the hydrologic analysis will need to be revised to establish that stormwater discharges from the site meet the criteria of the City of Oxnard. Also, the volume capacity of the proposed detention basin has not been developed. A hydrologic analysis of the needed onsite stormwater retention volume is required to determine if the acreage and depth of the basin is adequate. Because these specific design features have not yet been developed, potential impacts due to flooding during occupancy cannot be fully assessed. Impacts are, therefore, assumed to be *significant but feasibly mitigated (Class II)*. Mitigation Measures: Water-11, Water-12, Water-13, Water-14.

Impact Water-16: Surface Runoff Erosion (Southern Subarea). Increased surface runoff during construction and occupancy could result in short- and long-term erosion and sedimentation impacts to the watercourses and waterbodies in the Southern Subarea. Impacts would be *significant, but feasibly mitigated (Class II).* Mitigation measures: Water-11, Water-12.

Wastewater Collection and Treatment

Impact Water-17: Wastewater Collection and Treatment (Southern Subarea). The draft 2005 Wastewater Master Plan Update for the City of Oxnard includes the Ormond Beach Specific Plan Area in its wastewater flow projections. Therefore, buildout of the Study Area has been accounted for in the analysis of future wastewater infrastructure needs. Additional studies are, however, needed to assess the impact to the existing sewer and wastewater treatment infrastructure. The impact to existing wastewater collection and conveyance lines, capacity of the OWWTP, wastewater treatment requirements and construction of wastewater infrastructure is considered *significant but feasibly mitigated (Class II)* to *less than significant (Class III).* Mitigation measures: Water-15.

3.3.3.3.3 Cumulative Impacts

Water Supply

Impact Water-18: Cumulative Water Supply. The proposed projects would not result in a cumulative impact on water supply or water infrastructure. While the projects have not been determined to have either a project specific or cumulative impact on water supply, there is the potential that due to uncertainties, the City could face water shortages. Therefore, the following measures, many of which are recommended in the WSAs, are available and shall be implemented by the City and future developers, as necessary, to avoid or reduce the risk of potential future water shortages. While many of these measures are programmatic in nature and go beyond what can be accomplished at the project level, the project developers and subsequent developers shall be required to support the City with implementation of the following measures, as applicable. These measures help to illustrate the flexibility in programs that the City has to avoid environmental impacts associated with future water supply and demand issues.

- The City shall build up City Groundwater Credits between 2008 and 2010 for use in 2011 through 2016 until the GREAT Program expansion is operational.
- The City shall continue to maximize its reliance on the M&I Supplemental Water Supply Program.
- The City has the option to pump additional groundwater from City wells above their allocation. However, this may result in additional surcharges from the GMA.
- The supply and demand comparison tables above (Tables 3.3-8 through 3.3-13) are predicated on the City's utilizing its full purchase order entitlement of CMWD water, less the PHWA water use and reservation as discussed above. However, in 2007 PHWA only used 2,220 AFY of its 3,262.5 AFY of reservation. Thus the City could potentially purchase an additional 1,040 AFY of CMWD in times of need.
- Implement the initial phase of the GREAT Program (for 6.25 MGD) by 2012 when demand starts to increase. If the facility is delayed, then other sources of water would be needed. A portion or all could be from the rest of the CMWD Tier 1 rate or even Tier 2 water.
- Obtain City Council approval for use of the allocation and credits associated with UCWD's acquisition of the Ferro Property.
- The City also has options of purchasing unused O-H water from other water purveyors.
- Plan for the first expansion of the GREAT Program to be an additional 5.2 MGD (to 11.45 MGD).

- The City should plan for the second expansion of the GREAT Program to be an additional 5.0 MGD (to 16.45 MGD). Before designing the second expansion, in particular, the demand and surplus projections should be revisited.
- The City could also implement additional temporary water demand measures for periods when supply is not sufficient to meet demand as outlined in City Ordinance No. 2729, "City of Oxnard Water Conservation and Water Shortage Response Ordinance."
- The City shall monitor the pace of new development as it relates to the phasing and implementation of new water supply systems and changing legal, environmental, technological, and social conditions. If it becomes apparent that the anticipated water supply systems are not keeping pace with development or should unanticipated events occur that would cause such new development to adversely impact local water supplies, the City shall curtail or limit the issuance of building permits until such time that a water supply can be assured.

Each project shall be required to pay a fair share contribution to all programs, such as the City's fee program, that are in place to fund the GREAT Program and to facilitate implementation of new water supplies for the City. In addition, all projects shall be required to comply with standard water conservation requirements of the City, State, and Uniform Building Code. These include the use of low-flush toilets and urinals, compliance with statewide efficiency standards for shower heads and faucets, and insulation of pipes to reduce water used before hot water reaches equipment or fixtures.

CEQA also requires that an EIR disclose the environmental effects of potential mitigation measures such as the implementation of the City's GREAT Program. A complete programmatic EIR that addressed the environmental effects of the GREAT was prepared and certified in 2004. That EIR document noted that, with the exception of a small but finite safety risk associated with project elements within an identified tsunami hazard area, all of the GREAT project impacts can be mitigated to a less than significant level. Potentially significant but mitigable impacts were identified in the areas of land use, geology, cultural and paleontological resources, water resources, biological resources, air quality, traffic, noise, visual resources, public services and utilities, and hazardous materials and waste.

As part of the GREAT Program approval, a Mitigation Monitoring and Reporting Plan (MMRP) was adopted to ensure that project-specific impacts of that program and all of its components are effectively mitigated. Implementation of the mitigation measures in the GREAT Program EIR as well as those identified above would help to ensure that cumulative water supply impacts due to inherent uncertainties in long range forecasting would be reduced to *less than significant (Class III)*.

Flood Control and Stormwater Drainage

Impact Water-19: Cumulative Flood Control and Stormwater Drainage. Stormwater from the Northern Subarea will ultimately flow to the OID. New development discharging to the OID is restricted by the VCWPD to a maximum discharge of the 10-year 24-hour storm event. Approved Specific Plan areas along the OID include the Northeast Community, Central Business District, Wooly and Rose Area, South Hueneme Road developments. All developments will be subject to the same stormwater discharge requirements. The VCWPD is planning on upgrading the OID, however it is not considered a priority at this time. As all new residential/industrial development will comply with VCWPD standards, no cumulative impacts are expected.

Wastewater Collection and Treatment

Impact Water-20: Cumulative Wastewater Collection and Treatment. The City of Oxnard Wastewater Collection System Master Plan includes projections for the full build-out of the land uses allowed by the City's 2020 General Plan. Facilities have been master planned to serve all these uses. The draft 2005 Wastewater Master Plan Update for the City of Oxnard includes the proposed project in its wastewater flow projections. Therefore, build-out of the Study Area has been accounted for in the analysis of future wastewater infrastructure needs. Payment of sewer connection fees and the requirement for individual developers to provide adequate capacity to convey sewage to a safe point of discharge will upgrade the system as necessary to accommodate new development. No cumulative impacts are expected.

3.3.4.4 Mitigation Measures

The specific plans for the Northern and Southern subarea would be required to incorporate and implement design, construction, and occupancy BMPs to protect sensitive riparian, wetland, and marine environments, reduce adverse affects to runoff water quality, and treat runoff generated by the community development and residential-occupancy phases to existing condition and levels.

The following mitigation measures are grouped into three categories: 1) water supply and demand measures, 2) water quality measures, 3) flood control and stormwater drainage measures, and 4) wastewater measures. The mitigation measures presented in this section are derived from several sources and are not meant to be an exhaustive list of applicable BMPs. They are instead a guide to the degree of mitigation that would be required to ensure water supply availability, protect water quality, minimize flooding hazards, and ensure adequate wastewater collection and treatment service in the Study Area.

3.3.3.4.1 Water Supply and Demand Mitigation Measures

While the project has not been determined to have either a project specific or cumulative impact on water supply, there is the potential that due to uncertainties, the City could face water shortages. Therefore the following measures shall be implemented, as necessary, to avoid or reduce the risk of potential future water shortages.

Mitigation Measure Water-1: On-site Domestic Water System. The on-site domestic water system shall include a:

- A public pipeline systems which feed into separate water meters for each ownership. In addition, there shall be separate water meters for each multi-family unit townhouses, but not apartment units. The high-rise residential towers may be master-metered.
- A separate water meter (1) for the common landscape areas that would be connected to the future recycled water system.
- All domestic water pipelines shall adhere to DOHS requirements for separation between water and recycled water/wastewater pipelines.
- The developer shall be responsible for payment of capital improvement/connection fees, including all related "installation fees."
- Developer shall provide the City any approvals necessary to dedicate to the City all FCGMA allocation associated with the project site, whether such allocation is associated with the conversion of agricultural to urban uses, or otherwise.
- Developer shall provide to the City addition water rights, water supplies, or water offsets in the form of recycled water facilities, conservation retrofits, financial contributions towards City programs which generate in-City water conservation, or participation in other similar programs with cumulatively result in a total water supply contribution, taken together with other water rights or FCGMA allocation provided to the City, which offset the entire estimated water demand associated with the project,

Mitigation Measure Water-2: On-site Recycled Water System. An on-site recycled water system shall include the following:

- The developer will be responsible for the pipeline extension from the mainline in Ventura Road to the property (either to construct the line or to reimburse the City if as part of the RWBS project, a service extension is made to the Oxnard Village property).
- The developer shall be responsible for the design and construction of the recycled water main pipeline system within the Oxnard Village development. The mainline shall be a public system with meters, as appropriate, to recycled water customers. Construction will be per City standard requirements with applicable fees. The design must allow for connection to the domestic water system until the time when recycled water is available. At that time the system will be switched from domestic water to recycled water.

- The developer shall provide a recycled water system that serves all practical irrigated areas and which is: (1) separated from the domestic water system, (2) constructed per the City's Recycled Water Construction Standards (being developed), (3) irrigated at night and (4) properly signed. Note that the signs shall be installed once the system is fully operational.
- The portion of the irrigation intended for the future recycled water system shall be separately metered from that portion of the system that will not be connected to the future recycled water system, if any.
- Until the recycled water system is operational, the common area irrigation system shall be connected to the domestic system. Once recycled water is available, and connection to the recycled water system is made, the developer shall remove the connection to the domestic water system. No domestic water back-up is needed, since the City will provide such back-up including an appropriate air gap facility as part of the City's system.
- Prior to the availability of recycled water, the developer shall be responsible for payment of the Recycled Water Connection Fee or the water connection fee, whichever is greater for facilities constructed.
- At such time as recycled water is available, the developer shall be responsible for all costs involved with the re-connection of the applicable portions of the irrigation system to the public recycled water system, including appropriate signage. Credits for connection fees shall be given by the City based on the size of the meter(s). Under no circumstance will there be a refund of water connection fees already paid.
- The developer shall be responsible for appropriate CCR's covering the use of recycled water within the property and for proper disclosures.
- Prior to submittal of subdivision improvement plans, the developer shall review with the City the potential for dual plumbing for the high-rise towers, whereby toilet facilities would be served by the recycled water system. No determination has yet been made regarding whether the City will desire to proceed with this plan. However, should the City decide that it is desired, all costs associated with the dual plumbing shall be borne by the developer.

Mitigation Measure Water-3: Exterior Water Conservation. The developer shall incorporate exterior water conservation features, as recommended by the State Department of Water Resources, into the project. These shall include, but are not limited to:

- Landscaping of common areas with low water-using plants
- Minimizing the use of turf by limiting it to lawn dependent uses
- Wherever turf is used, installing warm season grasses

Mitigation Measure Water-4: Grey Water. The developer shall, to the extent feasible, use reclaimed water for irrigation of landscaping and other uses if or when such water is available at the project site.

Mitigation Measure Water-5: Drought-Tolerant Landscaping. The developer shall predominantly use vegetation that requires minimal irrigation (i.e., drought tolerant plant species) in all site landscaping where feasible for new plantings.

3.3.3.4.2 Water Quality Mitigation Measures

The following measures would be required to address water quality impacts.

Mitigation Measure Water-6: Environmental Site Assessment. An environmental site assessment shall be conducted to identify potential sources of stormwater contaminants and areas that may require remediation. The assessment must include the location and condition of areas used for the storage of pesticides and herbicides, petroleum storage tanks or fueling areas, septic tanks, and underground storage tanks. Areas of soil staining shall be noted and the potential contaminant identified. Soil shall be excavated to determine the exact vertical extent of contamination. During soil removal, if staining indicates petroleum contamination continuing below the ground surface, sampling shall be performed to characterize the extent of contamination and identify appropriate remedial measures.

Septic tanks shall be removed and stained soils underneath sampled to determine remedial activity.

Mitigation Measure Water-7: Dewatering. Dewatering operations during construction will utilize established BMPs to limit the discharge of sediment. Prior to the discharge of waterflows from shallow groundwater dewatering operations, water quality sampling will be performed to determine if the groundwater to be dewatered is contaminated with pesticides or petroleum products. If levels of pollutants are present in quantities exceeding applicable water quality standards, the water collected from dewatering will be pumped and removed for proper disposal offsite.

Mitigation Measure Water-8: Stormwater Pollution Prevention Plan. The applicants shall submit to the City evidence of County review and approval of the receipt letter of a completed Notice of Intent (NOI) and waste discharge identification number to obtain coverage under the NPDES General Permit for Discharges Associated with Construction Activity issued by the California State Water Resources Control Board. Along with the NOI, the applicant shall submit to the County a Stormwater Pollution Prevention Plan (SWPPP) and monitoring program consistent with SWRCB rules for the construction phase of the project prior to initiating construction. At a minimum, the SWPPP shall contain the following specific mitigation measures designed to reduce or eliminate construction site runoff pollution, which can be grouped into four classes of BMPs:

- Construction Site Planning BMPs, including but not limited to:
  - Development planning shall fit the topography, soils, drainage patterns, and natural vegetation of the site
  - Only the minimum amount of vegetation necessary for construction shall be removed
  - The clearing limits, setbacks, protected habitat areas, trees, drainage courses, and buffer zones shall be delineated on plans and in the field to prevent excessive or unnecessary soil disturbance and exposure
  - The amount of cuts and fills shall be minimized
  - Temporary and permanent roads and driveways shall be aligned along slope contours
  - Grading operations shall be phased to reduce the extent of disturbed areas and length of exposure
  - Excavation and grading shall be avoided during the rainy season
  - Impervious surface areas shall be minimized and permeable paving materials shall be used whenever possible
- BMPs to Minimize Soil Movement including but not limited to:
  - Soil stockpiles shall be covered
  - Stabilized access roads and entrances shall be constructed in the initial phase of construction
  - Tire wash stations, gravel beds, and/or rumble plates will be installed at site entrance and exit points to prevent sediment from being tracked onto adjacent roadways
  - Sediments and construction materials shall be dry-sweeped from finished streets the same day they are deposited
  - Site runoff control structures, such as earth berms, drainage swales, and ditches that convey surface runoff during construction into temporary or permanent sediment detention basins shall be installed and made operational in the initial phase of construction, as necessary
- BMPs to Capture Sediment including but not limited to:
  - Storm drain inlets shall be protected from sediment-laden runoff with inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, excavated inlet sediment traps, sand bag barriers, and/or other devices
  - Sediment shall be removed from dewatering discharge with portable settling and filtration methods, such as Baker tanks or other devices
- Good Housekeeping BMPs, including but not limited to the following requirements:
  - All storm drains, drainage patterns, and creeks located near the construction site prior to construction shall be identified to ensure that all subcontractors know their location to prevent pollutants from entering them
  - Washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site; wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands; areas designated for washing functions shall be at least

100 feet from any storm drain, waterbody or sensitive biological resources; the location(s) of the washout area(s) shall be clearly noted at the construction site with signs; the applicant shall designate a washout area, acceptable to Building and Safety and P&D staff; the wash-out areas shall be shown on the construction and/or grading and building plans and shall be in place and maintained throughout construction

- All leaks, spills, and drips shall be immediately cleaned up and disposed of properly
- Vehicles and heavy equipment that are leaking fuel, oil, hydraulic fluid or other pollutants shall be immediately contained and either repaired immediately or removed from the site
- One or more emergency spill containment kits shall be placed onsite in easily visible locations. Personnel will be trained in proper use and disposal methods
- Vehicles and heavy equipment shall be refueled and serviced in one designated site located at least 500 feet from creeks and drainage swales
- Temporary storage of construction equipment shall be limited to an area approved by the City of Oxnard, and shall be located at least 100 feet from any water bodies
- Dry clean-up methods shall be used whenever possible
- Clean site runoff shall not be contaminated with polluted water through the use of berms or ditches to divert surface runoff around the construction site
- Exposed stockpiles of soil and other erosive materials shall be covered during the rainy season
- Trash cans shall be placed liberally around the site and properly maintained
- All subcontractors and laborers shall be educated about proper site maintenance and stormwater pollution control measures through periodic "tailgate" meetings
- Roadwork or pavement construction, concrete, asphalt, and seal coat shall be applied during dry weather only
- Storm drains and manholes within the construction area shall be covered when paving or applying seal coat, slurry, fog seal, etc.

Mitigation Measure Water-9: Stormwater Pollution Control Plan. Prior to issuance of any construction/grading permits a Stormwater Pollution Control Plan (SWPCP) will be prepared. The SWPCP will include erosion and sediment control BMPs for both active and inactive (previously disturbed) construction areas.

Mitigation Measure Water-10: Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) Development Guidelines. A combination of non-structural and structural BMPs (e.g., bioswales, permeable pavement, etc.) shall be installed to effectively prevent the discharge of pollutants from the residential units, roads, and open space easements and, their conveyance, either directly or through storm drain systems into natural watercourses and the Pacific Ocean.

Because long term water quality impacts are most effectively minimized or eliminated through proper site design and planning in the early stages of project development, the stormwater pollution control plan must focus on initial project design. Measures that can effectively mitigate impacts associated with occupancy-generated stormwater runoff pollution fall into three classes of BMPs. The Plan shall address these three classes of BMPs in order of priority:

1. **Site Planning Measures** that minimize directly-connected impervious surfaces and maximize infiltration, including the following required measures: using permeable paving materials to the maximum extent practicable; directing runoff from roofs and driveways into either a subsurface infiltration trench, French drains, adjacent landscaped areas, or into the site's irrigation system, and mandating creation of open space areas.

   The following additional site planning design BMPs shall be incorporated to the maximum extent practicable: clustering development; preserving natural drainages; reducing sidewalk and roadway widths; avoiding curbs and gutters along roadways where appropriate; and, shortening or otherwise reducing the amount of impervious surfaces on driveways (e.g., paving only under wheels, use of permeable surfaces).

2. **Pollution Prevention/Source Control Measures** that avoid polluting stormwater over the long term by eliminating sources, including the following required measures: creating berms around waste receptacle areas; labeling all storm drains in both English and Spanish to discourage dumping; incorporating low- or no-irrigation landscape plantings; and, employing Integrated Pest Management techniques in landscape maintenance.

   The following additional pollution prevention/source control BMPs shall be incorporated to the maximum extent practicable: providing green areas where pets can be exercised; constructing designated vehicle wash areas that are connected to the sanitary sewer system; installing landscaping or other cover to all disturbed surfaces; and using low-maintenance landscaping.

3. **Treatment Control Measures** that capture, treat, and/or filter water to remove pollutants from onsite runoff before it enters the storm drain system or other receiving waters must meet the design standards of the County of Ventura SMP and the City of Oxnard Department of Public Works. These measures may include, but not be limited to: infiltration, evapotranspiration, and storage/reuse (e.g., rooftop catchment systems, vegetated filter strips and bioswales, stormwater detention basins, storm drain filters/inserts, and in-line clarifiers or separators).

3.3.3.4.3 Flood Control and Stormwater Drainage Mitigation Measures

The following measures would address construction and post-construction (occupancy) flooding impacts from the proposed project. (See the individual impact discussions for a listing of which mitigation measures would address which potentially significant impacts.)

Mitigation Measure Water-11: Drainage Plan. A drainage plan, including a detailed hydraulic analysis, shall be prepared to determine the needed capacity of new drainage and detention facilities. The volume of runoff for design storms must be estimated according to the standards provided in the VCWPD's Hydrology and Design manuals. Storm drain systems must be designed to comply with the requirements of the City of Oxnard Master Plan of Drainage by incorporating adequate capacity to convey a 10-year frequency storm. Sumps must be designed for a 50-year storm and provided with an emergency overflow escape path.

Mitigation Measure Water-12: Stormwater Control Structures and Devices. The projects in both the Northern and Southern subareas propose to construct detention basins to attenuate peak stormwater runoff flows. In the case of the Northern Subarea, the detention basin will take the form of an artificial lake. Due to the amount of water collected and the presence of shallow groundwater, these basins will require relatively large footprints to provide enough volume to perform their desired function. Detention basin storage volume shall be based on VCWPD hydrographs and the requirements of the VCWPD Hydrology Manual. Stormwater retention and protection structures (e.g., detention basins, outlet dissipaters, etc.) and other industry-standard erosion protection devices (e.g., silt fences, jute netting, straw bales, bioswales, etc.) shall be constructed, installed, and made operational during the initial phases of site grading. Pre- and post-construction surface runoff from the new residential developments shall not exceed existing conditions. A registered civil engineer specializing in flood control or other qualified professional shall design stormwater structures to ensure that adequate flood control capability is met.

Mitigation Measure Water-13: Construction Base Elevation. New construction shall have the lowest floor, including basement, elevated above the Base Flood Elevation (BFE). A general requirement is to elevate building pads at least one foot above the BFE.

Mitigation Measure Water-14: Road Elevation. At least one route of ingress and egress to any development shall be available during a 100-year flood.

3.3.3.4.4 Wastewater Mitigation Measures

Mitigation Measure Water-15: Downgradient Sewer Study. Prior to issuance of building permits, the City of Oxnard shall complete a sewer study and implement the recommended upgrades to the downgradient wastewater system to ensure that the existing system is adequate to convey sewage flows from the proposed Project.

3.4
AIR QUALITY

3.4 AIR QUALITY

3.4.1 Existing Conditions

This Air Quality section has been prepared according to the procedures outlined by the Ventura County Air Pollution Control District (Ventura County APCD, 2003). Ventura County is located in the South Central Coast Air Basin, which is comprised of Ventura, Santa Barbara, and San Luis Obispo counties (Figure 3.4-1).

The United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards to protect the health and welfare of the public. Table 3.4-1 details the federal and state air quality standards for criteria pollutants.

Ventura County is designated a severe non-attainment area for the state one-hour ozone standard, and recommended by the ARB as a non-attainment area for the federal eight-hour ozone standard. Table 3.4-2 identifies the number of days exceeding the federal and state ozone standards from 1990 to 2002. Table 3.4-3 details the maximum one-hour ozone concentrations in Ventura County during this same period.

Ventura County is designated a non-attainment area for the state standard for PM_{10} (particulate matter with an aerodynamic diameter of 10 microns or smaller). Table 3.4-4 details the number of violations of the state PM_{10} standard from 1990 to 2002. Other pollutants in Ventura County do not violate state or federal standards.

3.4.1.1 Meteorological Factors Affecting Air Quality

Ventura County often exhibits weak vertical and horizontal dispersion characteristics limiting the dispersion of emissions and causing increased ambient air pollutant levels. Persistent temperature inversions prevent vertical dispersion. The inversions act as a “ceiling” preventing pollutants from rising and dispersing. Surrounding mountain ranges act as “walls” that inhibit horizontal dispersion of air pollutants. The diurnal land/sea breeze pattern common in Ventura County recirculates air contaminants. Air pollutants are pushed toward the ocean during the early morning by the land breeze and toward the east during the afternoon by the sea breeze. This creates a “sloshing” effect, causing pollutants to remain in the area for several days. Residual emissions from previous days accumulate and chemically react with new emissions in the presence of sunlight, thereby increasing ambient air pollutant levels. This pollutant “sloshing” effect occurs predominantly from May through October (“smog season”). Air temperatures are usually higher and sunlight more intense during the smog season, explaining why Ventura County experiences more exceedances of the state and federal ozone standards during this six-month period.

TABLE 3.4-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards Concentration[1,3]	National Standards[2] Primary[3,4]	National Standards[2] Secondary[3,5]
Ozone	1 Hour	0.09 ppm (180 µg/m^3)	0.12 ppm (235 µg/m^3)[5] discontinued late 2005]	
	8 Hour	0.07 ppm (180 µg/m^3)	0.08 ppm (157 µg/m^3)[5]	Same as Primary Standard
Fine Particulate Matter ($PM_{2.5}$)	24 Hour		65 µg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m^3*	15 µg/m^3	
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	30 µg/m^3*	50 µg/m^3	
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	9.0 ppm (10 mg/m^3)	Same as Primary Standard
	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	None	0.053 ppm (100 µg/m^3)	Same as Primary Standard
	1 Hour	0.25 ppm (470 µg/m^3)	None	None
Lead	30 Day Average	1.5 µg/m^3	None	None
	Calendar Quarter	None	1.5 µg/m^3	Same as Primary Standard
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	None	80 µg/m^3 (0.3 ppm)	None
	24 Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)	None
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.7/km & 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent	None	None
Sulfates	24 hour	25 µg/m^3	None	None
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m^3)	None	None

* On June 20, 2002, the Air Resources Board approved staff's recommendation to revise the PM_{10} annual average standard to 20 µg/m^3 and to establish an annual average standard for $PM_{2.5}$ of 12 µg/m^3. These standards took effect on July 5, 2003. Information regarding these revisions can be found at http://www.arb.ca.gov/research/aaqs/std-rs/std-rs.htm.

1. California standards for ozone, carbon monoxide, sulfur dioxide (1- and 24- hour), nitrogen dioxide, suspended particulate matter PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly concentrations over the standard is equal or less than one. The 8-hour ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal or less than the standard. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect public health.
5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse affects of a pollutant.

Ormond Beach Specific Plan EIR **URS Corporation**	Figure 3.4-1. **VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT BOUNDARIES**	Nov. 2009

TABLE 3.4-2
NUMBER OF DAYS EXCEEDING THE FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS FOR OZONE*

Location	Days Exceeding National Standard/State Standard											
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
El Rio	0/7	0/8	0/2	0/1	0/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Ventura	0/4	1/10	0/2	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Simi Valley	22/85	13/73	2/47	4/37	2/31	1/31	2/32	1/14	1/26	0/18	0/13	1/14
Piru	1/20	0/17	0/6	1/4	0/3	0/3	0/16	0/10	0/27	0/6	0/7	0/8
Ojai	2/27	2/38	0/10	0/13	0/7	0/15	1/17	1/15	1/24	0/7	0/8	0/6
Thousand Oaks	1/28	5/26	0/20	1/13	0/9	0/6	0/4	0/3	0/13	0/5	0/2	0/2

*Federal 1-hour standard: >0.12 parts per million; State 1-hour standard: >0.09 parts per million

Source: Ventura County Air Pollution Control District (APCD), February 2003, California Air Resources Board, 2007

TABLE 3.4-3
MAXIMUM OZONE CONCENTRATIONS VENTURA COUNTY (PARTS PER MILLION)

Location	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
El Rio	0.12	0.12	0.10	0.11	0.10	0.08	0.09	0.09	0.08	0.08	0.08	0.09
Ventura	0.12	0.13	0.11	0.09	0.09	0.08	0.09	0.08	0.09	0.09	0.09	0.08
Simi Valley	0.17	0.16	0.13	0.17	0.13	0.13	0.13	0.12	0.13	0.12	0.12	0.13
Piru	0.13	0.12	0.11	0.13	0.10	0.10	0.12	0.12	0.12	0.10	0.12	0.12
Ojai	0.14	0.14	0.11	0.11	0.11	0.11	0.13	0.13	0.13	0.11	0.11	0.11
Thousand Oaks	0.15	0.14	0.12	0.13	0.11	0.10	0.12	0.12	0.11	0.11	0.11	0.10

3.4.1.2 Criteria Air Pollutants

A criteria air pollutant is any air pollutant for which the U.S. EPA or the ARB set an ambient air quality standard. Criteria pollutants include ozone (O_3), fine particulate matter ($PM_{2.5}$), respirable particulate matter (PM_{10}), carbon monoxide (CO), nitrogen dioxide (NO_2), lead (Pb), sulfur dioxide (SO_2), visibility-reducing particles, sulfates, and hydrogen sulfide. The following sections provide details regarding the criteria pollutants of concern for the proposed project. More information regarding each pollutant, including its effect on human health and the environment, is provided by the Ventura County APCD (2003: pages 2-6 through 2-13).

TABLE 3.4-4
NUMBER OF DAYS EXCEEDING THE STATE
AMBIENT AIR QUALITY STANDARDS FOR PM10*

Location	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
El Rio	3	1	3	1	1	1	2	2	5	1	2	0
Ventura	2	0	**	**	**	**	**	**	**	**	**	**
Simi Valley	8	2	4	0	6	3	4	3	6	0	1	1
Piru	4	5	8	1	2	3	1	1	2	0	***	***
Ojai	0	0	0	2	2	0	0	0	0	0	1	0
Thousand Oaks	4	1	3	0	5	6	1	0	3	1	***	***

*Greater than 50 micrograms per cubic meter
** No monitor at location
*** Insufficient data

3.4.1.2.1 Ozone

Ozone formation occurs in the atmosphere through a series of complex chemical reactions and transformations in the presence of sunlight. Ozone is a pungent, colorless, toxic gas and is the major air pollutant of concern in Ventura County. Oxides of nitrogen (NO_X) and reactive organic compounds (ROC) are the principal constituents in these reactions.

***Sources*.** O_3 is a secondary pollutant because formation occurs in the atmosphere through a complex series of chemical reactions, rather than being emitted directly into the air. The major sources of NO_X in Ventura County are motor vehicles and other combustion processes. The major sources of ROC in Ventura County are motor vehicles, cleaning and coating operations, petroleum production and marketing operations, and solvent evaporation.

3.4.1.2.2 Particulate Matter 10 Microns or Smaller in Diameter (PM_{10})

PM_{10} consists of particulate matter (fine dusts and aerosols) ten microns or smaller in aerodynamic diameter. Ten microns is about one-seventh the width of a human hair. When inhaled, particles larger than ten microns generally are caught in the nose and throat and do not enter the lungs. PM_{10} gets into the large upper branches of the lungs just below the throat, where they are captured and removed (by coughing, spitting, or swallowing).

***Sources*.** The primary sources of PM_{10} include paved and unpaved road dust, diesel exhaust, acidic aerosols, construction and demolition operations, soil and wind erosion, agricultural operations, residential wood combustion, and smoke. Secondary sources of PM_{10} include tailpipe emissions and industrial sources and have different constituents varying effects on health. Road dust is composed of many particles other than soil dust. It also includes engine exhaust, tire rubber, oil, and truckload spills. Diesel exhaust contains many toxic particles and elemental carbon (soot) and is identified as an air toxin in California. Airborne particles absorb and adsorb toxic substances and can be inhaled and lodge in the lungs. Once in the

lungs, the toxic substances are adsorbed into the bloodstream and carried throughout the body. PM_{10} concentrations tend to be lower during the winter months because meteorology greatly affects PM_{10} concentrations. During rain, concentrations are relatively low and on windy days PM_{10} levels can be high. Photochemical aerosols, formed by chemical reactions with manmade emissions, may also influence PM_{10} concentrations.

3.4.1.2.3 Particulate Matter 2.5 Microns or Smaller in Diameter ($PM_{2.5}$)

$PM_{2.5}$ is a mixture of particulate matter (fine dusts and aerosols) 2.5 microns or smaller in aerodynamic diameter. This is approximately 1/30 the size of a human hair. Particles 2.5 microns or smaller are transported into the deepest portions of the lungs where gas exchange occurs between the air and the blood stream. These are the most dangerous particles because the deepest portions of the lungs have no efficient mechanisms for removing them.

***Sources*.** $PM_{2.5}$ particles occur from activities such as industrial and residential combustion processes, wood burning, and from diesel and gasoline-powered vehicles. They are also formed in the atmosphere from gases such as SO_2, NO_X, ammonia, and volatile organic compounds (VOCs) emitted from combustion activities, and then become particles because of chemical transformations in the air (secondary particles).

3.4.1.2.4 Carbon Monoxide (CO)

Carbon monoxide is a colorless, odorless, highly toxic gas produced by natural and anthropogenic combustion processes.

***Sources*.** The major source of CO in urban areas is incomplete combustion of carbon containing fuels (primarily gasoline, diesel fuel, and natural gas). It also results from combustion processes, including forest fires and agricultural burning. Motor vehicles contribute over 80 percent of the CO emitted in urban areas.

Ambient CO concentrations are generally higher in the winter, usually on cold, clear days and nights with little or no wind. Low wind speeds inhibit horizontal dispersion, and surface inversions inhibit vertical mixing.

Traffic-congested intersections have the potential to result in localized high levels of CO. These localized areas of elevated CO concentrations are termed CO “hotspots.” CO hotspots are defined as locations where ambient CO concentrations exceed the State Ambient Air Quality Standards (20 ppm, 1-hour; 9 ppm, 8-hour).

3.4.1.2.5 Nitrogen Dioxide (NO_2)

Nitrogen dioxide is formed in the atmosphere primarily by the rapid reaction of the colorless gas nitric oxide (NO) with atmospheric oxygen. It is a reddish brown gas with an odor similar to that of bleach. NO_2 participates in the photochemical reactions that result in ozone.

***Sources*.** The greatest source of NO, and subsequently NO_2 (referred to collectively as NO_X), is the high-temperature combustion of fossil fuels such as in motor vehicle engines and power plant boilers.

3.4.1.2.6 Lead (Pb)

Lead is a bluish-gray metal that occurs naturally in small quantities. Lead also occurs in a variety of compounds such as lead acetate, lead chloride, lead chromate, lead nitrate, and lead oxide. Pure lead is insoluble in water, but some lead compounds are water-soluble.

***Sources*.** Lead and lead compounds in the atmosphere often come from fuel combustion sources, such as the burning of solid waste, coal, and oils. Atmospheric lead may also result from lead in entrained dust and dirt contaminated with lead.

3.4.1.2.7 Sulfur Dioxide (SO_2)

Sulfur dioxide is a colorless gas with a sharp, irritating odor. It reacts in the atmosphere to produce sulfuric acid and sulfates that contributes to acid deposition and atmospheric visibility reduction. It also contributes to the formation of PM_{10}.

***Sources*.** Most of the SO_2 emitted is from burning fossil fuels containing sulfur.

3.4.1.3 Toxic Air Contaminants

Toxic air contaminants (TACs), also referred to as hazardous air pollutants, are air pollutants (excluding O_3, CO, SO_2, and NO_2) that cause cancer, developmental effects, reproductive dysfunction, neurological disorders, heritable gene mutations, or other serious or irreversible acute or chronic health effects in humans. Regulation of TACs occurs under different federal and state regulatory processes than the criteria air pollutants. Generally, health effects of TACs occur at extremely low levels and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TACs generally consist of four types:

1. Organic chemicals, such as benzene, dioxins, toluene, and percholorethylene
2. Inorganic chemicals such as chlorine and arsenic
3. Fibers such as asbestos
4. Metals such as mercury, cadmium, chromium, and nickel

The U.S. EPA, the State of California, and other governmental agencies define these air contaminants. Currently, federal, state, and local jurisdictions regulate over 900 substances.

***Sources*.** Toxic air contaminants are produced by a great variety of sources, including industrial facilities such as refineries, chemical plants, chrome plating operations, and surface coating operations; commercial facilities such as dry cleaners and gasoline stations; motor vehicles, especially diesel-powered vehicles; and, consumer products. Emissions of TACs occur through normal industrial operations, as well as from accidental releases during process-upset conditions.

3.4.1.4 Other Pollutants Of Concern

3.4.1.4.1 Odors

Odors are substances in the air that pose a nuisance to nearby land uses such as residences, schools, daycare centers, and hospitals. Odors are typically not a health concern, but can interfere with the use and enjoyment of nearby property.

***Sources*.** Odors are generated by a wide variety of sources. Following are examples of facilities and operations that may generate significant odors for this project and create a nuisance to nearby sensitive receptors:

- Portable asphalt batch plants
- Painting and coating operations
- Diesel exhaust from on- and off-road trucks and construction equipment
- Wastewater treatment plant aeration ponds
- Large water bodies such as natural or artificial lakes with inadequate aeration

3.4.1.4.2 Fugitive Dust

Fugitive dust refers to solid particulate matter that becomes airborne because of wind action and human activities. Fugitive dust particles are mainly soil minerals, but also can be sea salt, pollen, spores, and tire particles. About half of fugitive dust particles (by weight) are larger than 10 microns and settle quickly. Fugitive dust particles 10 microns or smaller can remain airborne for weeks.

***Sources*.** The primary sources of fugitive dust are grading and excavation operations. Unpaved roadways also are a large source of fugitive dust. Other sources of fugitive dust include unpaved roadway shoulders, material stockpiles, abrasive blasting operations, and off-road vehicles. The amount of fugitive dust created by such activities is dependent largely on the type of soil, type of operation taking place, size of the area, degree of soil disturbance, soil moisture content, and wind speed.

3.4.1.4.3 Greenhouse Gases

Greenhouse gas refers to gases present in the atmosphere which reduce the loss of heat into space and contribute to global temperatures through the greenhouse effect. Greenhouse gases are required to maintain the temperature of the Earth. During the past century humans have substantially added to the amount of greenhouse gases in the atmosphere by burning fossil fuels such as coal, natural gas, oil and gasoline to power cars, factories, utilities and appliances. The added gases (primarily carbon dioxide and methane) are enhancing the natural greenhouse effect, and likely contributing to an increase in global average temperature and related climate changes.

Section 3.4.3.6, Global Climate Change, provides a more detailed description of the sources, effects, and the regulatory framework for greenhouse gases.

3.4.2 Regulatory Framework

3.4.2.1 California Environmental Quality Act (CEQA)

The State Legislature enacted CEQA (Public Resources Code (PRC) §§21000 - 21177) in 1970. The purpose of CEQA is to ensure that governmental decision makers and the public are informed of potential significant environmental effects of proposed projects and activities. EIRs must include a discussion of applicable regional plans, such as the air quality attainment or maintenance plan. CEQA also requires environmental impacts be avoided or reduced where feasible. The Ventura County APCD published its *Air Quality Assessment Guidelines* (2003), which are used in describing and evaluating air quality impacts in this EIR.

3.4.2.2 Federal Clean Air Act (CAA)

The first comprehensive national air pollution legislation was the federal Clean Air Act of 1970. Amendments to the federal Clean Air Act occurred in 1977 and required plans for meeting the national health-based standards "as expeditiously as practicable," but no later than December 31, 1982. In 1990, significant amendments occurred to the federal Clean Air Act Amendments (CAAA). Under the CAAA, areas that do not meet the federal one-hour ozone standard are classified according to the severity of each area's respective ozone problem. The classifications are Marginal, Moderate, Serious, Severe, and Extreme. Marginal areas are closest to meeting the federal one-hour ozone standard. Extreme areas have the worst air quality problems.

In 2002, Ventura County achieved the 1-hour ozone standard for the first time as measured by the "design value," which is the fourth highest 1-hour ozone concentration averaged over a three-year period (for years 2000-2002, with a design value of 12.4 parts per hundred

million [pphm]). A design value is a statistic used to describe the air quality of an area relative to the respective NAAQS. Design values are used to classify nonattainment areas and assess progress towards meeting the NAAQS, and for developing clean air strategies. Despite meteorological conditions conducive to ozone formation, Ventura County has continued to meet the federal 1- hour ozone standard (VCAPCD, 2007).

The CAAA contain a number of requirements designed to improve air quality. These include motor vehicle emission limits, pollution controls on industrial facilities, use of low-polluting vehicle fuels, permit and compliance programs, and economic incentives to encourage industries to curtail emissions.

In July 1997, the U.S. EPA approved new federal standards for $PM_{2.5,}$ and modified the PM_{10} and ozone standards. The 1997 federal standards are presented in Table 3.4-1, Ambient Air Quality Standards.

3.4.2.3 California Clean Air Act (CCAA)

The CCAA was enacted on September 30, 1988, and became effective January 1, 1989. The purpose of the CCAA is to achieve the more stringent health-based state clean air standards at the earliest practicable date.

The state standards are more stringent than the federal air quality standards. Similar to the federal Clean Air Act, the CCAA also classifies areas according to pollution levels. Under the CCAA, Ventura County is classified as a severe ozone non-attainment area, and is a state PM_{10} non-attainment area. The CCAA requires attainment of the standards at the earliest practicable date. Further, district-wide air emissions must be reduced at least five percent per year (averaged over three years) for each non-attainment pollutant or its precursors. A district may achieve a smaller average reduction if the district can demonstrate that, despite inclusion of every feasible measure in its air quality plan, it is unable to achieve the five percent annual reduction in emissions.

On June 20, 2002, the ARB approved revisions to the PM_{10} annual average standard, and established an annual average standard for $PM_{2.5}$. These standards are presented in Table 3.4-1.

3.4.2.4 Ventura County Air Quality Management Plan

The 1995 Air Quality Management Plan (AQMP) revisions occurred in response to the CCAA and elaborated on information contained in previous AQMPs. It also included new and modified control measures designed to move the county closer to achieving state clean air standards.

Preparation of the 1995 AQMP revision satisfied the planning requirements of the CAAA and outlined a strategy for meeting the federal one-hour ozone clean air standard while accommodating anticipated growth. The District proposed revisions to the 1995 AQMP in 2004 that demonstrated that Ventura County will continue to show ongoing progress in reducing emissions, and that changes to the on-road motor vehicle emissions budget will not delay progress in attaining the federal one-hour ozone standard.

3.4.2.4.1 Consistency with the Clean Air Plan

The VCAPCD Clean Air Plan provides a detailed estimate of long-range emissions for the region consistent with regional growth and development plans. The project site is within the jurisdiction of the County. The project appears consistent with growth projections identified in the VCAPCD Clean Air Plan.

3.4.3 Project Impacts and Mitigation

Motor vehicles are the primary source of air pollutant emissions associated with residential, commercial, institutional, and some industrial land uses. These land uses may not result in significant amounts of direct emissions, but they may generate motor vehicle trips, whose emissions may adversely affect air quality. These land uses are referred to as "indirect" emission sources.

ARB developed the URBEMIS program in 1982. This computer program was designed to estimate air emissions from land use development projects. The most current version of the URBEMIS program is URBEMIS2007 (Version 9.2.4). URBEMIS2007 applies ARB's most recent motor vehicle emission factor model, EMFAC2007. URBEMIS allows the user to select mitigation measures for construction emissions, area source emissions, and project operational emissions. Motor vehicle trip rates in URBEMIS are based primarily on the average daily trip data for the various land uses in the Institute of Transportation Engineers' (ITE) publication *Trip Generation*, Sixth Edition (1997).

URBEMIS requires entry of project-specific information concerning the number and type of units for each land use. The number of daily vehicle trips associated with each land use is derived from the traffic report, Ormond Beach Traffic Impact Analysis (RBF, 2006). Whenever project-specific data is not available, Ventura County-specific default inputs built into the program are used. These defaults were obtained from the Ventura County Air Pollution Control District, the ARB (http://www.arb.ca.gov/planning/urbemis/urbemis2002/urbemis2002.htm), or the South Coast Air Quality Management District (http://www.aqmd.gov/ceqa/urbemis.html). The URBEMIS computer program model outputs are presented in Appendix C.

3.4.3.1 Thresholds of Significance

Section 15002(g) of the CEQA Guidelines defines "significant effect on the environment" as "a substantial adverse change in the physical conditions that exist in the area affected by the proposed project." When an environmental document identifies a significant environmental effect, the government agency approving the project must make findings as to whether the adverse environmental effects have been substantially reduced or if not, why they were not substantially reduced. A project will have a "potentially significant impact" on air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)
- Expose the public (especially schools, day care centers, hospitals, retirement homes, convalescence facilities, and residences) to substantial pollutant concentrations
- Create objectionable odors affecting a substantial number of people

3.4.3.1.1 Ozone – Based on Emission Levels of Reactive Organic Compounds and Oxides of Nitrogen

The Ventura County Air Pollution Control Board has established a threshold of 25 pounds per day for reactive organic compounds (ROC) and nitrogen oxides (NO_X). Levels exceeding these thresholds have been determined to individually and cumulatively jeopardize attainment of the federal one-hour ozone standard, and thus have a significant adverse impact on air quality in Ventura County (excluding the Ojai Planning Area).

3.4.3.1.2 Criteria Pollutants – General

A project that may cause an exceedance of any ambient air quality standard (state or federal), or may make a substantial contribution to an existing exceedance of an air quality standard will have a significant adverse air quality impact. "Substantial" is defined as making measurably worse an existing exceedance of a state or federal ambient air quality standard. For example, a project that directly or indirectly produces large quantities of carbon monoxide (CO) could cause an exceedance of the state or federal CO standards. Such a determination may require the use of an appropriate air quality model.

3.4.3.1.3 Ozone – Cumulative Impacts Based on Project-Specific AQMP Consistency

A project with emissions of two pounds per day or greater of ROC, or two pounds per day or greater of NO_X that is found to be inconsistent with the AQMP will have a significant cumulative adverse air quality impact. A project with emissions below two pounds per day of ROC, and below two pounds per day of NO_X, is not required to assess consistency with the AQMP. Inconsistent projects are usually those that cause the existing population to exceed the population forecasts contained in the most recently adopted AQMP.

3.4.3.1.4 Ozone – Cumulative Impacts Based on General AQMP Consistency

Any General Plan Amendment or revision that would provide directly or indirectly for increased population growth above that forecasted in the most recently adopted AQMP will have a significant cumulative adverse air quality impact.

3.4.3.2 Project Impacts

3.4.3.2.1 Northern Subarea

Impact AQ-1: Soil Import in the Northern Subarea. The Northern Subarea would require import of fill from an offsite source. The import material will be transported to the site during the rough grading operation and will be deposited into fills as part of the grading operations. Emissions from the transport of the fill were estimated using URBEMIS2007. Appendix C includes data and assumptions used to estimate mitigated and unmitigated transport of fill material. Table 3.4-5 summarizes the results of the URBEMIS model run for the soil import activities, showing both the unmitigated and mitigated impacts for particulates and ozone.

TABLE 3.4-5
SOIL IMPORT AIR QUALITY
IMPACTS NORTHERN SUBAREA

	ROC	NO_X	CO	SO_2	Total PM_{10}	PM_{10} Exhaust	Dust
Totals (lbs/day,unmitigated)	16.63	240.00	82.88	0.28	109.99	8.93	101.06
Totals (lbs/day, mitigated)	16.63	240.00	82.88	0.28	32.76	8.93	23.83

Emissions from trucks transporting the fill could potentially create localized hotspots of toxic air contaminants. The haul route is from the fill source near Laguna and Hueneme roads along Hueneme Road to the project site, and does not pass close to sensitive receptors. Consequently, the Ventura County APCD is not requesting a health risk assessment for the transport of the fill.

Impacts from ground disturbances and equipment operation would be *significant but feasibly mitigated (Class II).*

Impact AQ-2: Construction-Related Particulates. Ground disturbances and equipment operation during construction activities produce potentially significant, but feasibly mitigated short-term PM_{10} emissions (Table 3.4-6). Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories: entrained dust, and vehicle and equipment emissions. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} emissions.

Although the APCD has no quantitative significance criteria for construction-generated PM_{10} emissions, the District recommends that such emissions be minimized. Dust mitigation measures are required for all discretionary construction activities regardless of the significance in impacts based on policies in the County's Air Quality Assessment Guidelines (2003). Impacts would be considered *significant but feasibly mitigated (Class II).*

TABLE 3.4-6
CONSTRUCTION-RELATED PARTICULATE EMISSIONS NORTHERN SUBAREA (LBS/DAY)

		Exhaust PM_{10}	Dust PM_{10}	Total PM_{10}
2010	Unmitigated	8.93	1086.03	1092.44
	Mitigated	8.93	247.24	253.65
2011	Unmitigated	6.03	1.85	7.89
	Mitigated	6.03	1.85	7.89
2012	Unmitigated	3.96	1.84	5.80
	Mitigated	3.96	1.84	5.80
2013	Unmitigated	3.58	1.84	5.42
	Mitigated	3.58	1.84	5.42
2014	Unmitigated	3.21	1.84	5.05
	Mitigated	3.21	1.84	5.05
2015	Unmitigated	2.99	1.84	4.83
	Mitigated	2.99	1.84	4.83

Impact AQ-3: Construction-Related Emissions. Architectural coatings and heavy equipment used during proposed construction activities produces combustive NO_X and ROG emissions (Table 3.4-7). Emissions from the construction of development projects are accounted for in the County ozone attainment planning process. Short-term impacts from ROC and NO_X emissions from construction equipment would be *significant and unavoidable (Class I).*

TABLE 3.4-7
CONSTRUCTION-RELATED EMISSIONS IN NORTHERN SUBAREA (LBS/DAY)

		ROC	NO_X	CO	SO_2
2010	Unmitigated	16.63	240.00	82.88	0.28
	Mitigated	16.63	240.00	82.88	0.28
2011	Unmitigated	74.72	116.57	264.92	0.36
	Mitigated	27.25	116.57	264.92	0.36
2012	Unmitigated	69.76	86.79	235.26	0.36
	Mitigated	25.11	86.79	235.26	0.36
2013	Unmitigated	68.55	77.96	218.59	0.36
	Mitigated	23.86	77.96	218.59	0.36
2014	Unmitigated	67.46	69.83	203.29	0.36
	Mitigated	22.76	69.83	203.29	0.36
2015	Unmitigated	66.47	62.35	189.02	0.36
	Mitigated	18.99	62.35	189.02	0.36

Impact AQ-4: Project-Related Emissions. Occupancy of the residential and commercial uses in the Northern Subarea would produce ROC and NO_X emissions from all combined project sources, including vehicular traffic, space heating, water heating, and consumer products. These project-related emissions were estimated using the URBEMIS2007 model, assuming the project would be fully built-out by the year 2020. Input data to URBEMIS 2007 included vehicle trips, vehicle fleet mix, winter and summer temperatures, trip characteristics, variable start information, emission factors, and trip distances. The model applies Ventura County default data for the modeling analysis. In addition to estimating mobile source emissions, the URBEMIS2007 model also estimated emissions from the project area sources. Appendix C includes data and assumptions used to estimate unmitigated and mitigated area and operational emissions from the project area. While URBEMIS2007 predicts peak daily emissions for both summer and winter, this analysis uses emissions predicted for the summer because it is the peak ozone season. Table 3.4-8 summarizes peak daily emissions, showing the mitigated combined project source emissions exceed the APCD threshold of 25 pounds per day for ROC and NO_X.

TABLE 3.4-8
SUMMARY OF ESTIMATED PROJECT-RELATED EMISSIONS*

Area Source Emission Estimates	ROC	NO_X	CO	SO_2	PM_{10}
Totals (lbs/day, unmitigated)	87.07	16.62	43.29	0.00	0.13
Totals (lbs/day, mitigated)	84.00	13.30	34.63	0.00	0.10
Project-Related (Vehicles) Emission Estimates					
Totals (lbs/day, unmitigated)	93.15	73.97	735.83	1.16	235.24
Totals (lbs/day, mitigated)	91.32	72.03	716.83	1.14	229.18
Sum of Area and Project-Related Emission Estimates					
Totals (lbs/day, unmitigated)	180.22	90.59	779.12	1.16	235.37
Totals (lbs/day, mitigated)	175.32	85.33	751.46	1.14	229.28

*Reflects summer season predictions because that is Ventura County's peak ozone season.

The "mitigation" component of URBEMIS2007 accounted for existing environmental factors applicable to the project such as sidewalks, transit service, and bike paths. URBEMIS2007 provided minimal credit for a number of emissions-reducing project design components. These include the following:

Components to reduce the reliance on vehicles and encourage walking:

- Walkways to open space areas and beach
- Walking sites within the development
- Areas dedicated as home offices in all single-family dwellings
- Shade trees to shade buildings
- Visually interesting walk areas

Components to encourage biking:

- Close proximity to beach and open space areas

Components to increase site safety and security – site layout:

- Exterior building and street lighting

As identified in Table 3.4-8, the estimated project operations air pollutant emissions after implementation of the above-described design features are insufficient to reduce ROC and NO_X emissions below the APCD daily emission threshold. Impacts from project-related emissions are considered a *significant and unavoidable impact (Class I).*

3.4.3.2.2 Southern Subarea.

Impact AQ-5: Construction-Related Particulates. Ground disturbances and equipment operation during construction activities produce potentially significant, but feasibly mitigated short-term PM_{10} emissions (Table 3.4-9). Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories: entrained dust and vehicle and equipment emissions. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} emissions.

TABLE 3.4-9
CONSTRUCTION-RELATED
PARTICULATES SOUTHERN SUBAREA

		Exhaust PM_{10}	Dust PM_{10}	Total PM_{10}
2011	Unmitigated	6.25	1600.03	1606.28
	Mitigated	6.25	364.24	370.49
2012	Unmitigated	15.56	1604.01	1619.57
	Mitigated	15.56	368.22	383.78
2013	Unmitigated	12.64	1603.99	1616.63
	Mitigated	12.64	368.21	380.85
2014	Unmitigated	7.78	3.98	11.76
	Mitigated	7.78	3.98	11.76
2015	Unmitigated	7.09	3.98	11.08
	Mitigated	7.09	3.98	11.08
2016	Unmitigated	6.42	3.98	10.40
	Mitigated	6.42	3.98	10.40
2017	Unmitigated	5.89	3.98	9.87
	Mitigated	5.89	3.98	9.87
2018	Unmitigated	5.45	3.98	9.43
	Mitigated	5.45	3.98	9.43
2019	Unmitigated	5.08	3.98	9.06
	Mitigated	5.08	3.98	9.06
2020	Unmitigated	4.75	3.98	8.74
	Mitigated	4.75	3.98	8.74
2021	Unmitigated	3.91	3.98	7.89
	Mitigated	3.91	3.98	7.89
2022	Unmitigated	3.91	3.98	7.89
	Mitigated	3.91	3.98	7.89
2023	Unmitigated	3.91	3.98	7.89
	Mitigated	3.91	3.98	7.89

Although the Ventura County APCD currently has no quantitative significance criteria for construction-generated PM_{10} emissions, the District recommends that such emissions be minimized. Dust mitigation measures are required for all discretionary construction activities regardless of the significance in impacts based on policies in the County's Air Quality Assessment Guidelines Document. Impacts would be considered *significant but feasibly mitigated (Class II).*

Impact AQ-6: Construction-Related Emissions. Architectural coatings and heavy equipment used during proposed construction activities produce combustive NO_X and ROC emissions (Table 3.4-10). However, emissions from the construction of development projects are accounted for in the County ozone attainment planning process. Short-term impacts from ROC and NO_X emissions from construction equipment would be *significant and unavoidable (Class I).*

TABLE 3.4-10
CONSTRUCTION-RELATED
EMISSIONS SOUTHERN SUBAREA

		ROG	NO_X	CO	SO_2
2011	Unmitigated	15.37	120.66	63.17	0.01
	Mitigated	15.37	120.66	63.17	0.01
2012	Unmitigated	75.47	359.47	515.24	0.84
	Mitigated	46.04	359.47	515.24	0.84
2013	Unmitigated	68.97	307.46	467.90	0.83
	Mitigated	40.14	307.46	467.90	0.83
2014	Unmitigated	55.97	193.87	391.35	0.83
	Mitigated	27.14	193.87	391.35	0.83
2015	Unmitigated	53.84	171.48	363.01	0.83
	Mitigated	25.01	171.48	363.01	0.83
2016	Unmitigated	52.00	153.73	339.14	0.83
	Mitigated	23.17	153.73	339.14	0.83
2017	Unmitigated	50.51	139.24	317.09	0.83
	Mitigated	21.68	139.24	317.09	0.83
2018	Unmitigated	49.07	127.05	296.80	0.83
	Mitigated	20.24	127.05	296.80	0.83
2019	Unmitigated	47.82	116.38	278.13	0.83
	Mitigated	18.99	116.38	278.13	0.83
2020	Unmitigated	46.67	107.10	260.61	0.83
	Mitigated	17.85	107.10	260.61	0.83
2021	Unmitigated	42.90	78.24	193.69	0.83
	Mitigated	14.07	78.24	193.69	0.83
2022	Unmitigated	42.90	78.24	193.69	0.83
	Mitigated	14.07	78.24	193.69	0.83
2023	Unmitigated	42.90	78.24	193.69	0.83
	Mitigated	13.46	78.24	193.69	0.83

Impact AQ-7: Project-Related Emissions. Occupancy of the business park and industrial uses in the Southern Subarea would produce ROC and NO_X emissions from all combined project sources, including vehicular traffic, space heating, water heating, and consumer products. These project-related emissions were estimated using the URBEMIS2007 model, assuming the project would be fully built-out by the year 2020. Input data to URBEMIS 2007 included vehicle trips, vehicle fleet mix, winter and summer temperatures, trip characteristics, variable start information, emission factors, and trip distances. The model applies Ventura County default data for the modeling analysis. In addition to estimating mobile source emissions, the URBEMIS2007 model also estimated emissions from the project area sources. Appendix C includes data and assumptions used to estimate unmitigated and mitigated area and operational emissions from the project area. While URBEMIS2007 predicts peak daily emissions for both summer and winter, this analysis uses emissions

predicted for the summer because it is the peak ozone season. Table 3.4-11 summarizes peak daily emissions, showing the mitigated combined project source emissions exceed the APCD threshold of 25 pounds per day for ROC and NO_X.

TABLE 3.4-11
SUMMARY OF ESTIMATED OPERATIONAL AIR POLLUTANT EMISSIONS*

Area Source Emission Estimates	ROC	NO_x	CO	SO_2	PM_{10}
Totals (lbs/day, unmitigated)	26.53	7.09	10.55	0.00	0.03
Totals (lbs/day, mitigated)	23.79	5.68	8.44	0.00	0.02
Operational (Vehicles) Emission Estimates					
Totals (lbs/day, unmitigated)	147.39	133.02	1331.21	2.10	424.39
Totals (lbs/day, mitigated)	144.52	130.01	1301.10	2.05	414.79
Sum of Area and Operational Emission Estimates					
Totals (lbs/day, unmitigated)	173.92	140.11	1341.76	2.10	424.42
Totals (lbs/day, mitigated)	168.31	135.69	1309.54	2.05	414.81

*Reflects summer season predictions because that is Ventura County's peak ozone season.

The "mitigation" component of URBEMIS2007 accounted for existing environmental factors applicable to the project such as sidewalks, transit service, and bike paths. URBEMIS2007 provided minimal credit for a number of emissions-reducing project design components. These include the following:

Components to reduce the reliance on vehicles and encourage walking:

- Walkways to open space areas and beach
- Walking sites within the development
- Shade trees to shade buildings
- Visually interesting walk areas

Components to encourage biking:

- Close proximity to beach and open space areas

Components to increase site safety and security – site layout:

- Exterior building and street lighting

As identified in Table 3.4-11, the estimated project operations air pollutant emissions after implementation of the above-described design features are insufficient to reduce ROC and NO_X emissions below the County daily emission threshold. Impacts from project-related emissions are considered a *significant and unavoidable impact (Class I).*

3.4.3.3 Cumulative Impacts

***Impact AQ-8: Contribution to Cumulative Particulates*.** The Ventura County APCD states that a project's contribution to cumulative air quality impacts should be evaluated based on its consistency with the land use assumptions in the AQMP. The basis for determination of cumulative effect is, therefore, a comparison of the development proposed by the specific plans with the land use assumptions of the AQMP (i.e., City's 2020 General Plan Land Use Map). Ventura County is currently in non-attainment of state standards for PM_{10} emissions, and project-generated PM_{10} emissions could exacerbate such non-attainment. Proposed development of the Study Area according to the specific plans, while generally consistent with the Oxnard 2020 General Plan and, thus, the AQMP, would result in potentially significant impacts. Implementation of standard dust control measures should, however, would ensure that the project's contribution to cumulative levels of PM_{10} emissions is minimized. Thus, the projects' cumulative contribution to particulates would be *significant but feasibly mitigated (Class II).*

***Impact AQ-9: Cumulative Emissions*.** A project with emissions of two pounds per day or greater of ROC, or two pounds per day or greater of NO_X, that is found to be inconsistent with the AQMP will have a significant cumulative adverse air quality impact. Inconsistent projects are usually those that cause the existing population to exceed the population forecasts contained in the most recently adopted AQMP or more recent population forecasts.

Section 4.2.3 of the Ventura County APCD Guidelines outlines a method for evaluating the population growth associated with a project with respect to projected population growth in the area to determine consistency or inconsistency with the adopted AQMP. The Study Area has been identified as a Specific Plan Study Area in the City's 2020 General Plan. While the proposed project would require approval of a General Plan Amendment because the proposed subareas differ from those adopted in the General Plan, the proposed project generally conforms with the City's 2020 General Plan. Additionally, as determined in the analysis in Section 3.7 (Land Use and Planning), the project would not result in any significant land use and planning impacts.

According to the City's 2020 General Plan, under existing land use designations, the build-out of the Ormond Beach area could result in up to 3,500 residential units. The proposed project would result in the development of a 1,283 residential units. As the proposed project would result in considerably fewer residential units within the Ormond Beach Specific Plan Study Area than the General Plan, the project would not result in growth exceeding adopted population projections. Based on the Ventura County APCD guidelines, the proposed project is consistent with the AQMP and would not result in a cumulatively significant impact. Thus, the project would result in *less than significant (Class III)* cumulative impacts.

Impact AQ-10. CO Hotspots. Implementation of the proposed project would lead to increased traffic volumes on local roadways. An analysis of potential CO concentrations based on 2020 project conditions using CALINE4 was conducted to estimate potential exposure of sensitive receptors to substantial CO concentrations (or "hotspots"). The results show that implementation of the project would not expose sensitive receptors to substantial CO concentrations. Table 3.4-12 shows that CO concentrations are well below established state and federal thresholds. This impact would be *less than significant (Class III).*

TABLE 3.4-12
YEAR 2020 CARBON MONOXIDE CONCENTRATION (PPM)

Intersection	Receptor Location at Street Corners	With Project CO Concentration	
		1-hour[a]	8-hour[a]
Rose Avenue & Camino Del Sol	SE	7.7	3.9
	NW	7.7	3.9
	SW	7.7	3.9
	NE	7.8	3.9
Rose Avenue & 1st Street	SE	7.8	3.9
	NW	7.8	3.9
	SW	7.8	3.9
	NE	7.8	3.9
Rose Avenue & Sanford Street	SE	7.5	3.7
	NW	7.5	3.7
	SW	7.5	3.7
	NE	7.5	3.7

[a] All data are in parts per million (ppm). Includes the ambient 1-hour CO concentration of 7.2 ppm and the ambient 8-hour CO concentration of 3.5 ppm recorded at the Rio Mesa, El Rio air monitoring station in year 2003, which are the highest CO concentrations measured in the last three years. State and national 1- hour standards are 20 and 35 ppm, respectively. State and national 8-hour standards are both 9 ppm.

Source: URS Inc., 2006.

3.4.3.4 Mitigation Measures

Mitigation measures were based in a large part on the Ventura County Air Quality Assessment Guidelines (2003).

Mitigation Measure AQ-1: Dust Control Measures. Dust generated by project construction shall be kept to a minimum by following the dust control measures listed below (addresses impacts AQ-1, AQ-2 and AQ-5):

1. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.

2. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
3. Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:

a. All trucks shall cover their loads as required by California Vehicle Code §23114.
b. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.

4. Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be hydroseeded and watered until growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
5. Signs shall be posted onsite limiting traffic to 15 miles per hour or less.
6. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by onsite activities and operations from being a nuisance or hazard, either offsite or onsite. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.
7. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
8. Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

These measures shall be included as conditions of approval for Tentative Tract Maps, Coastal Development Permits, or land use permit for grading or development within the Specific Plan.

In addition, the following measures should be considered to minimize the Valley Fever risk during project construction:

1. Restrict employment to persons with positive coccidioidin skin tests (since those with positive tests can be considered immune to reinfection).
2. Hire crews from local populations where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.
3. Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.
4. Require that the cabs of grading and construction equipment be air-conditioned.
5. Require crews to work upwind from excavation sites.
6. Pave construction roads.
7. Where acceptable to the fire department, control weed growth by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.
8. During rough grading and construction, the access way into the project site from adjoining paved roadways should be paved or treated with environmentally-safe dust control agents.

Mitigation Measure AQ-2: Construction-Related Control Measures. ROC and NO_X emissions generated by project construction shall be kept to a minimum by following the control measures listed below (addresses impacts AQ1, AQ-2, AQ-3, AQ-5, and AQ-6):

1. Minimize equipment idling time.
2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.
4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.
5. Use low VOC architectural coatings to reduce evaporative ROC emissions.

The applicant shall include these measures as notes on a separate sheet attached to the grading plans to be reviewed and approved prior to approval of any Coastal Development Permit or land use or grading permit for development.

Mitigation Measure AQ-3: Operational Control Measures. Measures to reduce operational and vehicle emissions to the extent feasible shall be identified and incorporated in conditions of approval for any Tentative Tract Map or development permit within the Specific Plan. These measures may be drawn from the following list provided by the Ventura County APCD in Table 3.4-13 (addresses impacts AQ-4 and AQ-7).

Prior to approval of any Tentative Tract Map, Coastal Development Permit or land use or grading permit for construction of residential dwelling units and/or accessory habitable

structures, the City of Oxnard shall review the project plans and confirm the inclusion of feasible mitigation measures.

Mitigation Measure AQ-4: TDM Fee Program. A Transportation Demand Management (TDM) Fee Program shall be developed for the project and approved by the City of Oxnard prior to the issuance of the first building permit for any project within the Study Area. This program shall determine the total TDM fee to be paid for individual projects within the Study Area, consistent with City standards and the methodology identified in Section 7.5.3 of the Ventura County APCD Guidelines (addresses impacts AQ-4 and AQ-7).

TABLE 3.4-13
MEASURES TO REDUCE OPERATIONAL AND VEHICLE EMISSIONS TO THE EXTENT FEASIBLE

Measure Type	Mitigation Measures
	Area Source
Residential Water Heaters	Use solar or low-emission water heaters
	Use central water heating systems
Residential Heating	Orient buildings to the north for natural cooling and heating
	Increase walls and attic insulation beyond Title 24[1] requirements
Residential Landscape Maintenance	Provide electric maintenance equipment
Commercial Water Heaters	Use solar or low-emission water heaters
	Use central water heating systems
Commercial Heating	Orient buildings to the north for natural cooling and heating
	Increase walls and attic insulation beyond Title 24[1] requirements
Commercial Landscape Maintenance	Provide electric maintenance equipment
Industrial Heating	Orient buildings to the north for natural cooling and heating
	Residential
Transit Infrastructure	Project density meets transit level of service requirements
	Provide transit shelters, benches, etc.
	Provide street lighting
	Provide route signs and displays
	Provide bus turnouts/bulbs
Pedestrian Infrastructure	Mixed-use project (residential oriented)
	Provide sidewalks and/or pedestrian paths
	Provide direct pedestrian connections
	Provide pedestrian safety design/infrastructure
	Provide street furniture and artwork
	Provide street lighting
	Provide pedestrian signalization and signage
Bicycle Infrastructure	Provide bike lanes/paths connecting to bikeway system
Trip Reduction/VMT	Park-and-ride lots[2] and satellite telecommuting center[3]
	Commercial/Industrial
Transit Infrastructure	Project density meets transit level of service requirements
	Provide transit shelters, benches, etc.
	Provide street lighting
	Provide route signs and displays
	Provide bus turnouts/bulbs

TABLE 3.4-13 (CONTINUED)
MEASURES TO REDUCE OPERATIONAL AND VEHICLE EMISSIONS TO THE EXTENT FEASIBLE

Measure Type	Mitigation Measures
Pedestrian Infrastructure	Mixed-use project (commercial oriented)
	Floor area ratio 0.75 or greater
	Provide wide sidewalks and onsite pedestrian facilities
	Project uses parking structure(s)/small dispersed lots
	Provide street lighting
	Provide shade trees to shade sidewalks
	Provide street art and/or street furniture
	Project uses zero building setback with entrance on street
	Provide pedestrian safety designs/infrastructure at crossings
	Articulated storefront display windows for visual interest
	No long uninterrupted walls along pedestrian access routes
Bicycle Infrastructure	Provide bike lanes/paths connecting to bikeway system
	Provide secure bicycle parking
	Provide employee lockers and showers
Trip Reduction	Charge for employee parking
	Shuttle/minibus service to transit/multimodal center
	Preferential carpool/vanpool parking
	Parking limited (below minimum)
	Employee rideshare incentive program
	Day care center onsite or within ½ mile
	Employee telecommuting program Compressed work schedule
	Charge for customer parking
	Commercial/Industrial
VMT	Lunch/shopping shuttle service
	Provide onsite shops and services
	- many frequently needed services
	- some frequently needed services
	- minor services
Trip Reduction/VMT	Park-and-ride lots[2]
	Satellite telecommuting center[3]

[1] Title 24, California Code of Regulations, Part 6 - California Energy Efficiency Standards for Residential and Nonresidential Buildings.

[2] Number of spaces x 89% x miles/trip = miles reduced to be determined.

[3] Number of workstations x 89% x miles/trip = miles reduced to be determined.

Source: Ventura County APCD

3.4.3.5 Residual Impacts

With implementation of Mitigation AQ-1, Impacts AQ-2 and AQ-5, construction-related particulates in the Northern and Southern subareas, would be significant but mitigated. Impacts AQ-3 and AQ-6, generation of NOX and ROG emissions from the use of onsite construction equipment in the Northern and Southern subareas are significant but mitigated by the implementation of mitigation measure AQ-2.

Impacts AQ-4 and AQ-7, project-related emissions in the Northern and Southern subareas are mitigated by implementation of Mitigation AQ-3, measures to reduce operational and vehicle emissions, and Mitigation AQ-4, Transportation Demand Management Fee Program. Project-related emissions cannot, however, be feasibly mitigated to less-than-significant levels.

Impact AQ-8, contribution to cumulative particulates from project construction is significant but mitigated. Cumulative project emissions AQ-9, which are evaluated based on consistency with the most recently adopted AQMP, in contrast to project related emissions are significant but mitigated. Impact AQ-10, CO hotspots, is less than significant.

3.4.3.6 Global Climate Change

Climate change refers to any significant change in measures of climate (such as temperature, precipitation or wind) lasting for an extended period (decades or longer) (EPA, 2008). While the term climate change is often used interchangeably with the term global warming, the phrase 'climate change' is preferred as it helps convey that there are other changes in addition to rising temperatures. (NAS, 2008)

3.4.3.6.1 The Greenhouse Effect and Greenhouse Gases (GHGs)

Gases that trap heat in the atmosphere are often called greenhouse gases. Principal GHGs include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), ozone (O3), and water vapor (H2O). Some greenhouse gases, such as CO2, CH4, and N2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO2 and CH4 are emitted in the greatest quantities from human activities. Emissions of CO2 are largely by-products of fossil fuel combustion, whereas CH4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, which have a much greater heat-absorption potential than CO2, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF6), which are byproducts of certain industrial processes. (Cal EPA, 2006b).

The greenhouse effect is a natural process that contributes to regulating the earth's temperature. Without it, the temperature of the Earth would be about zero degrees F (-18°C) instead of its present 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect (NCDC, NCOA, 2007).

It is generally agreed that human activity has been increasing the concentration of greenhouse gases in the atmosphere (mostly carbon dioxide from combustion of coal, oil, and gas, and a few other trace gases) (US EPA 2000). Pre-industrial levels of carbon dioxide were about 280 parts per million by volume (ppmv), and current levels are about 370 ppmv. The current concentration of CO2 in the earth's atmosphere has not been exceeded in the last 420,000 years, and likely not in the last 20 million years. Based on current rates of increase, carbon dioxide concentrations could reach between 490 to 1260 ppm by the end of the 21st century, 75 to 350 percent above the pre-industrial concentration (IPCC 2007, SRES 2007, NCDC 2007, and NCOA 2007).

A warming trend of approximately 0.7 to 1.5°F occurred during the 20th century. Warming occurred in both the northern and southern hemispheres, and over the oceans (US EPA 2000). Most of the warming in noted recent decades is very likely the result of human activities (US EPA, 2000; IPCC, 2007). There is much uncertainty, however, concerning the

magnitude and rate of the warming. Specifically, the US EPA (2000) notes that "important scientific questions remain about how much warming will occur, how fast it will occur, and how the warming will affect the rest of the climate system, including precipitation patterns and storms." Nevertheless, global climate change is considered a cumulative impact, in that it is a result of incremental increases in fossil fuel use and resulting GHG emissions worldwide.

The major greenhouse gases emitted by human activities remain in the atmosphere for periods ranging from decades to centuries. It is, therefore, virtually certain that atmospheric concentrations of greenhouse gases will continue to rise over the next few decades.

The increased greenhouse gas concentrations may be reduced by ongoing efforts to increase the use of newer, cleaner technologies and other measures. Additionally, alternative conservation strategies involving commuting, housing, electricity use, and recycling can positively influence the amount of greenhouse gases being emitted (US EPA 2008).

The effect each GHG has on climate change is measured as a combination of the volume of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). This effect is expressed as a function of how much warming would be caused by the same mass of CO2. Thus, GHG gas emissions are typically measured in terms of pounds or tons of CO2 equivalents (CO2e). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in terms of pounds or tons of "carbon dioxide-equivalents" (CO2e), which present a weighted average based on each gas' heat absorption (or "global warming") potential.

Worldwide emissions of GHGs in 2004 were 30 billion tons of CO2e per year (including ongoing emissions from industrial and agricultural sources, but excluding emissions from land-use changes) (UNFCC, 2007).

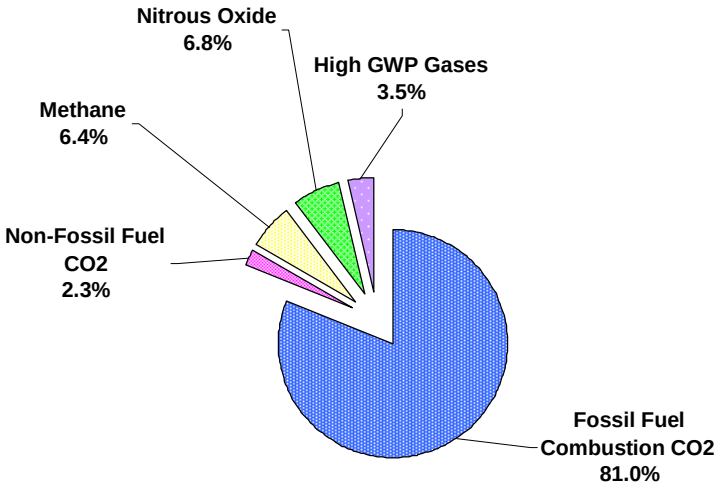
In 2004, the United States emitted about 8 billion tons of CO2e or about 25 tons/year/person. Of the four major sectors nationwide (residential, commercial, industrial, and transportation), transportation accounts for the highest percentage of GHG emissions (approximately 35 to 40 percent). These emissions are entirely generated from direct fossil fuel combustion (US EPA, 2007).

In 2004, California emitted approximately 550 million tons of CO2e, or about 6 percent of the U.S. emissions. This large number is due primarily to the sheer size of California compared to other states. By contrast, California has one of the fourth lowest per capita GHG emission rates in the country, due to the success of its energy-efficiency and renewable energy programs and commitments that have lowered the state's GHG emissions rate of growth by more than half of what it would have been otherwise (CEC, 2007). Another factor

that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states.

According to the California EPA Climate Action Team report (CalEPA 2006), fossil fuel combustion accounted for 81 percent of gross California's CO2 emissions, while CH4 and NO2 accounted for approximately 6.4 percent and 6.8 percent, respectively of gross 2002 climate change emissions in California (CO2 equivalents). Figure 3.4-2 identifies California's Composition of Gross Climate Change Pollutants (2002) expressed in terms of CO2 equivalents. (CalEPA, 2006b).

FIGURE 3.4-2
COMPOSITION OF GROSS CLIMATE CHANGE POLLUTANTS
CALIFORNIA 2002
EXPRESSED IN TERMS OF CO2 EQUIVALENTS



3.4.3.6.2 Potential Effects of Human Activity on Climate Change

Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place, including substantial ice loss in the Arctic (IPCC, 2007).

However, the scientific understanding of the effect of GHG emissions, particulate matter, and aerosols on global climate trends remains uncertain. In addition to uncertainties about the extent to which human activity rather than solar or volcanic activity is responsible for increasing warming, there is also evidence that some human activity has cooling rather than warming effects (IPCC, 2001.).1

According to CARB, some of the potential impacts in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB 2006c, 2007c). Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California. These reports acknowledge that climate scientists' understanding of the complex global climate system, and the interplay of the various internal and external factors that affect climate change, remains too limited to yield scientifically valid conclusions on such a localized scale. Substantial work has been done at the international and national level to evaluate climatic impacts, but far less information is available on regional and local impacts. In addition, projecting regional impacts of climate change and variability relies on large-scale scenarios of changing climate parameters, using information that is typically at too coarse a scale to make accurate regional assessments (Kiparsky, 2003). For example, a 2005 report prepared by the National Research Council included analysis of the uncertainties involved in determining the impact on global climate of land use changes and concluded that "the mechanisms involved in land-atmosphere interactions are not well understood, let alone represented in climate models." (NRC, 2005)

Below is a summary of some of the potential effects reported by an array of studies that could be experienced in California as a result of global warming and climate change:

Air Quality: Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. For other pollutants, the effects of climate change and/or weather are less well studied, and even less well understood (US EPA, 2006). If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and

[1] The IPCC was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme to assess scientific, technical and socio- economic information relevant for the understanding of climate change, its potential impacts and options for adaptation and mitigation.

reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CCCC, 2006).

Water Supply: Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, "Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change." (Climate Change and California Water Resources). For example, some studies identify little change in total annual precipitation in projections for California (California Climate Change Center, 2006). Other studies show significantly more precipitation (Climate Change and California Water Resources [(DWR 2006)]). Even assuming that climate change leads to long-term increases in precipitation, analysis of the impact of climate change is further complicated by the fact that no studies have identified or quantified the runoff impacts such an increase in precipitation would have in particular watersheds (California Climate Change Center, 2006)). Also, little is known about how groundwater recharge and water quality will be affected (Id.). Higher rainfall could lead to greater groundwater recharge, although reductions in spring runoff and higher evapotranspiration could reduce the amount of water available for recharge (Ibid.).

The California Department of Water Resources (DWR 2006) report on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta. concludes that "[c]climate change will likely have a significant effect on California's future water resources . . . [and] future water demand." It also reports that "much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain" (DWR, 2006).

This uncertainty serves to complicate the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood (DWR, 2006). DWR adds that "[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future." Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows (Kiparsky 2003; DWR 2005; Cayan 2006, Cayan, D., et al, 2006).

Hydrology: As discussed above, climate changes could potentially affect the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs

(flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise can be a product of global warming through two main processes: expansion of sea water as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture: California has a $30 billion agricultural industry that produces half the country's fruits and vegetables. Higher CO2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thus affect their quality (CCCC, 2006).

Ecosystems and Wildlife: Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface temperature could rise as discussed previously: 1.0-4.5°F (0.6-2.5°C) in the next 50 years, and 2.2-10°F (1.4-5.8°C) in the next 100 years, with significant regional variation (EPA 2000). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as two feet along most of the U.S. coast. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes such as carbon cycling and storage (Parmesan, 2004; Parmesan, C. and H. Galbraith 2004.)

3.4.3.6.3 Regulatory Setting

International and Federal: The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change (UNFCCC) since is was signed on March 21, 1994. The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008–2012. It should be noted that although the United States is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the United States is not bound by the Protocol's commitments (UNFCCC, 2007)

The United States has opted for a voluntary and incentive-based approach toward emissions reductions in lieu of the Kyoto Protocol's mandatory framework. The Climate Change Technology Program (CCTP) is a multi-agency research and development coordination effort (which is led by the Secretaries of Energy and Commerce) that is charged with carrying out the President's National Climate Change Technology Initiative (CCTP, 2006).

To date, the US EPA has not regulated GHGs under the Clean Air Act (discussed in 5.1.2 State Regulatory Setting) based on the assertion that the "Clean Air Act does not authorize it to issue mandatory regulations to address global climate change and that it would be unwise to regulate GHG emissions because a causal link between GHGs and the increase in global surface air temperatures has not been unequivocally established." However, the U.S. Supreme Court in Massachusetts v. EPA (April 2, 2007) recently held that the US EPA can, and should, consider regulating motor-vehicle GHG emissions. Despite the Supreme Court ruling, to date the EPA has not promulgated federal regulations limiting GHG emissions.

State of California: In response to growing scientific and political concern with global climate change, the California legislature has adopted a series of laws to reduce emissions of GHGs to the atmosphere from commercial and private activities. In September 2002, Governor Gray Davis signed Assembly Bill (AB) 1493, requiring the development and adoption of regulations to achieve "the maximum feasible reduction of greenhouse gases" emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. This EO provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels (CalEPA 2006a).

In response to the Executive Order, the Secretary of Cal/EPA created the Climate Action Team (CAT), which, in March 2006, published the Climate Action Team Report to Governor Schwarzenegger and the Legislature (the "2006 CAT Report"). The 2006 CAT Report identifies a recommended list of strategies that the State could pursue to reduce climate change greenhouse gas emissions. These are strategies that could be implemented by various State agencies to ensure that the Governor's targets are met and can be met with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture.

On August 31, 2006, the California Senate passed SB 1368 (signed into law on September 29, 2006), which charged the Public Utilities Commission (PUC) with developing and adopting a "greenhouse gases emission performance standard" by February 1, 2007, for the private electric utilities under its regulation. The PUC adopted an interim standard on January 25, 2007, and formally requested a delay until September 30, 2007, for the local publicly-owned electric utilities under its regulation. These standards apply to all long-term financial commitments entered into by electric utilities (California SB 2006). The California Energy Commission (CEC) was required to adopt a consistent standard by June 30, 2007. However, this date was missed, and CEC will address the concerns of the Office of Administrative Law (OAL) and resubmit the rulemaking as soon as possible. The rulemaking then must be approved by the OAL before it can take effect (Collord, 2007).

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act of 2006, also known as AB 32, into law. AB 32 commits the State to achieving 1990 levels of GHGs by 2020. To achieve this goal, AB 32 mandates that the ARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved.

In October 2006, Governor Schwarzenegger issued an Executive Order in which he designated the Cal/EPA Secretary and CARB with the responsibility for implementing AB 32. In late December, the Governor announced the members of a blue-ribbon Market Advisory Committee board to devise approaches to develop a market for carbon trading. Given that the intent of AB 32 is to limit 2020 emissions to the equivalent of 1990, and the present year (2008) is near the midpoint of this timeframe, it is expected that the regulations would affect many existing sources of GHGs and not just new general development projects.

In June 2007, the CARB directed staff to pursue 37 early actions for reducing GHG emissions under AB 32. The spectrum of strategies to be developed, including a Low Carbon Fuel Standard, regulations for refrigerants with high global warming potentials, guidance and protocols for local governments to facilitate GHG reductions, and green ports, reflects a commitment to broad action. Three of these 37 strategies were also identified as "discrete early action measures." These are measures that could be fully adopted as regulations and made effective no later than January 1, 2010, the date established by the Health and Safety Code (HSC) Section 38560.5(b) that requires CARB to adopt discrete early actions.

In addition to approving the 37 GHG reduction strategies, CARB directed staff to further evaluate early action recommendations made at the June 2007 meeting by the AB 32 Environmental Justice Advisory Committee (EJAC), the California Air Pollution Control

Officers Association (CAPCOA), and the South Coast Air Quality Management District (SCAQMD), and to report back to the Board within six months.

On October 25, 2007, CARB expanded the early action list to a total of 44 measures, which have the potential to reduce GHG emissions by at least 42 million metric tons of CO2 emissions by 2020, representing about 25% of the estimated reductions needed by 2020 (CARB, October 2007). ARB staff is working on 1990 and 2020 GHG emission inventories in order to refine the projected reductions needed by 2020. After completing a comprehensive review and update process, CARB has approved a 1990 statewide GHG level and 2020 limit of 427 MMTCO2E.

In addition, the CARB is in the process of developing a comprehensive Scoping Plan estimated to be delivered in late 2008 that will outline a multifaceted approach to meeting the 2020 emissions reduction target defined in AB 32. The Scoping Plan will evaluate opportunities for sector-specific reductions; integrate all CARB and CAT early actions and additional GHG reduction measures by both entities; identify additional measures to be pursued as regulations; and define the role of any potential market mechanisms such as a cap-and-trade program. The analyses of many potential GHG emission reduction strategies that are not recommended as early actions are currently underway and will continue as part of the Scoping Plan development. Recommendations regarding the form of these additional GHG reduction measures (e.g., regulatory, non-regulatory, market-based) will be included in the Scoping Plan. The CARB has until January 1, 2011, to adopt the Plan's various regulations and other initiatives reducing GHG emissions. These various reduction strategies are scheduled to be implemented by January 1, 2012.

The list of discrete early action measures that can be adopted and implemented before January 1, 2010, was adopted by the CARB in June 2007, and supplemented with further measures in October 2007. The early action measures focus on major statewide contributing sources and industries, not on individual development projects or practices.

For more information on the Assembly Bills and Executive Orders identified above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and http://www.arb.ca.gov/cc/cc.htm.

CEQA and Climate Change: GHG emissions contributing to global climate change have only recently been addressed in California Environmental Quality Act (CEQA) documents and neither the CEQA statutes nor the CEQA Guidelines provide guidance relative to their assessment. Furthermore, quantitative significance thresholds for this topic have not been adopted by the State of California or any air pollution control district, including the Ventura County APCD.

The CEQA Guidelines do, however, provide guidance regarding topics such as climate change in Section 15144, Forecasting. Section 15144 notes that preparation of an environmental impact analysis document necessarily involves some degree of forecasting. While forecasting the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.

Section 15146 of the Guidelines addresses informed decision-making, establishing that the "rule of reason" applies, such that the EIR analysis must be specific enough to permit informed decision-making and public participation.

In response to this guidance provided in the Guidelines, it is possible to document the current state of research regarding Global Climate Change and GHG emissions, and to forecast a project emissions inventory for GHGs, as well as to describe measures that will advance efforts to reduce GHGs in projects.

At the time this EIR was being prepared, neither CARB, the Ventura County APCD, nor the City of Oxnard had established project-level significance thresholds for GHG emissions. Thus, while emissions of GHGs can be quantified, the emission levels should not be used to determine significance under CEQA. Furthermore, the regulations required to meet the goal under AB 32 of reducing emissions to 1990 levels by 2010 are still under development. The list of discrete early action measures that can be adopted and implemented before January 1, 2010, was adopted by the ARB in June 2007. The three early action measures focus on major statewide contributing sources and industries, not on individual development projects or practices. These three measures are: 1) a low-carbon fuel standard; 2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance; and 3) increased methane capture from landfills.

Under CEQA, an EIR must identify and focus on the significant environmental effects of a proposed project. A significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment (PRC Section 21068). CEQA further states that the CEQA Guidelines shall specify certain criteria that require a finding that a project may have a significant effect on the environment. As of the preparation of this EIR, the agencies with jurisdiction over air quality regulation and GHG emissions such as the CARB and the Ventura County Air Pollution Control District (APCD) had not established regulations, guidance, methodologies, significance thresholds, standards, or analysis protocols for the assessment of GHG emissions and climate change. Thus, the methodology to establish an appropriate baseline, to develop a project-level inventory for the project, or to evaluate the significance of GHG emission changes has not yet been established. In the absence of this information, analysis and mitigation of a global phenomenon at a local level could be considered piecemeal and would require speculation and assignment of mitigation that may not meet the "rough proportionality" standards established by CEQA case law

(Ehrlich v. City of Culver City [1996]) and the Federal Supreme Court (Dolan v. City of Tigard 512 US. 374 [1994]). If an accurate means to measure and determine a project's significance is not available, then making a conclusion whether the mitigation measures applied to a project mitigate the project's impacts cannot be reached.

Analysis of a project's contribution to GHG emissions is further complicated by the global nature of climate change. The nature of the proposed project poses particular challenges concerning baseline determination. Besides the fundamental difficulty of evaluating the impacts of a development project on a global phenomenon without scientific tools to accurately model climate conditions, it is difficult to attribute changes in GHG emissions to a particular project. Furthermore, development projects may simply shift the locale of GHG emissions, rather than causing "new" GHG emissions. Whether this shift represents a net global increase, reduction, or no change depends on the GHGs that would exist if the project were not implemented. For the projects evaluated in this EIR, it is possible that some of the GHG emissions associated with traffic and energy demand would be "new" emissions, but it is also possible that some of the emissions represent diversion of emissions from other locations. Thus, although GHG emissions are associated with the projects, it is not possible to discern how much diversion is occurring or what share of those emissions represent global increases.

Based upon the discussion above and the factors discussed above and summarized below, the project's impact on global climate change is determined to be speculative and cannot be evaluated at this time:

- Uncertainties regarding human activities and climate change and the potential human activities that may reverse global warming trends;
- Lack of guidance for analysis of climate change issues;
- Lack of methodology for evaluating GHGs, specifically for determining the incremental increase in GHG emissions for an individual project, the impacts of a particular development project on global climate change, and the significance of any such impacts under CEQA;
- Lack of methodology for determining whether GHG emissions from an individual project are significant;
- Lack of scientific basis to accurately project future climate trends, much less the likely adverse environmental impacts resulting from those trends in any specific location;

- No methodology to distinguish relocated GHG emissions from new emissions and, therefore, no methodology to evaluate the incremental increase in GHGs for an individual project; and
- No guidance provided by regulatory agencies on how to adequately control or mitigate GHG emissions.

For all of the reasons summarized above and pursuant to Section 15145 of the CEQA Guidelines, until there is a sufficient scientific basis to ascertain the incremental impact of an individual project on climate change and to accurately project future climate trends associated with that increment of change and until guidance is provided by regulatory agencies on the control of GHG emissions[2] and thresholds of significance, the significance of an individual project's contribution to global GHG emissions is too speculative to be determined. Therefore, further analysis and application of current emissions scenarios, climate models, and climate change projections to the proposed project is also speculative.

Accordingly, the Global Climate Change analysis included in this EIR forecasts an emissions inventory for GHGs associated with the proposed project and describes unique project measures that may advance efforts to reduce GHGs, but does not determine a level of significance under CEQA.

3.4.3.6.4 Environmental Setting

The Ormond Beach Study area is currently in agricultural production. On a continuous basis, there is minimal existing measurable level of greenhouse gas emissions associated with the current agricultural production.

Project Emissions

Construction Impacts: Greenhouse gas emissions would be associated with the construction phase of the proposed project through the use of heavy equipment and vehicle trips. Emissions of greenhouse gases would be short-term. The URBEMIS 2007 9.2.4 Model provides a calculation of emissions of CO2 for all project phases, including construction. Based on the model estimates, GHG emissions associated with construction activities are estimated to total approximately 163,111 tons of CO2. Emissions of other greenhouses gases (ROC, NOx, etc.) would also occur during construction, although at substantially lower levels.

[2] Refer to the discussion under "Regulatory Setting, California" regarding the Proposed Early Actions to Mitigate Climate Change in California published by CARB in April 2007. There are no early action measures specific to residential development included in the list of 36 measures identified for CARB to pursue during calendar years 2007, 2008, and 2009.

Operational Impacts: It is important to acknowledge that new residential development does not necessarily create entirely new GHG emissions, since most of the persons who will visit or occupy new development will come from other locations where they were already causing such GHG emissions. Further, as discussed above, it has not been demonstrated that even new GHG emissions caused by a local residential development project can affect global climate change, or that a project's net increase in GHG emissions, if any, when coupled with other activities in the region, would be cumulatively considerable.

The following analysis forecasts emissions for GHGs associated with the proposed projects and describes project measures that may further efforts to reduce GHGs.

The predicted average global surface temperature increase and associated rise in sea level in the next century has long-term implications for the greater Ventura County region because it would likely result in increased rates of sea cliff erosion and retreat, loss of beaches, and a higher flood hazards in low-lying portions of the community. These local consequences of climate change would not affect the proposed project sites.

Project Energy Use: Emissions associated with energy use would arise from the combustion of fossil fuels to provide energy for the development. Emissions from area sources were calculated using the URBEMIS 2007 9.2.4 Model and are included in the area source emissions shown below in Table 3.4-14. However, the emissions associated with electricity generation for the project may be reduced in the future in light of the adoption of the California Public Utilities Commission's Emission Performance Standard policies (Commission's Rulemaking on greenhouse gas policies R.06-04-009) and Senate Bill 1368, which requires that electricity generators produce power more efficiently.

Project Vehicle Emissions: Generally, an individual project cannot generate enough greenhouse gas emissions to influence global climate change because it is the increased accumulation of GHGs which may result in global climate change. However, an individual project may contribute an incremental amount of GHG emissions. For most projects, the main contribution of GHG emissions is from motor vehicles, but how much of those emissions are "new" is uncertain. New projects do not necessarily create new drivers, and therefore do not create a new mobile source of emissions. Rather, new projects only redistribute the existing traffic patterns. Larger projects will certainly affect a larger geographic area, but again, would not necessarily cause the creation of new drivers. Some mixed-use and transportation-oriented projects could actually reduce the number of vehicle miles traveled.

Emissions from vehicles were calculated using the URBEMIS 2007 9.2.4 Model. While more precise modeling programs for nitrous oxide (NO2) and methane (CH4) may be available, use of the URBEMIS 2007 model to model these constituents as NOx and ROC

respectively, as identified in Table 3.4-14, should be considered a reasonable worst case scenario. These emission estimates do not take into account proposed measures to improve vehicle fuel efficiency or reduce GHG emissions as proposed under AB 32.

For the purpose of this analysis, GHG emissions directly associated with the proposed development have been identified and quantified. These emissions are associated with increased area sources and vehicular emissions due to project-generated traffic.

TABLE 3.4-14
ESTIMATED OPERATIONAL GREENHOUSE GAS EMISSIONS

Emission Source	Annual Emissions (tons/year)		
	CO_2	NO_x (N_2O)	CH_4
Area Source Emissions	5,007.69	3.99	27.11
Vehicular Use Emissions	60,928.94	41.75	43.35
Global Warming Potential Factor[1]	1	310	21
CO2 Equivalent Emissions	65,936.63	14,179.40	1,479.66

[1] Global Warming Potential Factors obtained from Cal/EPA's CAT Report, 2006.

The following adjustments to convert CO2 emissions to GHG emissions on a carbon dioxide equivalent (CO2E) basis were undertaken:

- **Motor vehicles:** The CO2 emissions associated with project residents were multiplied by a factor based on the assumption that CO2 represents 95 percent of the (CO2E) emissions associated with passenger vehicles, which account for most of the project-related trips, and by 365 operational days per year.
- **Area sources (natural gas combustion):** The CO2 emissions from natural gas consumption residences were adjusted based on emission factors for CO2, CH4, and N2O for natural gas combustion from the U.S. EPA's Compilation of Air Pollutant Emission Factors; the global warming potential for each GHG; and 365 days per year.

The estimated GHG emissions associated with the project are shown in Table 3.4-15. Total project GHG emissions are 70,950 tons/year (64,365 metric tons/year).

TABLE 3.4-15
ESTIMATED OPERATIONAL GREENHOUSE GAS EMISSIONS

Emission Source	Annual Emissions (tons/year)		
	CO_2	NO_x (N_2O)	CH_4
Area Source Emissions	5,008	1,237	569
Vehicular Use Emissions	64,136	N.A.	N.A.
CO2 Equivalent Emissions[2]	69,144	1,237	569

1 Global Warming Potential Factors obtained from Cal/EPA's CAT Report, 2006.

2 Total CO2 Equivalent Emissions equals the sum of the CO2 Equivalent Emissions of CO2, NOx N2O and CH4

3.4.3.6.5 Project Cumulative Impacts

While globally climate change is, by definition, a cumulative environmental impact and the impacts of climate change on California human and natural systems would also be substantial, there currently is no agreed-upon methodology to adequately identify, under CEQA, when project-level GHG emissions contribute considerably to this cumulative impact. Thus, at this time, it would be speculative to determine if the potential GHG emissions associated with the proposed project would or would not contribute considerably to this cumulative impact.

Consistency with the 2006 CAT Report: As indicated above, in response to Governor Schwarzenegger's Executive Order, the Secretary of Cal/EPA created the Climate Action Team (CAT), which, in March 2006, published the Climate Action Team Report to Governor Schwarzenegger and the Legislature (the "2006 CAT Report"). The 2006 CAT Report identifies a recommended list of strategies that the State could pursue to reduce climate change greenhouse gas emissions. These are strategies that could be implemented by various State agencies to ensure that the Governor's targets are met and can be met with existing authority of the State agencies. Among other the strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, landfill methane capture.

The consistency of the proposed project with applicable strategies from the 2006 CAT Report is evaluated in Table 3.4-16 below. As shown, the project would be consistent with all the strategies identified below to reduce greenhouse gas emissions in California.

TABLE 3.4-16
PROJECT CONSISTENCY WITH APPLICABLE 2006 CAT REPORT GREENHOUSE GAS EMISSION REDUCTION STRATEGIES

Strategy	*Project Consistency*
California Air Resources Board	
Vehicle Climate Change Standards	**Consistent**
AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the ARB I September 2004.	The vehicles that travel to and from the Study Area on public roadways would be in compliance with ARB vehicle standards that are in effect at the time of vehicle purchase.
Diesel Anti-Idling	**Consistent**
In July 2004, the ARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Current State law restricts diesel truck idling to five minutes or less. Diesel trucks operating from, and making deliveries to, the project site are subject to this State law.
Hydrofluorocarbon Reduction	**Consistent**
1) Ban retail sale of HFC in small cans. 2) Require that only low GWP refrigerants be used in new vehicular systems. 3) Adopt specifications for new commercial refrigeration. 4) Add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs. 5) Enforce federal ban on releasing HFCs.	This strategy applies to consumer products. All applicable products would comply with the regulations that are in effect at the time of manufacture.
Alternative Fuels: Biodiesel Blends	**Consistent**
ARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	The diesel vehicles that travel to and from the project site on public roadways could utilize this fuel once it is commercially available.
Alternative Fuels: Ethanol	**Consistent**
Increased use of E-85 fuel.	Employees and patrons of the project site could purchase flex-fuel vehicles and utilize this fuel once it is commercially available in the region and local vicinity.
Heavy-Duty Vehicle Emission Reduction Measures	**Consistent**
Increased efficiency in the design of heavy duty vehicles and an education program for the heavy duty vehicle sector.	The heavy-duty vehicles that travel to and from the project site on public roadways would be subject to all applicable ARB efficiency standards that are in effect at the time of vehicle manufacture.
Achieve 50% Statewide Recycling Goal	**Consistent**
Achieving the State's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48% has been achieved on a statewide basis. Therefore, a 2% additional	The City of Oxnard's solid waste diversion rate was 67% in 2005. It is anticipated that the project would similarly divert at least 50 percent of its solid waste after the recyclable content is diverted. The project will be conditioned to provide recycling bins to promote recycling of paper, metal, glass, and other recyclable material.

TABLE 3.4-16
PROJECT CONSISTENCY WITH APPLICABLE 2006 CAT REPORT GREENHOUSE GAS EMISSION REDUCTION STRATEGIES

reduction is needed.	
Zero Waste – High Recycling	**Consistent**
Efforts to exceed the 50 percent goal would allow for additional reductions in climate change emissions.	The City of Oxnard's solid waste diversion rate was 67% in 2005. It is anticipated that the project would similarly divert at least 50 percent of its solid waste after the recyclable content is diverted. The project will be conditioned to provide recycling bins to promote recycling of paper, metal, glass, and other recyclable material. The project would also be subject to all applicable State and City requirements for solid waste reduction as they change in the future.
Department of Forestry	
Urban Forestry	**Consistent**
A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	The landscaping proposed for the project would include new trees throughout the site.
Department of Water Resources	
Water Use Efficiency	**Consistent**
Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.	The project will be conditioned to provide drought-tolerant, low water consumption plant varieties.
Energy Commission (CEC)	
Building Energy Efficiency Standards in Place and in Progress	**Consistent**
Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	The project will be required to be constructed in compliance with the standards of Title 24 that are in effect at the time of development.
Appliance Energy Efficiency Standards in Place and in Progress	**Consistent**
Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Under State law, appliances that are purchased for the project (both pre- and post-development) would be consistent with energy efficiency standards that are in effect at the time of manufacture.
Fuel-Efficient Replacement Tires & Inflation Programs	**Consistent**
State legislation established a statewide program to encourage the production and use of more efficient tires.	Residents and businesses locating in the Study Area could purchase tires for their vehicles that comply with state programs for increased fuel efficiency.
Municipal Utility Energy Efficiency Programs/Demand Response	*Not applicable*, but the project would not preclude the implementation of this strategy by municipal utility providers.

TABLE 3.4-16
PROJECT CONSISTENCY WITH APPLICABLE 2006 CAT REPORT GREENHOUSE GAS EMISSION REDUCTION STRATEGIES

Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	
Municipal Utility Renewable Portfolio Standard California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 20 percent of retail electricity sales from renewable energy sources by 2017, within certain cost constraints.	*Not applicable*, but the project would not preclude the implementation of this strategy by Southern California Edison.
Municipal Utility Combined Heat and Power Cost effective reduction from fossil fuel consumption in the commercial and industrial sector through the application of on-site power production to meet both heat and electricity loads.	*Not applicable* since this strategy addresses incentives that could be provided by utility providers such as Southern California Edison and The Gas Company.
Alternative Fuels: Non-Petroleum Fuels Increasing the use of non-petroleum fuels in California's transportation sector, as recommended as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.	**Consistent** Residents and businesses occupying the Study Area \could purchase alternative fuel vehicles and utilize these fuels once they are commercially available in the region and local vicinity.
Business, Transportation and Housing	
Measures to Improve Transportation Energy Efficiency Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.	**Consistent** The projects under consideration propose a broad mixture of uses that would promote spatial and qualitative opportunities for residents of the area to work in nearby businesses and employees of businesses to reside in nearby residences. This presents an opportunity for more efficient travel behavior that could reduce climate change emissions.
Smart Land Use and Intelligent Transportation Systems (ITS) Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. The Governor is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity and a quality environment.	**Consistent** The projects under consideration propose a broad mixture of uses that would promote spatial and qualitative opportunities for residents of the area to work in nearby businesses and employees of businesses to reside in nearby residences. The types of development proposed would also support transit investments on major travel routes in the area.

TABLE 3.4-16
PROJECT CONSISTENCY WITH APPLICABLE 2006 CAT REPORT GREENHOUSE GAS EMISSION REDUCTION STRATEGIES

Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	
State and Consumer Services Agency	
Green Buildings Initiative Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels. The Executive Order and related action plan spell out specific actions state agencies are to take with state-owned and -leased buildings. The order and plan also discuss various strategies and incentives to encourage private building owners and operators to achieve the 20 percent target.	**Consistent** As discussed previously, the project would be required to be constructed in compliance with the standards of Title 24 that are in effect at the time of development. The 2005 Title 24 standards are approximately 8.5 percent more efficient than those of the 2001 standards.
Public Utilities Commission (PUC)	
Accelerated Renewable Portfolio Standard The Governor has set a goal of achieving 33 percent renewable in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	*Not applicable*, but the project would not preclude the implementation of this strategy by energy providers.
California Solar Initiative The solar initiative includes installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses, increased use of solar thermal systems to offset the increasing demand for natural gas, use of advanced metering in solar applications, and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	**Consistent** The South Ormond Beach Specific Plan promotes opportunities for implementation of solar power through site orientation guidelines and requires that structures include some level of environmental design elements, which could include solar panels.

Sources: Climate Action Team, 2006 and URS Corporation, 2008.

The proposed projects would be consistent with the 2006 CAT Report. It should be noted that the projects together include a broad mixture of uses and densities and intensities, which should ultimately help in reducing vehicle miles traveled. Furthermore, the Governor of California has also signed Executive Order S-01-07, calling for a reduction in carbon content in fuels in California, the goal of which is to decrease carbon intensity in fuels by 10 percent by the year 2020. Finally, due to the adoption of AB 1493, passenger cars and light-duty trucks would be required to reduce emissions by 18 percent by the year 2020 and by 27 percent by the year 20303. All of these measures are designed to reduce emissions of GHG.

Although the direct output of greenhouse gases from a project can theoretically be estimated (provided valid methodologies are developed), the emission of GHGs associated with implementation of any one development project would not necessarily result in any discernable direct impact globally or locally on climate, water availability, plant or wildlife species, populations, habitats, or ecosystems. Based on available science, the indirect effects of project-specific greenhouse gases emissions from an individual development project, such as the proposed high-density residential project, are speculative, and available science considers them immeasurable.

While it is not currently possible to quantify all the reductions in GHG emissions resulting from the implementation of the above listed measures, the proposed project would nonetheless be consistent with the goals of mandated by AB 32. In addition, the standard conditions addressing short-term ROC and NOx emissions generated during construction activities, as described in Impact AQ-2, and the mitigation measures addressing long-term ROC and NOx emissions generated during project operations, as described in Impact AQ-5, would reduce the proposed project's contribution to ozone precursors. This would also address the proposed project's contribution to cumulative impacts on global climate change.

While no significant impacts have been identified due to the speculative nature of greenhouse gas impact assessment, with the result that no mitigation for such impacts is required, Mitigation Measures AQ-2, AQ-4, and AQ-5a through -5c would reduce the amount of GHG emissions generated during construction and operation.

[3] The U.S. EPA has denied the waiver that would allow these standards to be implemented; however, the state has filed a lawsuit to overturn this decision. The implementation of these standards and the time schedule for the introduction of compliance passenger vehicles and light trucks are in question at this time.

3.5 HAZARDS AND HAZARDOUS MATERIALS

This section focuses on potential hazards, including hazardous materials, that may be present in the Ormond Beach Specific Plan Study Area. The potential hazards are described by location and type. This section also identifies potential project-related impacts and proposes mitigation measures to address each potential impact. Geologic hazards and flood hazards are discussed in Sections 3.2 (Geology) and 3.3 (Water Resources) of this EIR. Air quality impacts from agricultural operations are addressed in Sections 3.4 (Air Quality) and 3.8 (Agricultural Resources) of this document.

This analysis was performed based primarily on the Phase I Environmental Site Assessments (ESAs) prepared by RBF Consulting for the Northern Subarea (2003) and for the Southern Subarea (2005). Both ESAs are contained in Appendix F.

The RBF Phase I work was conducted under ASTM Standard E 1527-00, which defines a Recognized Environmental Condition (REC) as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property." The term REC does not include "de minimis" conditions, which are those conditions that do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

TABLE 3.5-1
REGULATORY DEFINITIONS

Hazardous Material	Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering regulatory agency has a reasonable basis for believing it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. A number of properties may cause a substance to be considered hazardous including toxicity, ignitibility, corrosiveness, or reactivity (California Health and Safety Code Section 25501 (K)).
Hazardous Waste	A waste or combination of ignitable, corrosive, reactive, or toxic waste that, because of quantity, concentration, or physical, chemical or infection characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation reversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of or otherwise managed. Title 22. Sections 66261.20 and 66261.3 of the California Code of Regulations define what materials constitute hazardous waste. The term hazardous waste includes extremely hazardous waste and acutely hazardous waste.

3.5.1 Existing Conditions

3.5.1.1 Overview

The Ormond Beach Specific Plan Study Area is located on lands with both past and present agricultural uses. Several unimproved roadways (dirt roads) are located within the boundaries of the Study Area and are used for agricultural operations. Onsite topography is relatively flat, approximately 20 feet above mean sea level within the Northern Subarea and 10 to 15 feet above mean sea level within the Southern Subarea. The topography gently slopes to the southwest (USGS Oxnard Quadrangle Map, 1967) (Figure 3.2-1).

3.5.1.2 Agricultural Operations

Since agricultural operations have been historically conducted in and around the Study Area, it is expected that various pesticides, herbicides, and/or rodenticides have been used on portions of the site. It is possible that residual levels of agricultural chemicals may be present in soil and/or groundwater at the project site due to historical applications. Beginning in the 1970s, anyone who used restricted materials was required to file a pesticide use report with the county agricultural commissioner. Restricted materials, with certain exceptions, may be possessed or used only by, or under the supervision of, licensed or certified persons and only in accordance with an annual permit issued by the county agricultural commissioner. These pesticide-related requirements are intended to protect agricultural workers, the public, and water quality. Examples of commonly used compounds in Ventura County associated with strawberry production include captan, sulphur, and chloropicrin. Examples of commonly used compounds in Ventura County associated with sod and turf production include mancozeb and triclopyr (Ventura County Agricultural Commissioner, *Ventura County Pesticide Use Data*, 2004).

3.5.1.3 Energy Generation Facilities in the Project Vicinity

Reliant Energy's Ormond Beach Generating Station is located on approximately 140 acres immediately south of the Study Area. The Station consists of two power generating units, with a combined generating capacity of 1,516 megawatts. This facility generates power which is then fed onto the electrical grid and distributed throughout California and the west. Unit 1 began commercial operation in August 1971, and Unit 2 in March 1973. The steam generators for each unit use natural gas. Both units are equipped with oxides of nitrogen (NO_X) reduction equipment.

The Reliant facility utilizes aqueous ammonia in the Selective Catalytic Reduction Systems (SCR) for the control of NO_X emissions from the main boilers of Units 1 and 2. Aqueous ammonia is also used in the station water treatment system for pH control, and in the demineralizer system for the regeneration of anion and cation exchange resins. Aqueous

ammonia is a solution of ammonia mixed with water at concentrations of typically 19 percent or 29 percent ammonia.

Pursuant to the requirements of Title 40 Code of Federal Regulations Part 68.1 through 68.220 and Chapter 6.95, Article 2 of the California Health & Safety Code 25531 through 25543.3, a federal (federal threshold is 20,000 pounds of ammonia) Risk Management Plan (RMP) has been implemented under the California Accidental Release Prevention (CalARP) Program for the Reliant Energy's Ormond Beach Generating Station. The City of Oxnard Fire Department is the designated Certified Unified Program Agency (CUPA) for the Reliant facility. With input from the CUPA, the selective catalytic reduction (SCR) ammonia storage and handling system has been identified as the only process at the facility which triggers the CalARP RMP requirements. However, URS has not been able to review the Offsite Consequence Analysis (OCA) for the Reliant facility. This portion of the RMP describes the off-site consequences of an accidental release of aqueous ammonia.

The Reliant facility is located immediately southwest of the Southern Subarea. Land uses proposed for the Southern Subarea include approximately 420 acres of developed land, primarily with light industrial and business/research park uses. The remaining developed areas would include detention/biofiltration areas and a greenbelt area. The southernmost 220 acres would remain under agricultural uses. Proposed uses for the Northern Subarea include a mix of residential, schools, recreation, neighborhood commercial, and light industrial. Although the proposed land uses adjacent to the Reliant facility are the same as the existing uses, the addition of urbanized areas and sensitive uses, as well as the increase in population that would occur with the proposed project, could create an additional risk to the future Specific Plan area population. Additional information will need to be obtained from the RMP in order to address health and safety impacts associated with the Reliant facility (Ormond Beach Generating Station RMP, 2004).

3.5.1.4 Oil and Gas Facilities in the Project Vicinity

There were and are oil and gas extraction, processing, and treatment facilities located in and around the City of Oxnard. Potential concerns to public health and safety associated with these type of facilities are releases of hazardous materials, including flammable, explosive, and toxic materials.

According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Services, Map W2-1 (District 2), there are no active oil wells and only three abandoned oil wells within one mile of the Study Area: Oceanic Oil Company 'Petit' 1 (approximately ⅓ mile from the site); Texaco E & P Inc 'Eastwood' 1 (approximately ⅓ mile from the site); and Southern California Petroleum 'Merchants-Hartman' 1 (approximately ½ mile from the Study Area). The Oxnard and West Montalvo oil fields, which are active, are located more than one mile north of the Study Area.

3.5.1.5 Proposed Liquefied Natural Gas Facilities

A proposal by BHP-Billiton to construct a floating liquefied natural gas (LNG) storage and regasification unit in federal waters offshore of Ventura and Los Angeles counties was under review at the federal and state levels at the time the NOP for this project was issued. The proposal has since been abandoned.

3.5.1.6 Halaco Superfund Site

From 1965 to 2004, Halaco Engineering Company operated a secondary metal smelter at 6200 Perkins Road approximately 0.5 mile west of the proposed Ormond Beach Specific Plan Study Area. The Halaco site is adjacent to the Ormond Beach wetlands, and is close to the Ormond Beach Lagoon, Ormond Beach, and the Pacific Ocean. The site includes an 11-acre parcel containing the former smelter, and an adjacent 26-acre waste management area where wastes were deposited.

During 40 years of operation, Halaco recovered aluminum, magnesium, and zinc derived from aluminum cans, metal waste from other smelters, and other scrap materials, resulting in a large quantity of waste. Halaco's primary wastes were non-target metals and metal salts (i.e., slag or dross). From about 1965 to 1970, Halaco discharged waste to an unlined earthen settling pond adjacent to the Oxnard Industrial Drain (OID). From about 1970 to 2002, Halaco discharged wastes to unlined earthen settling ponds east of the smelter. As early as 1977, numerous federal, state, and local agencies attempted to regulate Halaco's operations, Halaco contested and/or litigated many of the regulatory efforts by these agencies (USEPA, 2008). The Ventura County District Attorney and the Environmental Defense Center, a nonprofit pubic interest organization, have also been in litigation with Halaco on environmental matters (USEPA, 2007a).

Halaco filed for bankruptcy in 2002 and ceased operations in 2004. In 2006, Alpha and Omega Development LLC purchased the waste management area and assumed the lease to the former smelter property. Future use of the property remains uncertain (USEPA, 2007a).

In June 2006, the United States Environmental Protection Agency (USEPA) collected samples from the Halaco site and adjacent properties and environments, including nearby residential areas (not within the Study Area), wetlands, near-shore sediments and Ormond Beach. These samples of soil, waste, sediment, groundwater, surface water, air, and fish tissue were analyzed in a laboratory to determine the presence and concentration of specific contaminants. Based on the results, USEPA confirmed that there is contamination at the Halaco facility, on the smelter and waste disposal parcels, and found evidence that wastes from the Halaco facility have moved into adjacent beach and wetlands, OID sediments and underlying groundwater. Limited sampling in a nearby residential area did not show elevated levels of contaminants of concern (USEPA, 2007b).

Based on the results of the 2006 site assessment and prior investigations conducted by other agencies, USEPA concluded that the Halaco Site will require additional cleanup to properly address the environmental and human health risks associated with the contamination (USEPA, 2007b). USEPA proposed adding the Halaco Site to the Superfund National Priorities List (NPL) on March 7, 2007. The site was added to the NPL on September 19, 2007 (USEPA, 2007a).

USEPA is conducting ongoing human health and ecological risk assessments for the site (USEPA, 2007c). The California Department of Public Health (CDPH) is also conducting a health risk assessment. In late 2007, the USEPA determined that a time-critical removal action was necessary to stabilize the site and reduce immediate concerns about contamination. Removal operations for Halaco's estimated 700,000 cubic yards of onsite waste were completed as of March 28, 2008 (USEPA, 2008).

In 2009, the California Department of Public Health (CDPH) completed a draft report summarizing its investigation of the public health implications of exposure to contamination from the Halaco Site. Key findings were that activities that create a lot of dust (e.g., dirt bike riding in contaminated areas) pose a public health concern but that the following exposure pathways pose no public health concern:

- Exposure to the soil in the nearby agricultural fields and neighborhoods.
- Short-term exposure when trespassing on the Halaco site.
- Visiting the Nature Conservancy Land, Ormond Beach, or the wetlands.
- Swimming in the Oxnard Industrial Drain.

Based on existing preliminary information, the Halaco site is not expected to present a hazard to human health at the Ormond Beach Specific Plan Study Area, because the proposed Project would not use groundwater (see Section 3.3, Water Resources), and because limited sampling in a residential area near the Halaco site did not show elevated levels of the specific contaminants of concern.

3.5.1.7 Other Hazardous Materials

3.5.1.7.1 Radon

Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, which is found in the earth's crust. Radon is an invisible, odorless, inert gas that emits alpha particles known to cause lung cancer. Radon levels are highest in basements (areas close to the soil) that are poorly ventilated. A radon survey was not conducted as part of the Phase I ESA (RBF, 2003). According to the State of California Department of Health Services Radon Database for California (2002), the proposed project

site does not have a predicted average indoor screening level greater than 4.0 picocuries per liter (pCi/l). The database shows that eight radon tests were performed within the zip code that includes the Study Area (93033) and none of these tests showed radon levels equal to or higher than 4.0 pCi/l. The US Environmental Protection Agency (USEPA) recommends remedial actions when radon levels exceed 4.0 pCi/l.

3.5.1.7.2 Asbestos and Lead

Based on the period during which the majority of the existing onsite structures were built (prior to 1978), it is likely that asbestos-containing materials (ACMs) and lead-based paints (LBPs) are present within the Study Area.

3.5.1.8 Northern Subarea

Review of historical USGS Quadrangle Maps dating from 1904 to the most current (1967, revised), show agricultural uses onsite and in the immediate vicinity, with slowly increasing associated buildings and water wells. Increasing large-scale development started occurring in the 1950s to the northwest and west of the Study Area.

According to the Phase I ESA prepared for the Northern Subarea (RBF, 2003), multiple structures are located within the boundaries of the site, and are generally used for residential, agricultural offices, storage areas, and greenhouses uses. The one-story onsite structures appeared to be situated on concrete foundations and of wood construction. Based on the review of aerial photographs and topographic maps, the majority of the onsite structures appeared to be constructed prior to 1978.

The Phase I ESA prepared for the Northern Subarea (RBF, 2003) identifies the following issues related to the site, noted during a site inspection on May 2003:

- Several aboveground storage tanks (ASTs) were noted onsite, near agricultural maintenance/staging areas adjoining Hueneme Road. There was superficial staining and odors near the ASTs and on the bare soil throughout the maintenance/staging yard.
- Miscellaneous storage containers (5-gallon buckets) were seen throughout the project areas (contents unknown).
- Based on the review of historical aerial photographs and the site inspection performed by RBF as part of the Phase I ESA report (2003), the Northern Subarea was historically used for agricultural activities. Therefore, a combination of several commonly used pesticides (e.g., DDD, DDT, DDE) that are now banned may have been used throughout the subject site. The historical use of agricultural pesticides may have resulted in pesticide residues persisting in the soil at concentrations that are considered hazardous according to established federal regulatory levels. The primary concern with historical pesticide

residues is the risk to human health from inadvertent ingestion of contaminated soil, particularly by children. The presence of moderately elevated pesticide residuals in soil presents potential health and marketplace concerns.

- Due to current agricultural activities there is potential for storage/mixing areas (primarily associated with pesticides/herbicides).
- Shops and garages were noted next to residential units and greenhouses. These uses often contain hazardous materials (e.g., solvents, grease, waste oil, fertilizers). Therefore, the potential for chemical storage areas onsite is considered likely.
- Due to the rural nature of the site, septic systems may be present within the site boundaries.
- Based upon the period during which the majority of the existing onsite structures were built (prior to 1978), it is likely that ACMs are present onsite.
- Based upon the period during which the majority of the existing onsite structures were built (prior to 1978), it is likely that LBPs are present onsite.
- There are 20 listed regulatory sites located within a one-mile radius of the site. Two properties adjacent to the Northern Subarea (5601 Edison Drive and 1790 Pleasant Valley Road) have reported subsurface releases of petroleum products and toxic chemicals that have impacted groundwater. The appropriate regulatory agency had not granted closure status for these properties at the time of preparation of the Phase I ESA for the Northern Subarea (RBF, 2003).
- One parcel located within the Northern Subarea (1531 East Hueneme Road, APN 223-0-030-285) was listed in the California Hazardous Material Incident Report System (CHMIRS), which contains information on reported hazardous material incidents (i.e., accidental spills or releases). A hazardous material release occurred on September 12, 1989, and resulted in contamination (liquid organophosphate-malathion) on the ground surface). The site was completed/closed on the same release date; therefore, a present REC within the property resulting from this occurrence appears to be low.

3.5.1.9 Southern Subarea

The Southern Subarea has one uninhabitable metal structure (utilized for storage) and unimproved dirt roads used for agricultural activities. The subject site has historically consisted of vacant land, agricultural uses with multiple structures, and power transmission lines. Through the review of historical aerial photographs, topographic maps, and the current USGS topographic map, multiple residential structures were visible as well as associated structures that served both residential and agricultural activities. However, during the October 25, 2005, RBF site reconnaissance, only the metal structure was visible.

The Phase I ESA prepared for the Southern Subarea (RBF, 2005) identifies the following issues related to the site, noted during a site inspection on October 2005:

- Based on the review of historical aerial photographs and the site inspection performed by RBF as part of the Phase I ESA report, the Southern Subarea was historically used for agricultural activities. Therefore, as identified in the Northern Subarea issues, a combination of several commonly used pesticides (e.g., DDD, DDT, DDE) that are now banned may have been used throughout the subject site.
- Miscellaneous debris (e.g., irrigation piping, 55-gallon drums, multiple portable outhouses, paint cans, miscellaneous agricultural equipment, etc.) was noted throughout the site. One uninhabitable metal structure utilized for storage was located onsite. The structure housed fertilizers and used oils, and staining was noted on the structure's concrete floor. Multiple additional storage areas were located onsite. These storage areas are anticipated to be associated with agricultural activities as well, and may contain petroleum and pesticide products.
- There were three active diesel generators onsite. Secondary containment was not utilized for generators and staining and odor associated with petroleum were observed.
- Multiple water wells were noted onsite. One unidentified well was noted within the storage area located along East Hueneme Road.
- Powerlines with transformers traverse the site.
- A high-pressure gas line is located along the western portion of the site, along Edison Road.
- Multiple ASTs were visible. Ground staining and odor was associated with most of these ASTs.
- Approximately seven 55-gallon drums were noted, with undefined content. Dark staining and odor were noted.
- Based upon the year the existing onsite structure was built (prior to 1978), it is likely that ACMs are present onsite.
- Based upon the year the existing onsite structure was built (prior to 1978), it is likely that LBPs are present onsite.
- The presence of hazardous materials on the subject site that may have been generated from adjacent properties was not visible during the October 25, 2005 site inspection.
- One property within the Southern Subarea (Remie Callens Estate, 1552 E. Hueneme Road) was listed in the HAZNET, UST (Underground Storage Tank), HIST UST (Historical UST), LUST (Leaking UST), and Cortese databases. The site was listed in the HAZNET database for handling/using hydrocarbon solvents, oxygenated solvents, liquids

with halogenated organic compounds that are greater than 1,000 mg/l, unspecified oil-containing waste, and aqueous solution with less than 10 percent total organic residues. These wastes were disposed of using both the Recycler and Transfer Station methods. This site was reported in the UST and HIST UST databases due to the inactive UST onsite. The site was listed in the LUST and Cortese databases due to a LUST that released gasoline to the soil. The case was reported closed on May 23, 1995; therefore, a present REC within the property resulting from this occurrence appears to be low.

3.5.2 Regulatory Framework

Information regarding federal, state, and local regulations pertinent to hazardous materials and hazardous waste are discussed below. The information presented below supplements the information presented in Section 3.5.1.

3.5.2.1 Federal Authorities and Administering Agencies

3.5.2.1.1 CERCLA 42 U.S.C. §9601 et seq.; and SARA 42 U.S.C. §11001 et seq.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA reflected the USEPA's experience in administering the complex Superfund program during its first six years and made several important changes and additions to the program. SARA also required USEPA to revise the Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the National Priorities List.

3.5.2.1.2 Resource Conservation and Recovery Act 42 U.S.C. §6901 et seq.

The Resource Conservation and Recovery Act (RCRA) gave USEPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also set forth a framework for the management of non-hazardous wastes.

The 1986 amendments to RCRA enabled the USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. RCRA focuses only on active and future facilities and does not address abandoned or historical sites.

3.5.2.1.3 U.S. Department of Transportation (Code of Federal Regulation Title 49)

The U.S. Department of Transportation has the regulatory responsibility for the safe transportation of hazardous materials.

3.5.2.2 State Authorities, Administering Agencies, and Regulations

3.5.2.2.1 California Office of Emergency Services (OES)

The California Office of Emergency Services coordinates the emergency response to accidental releases of acutely/ extremely hazardous materials.

3.5.2.2.2 Los Angeles Regional Water Quality Control Board (LARWQCB)

Federal and state site remediation regulations are enforced by the RWQCB and the County Environmental Health Division (EHD). The EHD is the lead agency responsible for the supervision of cleanup at sites located throughout Ventura County. The County will grant closure of an impacted site when confirmatory samples of soil and groundwater taken reveal that levels of contaminants are below the standards set by EHD and the LARWQCB.

3.5.2.2.3 Department of Toxic Substances Control (DTSC)

DTSC is authorized by the USEPA to administer the hazardous waste laws and oversee remediation of hazardous wastes sites.

3.5.2.2.4 California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR)

DOGGR is mandated by Section 3106 of the Public Resources Code to supervise the drilling, operation, maintenance, and abandonment of oil and gas wells for the purpose of preventing: 1) damage to life, health, property, and natural resources; 2) damage to underground and surface waters suitable for irrigation or domestic use; 3) loss of oil, gas, or reservoir energy; and 4) damage to oil and gas deposits by infiltrating water and other causes. DOGGR regulations are contained in CCR Title 14.

3.5.2.2.4 California Health and Safety Code and California Code of Regulations

The storage, handling and disposal of potentially hazardous materials shall be in conformance with the requirements set forth in the following statutes and regulations:

- The Hazardous Waste Control Act (HWCA) of 1972 is codified in Health and Safety Code Section 25100 et seq. Regulations addressing the management of hazardous wastes are found in 22 CCR 66001 et seq. These management issues include: characterizing

wastes, obtaining a waste identification number, implementing a waste reduction program, manifesting wastes, packaging and labeling of wastes, recordkeeping, monitoring and emergency preparedness.

- USTs – California Health and Safety Code, Division 20, Chapter 6.7 and the California Code of Regulations Title 23, Division 3, Chapter 16
- Hazardous Materials Business Plan – California Health and Safety Code Section 25504
- RMP – California Health and Safety Code, Division 20, Chapter 6.95, Article 2
- Certified Unified Program Agency (CUPA) – California Health and Safety Code, Division 20, Chapter 6.11

The storage, handling and disposal of potentially hazardous waste shall be in conformance with the requirements set forth in the following statutes and regulations:

- Implementing Regulations – California Code of Regulations (CCR), Title 22, Division 4.5.
- Hazardous Waste Control – California Health and Safety Code, Division 20, Chapter 6.5.

3.5.2.3 Local Authorities and Administering Agencies

3.5.2.3.1 Ventura County Local Agency Formation Commission

The Ormond Beach Specific Plan Study Area is located in the County of Ventura, within the City of Oxnard Sphere of Influence. The County Local Agency Formation Commission (LAFCO) will review the proposal with respect to annexation to the City of Oxnard. During the annexation review and approval process, LAFCO is required to make findings certifying that the annexation is consistent with public safety requirements, including potential hazards and hazardous materials.

3.5.2.3.2 Ventura County General Plan/Local Coastal Plan

The Ventura County General Plan was adopted by the Ventura County Board of Supervisors in 1988 and most recently amended in 2004. Because the Ormond Beach area is within the City of Oxnard Sphere of Influence, but is currently unincorporated, the Study Area is currently subject to the standards of the County General Plan and Local Coastal Plan. The Coastal Plan contains the principal land-use policies for development within Ventura County's Coastal Zone as defined under the California Coastal Act of 1972. Of the Study Area, only about five acres in the southerly portion of the Southern Subarea is located within the Coastal Zone. However, issues outside the Coastal Zone that could potentially have effects on resources within the Coastal Zone may be reviewed for consistency with Ventura County Local Coastal Plan and California Coastal Act policies.

3.5.2.3.3 Ventura County Ordinance

The storage, handling and disposal of potentially hazardous waste shall be in conformance with the requirements set forth in the following regulation, in addition to the regulations listed in Section 3.5.2.2.5 above:

- Permit Requirements – Ventura County Ordinance Code, Division 4, Chapter 5 (Hazardous Substances), Article 1, (Certified Unified Program Agency)

3.5.2.3.4 Ventura County Environmental Health

In 1997, the Ventura County Hazardous Materials Program was approved by the California USEPA to be a CUPA. The CUPA provides regulatory oversight for the following programs: Hazardous Waste Generator; Hazardous Waste Generator Onsite Treatment (Tiered Permit); Underground Storage Tank; Aboveground Storage Tank Spill Prevention Control and Countermeasure Plan; Hazardous Materials Release Response Plans and Inventory (Business Plans); and Risk Management Plans. In addition to conducting annual facility inspections the Hazardous Materials Program is involved with hazardous materials emergency response, investigation of the illegal disposal of hazardous waste, public complaints, and stormwater illicit discharge inspections.

3.5.2.3.5 City of Oxnard General Plan/Local Coastal Program

The City of Oxnard's 2020 General Plan was adopted in 1990 and most recently amended in 2004. The proposed project will include annexation into the City of Oxnard and therefore must meet the standards of the City's 2020 General Plan and certified Local Coastal Program. The City is in the process of updating the 2020 General Plan and the intent is to integrate the Ormond Beach Specific Plan into the update process.

3.5.2.3.6 City of Oxnard Fire Department

The City of Oxnard Fire Department is the local CUPA for the Study Area.

3.5.3 Project Impacts and Mitigation

3.5.3.1 Thresholds of Significance

According to the City of Oxnard Threshold Guidelines (1995), whether the hazardous materials impacts of a project are "significant" is decided on a case-by-case basis and depends on:

- Individual or cumulative physical hazard of material or materials
- Amounts of materials onsite, either in use or storage
- Proximity of hazardous materials to populated areas and compatibility of materials with neighboring activities
- Federal, state, or local laws and ordinances governing storage and use of hazardous materials
- Potential for spill or release of hazardous materials

In addition, according to the CEQA Guidelines, a project is considered to have a potentially significant adverse impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials
- Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment

The following project impacts were identified based on a review of the combined County, City, and CEQA thresholds.

3.5.3.2 Project Impacts

3.5.3.2.1 Northern Subarea

Impact HM-1: Impacts from Potentially Contaminated Soils Resulting from Agricultural Operations. Although the area has been used for agriculture for several decades, the specifics

of these operations are unknown. The Phase I ESA (RBF, 2003) prepared for the Northern Subarea identified superficial stains and odor in several locations, which may be indicative of soil contamination. There is also a potential for pesticides, herbicides, fuels, and other chemicals used in various agricultural operations to be present onsite. These substances may have resulted in soil and/or groundwater contamination at concentrations above regulatory action levels. Potentially significant adverse health impacts to construction workers and/or future project site residents could occur if high levels of residual pesticides are present. In addition, due to the rural nature of the Study Area, septic systems may be present.

Significant hazards to the public and the environment through the release of hazardous materials into the environment when the Study Area is graded, because of the potential for hazardous materials to be present.

In light of the potential contamination issues identified in the Phase I ESA, the grading and development of the Northern Subarea may result in significant impacts due to the potential presence of soil contaminated by pesticide or chemical use by agricultural operations. There is also the potential for the presence of a septic system(s). Impacts from potentially contaminated soils resulting from agricultural operations are *significant but feasibly mitigated to less than significant (Class II)* through implementation of Mitigation Measure HM-1.

Importation of approximately 450,000 cubic yards of clean fill material could help reduce the contamination concentrations, depending upon the mitigation methods implemented pursuant to Mitigation Measure HM-1. The fill material was purchased from the Ventura County Watershed Protection District's Calleguas Creek existing permitted maintenance dredging program. The material has been tested for contamination and determined to meet applicable standards (Appendix F). The material is stockpiled at the County's stockpile site located near the intersection of Hueneme Road and Laguna Road in the unincorporated area.

Impact HM-2: Impacts from Hazardous Materials Leaks and Spills Recorded Onsite and on Adjacent Properties. The Phase I ESA (RBF, 2003) prepared for the Northern Subarea identified the following occurrences within the Study Area and adjacent properties:

- One parcel located within the Northern Subarea (1531 East Hueneme Road, APN 223-0-030-285) was listed in the CHMIRS. A hazardous material release occurred on September 12, 1989, and resulted in the contamination (liquid organophosphate-malathion) on the ground surface. The site was completed/closed on the same release date; therefore, potential impacts (or a present REC) resulting from this occurrence appears to be low.

- In light of the potential groundwater contamination issues identified in the Phase I ESA, the grading and development of the Northern Subarea may result in significant impacts due to the potential presence of contaminated groundwater.
- Two properties adjacent to the Northern Subarea (5601 Edison Drive and 1790 Pleasant Valley Road) have reported subsurface releases of petroleum products and toxic chemicals, which have impacted groundwater. The appropriate regulatory agency had not granted closure status for these properties in 2003 (RBF, 2003). Therefore, potential impacts (or a present REC) within the property resulting from these occurrences appears to be moderate to high. The Study Area proposes a manmade lake. Construction of the lake and possibly building foundations will require dewatering. If groundwater is contaminated then mitigation treatment to federal standards may be required during the dewatering period prior to discharge.

This impact exceeds the threshold of reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts from hazardous materials leaks and spills recorded onsite and on adjacent properties are *significant but feasibly mitigated to less than significant (Class II)* through implementation of Mitigation Measure HM-2.

Impact HM-3: Impacts from Asbestos-Containing Materials and Lead-Based Paints. Based upon the period during which the existing onsite structures were built (prior to 1978), it is likely that ACMs and LBPs are present onsite and would have to be handled properly prior to demolition activities. Impacts from ACMs and LBPs are *significant but feasibly mitigated to less than significant (Class II)* through implementation of Mitigation Measure HM-3.

Impact HM-4: Impacts Associated with Radon. Based on the State of California Department of Health Services Radon Database for California (2002), the proposed project site does not have a predicted average indoor screening level greater than 4.0 pCi/l. The database shows that eight radon tests were performed within the zip code that includes the Study Area (93033) and none of these tests showed radon levels equal to or higher than 4.0 pCi/l. USEPA recommends remedial actions only when radon levels exceed 4.0 pCi/l. The impacts associated with radon are, thus, considered to be *less than significant (Class III)*. No mitigation is proposed.

Impact HM-5: Impacts from Future Accidental Release of Hazardous Materials. The proposed project will include residential, commercial, and light industrial uses. Since any facilities using hazardous substances will have to be designed, constructed, and operated in accordance with applicable regulations, no significant impacts are expected to occur. Businesses that handle hazardous materials or generate hazardous waste would need a CUPA permit from the City of Oxnard Fire Department. The impacts associated with accidental

release of hazardous materials from the proposed uses are considered to be *less than significant (Class III).* Other than compliance with existing regulations, no mitigation is proposed.

Impact HM-6: Impacts to Public Health from Migration of Contaminants from the Halaco Superfund Site. Based on current information (USEPA 2007a,b,c), the Halaco site is not expected to present a hazard to human health at the Ormond Beach Specific Plan Study Area because the proposed Project would not use groundwater, and because limited sampling in a residential area near the Halaco site did not show elevated levels of site contaminants. However, since the Study Area is located less than 4 miles from the Halaco site, this preliminary assessment must be confirmed upon completion of USEPA's and CDPH's Health Risk Assessments prior to issuance of any building permits. Impact HM-6 is, therefore, considered *potentially significant, but feasibly mitigated to less than significant (Class II).*

3.5.3.2.2 Southern Subarea

Impact HM-7: Impacts from Potentially Contaminated Soils Resulting from Agricultural Operations. The Study Area has been used for agriculture for several decades, although the specifics of these operations are unknown. The Phase I ESA (RBF, 2005) prepared for the Southern Subarea identified superficial stains and odor in several locations, which may be indicative of soil contamination. There is a potential for pesticides, herbicides, fuels and other chemicals used in various agricultural operations to be present onsite. These substances may have resulted in soil and/or groundwater contamination at concentrations above regulatory action levels. Potentially significant adverse health impacts to construction workers and/or future project site residents could occur if high levels of residual pesticides are present at the site. In addition, due to the rural nature of the site, septic systems may be present within the site boundaries.

In light of the potential contamination issues identified in the Phase I ESA, the grading and development of the Northern Subarea may result in significant impacts due to the potential presence of soil contaminated by past pesticide or chemical use by agricultural operations. There is also the potential for the presence of a septic system(s). Impacts from potentially contaminated soils resulting from agricultural operations are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure HM-1.

Impact HM-8: Impacts from Hazardous Materials Leaks and Spills Recorded Onsite and on Adjacent Properties. The Phase I ESA (RBF, 2005) prepared for the Southern Subarea identified the following occurrences within the site and adjacent properties:

- One property within the Southern Subarea (Remie Callens Estate, 1552 E. Hueneme Road) was listed in the HAZNET, UST (Underground Storage Tank), HIST UST

(Historical UST), LUST (Leaking UST), and Cortese databases. The site was listed due to a LUST that released gasoline to the soil. The case was reported closed on May 23, 1995, therefore, potential impacts (or a present REC) within the property resulting from this occurrence are unlikely. Since there are no impacts, no mitigation is proposed.

Impact HM-9: Impacts from Asbestos-containing Materials and Lead-based Paints. Based upon the period during which the existing onsite structure was built (prior to 1978), it is likely that ACM and LBP are present onsite and would have to be handled properly prior to demolition activities. Impacts from ACMs and LBPs are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure HM-3.

Impact HM-10: Impacts Associated with Radon. Based on the State of California Department of Health Services Radon Database for California (2002), the proposed project site does not have a predicted average indoor screening level greater than 4.0 pCi/l. The database shows that eight radon tests were performed within the zip code that includes the Study Area (93033) and none of these tests showed radon levels equal to or higher than 4.0 pCi/l. USEPA recommends remedial actions only when radon levels exceed 4.0 pCi/l. The impacts associated with radon are, thus, considered to be *less than significant (Class III)*. No mitigation is proposed.

Impact HM-11: Impacts from Future Accidental Release of Hazardous Materials. The proposed project will include general commercial, business/research park, and light industrial uses. The specific tenants of the uses is still unknown, thus it is not possible to assess potential hazards and significance. Since any facilities using hazardous substances will have to be designed, constructed, and operated in accordance with applicable regulations, no significant impacts are expected to occur. Businesses that handle hazardous materials or generate hazardous waste would need a CUPA permit from the City of Oxnard Fire Department. The impacts associated with accidental release of hazardous materials from the proposed uses are considered to be *less than significant (Class III)*. Other than compliance with existing regulations, no mitigation is proposed.

Impact HM-12: Electromagnetic Fields. Electromagnetic Fields (EMF) occur independently of one another as electric and magnetic fields at the 60-Hz frequency used in transmission lines, and both are created by electric charges. Electric fields exist when these charges are not moving. Magnetic fields are created when the electric charges are moving. The magnitude of both electric and magnetic fields falls off rapidly as the distance from the source increases (proportional to the inverse of the square of distance). However, the existing transmission line is located within a 250-foot-wide easement area. In addition both specific plans have proposed commercial and/or industrial uses within the easterly portion of the existing transmission right-of-way which is closest to the transmission line. Potential impacts

associated with EMF exposure to residential areas are *less than significant (Class III)* and no mitigation is necessary.

Impact HM-13: Impacts to Public Health from Migration of Contaminants from the Halaco Superfund Site. Based on current information (USEPA 2007a,b,c), the Halaco site is not expected to present a hazard to human health at the Ormond Beach Specific Plan Study Area because the proposed Project would not use groundwater, and because limited sampling in a residential area near the Halaco site did not show elevated levels of site contaminants. However, since the Study Area is located less than 4 miles from the Halaco site, this preliminary assessment must be confirmed upon completion of USEPA's and CDPH's Health Risk Assessments prior to issuance of any building permits. Impact HM-13 is, therefore, considered *potentially significant, but feasibly mitigated (Class II).*

3.5.3.2.3 Cumulative Impacts

Impact HM-14: Offsite Contaminated Soil Disposal. There is the potential for cumulative impacts resulting from disposal of contaminated soil associated with remediation activities at an appropriate offsite disposal facility, which will be determined by the type and concentration of the contaminant. This potential impact would occur if site remediation is required, and actual impacts will only be determined after completion of a comprehensive Phase II ESA. The amount of contaminated soil generated by this project is expected to be relatively minor and no significant contribution to cumulative effects associated with potential reduced landfill capacity is anticipated. All necessary remediation activities, including transport and disposal of contaminated soil, would be in compliance with the regulating agencies' requirements. This impact is considered to be *less than significant (Class III).* No other mitigation is proposed.

3.5.3.3 Mitigation Measures

Mitigation Measure HM-1: Soil Sampling. The majority of the Study Area has been utilized for agricultural purposes for several decades and may contain pesticide residues in the soil. Soil sampling shall occur throughout the subject site, as part of a Phase II ESA, including any known pesticide mixing areas. In order to adequately assess the extent of any existing soil contamination affecting the site, a Phase II ESA complying with ASTM standards shall be completed before recordation of any Tract Maps for the proposed Study Area. The sampling and the comprehensive Phase II ESA will determine if pesticide concentrations exceed established regulatory requirements and will identify proper handling procedures that may be required.

If the sampling program identifies pesticide concentrations that exceed regulatory requirements, the contaminated areas could be mitigated through: 1) removal of all contaminated soils that exceed regulatory limits and disposal at a Class II facility; 2)

remediation of the site through mixing contaminated soils with clean fill material; 3) placement of contaminated soils under roads; 4) or some combination of the above. Implementation of the preceding measures will reduce the level of contamination such that impacts will be less than significant.

The following measures, identified in the Phase I ESAs prepared for the Study Area, will also be implemented to reduce potential impacts from contaminated soils resulting from agricultural operations:

- All miscellaneous debris (e.g., irrigation piping, 55-gallon drums, portable out-houses, paint cans, etc.), vehicles, maintenance equipment, and materials (e.g., fertilizer, lubricants, grease, waste oil, gasoline, etc.), construction/irrigation materials, miscellaneous stockpiled debris, storage tanks, and 5-gallon drums, shall be removed offsite and properly disposed of at an approved landfill facility. Once removed, a visual inspection of the areas beneath the removed materials and sampling shall be performed by a qualified hazardous materials consultant. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.
- All wells (and associated concrete pipes) present within the site shall be properly closed and abandoned pursuant to state and federal guidelines and pursuant to the latest procedures required by the local agency with closure responsibilities for the wells. Any associated equipment (e.g., diesel fuel tank, concrete, piping, and associated materials) should be removed and properly disposed of at a permitted landfill. A visual inspection of the areas beneath the removed materials (if present) should be performed by a qualified hazardous materials consultant.
- Due to visible evidence of dark surface soil staining of oil/petroleum products located within the immediate vicinity of the onsite petroleum ASTs, soil should be excavated and sampled to determine the vertical extent of the contamination. If during soil removal a qualified hazardous materials consultant identifies staining (evidence of petroleum products) that appears to continue below the ground surface, sampling should be performed to characterize the extent of the contamination and identify appropriate remedial measures.
- The interior of individual onsite structures and storage trailers within the subject site should be visually inspected and sampled by a qualified hazardous materials consultant prior to demolition or renovation activities, with particular attention to all garage/farm equipment maintenance uses. Should hazardous materials be encountered with any onsite structure, the materials should be tested and properly disposed of in accordance with State and Federal regulatory requirements. Any stained soils or surfaces underneath the removed materials should be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.

- Any removal or relocation of transformers during site construction/demolitions should be conducted under the purview of the local utility purveyor to identify properly handling procedures regarding potential Polychlorinated Biphenyl (PCBs).
- If unknown wastes or suspect materials are discovered during construction by the contractor which he/she believes may involve hazardous waste/materials, the contractor shall:
  - Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area
  - Notify the Project Engineer of the implementing Agency
  - Secure the areas as directed by the Project Engineer
  - Notify the implementing Agency's Hazardous Waste/Materials Coordinator
- Due to the rural nature of the subject site, the presence of septic tanks is considered likely. Building Department Records should be reviewed to indicate any documented septic tanks. If present, septic tanks should be removed and properly disposed of at an approved landfill facility. Once the tanks are removed (if any), a visual inspection of the areas beneath and around the removed tank(s) should be performed. Soils underneath the septic tank(s) should be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.

This mitigation addresses impacts HM-1 and HM-7 and reduces the impacts to less than significant.

Mitigation Measure HM-2: Groundwater Evaluation. At least two facilities adjoining the Northern Subarea have reported subsurface petroleum releases and contamination. The properties have impacted soil and groundwater; however, the extent of lateral contamination remains undefined. In order to adequately assess the extent of any existing hazardous materials contamination affecting the site, a groundwater evaluation complying with ASTM standards shall be completed before recordation of any Tract Maps for the proposed Study Area. The groundwater should be sampled for the contaminants of concern and the direction of groundwater flow determined. Groundwater is expected at depths of approximately 3 to 4 feet that are at an elevation above the elevation of the proposed lake at approximately 8 feet. Because of this difference, dewatering is likely and knowledge of conditions will help in evaluating the disposition of pumped groundwater. Upon completion of testing, if contamination is detected and dewatering is required, the contaminated groundwater must be kept separate and disposed of in accordance with state and federal regulations.

This mitigation addresses impact HM-2 and reduces the impact to less than significant.

Mitigation Measure HM-3: Phase II ESA. Based on the period during which the existing structures in both the Northern and Southern subareas were built (prior to 1978), ACM and LBP may be present within the existing onsite structures and shall be handled properly prior to remodeling or demolition activities. In order to adequately assess the presence of ACMs and LBPs affecting the site, a Phase II ESA complying with ASTM standards shall be completed before recordation of any Tract Maps for the proposed Study Area. If either ACMs or LBPs are identified in the structures, then removal of these materials in compliance with state and federal requirements shall be undertaken prior to demolition of the structure, and the removed materials will be disposed of at an approved landfill.

All activities involving ACMs and LBPs will be required to comply with the California Code of Regulations Title 22, the California Health and Safety Code, and the Code of Federal Regulations Title 29 (Department of Labor), and Title 49 (Department of Transportation).

This mitigation addresses impacts HM-3 and HM-9 and reduces the impact to less than significant.

Mitigation Measure HM-4: Halaco Site HRAs. The City must affirm that the USEPA's and CDPH's Health Risk Assessments conclude that the Halaco site presents no risk to future development in the Study Area before issuing any building permits for the proposed Project..

This mitigation addresses impacts HM-6 and HM-13 to less than significant.

3.5.3.4 Residual Impacts

Residual impacts on public safety caused by onsite hazards or hazardous materials would be mitigated to a less significant level with incorporation of mitigation measures HM-1 through HM-4.

3.6
BIOLOGICAL RESOURCES

3.6 BIOLOGICAL RESOURCES

3.6.1 Existing Conditions

The Ormond Beach Specific Plan Study Area consists of two subareas, the Northern Subarea and Southern Subarea (see Figure 3.6-1). For purposes of this discussion, the Northern and Southern subareas are referred to collectively as the Study Area. The two subareas are located within the same watershed and groundwater basin. The following is a description of the existing environmental and biological conditions at each of these subareas.

3.6.1.1 Regional Setting

The Study Area is located on the broad alluvial Oxnard Plain in Ventura County. The north, west, and southern borders adjoin the City of Oxnard. Residential development is to the north, industrial and agricultural uses lie to the west, and to the south are the Reliant Energy Ormond Beach Generating Station and the Ormond Beach wetland-dune complex. Along the eastern border are Naval Base Ventura County (NBVC) Point Mugu and agricultural land.

The Ormond Beach area adjacent to the southern boundary of the Southern Subarea is widely recognized to be quite rich biologically. Ormond Beach includes several hundred acres of salt marsh and brackish or freshwater wetlands, coastal dunes and scrub, and upland areas that are considered Environmentally Sensitive Habitat Areas (ESHAs) under the Local Coastal Plan. A number of sensitive habitats, wildlife and plants occur in the area that would potentially be impacted by the proposed project as described below.

3.6.1.2 Overview of Project Site

The 917-acre Study Area consists of two planning subareas, each of which will be covered by a separate specific plan. The proposed uses for these two subareas (Northern and Southern) are described below and the proposed land use distribution is shown in Figure 3.7-1. The two subareas are located north and south of Hueneme Road (see Figure ES-2).

The Northern Subarea is approximately 322 acres. The proposed land uses include low-density residential, medium-density residential, mixed-use commercial, school and park, and light industrial. Approximately 20 acres of this would include open space. The proposed development includes 537 single-family detached homes; 746 attached homes; one elementary school; one senior high school; one community park; neighborhood parks; a lake; a mixed-use commercial market place; light industrial uses; and open space with trails. The Southern Subarea is approximately 595 acres, of which approximately 230 will remain in agriculture use and 375 acres is proposed development including 218 acres of light industrial and 61 acres of business/research park. The remaining developed areas would include detention/biofiltration areas and a greenbelt area. A new overlay zone is being proposed to

identify parts of the Southern Subarea that will be appropriate for uses related to Port Hueneme.

The approximately 230 acres at the southernmost area of the Southern Subarea are currently in agricultural production as sod farms and are adjacent to sensitive wetland and dune habitat at Ormond Beach. This 230-acre area is proposed to continue in agricultural use and would not be annexed to the City as part of this project. The area may be sold to the California Coastal Conservancy or partner organization as part of the larger Ormond Beach wetland restoration project. The California Coastal Conservancy is coordinating the restoration and maintenance planning of this area. All agricultural uses are proposed to continue in this area until a purchase agreement or other arrangement is reached and a restoration process begins.

All of the 917-acre Study Area is currently in agricultural production and is regularly tilled. The topography of the area exhibits minimal slope, increasing the potential for flooding. Several large collection drains convey stormwater flow away from the Study Area. Manmade, open channels located along the boundaries of the Study Area connect to the Oxnard Drain. This drain, which exhibits minimal slopes, empties into the Mugu Lagoon. It is subject to the tidal influences of the lagoon, limiting its capacity for stormwater runoff and causing salinity levels as high as 9 ppm (9,000 mg/l).

The Study Area is surrounded by a variety of uses. To the north, the land use consists of developed single-family residential, which is a part of the Tierra Vista and Villa Capri neighborhoods. To the south, uses consist of Ormond Beach and the Reliant Energy Ormond Beach Generating Station. To the east, uses consist of agricultural fields and NBVC Point Mugu. To the west, uses include light industrial (north of McWane Boulevard) and agricultural uses (south of McWane Boulevard).

3.6.1.3 Project Site History

Prior to agriculture and industrialization, the vegetation in the Study Area and surrounding areas consisted of a mosaic of fresh and brackish coastal marshes interspersed with grassland, according to the U.S. Coastal and Geodetic Survey maps of 1855 and 1857 (Jones & Stokes, 1994). Today, although the Study Area contains minimal native vegetation, it continues to provide open grassland habitat for insects, small mammals, reptiles, and birds. Additionally, the Study Area serves as a piece of a mosaic of large refuges including the Santa Monica Mountains, Point Mugu, and Ormond Beach, and agricultural lands that provide fairly contiguous habitat for larger mammals and far-ranging raptors (see Figure 3.6-2). Highway 1 located between the Santa Monica Mountains and Point Mugu reduces the connectivity between these two large refuges but is not a complete barrier to wildlife movement. Other smaller roads within the agricultural lands reduce the habitat connectivity of these areas with Point Mugu and Ormond Beach especially for smaller wildlife.

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Legend

- Agriculture
- Freshwater/Brackish Wetlands
- Southern Coastal Salt Marsh
- Freshwater/Brackish Wetlands/ Salt Marsh
- Southern Foredune
- Ruderal
- Coyote Brush Scrub
- Developed
- Canals/Drains
- Oxnard/Port Hueneme City Limits

N

0 1,000 2,000 4,000

1 inch = 2,000 Feet

Ormond Beach Specific Plan EIR URS Corporation	**Source:** Ventura County Dated 2005	Figure 3.6-1. **HABITATS IN THE REGION OF THE STUDY AREA**	Nov. 2009

3.6.1.4 Adjacent (Offsite) Sensitive Habitats

The Study Area adjoins Ormond Beach and Mugu Lagoon located on NBVC Point Mugu, two large, habitat-rich sensitive areas. The species richness, high biological diversity, and significant biological, aesthetic and ecological values of these two areas are extensively documented. Numerous special-status plant and wildlife species have been documented within the State Coastal Conservancy wetland restoration Study Area for Ormond Beach, which includes NBVC Point Mugu (WRA, 2005). These areas are considered of particular combined value due to their relatively significant size, connectivity to each other and to upland open space areas, and their relatively undisturbed, high quality habitats. The two systems represent one of the largest and most important coastal wetland, estuarine, and dune complexes remaining in Southern California (WRA, 2005).

3.6.1.4.1 Southern Coastal Salt Marsh

Southern coastal salt marsh provides transitional habitat along the margins of bays, lagoons, and estuaries from Point Conception to the Mexican peninsula. Much reduced in extent from historic dimensions, southern coastal salt marsh is mainly characterized by highly productive herbaceous salt-tolerant hydrophytes, particularly species such as pickleweed (*Salicornia* sp.) that provide critical habitat for the state-listed endangered Belding's savannah sparrow (*Passerculus sandwichensis beldingi*). Other wildlife species occurring in coastal salt marsh habitat include salt marsh shrew, a federal and state Species of Concern, wandering salt marsh skipper, a federal Species of Concern and tidewater goby, a federally endangered species. In addition to wildlife species, sensitive plant species, salt marsh bird's beak (*Cordylanthus maritimus ssp. maritimus*) and wooly seablite (*Suaeda taxifolia*) occur in salt marsh habitats. Point Mugu and Ormond Beach contain salt marsh habitat, located to the southwest and southeast of the project site (Figure 3.6-1).

3.6.1.4.2 Freshwater Marsh

Freshwater marsh is characterized by nutrient rich soils with anaerobic conditions, dependent on freshwater input from subterranean sources. Typically, water is present year round with emergent perennial monocot species. Bullrushes, tules (*Scirpus* sp.), cattails (*Typha* sp.), spike rushes (*Eleocharis* sp.), and rushes (*Juncus* sp.) are all indicator plant species. Spiny rush (*Juncus acutus* ssp *leopoldii*), a CNPS List 4 plant species, has the potential to occur in this marsh habitat. It is known to occur in the Oxnard Drain, adjacent to the Southern Subarea. Freshwater marsh habitat supports a variety of wildlife species, Western pond turtle, treefrogs, California toads, lizards, mice, shrews, muskrat, raccoon, shorebirds and migratory ducks. The Ventura County Game Preserve to the southeast, the Nature Conservancy Preserve to the northwest, and the Ormond Lagoon to the southwest of the Study Area contain freshwater wetlands (Figure 3.6-1**).**

3.6.1.4.3 Brackish Marsh

Brackish marsh is intermediate between salt water marsh and freshwater marsh habitats in terms of water quality, flora and fauna. Due to undulating salt concentrations, vegetation and invertebrate diversity is limited. Indicator species are perennial monocots, tolerant of submergence like bulrush (*Scirpus* sp.) and cattail. Southern tarplant (*Centromadia parryi* ssp. *australis),* a CNPS List 4 sensitive plant and small spikerush (*Eleocharis parvula*), a CNPS 1B sensitive plant are found in brackish marsh wetlands. The Ventura County Game Preserve to the southeast, the Nature Conservancy Preserve to the northwest, and the Ormond Lagoon to the southwest of the project site contain brackish marsh (Figure 3.6-1).

3.6.1.4.4 Tidal Flats

Tidal flats are found adjacent to bays, estuaries and coastal salt marshes. Salt and mud flats within the tidal flats are often void of vegetation but can support plant species such as saltgrass (*Distichlis spicata*) and pickleweed. Despite the low diversity of plant species, tidal flats host numerous invertebrates, providing crucial foraging habitat for shorebirds, especially the California state species of concern, large-billed savannah sparrow and the federal threatened snowy plover.

3.6.1.4.5 Southern Foredune and Coastal Dune Scrub

Dune communities in southern California that form inland of the high-tide mark are composed of distinct zones, the foredunes and backdunes. Foredune habitat in southern California is very rare. From Point Conception to the Mexican border, it is only found in a few scattered locations in Santa Barbara County, El Segundo in Los Angeles County, in Ormond Beach and at Coronado in San Diego County. Plants capable of establishing in the dynamic substrate of the foredunes are often succulents and perennial herbs like sand verbena (*Abronia* sp.), beach morning glory (*Convolvulus soldanella*) and goosefoot (*Chenopodium californicum*). The substrate of the backdunes is more stable and can support greater species diversity. Coastal dune scrub associated with backdunes include, sagebrush (*Artemisia californica*), coyote bush (*Baccharis pilularis*), mock-heather (*Ericameria ericoides*), coastal buckwheat (*Eriogonum parvifolium*), deerweed (*Lotus scoparius*), lupines (*Lupinus* sp.) and black sage (*Salvia mellifera*). Salt marsh bird's beak, a federal and state endangered plant is known to occur in the dunes south and southwest of the project site. Red sand verbena, a CNPS List 4 sensitive plant grows along the foredunes of Ormond Beach and wooly seablite, CNPS List 4, grows within the MWD Exclusion parcel southwest of the project site. An extensive foredune is located along the beach from Ormond lagoon to Point Mugu. Inland from this foredune are fragmented areas of dune scrub.

3.6.1.5 Northern Subarea

The Northern Subarea consists of row crop agriculture and has adjacent residential development to the north. It provides some limited habitat value due to these disturbances and Hueneme Road along the southern boundary serves as somewhat of a deterrent to wildlife entering the Northern Subarea from habitats south of Hueneme Road.

3.6.1.5.1 Vegetation Types

The Northern Subarea consists mainly of agricultural lands with drainage ditches largely vegetated with weedy, non-native species such as cheeseweed (*Malva parviflora*), London rocket (*Sisymbrium irio*), black mustard (*Brassica nigra*), white sweet clover (*Melilotus albus*), and non-native grasses. The ditches draining the Northern Subarea are located along the north side of East Hueneme Road and the east side of Olds Road. One cypress tree was growing adjacent to the west side of Olds Road. A list of species observed in the Northern Subarea during the reconnaissance field survey is listed in Table 3.6-1.

TABLE 3.6-1
PLANT SPECIES OBSERVED IN THE NORTHERN SUBAREA

Scientific Name	Common Name	Origin
Brassica nigra	Black mustard	I
Chenopodium album	Lamb's quarters	I
Chenopodium murale	Nettle-leaved goosefoot	I
Cupressus sp.	Cypress tree	I
Erodium botrys	Long-beak storks bill	I
Malva parviflora	Cheeseweed	I
Melilotus albus	White sweet clover	I
Sisymbrium irio	London rocket	I
Taraxacum officinale	Common dandelion	I

I = Introduced Species
N = Native Species

3.6.1.5.2 Wildlife

Birds observed in the agricultural fields within the Northern Subarea during the 2004 reconnaissance survey conducted by URS included brown-headed cowbird (*Molothrus ater*), meadowlark (*Sturnella neglecta*), killdeer (*Charadrius montanus*), house sparrow (*Passer domesticus*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). While no other wildlife was observed during that survey, it is expected that common wildlife species that typically occur in developed areas and were observed during surveys conducted in 1985, 1994, and 1998 in the Ormond Beach vicinity still occur within the Study Area. This

includes species such as Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher *(Thomomys bottae)*, house mouse *(Mus musculus)*, and common rat *(Rattus rattus)*. Other species observed during the surveys at Ormond Beach that may occasionally occur in the Northern Subarea include Audubon's (desert) cottontail (*Sylvilagus audubonii*), black-tailed jack rabbit (*Lepus californicus*), bats, shrews (*Sorex* sp.), mice, coyote (*Canis latrans*), bobcat (*Felis rufus*), and fox (*Urocyon* sp.).

3.6.1.5.3 Habitat Types

Habitats within the Northern Subarea include agricultural lands mixed with ruderal vegetation, which is shown in Figure 3.6-1, quantified in Table 3.6-2, and described below.

TABLE 3.6-2
HABITAT TYPES OBSERVED IN THE NORTHERN SUBAREA[1]

Habitat Type	Acreage Present	Direct Impacts (Acres)	Open Space
Northern Subarea			
Agriculture	315.5	295.5	20
Agricultural Drain	6.5	6.5	-
Total	322	302	20

[1] The acreage calculations are approximate based on a combination of GIS calculations and acreages identified in the Specific Plans.

Most of the Northern Subarea's agricultural lands consist of row crops and drainages bordering these lands. Scattered ruderal vegetation is present in these areas. Approximately 315.5 acres of agricultural land is present in the Northern Subarea, and 6.5 acres of agricultural drainages.

3.6.1.5.4 Wildlife Corridors

The Northern Subarea, although mostly agricultural fields, provides habitat for wildlife species passing between the project site, adjacent agricultural fields from the northeast to the south, Ormond Beach wetlands to the south, the open space areas of federal, state and local parklands to the southwest, Santa Monica Mountains to the east, and Ventura County Game Preserve, Point Mugu Game Preserve, and NBVC Point Mugu to the southeast. Figure 3.6-2 depicts the spatial relationship between NBVC Point Mugu and the Santa Monica Mountains uplands, which is approximately five miles to the east of the Study Area (Santa Monica Mountains National Recreation Area and NBVC Point Mugu, 2002). Figure 3.6-3 shows the Study Area in relation to nearby Ormond Lagoon, Mugu Lagoon, Oxnard Canal No. 3, J Street Drain, and the Oxnard Industrial Drain.

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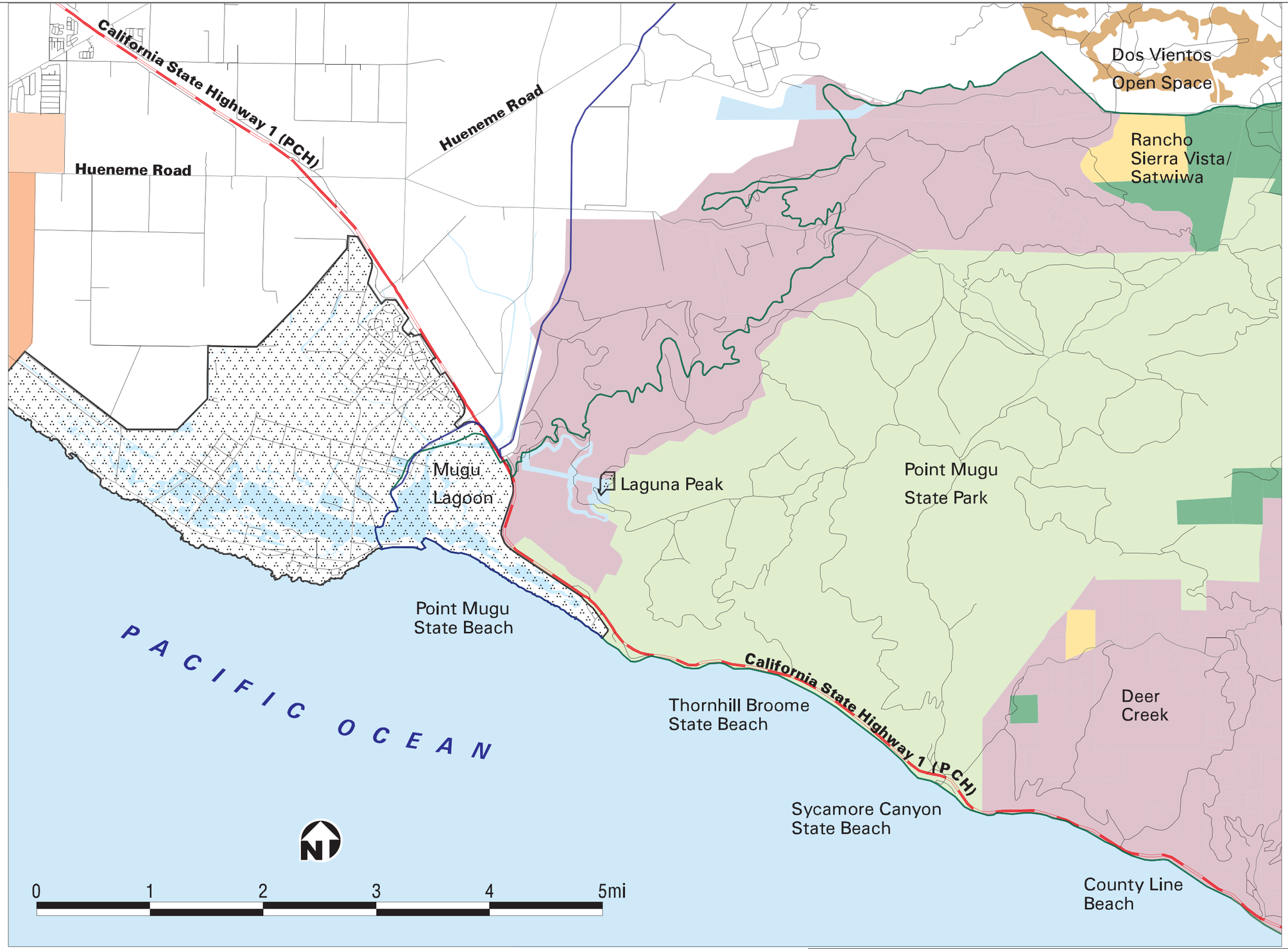

Legend

- National Park Service Land
- State of California Parkland
- Santa Monica Mountains Conservancy Land
- COSCA
- Other Federal and State Land
- Private Land Within NRA Boundary
- SMNRA Boundary
- SMNZ Boundary
- Northern Subarea
- Southern Subarea
- Lagoon / Wetlands

Data Source: Santa Monica Mts. National Rec. Area
Plotting Date:
17 Jan 02
Environmental GIS Database
NBVC Pt. Mugu Developed By:
Barbara J. Ball
The University of Arizona
Thomas W. Keeney
Natural Resource Management
NBVC Point Mugu

Ormond Beach Specific Plan EIR URS Corporation	Figure 3.6-2. **NBVC POINT MUGU AND NATIONAL PARK SERVICE BOUNDARY RELATIONSHIP**	Nov. 2009

3.6.1.5.5 Wetlands and Waters of the United States

Wetland habitats are not present within the Northern Subarea, although waters of the U.S. are found along the agricultural drainages along the north side of East Hueneme Road. There are approximately 6.5 acres of agricultural drainages in the Northern Subarea. These drainages are potentially subject to the permit authority of various regulatory agencies including the California Department of Fish and Game, the U.S. Army Corps of Engineers (ACOE), and the California Regional Water Quality Control Board. Agricultural drainage channels that are maintained for normal agricultural practices may not be regulated as they pertain to "normal agricultural practices." Once removed from agriculture, the ACOE may assume jurisdiction under Section 404.

3.6.1.5.6 Special-status Plants

No special-status plant species were observed during the reconnaissance field survey and none are expected to occur due to lack of suitable habitat. Special-status plants potentially occurring in the project vicinity, specifically in the Southern Subarea, are discussed in Section 3.6.1.6.6. No comprehensive plant survey appears to be on record for the Northern Subarea itself. However, since the project site is highly disturbed and under agricultural production, no additional native plant surveys are necessary.

3.6.1.5.7 Special-status Wildlife

Table 3.6-3 illustrates the special-status wildlife known to occur or potentially occur in Northern Subarea. Thirteen special-status species are expected to forage in the Northern Subarea because they have been observed in the nearby sod farms in the Southern Subarea and similar habitat is present. Seven special-status species have potential to occur in the Northern Subarea. See Appendix A-2 for a list of special-status species that are known to occur in the region, but are not expected to occur within the Northern Subarea or the nearby Southern Subarea due to lack of suitable habitat. Of particular sensitivity are the Belding's savannah sparrow, a state endangered species that frequently forages in the sod farm area, and burrowing owl, which is the only sensitive bird species with potential to breed in the Study Area. In addition, a variety of sensitive birds of prey and sensitive shorebirds forage within the Study Area. Although bird observations have been documented, no comprehensive wildlife surveys of use or distribution appear to be on record for the Northern Subarea.

3.6.1.6 Southern Subarea

The Southern Subarea has higher habitat value than the Northern Subarea because the sod farms provide better habitat for birds than the row crop fields and it is adjacent to sensitive

habitats at Ormond Beach. Habitat value in the Southern Subarea is limited by the agricultural disturbances associated with sod farming.

3.6.1.6.1 Vegetation Types

The predominant vegetation of the Southern Subarea consists of cultivated sod crops. Ruderal vegetation occurs along the margins of the cultivated areas and roads, usually in connection with the drainage ditches that convey water through the area. The drainage ditches are largely vegetated with weedy, non-native species such as cheeseweed, London rocket, black mustard, white sweet clover, and non-native grasses. The ditches draining the Southern Subarea are located east of Arnold Road, and east of Edison Drive. Oxnard Drainage District Canal #3, a larger channel, flows along the southern boundary of the Southern Subarea between the agricultural fields and Ormond Beach. The drainage along Arnold Road has some trimmed cattails on the southern end, and along the southern end of Edison Drive the ditch becomes dominated by California bulrush (*Scirpus californicus*) as it joins the California bulrush-dominated channel that runs along the southern end of the Study Area. At the south end of Arnold Road, near Agromin Wood Products, there is a small grove of myoporum (*Myoporum laetum*) trees mixed with castor bean (*Ricinus communis*). Plant species observed in the Southern Subarea during the field reconnaissance survey are listed in Table 3.6-4. See Figure 3.6-1 for detail on location of these agricultural lands and drainages.

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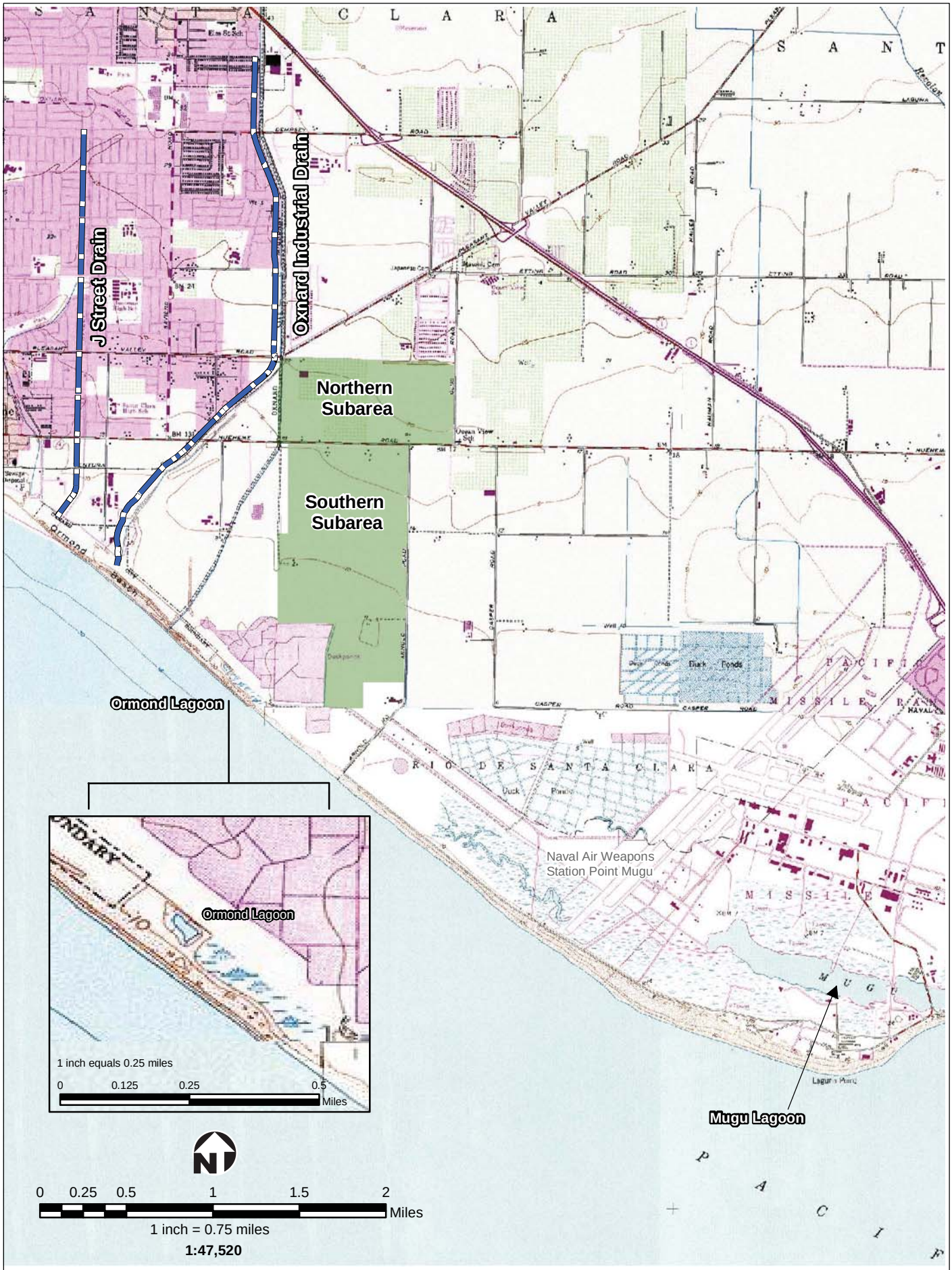

Ormond Beach Specific Plan EIR URS Corporation	Figure 3.6-3. **MUGU LAGOON, ORMOND LAGOON, OXNARD INDUSTRIAL DRAIN, J STREET DRAIN**	Nov. 2009

TABLE 3.6-3
POTENTIAL FOR SENSITIVE WILDLIFE SPECIES TO OCCUR WITHIN THE NORTHERN SUBAREA

Common Name	Scientific Name	Legal Status	Habitat	Potential to Occur Within the Northern Subarea
Reptiles and Amphibians				
Coast (San Diego) horned lizard	*Phrynosoma coronatum (blainvillei)*	CSC	Grassland, chaparral, coastal sage scrub, and sandy soils	Low potential to occur. May occur in open ditches with ruderal vegetation but this is unlikely since this species has not been observed in the project vicinity and the nearest occurrence is along the Santa Clara River in 1995 more than 5 miles outside of the project area (CNDDB, 2005).
Coastal western whiptail	*Aspidoscelis tigris stejnegeri*	CSC	Prefers open sunny areas with rocks and shrub or grassland habitat.	Low potential to occur. Suitable habitat is present in agricultural land and ruderal habitat; however, there are no records in the vicinity.
Silvery legless lizard	*Anneilla pulchra*	CSC	Prefers moist loose soils with sparse vegetation.	Low potential to occur. Marginal habitat present.
Birds				
Mountain plover	*Charadrius montanus*	FPT, CSC (wintering)	Low, sparsely vegetated areas, sod farms, bare areas, and sandy beaches	Moderate potential to occur. Known to occur in the sod farms of the Southern Subarea (Pereksta, 2005).
White-tailed kite	*Elanus leucurus majusculus*	CFP, FSC, CSC	Coastal and valley lowlands, nests in tree tops with dense foliage including orchards	Potential to forage in the Northern Subarea because it is known to occur near the project area. Also occurs at Ormond Beach and NBVC Point Mugu areas. Not expected to nest at the project site due to lack of suitable habitat, but may nest in the vicinity.
Northern harrier	*Circus cyaneus hudsonius*	CSC (nesting)	Open grasslands, freshwater marshes and coastal salt marshes	Potential to forage in the Northern Subarea because it is known to occur near the project area. Also occurs at Ormond Beach and NBVC Point Mugu areas. Not expected to nest at the project site due to lack of suitable habitat, but may nest in the vicinity.
Sharp-shinned hawk	*Accipiter striatus velox*	CSC (nesting)	Occurs in a variety of habitats; nests in dense stands of riparian/oak woodlands	Potential to forage in the Northern Subarea because it is known to occur near the project area. Not expected to nest at the project site due to lack of suitable habitat.
Cooper's hawk	*Accipiter cooperii*	CSC (nesting)	Occurs in a variety of habitats; nests in dense stands of riparian/oak woodlands	Potential to forage in the Northern Subarea because it is known to occur near the project area. Not expected to nest at the project site due to lack of suitable habitat, but may nest in the vicinity.

TABLE 3.6-3 (CONTINUED)
POTENTIAL FOR SENSITIVE WILDLIFE SPECIES TO OCCUR WITHIN THE NORTHERN SUBAREA

Common Name	Scientific Name	Legal Status	Habitat	Potential to Occur Within the Northern Subarea
Ferruginous hawk	*Buteo regalis*	CSC (wintering)	Occurs on levees and margins of open agricultural fields. (Wintering) open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon-juniper habitats	Moderate potential to occur due to suitable foraging habitat. The nearest CNDDB record is at Point Mugu approximately 3 miles southeast of the project site.
Merlin	*Falco columbarius*	CSC (wintering)	Found in a variety of habitats	Potential to forage in the Northern Subarea because it is known to occur near the project area during the winter only. It is not expected to breed in the project vicinity.
Peregrine falcon	*Falco peregrinus*	SE	Open wetlands near cliffs and urban areas	Potential to forage in the Northern Subarea because it is known to occur near the project area. Not known to breed in the project vicinity.
Long-billed curlew	*Numenius americanus*	CSC (nesting)	Coastal and lake beaches, salt marshes, and grain fields	Potential to forage in the Northern Subarea because it is known to occur near the project area. Not known to nest at the project site.
Burrowing owl	*Athene* (*Speotyto*) *cunicularia hypugaea*	CSC (burrow site)	Open grasslands, bare areas	Low potential to forage in the Northern Subarea because it is known to occur near the project area. Low potential to nest at the project site.
Short-eared owl	*Asio flammeus flammeus*	CSC (nesting)	Grassland, open shrub land	Low potential to occur. Marginal habitat present.
Loggerhead shrike	*Lanius ludovicianus*	CSC (nesting)	Grasslands, scrub, and sparsely vegetated areas	Potential to forage in the Northern Subarea because it is known to occur near the project area. Suitable nesting habitat not present within the Study Area but is present in shrub habitat nearby.
Bank swallow	*Riparia riparia*	FSC, ST (nesting)	Migrant in riparian lowlands; colonial nester in riparian areas with vertical bank cliffs with fine textured sandy soils near streams, rivers, lakes, or ocean to dig nesting hole	Low potential to forage in the Northern Subarea because it is known to occur near the project area as a migrant (Pereksta, 2005). Not likely to nest at the project site due to lack of suitable habitat and the rarity of the species.
Purple martin	*Progne subis*	CSC	Uncommon to rare local summer resident in a variety of wooded habitats	Low potential to occur. Has been observed in the project vicinity on occasion during spring migration and a rare migrant in Ventura County (Pereksta, 2005).

TABLE 3.6-3 (CONTINUED)
POTENTIAL FOR SENSITIVE WILDLIFE SPECIES TO OCCUR WITHIN THE NORTHERN SUBAREA

Common Name	Scientific Name	Legal Status	Habitat	Potential to Occur Within the Northern Subarea
Large-billed savannah sparrow	*Passerculus sandwichensis ssp. rostratis*	CSC	Coastal salt marsh	Low potential to forage in the Northern Subarea because it is known to occur near the project area.
Lark sparrow	*Chondestes grammacus*	FSC	Occurs in areas with herbaceous vegetation with scattered trees and shrubs	Moderate potential to occur. May occur in sod farm area.
Tricolored blackbird	*Agelaius tricolor*	CSC (nesting colony)	Freshwater marshes, open grasslands, and urban areas	Potential to forage in the Northern Subarea because it is known to occur near the project area.
California horned lark	*Eremophila alpestris actia*	CSC, FSC	Short grass prairie, fallow grain fields, mountain meadows, alkalai flats, open coastal plains	Potential to forage in the Northern Subarea because it is known to occur near the project area; the nearest CNDDB record is 4.2 miles northeast of the project site and was observed in the vicinity of Ormond Beach in 1991 (Impact Sciences, 1996).
Mammals				
Stephen's California vole	*Microtus californicus stephensi*	CSC	Occurs in variety of habitats, dry, grassy slopes, salt/freshwater marshes and moist meadows.	Low potential to occur. Marginal habitat present.
Southern California saltmarsh shrew	*Sorex ornatus salicornicus*	CSC	Coastal marshes in Los Angeles, Orange and Ventura counties.	Low potential to occur due to lack of suitable habitat. Observed in salt marsh east of the Halaco site (Impact Sciences, 1996). May occur in the salt marsh habitats in the project vicinity.
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	CSC	Previously common from the coast to desert habitats.	Low potential to occur. Observed in the sourthern foredune area southeast of the Halaco site (Impact Sciences, 1996).

Legal Status definitions:
FSC= Federal species of concern
FPT= Federally proposed threatened
CSC= California state species of special concern
CFP= California fully protected species
ST= State threatened
SE= State endangered

TABLE 3.6-4
PLANT SPECIES OBSERVED IN THE SOUTHERN SUBAREA

Scientific name	Common name	Origin
Atriplex lentiformis var. breweri	Brewer's saltbrush	N
Baccharis pilularis	Coyote brush	N
Brassica nigra	Black mustard	I
Chenopodium album	Lamb's quarters	I
Chenopodium murale	Nettle-leaved goosefoot	I
Coreopsis gigantea	Giant coreopsis	N
Erodium botrys	Long-beak storks bill	I
Juncus acutus	Spiny rush	N
Malva parviflora	Cheeseweed	I
Melilotus albus	White sweet clover	I
Myoporum laetum	Myoporum	I
Ricinus communis	Castor bean	I
Sisymbrium irio	London rocket	I
Scirpus californicus	California bulrush	N
Taraxacum officinale	Common dandelion	I
Typha domingensis	Southern cattail	N

I = Introduced Species

N = Native Species

3.6.1.6.2 Wildlife

The Southern Subarea has greater bird use and diversity of bird species than the Northern Subarea due to its larger area and closer proximity and connectivity to Ormond Beach. Birds observed along the Oxnard Drain channel at the southern end of the Southern Subarea and the wetlands on the south side of the drainage include mallard, American coot (*Fulica americana*), snowy egret (*Egretta thula*), great egret (*Ardea alba*), white-faced ibis (*Plegadis chihi*), greater yellowlegs (*Tringa melanoleuca*), black-necked stilt (*Himantopus mexicanus*), dunlin (*Calidris alpina*), and least/western sandpiper (*Calidris minutilla/mauri*).

In some respects, the drainage ditches and sod farm in the Southern Subarea provide similar habitat value to wildlife as the historic marshes and grasslands; however, the sod farm and drainage ditches are disturbed on a regular basis and are subject to a high degree of human activity so they provide lower habitat value than natural systems. Local bird experts, the U.S. Fish and Wildlife Service, and California Department of Fish and Game concur that the

Study Area, although in cultivation, also provides high habitat value for bird species (Tetra Tech, 2002; Pereksta, 2005; WRA, 2005; CH2MHill, 2004). The sod farm operation functions similarly to a grassland habitat interspersed with freshwater wetlands. Most shorebirds are foraging on surface and subsurface invertebrates, while egrets, herons, and raptors feed on small birds and rodents found mostly on the edges of the Southern Subarea. A number of rare or uncommon species occur nearly annually, including Pacific golden plover (*Pluvialis fulva*), American golden plover (*Pluvialis dominica*), buff-breasted sandpiper (*Tryngites subruficollis*), red-throated pipit (*Anthus cervinus*), McCrown's longspur (*Calcarius mccownii*), lapland longspur (*Calcarius lapponicus*), and chesnut-collared longspur (*Calcarius ornatus*). In addition, the fields are used regularly by migrating and wintering species such as black-bellied plover (*Pluvialis squatarola*), horned lark (*Eremophila alpestris*), and savannah sparrow (*Passerculus sandwichensis*). Belding's savannah sparrow, a state-listed endangered bird, has been sighted on or immediately adjacent to the Southern Subarea (Pereksta, 2005; USFWS, 2005; BioSystems Analysis, 1993). Appendix A-1 includes a list of birds observed on or directly adjacent (i.e., within the drainage ditches) to the sod fields compiled from various sources.

An international, non-advocacy coalition of government and non-government agencies and industry, Partners in Flight, has been working since 1990 to address landbird and habitat issues on a continental scale. Participants include the US Fish and Wildlife Service, California Department of Fish and Game, and the Department of Defense. Part of the effort includes development of bird conservation plans. The Draft Grassland Bird Conservation Plan (CPIF, 2000) defines grasslands as "all habitats dominated by grasses and/or by forbs," including row crops. According to the plan, habitat loss and habitat fragmentation have had adverse effects on grassland bird species. Among the primary challenges facing grassland bird species are replacement of native perennial and annual grasses and forbs with exotics; loss of grassland habitat; and decreased and decreasing patch size of remaining grasslands.

The focal grassland bird species described in the plan include:

- Ferruginous hawk (*Buteo regalis*)
- Grasshopper sparrow (*Ammodramus savannarum*)
- Mountain plover (*Charadrius montanus*)
- Northern harrier (*Circus cyaneus*)
- Belding's Savannah sparrow
- Western meadowlark
- White-tailed kite (*Elanus leucurus*)

Five of these seven species (mountain plover, northern harrier, Belding's savannah sparrow, western meadowlark, and white-tailed kite) have been observed at or adjacent to the sod

farm. Of these five species, two are California Species of Concern, one is State-listed endangered, and one is a California Fully Protected species. Additional species identified in the plan as nesting and/or foraging in grasslands have been observed in the Southern Subarea, including burrowing owl (*Athene cunicularia*), tri-colored blackbird (*Agelaius tricolor*), horned lark, and song sparrow (*Melospiza melodia*).

3.6.1.6.3 Habitat Types

The primary habitats within the Southern Subarea is agricultural land. Habitats observed adjacent to the southern end of the Southern Subarea include open water and coastal brackish marsh of the Oxnard Drainage District No. 3, and developed areas (BioResource Consultants, 2002). These habitats are shown in Figure 3.6-1, quantified in Table 3.6-5, and described below.

TABLE 3.6-5
HABITAT TYPES OBSERVED IN OR ADJACENT TO THE SOUTHERN SUBAREA[1]

Habitat Type	Acreage Present	Direct Impacts (Acres)	Open Space
Southern Subarea			
Agriculture	586	370	216
Agricultural Drain	9	5	4
Habitats Outside of the Southern Subarea			
Open Water/Coastal Brackish Marsh[2]	12	-	-
Light Industrial[2]	23	-	-
Duck Pond[2]	10	-	-
Total	640	375	220

[1] The acreage calculations are approximate based on a combination of GIS calculations and acreages identified in the Specific Plans.

[2] Note: The Open Water/Coastal Brackish Marsh, Light Industrial, and Duck Pond areas are neither directly impacted by the proposed development nor included in the Opens Space area.

Agricultural Lands. Most of the Southern Subarea consists of agricultural lands, including a sod farm and drainages bordering these lands. Scattered ruderal vegetation is present in these areas. Approximately 595 acres of agricultural land and drainages are present in the Southern Subarea, of which 586 acres is agricultural land and 9 acres is agricultural drainages.

Open Water. Open water habitat occurs in the ODD No. 3 Canal, which lies along the southerly boundary of the Southern Subarea, between the State Coastal Conservancy-owned Ormond Beach parcels and the sod farm. Approximately 12 acres of open water habitat is

located at the southern boundary of the Ormond Beach site (see Table 3.6-6). It provides habitat for fish and other species including insects, amphibians, and reptiles. The ODD No. 3 Canal and upstream drainage ditches provide the principal source of fresh water to the west arm of Mugu Lagoon (*Integrated Natural Resource Management Plan*, U.S. Navy, 2002). Due to a slight tidal influence, the water is characterized as slightly brackish (Jones & Stokes, 1995). Spiny rush, a locally sensitive plant, is reported from the canal north of Arnold Road. The Canal also provides potential habitat for South Coast garter snake (*Thamnophis sirtalis infernali*) which is state listed, and foraging habitat for California Least Tern (*Sterna antillarum browni*), which is both a state and federally listed species.

Coastal Brackish Marsh. Coastal brackish to freshwater marsh usually occurs along the interior margins of coastal estuaries, lagoons, or salt marshes. Approximately 12 acres of coastal brackish marsh habitat is located at the southern Ormond Beach site and is combined with the open water habitat (see Table 3.6-6). It is dominated by perennial, herbaceous plants such as California bulrush and rushes (*Juncus* spp.). The ODD No. 3 Canal supports this habitat along much of its length in varying densities. This habitat supports water birds, insects, amphibians and reptiles such as South Coast garter snake.

Developed Lands. An area adjacent to southeastern corner of the Study Area consists of developed lands including approximately 23 acres of light industrial use consisting of Agromin Wood Products and a duck pond covering approximately 10 acres.

3.6.1.6.4 Wildlife Corridors.

Refer to Section 3.6.1.5.4 for a discussion of wildlife corridors. The same wildlife corridors apply for the Southern Subarea as the Northern Subarea; however, the Southern Subarea has greater connectivity to the sensitive habitats of Ormond Beach and Point Mugu because there are no roads or barriers between the areas.

3.6.1.6.5 Wetlands and Waters of the United States.

Wetland habitats and waters of the U.S. within the Southern Subarea are found along the agricultural drainage ditches bordering the eastern and southern boundaries of the site. These are located east of Arnold Road and east of Edison Drive. ODD No. 3, a larger channel, flows along the southern boundary of the Southern Subarea between the agricultural fields and Ormond Beach. These wetland areas are potentially subject to the permit authority of various regulatory agencies including the California Department of Fish and Game, the California Coastal Commission, the ACOE, and the California Regional Water Quality Control Board. Jurisdictional wetland delineation would be required to determine the extent, quality, and quantity of jurisdictional waters (including wetlands) located within the Southern Subarea. Agricultural drainage channels that are maintained for normal agricultural practices

may not be regulated as they pertain to "normal agricultural practices." Once removed from agriculture, the ACOE may assume jurisdiction under Section 404.

3.6.1.6.6 Special-status Plants.

Table 3.6-6 illustrates the special-status plants known to occur or potentially occur in Southern Subarea, as well as special-status plants known to occur adjacent to the Southern Subarea within the State Coastal Conservancy wetland restoration Study Area for Ormond Beach, which includes NBVC Point Mugu (WRA, 2005). Spiny rush is the only special-status species known to occur in the Southern Subarea, one special-status species has potential to occur in the Southern Subarea, and eight special-status plants are known to occur near the Southern Subarea, but are not expected to occur within the Southern Subarea due to lack of suitable habitat. No comprehensive plant survey appears to be on record for the Southern Subarea itself. However, since the most of the project site is highly disturbed and under agricultural production, no additional native plant surveys are necessary, as long as the open water/coastal brackish marsh habitat remains undisturbed.

3.6.1.6.7 Special-status Wildlife.

Table 3.6-7 illustrates the special-status wildlife known to occur or potentially occur in Southern Subarea. Table 3.6-8 shows special-status wildlife known to occur adjacent to the Southern Subarea within the State Coastal Conservancy wetland restoration Study Area for Ormond Beach, which includes NBVC Point Mugu is provided in Appendix A-2 (WRA, 2005). Nineteen special-status species are known to occur in the Southern Subarea, twelve special-status species have potential to occur in the Southern Subarea. Of particular sensitivity are the Belding's savannah sparrow, a state-listed endangered species that frequently forages in the sod farm area, and burrowing owl, which is the only sensitive bird species with potential to breed in the Southern Subarea. In addition, a variety of sensitive birds of prey and sensitive shorebirds forage within the Southern Subarea. The south coast garter snake, American bittern (*Botaurus lentiginosus*), and California least tern are special-status species known to occur in the Oxnard Canal No. 3. There is a low-to-moderate potential for several sensitive fish species, the southwestern pond turtle, and light-footed clapper rail (*Rallus longirostris*) to occur there as well. Adjacent to the Southern Subarea at Ormond Beach there are a variety of special-status species, and the breeding and roosting populations of the federal and state-listed endangered California least tern and federal-listed threatened western snowy plover, Pacific Coast population (*Charadrius alexandrinus*) are of particular concern. Although bird observations have been documented, no comprehensive wildlife surveys of use or distribution appear to be on record for the Southern Subarea. More thorough wildlife surveys are necessary in order to determine the presence or absence of several potentially occurring special-status species in the Southern Subarea.

TABLE 3.6-6
POTENTIAL FOR SENSITIVE PLANT SPECIES TO OCCUR IN THE SOUTHERN SUBAREA

Common Name	Scientific Name	Legal Status or Sensitivity	Habitat	Potential to Occur in Southern Subarea	Source
Spiny rush	*Juncus acutus ssp. leopoldii*	CNPS 4,*	Freshwater wetlands, stream margins	Known to occur in the northwest portion of the Southland Sod Farm site in the Southern Subarea and adjacent to the Southern Subarea in the Oxnard Drain.	b, c
Southern tarplant	*Centromadia parryi ssp. australis*	CNPS 1B	Marshes and swamps, valley and foothill grassland, and vernal pools	Low potential to occur. The transitional habitats bordering open water/coastal brackish marsh habitat have a high potential to support this species; however, transitional habitats in the Southern Subarea are highly disturbed by agriculture.	d
Red sand verbena	*Abronia maritima ssp. maritima*	CNPS 4,*	Coastal sand dunes	Not expected to occur at the project site due to lack of suitable habitat. Occurs mainly on dunes of Ormond Beach.	c, d
Ventura marsh milk vetch	*Astragalus pycnostachyus var. lanosissimus*	FE, SE, CNPS 1B	Near coastal salt marsh	Not expected to occur at the project site due to lack of suitable habitat. Moderate potential to occur near salt marsh habitat at Ormond Beach. Re-establishment has been attempted, and potentially will be in future, by CDFG on State Coastal Conservancy lands at Ormond Beach.	d
Santa Barbara morning glory	*Calystegia sepium ssp. binghamiae*	CNPS 1A	Coastal salt marshes and swamps	Not expected due to lack of suitable habitat. Low potential to occur adjacent to the Southern Subarea. The open water/coastal brackish marsh habitat has a high potential to support this species; however, since this species is possibly extinct it is unlikely.	d
Salt marsh bird's beak	*Cordylanthus maritimus ssp. maritimus*	FE, SE, CNPS 1B	Coastal salt marsh, coastal dunes	Not expected to occur at the project site due to lack of suitable habitat, but known historically. Found adjacent to the Southern Subarea within the Ormond Beach back dune wetlands.	b
Dune larkspur	*Delphinium parryi ssp. blochmaniae*	CNPS 1B	Chaparral; coastal dunes. On rocky areas and dunes.	Not expected to occur at the project site due to lack of suitable habitat. High potential to occur in the southern foredune habitat in the project vicinity.	
	Dithyrea maritime	ST, CNPS 1B	Coastal dunes, coastal scrub (sandy)	Not expected to occur at the project site due to lack of suitable habitat. High potential to occur in the southern foredune habitat in the project vicinity.	
Small spikerush	*Eleocharis parvula*	CNPS 4	Marshes and swamps	Not expected due to lack of suitable habitat. High potential to occur adjacent to the Southern Subarea. Suitable habitat for this species is present in the open water/coastal brackish marsh habitat near the Southern Subarea at Ormond Beach.	d

TABLE 3.6-6 (CONTINUED)
POTENTIAL FOR SENSITIVE PLANT SPECIES TO OCCUR IN THE SOUTHERN SUBAREA AND ORMOND BEACH

Common Name	Scientific Name	Legal Status or Sensitivity	Habitat	Potential to Occur in Southern Subarea	Source
Suffrutescent wallflower	*Erysimum insulare ssp. suffrutescens*	CNPS 4	Coastal bluff scrub, coastal dune, coastal scrub	Not expected to occur at the project site due to lack of suitable habitat. High potential to occur in the southern foredune, annual grasslands, and coyote brush scrub habitat in the project vicinity.	
Vernal barley	*Hordeum intercedens*	CNPS 3	Coastal dunes, coastal scrub, valley and foothill needle grassland (saline flats and depressions), vernal pools	Not expected to occur at the project site due to lack of suitable habitat. High potential to occur in the southern foredune and wetland habitat in the project vicinity.	
Coulter's goldfields	*Lasthenia glabrata ssp. coulteri*	CNPS 1B	Coastal salt marshes, playas, valley and foothill grassland, vernal pools	Not expected to occur at the project site due to lack of suitable habitat. The nearest CNDDB record is 0.8 miles west of the western project boundary.	e
Estuary seablite	*Suaeda esteroa*	CNPS 1B	Coastal salt marshes in clay, silt, and sand substrates	Not expected to occur at the project site due to lack of suitable habitat. This species has been documented to occur at Point Mugu wetlands approximately 3 miles southeast of the project site, and suitable habitat is present at Ormond Beach.	c, d
Wooly seablite	*Suaeda taxifolia*	CNPS 4	Coastal bluff scrub, dune, and salt marshes	Not expected to occur at the project site due to lack of suitable habitat. Known to occur nearby within the City of Oxnard/MWD parcel, and the Nature Conservancy parcel.	d

Legal Status definitions:
FE= Federally listed as endangered
SE= State endangered
ST= State threatened
* = Species that are biologically rare, restricted in distribution, and declining throughout their range or closely related with a habitat that is declining in California.
California Native Plant Society List:
1A = plants presumed extinct in California
1B = plants that are rare, threatened, or endangered in California and elsewhere
4 = a watch list of plants of limited distribution

Sources:
[a] U.S. Navy and Tetra Tech EM, 2002.
[b] BioResource Consultants, 2002.
[c] Jones & Stokes, 1995.
[d] WRA, 2005.
[e] CNDDB, 2005

TABLE 3.6-7
POTENTIAL FOR SENSITIVE WILDLIFE SPECIES TO OCCUR WITHIN THE SOUTHERN SUBAREA

Common Name	Scientific Name	Legal Status	Habitat	Potential to Occur Within the Southern Subarea
Reptiles and Amphibians				
Coast (San Diego) horned lizard	*Phrynosoma coronatum (blainvillei)*	CSC	Grassland, Chaparral, Coastal Sage scrub, and sandy soils	Low potential to occur. May occur in open ditches with ruderal vegetation but this is unlikely since this species has not been observed in the project vicinity and the nearest occurrence is along the Santa Clara River in 1995 more than 5 miles outside of the project area (CNDDB, 2005).
Coastal western whiptail	*Aspidoscelis tigris stejnegeri*	CSC	Prefers open sunny areas with rocks and shrub or grassland habitat	Moderate potential to occur. Suitable habitat is present in sod farm and ruderal habitat; however, there are no records in the vicinity.
Western spadefoot toad	*Spea hammondii*	CSC	Found at elevation from sea level to 4500ft in Sierra foothills. Occurs in grasslands and occasionally valley-foothill hardwood woodlands.	Low potential to occur. Lack of suitable habitat due to saline soils and degraded upland habitat. No known records in the vicinity.
South coast garter snake	*Thamnophis sirtalis infernalis*	CSC	Associated with marsh and upland habitats near permanent water with riparian vegetation	Known to occur in the project area. Likely to use coastal freshwater/brackish marsh and upland transition areas within the project site.
Silvery legless lizard	*Aniella pulchra*	CSC	Warm moist loose soil, sparely vegetated dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, stream terraces with sycamores, cottonwoods and oaks.	Likely to occur throughout the project site.
Birds				
Great blue heron (rookery)	*Ardea herodias*		Colonial nester in tall trees, cliffsides, and areas along marshes usually near rivers and wetlands	Known to occur at project site. Potential rookery habitat at the duck club ponds in areas of dense riparian vegetation.
Great egret (rookery)	*Ardea alba*		Rookery sites located near marshes, tidal flats, irrigated pastures, and margins of lakes and rivers	Known to occur at the project site. No known rookery in the vicinity of the project site.
Snowy egret (rookery)	*Egretta thula*		Widespread along shores of coastal estuaries, emergent wetlands, ponds,slow-moving rivers, irrigation ditches, and wet fields.	Known to occur at the project site. No known rookery in the vicinity of the project site.
Black-crowned night heron (rookery)	*Nycticorax nycticorax*		Roosts in dense foliage and emergent vegetation and forages along fresh and saline emergent wetlands.	Known to occur at project site. Potential rookery habitat at the duck club ponds in areas of dense emergent wetland vegetation.
White-faced ibis	*Plegadis chihi*	CSC (rookery)	Freshwater wetlands and coastal salt marshes	Known to occur at the project site; however rookery not present. Also occurs adjacent to the project site at Ormond Beach and NBVC Point Mugu areas.
White-tailed kite	*Elanus leucurus majusculus*	CFP, FSC, CSC	Coastal and valley lowlands, nests in tree tops with dense foliage including orchards	Known to occur at the project site. Also occurs adjacent to the project site at Ormond Beach and NBVC Point Mugu areas.

TABLE 3.6-7 (CONTINUED)
POTENTIAL FOR SENSITIVE WILDLIFE SPECIES TO OCCUR WITHIN THE SOUTHERN SUBAREA

Common Name	Scientific Name	Legal Status	Habitat	Potential to Occur Within the Southern Subarea
Northern harrier	*Circus cyaneus hudsonius*	CSC (nesting)	Open grasslands, freshwater marshes and coastal salt marshes	Known to occur at the project site. Also occurs adjacent to the project site at Ormond Beach and NBVC Point Mugu areas. Not expected to nest at the project site due to lack of suitable habitat, but may nest in the vicinity.
Sharp-shinned hawk	*Accipiter striatus velox*	CSC (nesting)	Occurs in a variety of habitats; nests in dense stands of riparian/oak woodlands	Known to occur at the project site. Not expected to nest at the project site due to lack of suitable habitat.
Cooper's hawk	*Accipiter cooperii*	CSC (nesting)	Occurs in a variety of habitats; nests in dense stands of riparian/oak woodlands	Known to occur at the project site. Not expected to nest at the project site due to lack of suitable habitat, but may nest in the vicinity.
Ferruginous hawk	*Buteo regalis*	CSC (wintering)	Occurs on levees and margins of open agricultural fields. (Wintering) open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon-juniper habitats	Moderate potential to occur due to suitable foraging habitat. The nearest CNDDB record is at Point Mugu approximately 3 miles southeast of the project site.
Merlin	*Falco columbarius*	CSC (wintering)	Found in a variety of habitats	Known to occur at the project site during the winter only, so it is not expected to breed in the project vicinity.
Peregrine falcon	*Falco peregrinus*	SE	Open wetlands near cliffs and urban areas	Known to occur at the project site. Not known to breed in the project vicinity.
Long-billed curlew	*Numenius americanus*	CSC (nesting)	Coastal and lake beaches, salt marshes, and grain fields	Known to occur at the project site. Not known to nest at the project site.
Burrowing owl	*Athene* (*Speotyto*) *cunicularia hypugaea*	CSC (burrow site)	Open grasslands, bare areas	Known to occur at the project site. Potential to nest at the project site.
Mountain plover	*Charadrius montanus*	FPT, CSC (wintering)	Low sparsely vegetated areas, sod farms, bare areas, and sandy beaches	Known to occur at the project site as an occasional fall migrant (Pereksta, 2005).
Short-eared owl	*Asio flammeus flammeus*	CSC (nesting)	Grassland, open shrub land	Low potential to occur. Marginal habitat is present.
Loggerhead shrike	*Lanius ludovicianus*	CSC (nesting)	Grasslands, scrub, and sparsely vegetated areas	Known to occur at the project site. Suitable nesting habitat not present within the Study Area but is present in shrub habitat nearby.
Bank swallow	*Riparia riparia*	FSC, ST (nesting)	Migrant in riparian lowlands; colonial nester in riparian areas with vertical bank cliffs with fine textured sandy soils near streams, rivers, lakes, or ocean to dig nesting hole	Known to occur at the project site as a migrant (Pereksta, 2005). Not likely to nest at the project site due to lack of suitable habitat and the rarity of the species.

TABLE 3.6-7 (CONTINUED)
POTENTIAL FOR SENSITIVE WILDLIFE SPECIES TO OCCUR WITHIN THE SOUTHERN SUBAREA

Common Name	Scientific Name	Legal Status	Habitat	Potential to Occur Within the Southern Subarea
Purple martin	*Progne subis*	CSC	Uncommon to rare local summer resident in a variety of wooded habitats	Low potential to occur. Has been observed in the project vicinity on occasion during spring migration and a rare migrant in Ventura County (Pereksta, 2005).
Belding's savannah sparrow	*Passerculus sandwichensis ssp. Beldingi*	SE	Coastal Salt Marshes. Nests In *Salicornia* On And About Margins Of Tidal Flats	Known to occur at the project site. Also occurs adjacent to the project site at Ormond Beach approximately 0.6 mile away (CNDDB, 2005).
Large-billed savannah sparrow	*Passerculus sandwichensis ssp. Rostratis*	CSC	Coastal salt marsh	Known to occur at the project site (Pereksta, 2005).
Lark sparrow	*Chondestes grammacus*	FSC	Occurs in areas with herbaceous vegetation with scattered trees and shrubs	Moderate potential to occur. May occur in sod farm area.
Tricolored blackbird	*Agelaius tricolor*	CSC (nesting colony)	Freshwater marshes, open grasslands, and urban areas	Known to occur at the project site (Pereksta, 2005).
California horned lark	*Eremophila alpestris actia*	CSC, FSC	Short grass prairie, fallow grain fields, mountain meadows, alkalai flats, open coastal plains	Known to forage within the Study Area sod farms; the nearest CNDDB record is 4.2 miles northeast of the project site. Was observed in the vicinity of Ormond Beach in 1991 (Impact Sciences, 1996).
Mammals				
Stephen's California vole	*Microtus californicus stephensi*	CSC	Occurs in a variety of habitats, dry grass slopes, salt/freshwater marshes and moist meadows.	Low potential to occur. Marginal habitat present.
San Diego black-tailed jackrabbit	*Lepus californicus bennetti*	CSC	Formerly widespread in the North American southwest, occupying a variety of habitats; currently found along the coast	Moderate potential to occur. Observed at the southern foredune area southeast of Halaco in 1991 (Impact Sciences, 1996)
Southern California saltmarsh shrew	*Sorex ornatus salicornicus*	CSC	Coastal salt marshes in Los Angeles, Orange and Ventura counties.	Low potential to occur due to lack of suitable habitat. Observed in saltmarsh east of Halaco property in 1991 (Impact Sciences, 1996)

TABLE 3.6-8
POTENTIAL FOR SENSITIVE WILDLIFE SPECIES TO OCCUR ADJACENT TO THE SOUTHERN SUBAREA

Common Name	Scientific Name	Legal Status	Habitat	Potential to Occur in the Area Adjacent to the Southern Subarea (Oxnard Canal No. 3)
Fish				
Southern steelhead trout	*Oncorhychus mykiss irideus*	FE, CSC	Occur in southern California coastal streams that lack barriers to migration from the ocean	Low potential to occur, since the population of species has been greatly reduced in the region and upstream spawning habitat is not available in urban drains that pass through the Study Area. There is a slight potential for this species to occur in the Oxnard Industrial Drain and J-Street Drain when open to the ocean.
Arroyo chub	*Gilia orcutti*	CSC	Slow-moving coastal streams with mud or sand substrates	Low potential to occur in the Oxnard No. 3 Canal. Nearest CNDDB record is about 3.5 miles east of the project site. Observed in 1993 in tributaries of Mugu lagoon. Moderate potential to occur in J Street Drain and Oxnard Industrial drain.
Tidewater goby	*Eucyclobius newberryi*	FE, CSC	Shallow lagoons, estuaries, and lower reaches of coastal streams in brackish water. Feed along the bottom of clean, shallow and slow-moving water.	High potential to occur in the Oxnard No. 3 Canal. The nearest CNDDB record is 1.3 miles west of the project site at Ormond Beach. Suitable habitat present in J-Street Drain, Oxnard Industrial Drain, and J-Street Lagoon.
Unarmored threespined stickleback	*Gasterosteus aculeatus williamsoni*	FE, SE	Fresh water, artificial ponds, streams. Only known remaining populations in the upper reaches of the Santa Clara River in Los Angeles/Ventura counties	Moderate potential to occur. Marginal habitat is present.
Reptiles and Amphibians				
Southwestern pond turtle	*Clemmys marmorata ssp. pallida*	FSC, CSC	Occurs in a variety of habitats with permanent or nearly permanent water with suitable basking sites such as rocks, floating vegetation, or mud banks	Low potential to occur. There are no known records in the project vicinity; however, suitable habitat is present.
Birds				
Common loon	*Gavia immer*	FSC, CSC (nesting)	Winters in estuarine and subtidal marine habitats along the coast	Low potential to occur as a winter migrant in open water habitats.
California brown pelican	*Pelecanus occidentalis californicus*	SE, FE (nesting and wintering)	Coastal waters, nesting on the ground or cliffs of islands.	Low potential to occur. Marginal habitat is present. Known to roost on the beach adjacent to J-Street Lagoon and Mugu Lagoon.
Osprey	*Pandion haliaetus*	CSC (nesting)	Nests on top of snags, cliffs, human structures and occasionally the ground. Perches in trees by open water foraging areas.	Not likely to occur at the project site due to absence of suitable habitat.

TABLE 3.6-8
POTENTIAL FOR SENSITIVE WILDLIFE SPECIES TO OCCUR ADJACENT TO THE SOUTHERN SUBAREA

Common Name	Scientific Name	Legal Status	Habitat	Potential to Occur in the Area Adjacent to the Southern Subarea (Oxnard Canal No. 3)
Bald eagle	*Haliaeetus elucocephalus*	SE, FP (nesting and wintering)	Open water bodies, lakes, marshes, coasts, and rivers with tall trees for nesting.	Likely to occur in open spaces of the Southern Subarea. Local nesting known historically.
Light-footed clapper rail	*Rallus longirostris levipes*	FE, SE	Salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation	Moderate potential to occur in the Oxnard No. 3 canal. Known to occur in the marshes of Mugu Lagoon 2.4 miles southeast of the project site.
California least tern	*Sterna antillarum browni*	SE, FE, CFP	Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas	Known to forage in Oxnard Canal No. 3 and known to breed in the Ormond Beach area.
American bittern	*Botaurus lentiginosus*	FSC	Occurs in dense emergent vegetation on or near the ground	Known to occur at the project site, and suitable emergent wetland habitat is available adjacent to the Oxnard Canal No. 3.
Whtie-faced Ibis	*Plegadis chihi*	CSC	Uncommon summer resident in southern California. Feeds in fresh emergent wetland, shallow lacustrine waters and irrigated agricultural fields	Observed in flight in the project vicinity and foraging at duck ponds to the southeast of the Southern Subarea.

Legal Status definitions:

FE= Federally listed as endangered
FPT= Federally proposed threatened
FSC= Federal species of concern
CSC= California state species of special concern
CFP= California fully protected species
SE= State endangered
ST= State threatened

3.6.2 Regulatory Framework

3.6.2.1 Federal Authorities and Administration Agencies

3.6.2.1.1 Endangered Species Act.

The Federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.) is administered by the U.S. Fish and Wildlife Service (USFWS), and by the National Marine Fisheries Service (NMFS) in areas where marine habitats exist. Under FESA, the Secretary of the Interior and the Secretary of Commerce, jointly have the authority to list a species as threatened or endangered (16 United States Code [USC] 1533[c]).

The USFWS and NMFS typically reviews project plans and species information to determine the effects of federal actions on a proposed or candidate species. The USFWS recommends that candidate species and species proposed for listing also be considered in informal consultation during a project's environmental review. This is recommended because, in the event that a species were to be listed during the design or construction phases of a project, new studies and restrictions might be imposed. USFWS encourages consideration of species of concern in project planning, as they may become candidate species in the future. The determination of significance for species of concern must be made on a case-by-case basis, and must take into consideration current scientific knowledge about the individual species, known threats, and specific proposals.

Section 7 of the FESA requires federal agencies to use their authorities to conserve threatened and endangered species. It also directs federal agencies to consult with USFWS (or NMFS) if any action they authorize, fund, or carry out "may affect" in either a beneficial or adverse manner, any species that is listed or proposed for listing, or any designated or proposed critical habitat. For example, if the issuance of a Clean Water Act (CWA) Section 404 permit by the ACOE for a private development project may affect any listed species, the ACOE must consult with USFWS on the effects of the issuance of that permit. Species that are candidates for listing by the USFWS may also be addressed during federal interagency coordination. Section 7 also provides a mechanism for "incidental take," for actions that may affect a listed species, but which do not jeopardize its continued existence or destroy or adversely modify critical habitat.

Section 9 of the FESA prohibits "take" (defined as harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capture, or collecting, or the attempt to engage in any such conduct) of threatened and endangered species. "Harm" is further defined to include 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.

Recently, the USFWS diverted its resources from listing species to proposing and designating critical habitat. Currently, the USFWS had proposed or designated critical habitat for 16 wildlife and plant species. Critical habitat is defined as:

> *The specific areas within the geographical area occupied by the species, at the time it is listed …, upon a determination … that such areas are essential for the conservation of the species.*

The USFWS requires consultation for any modification to the critical habitat of a listed species.

3.6.2.1.2 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) was authorized in 1996 and requires the NMFS to identify, conserve, and enhance Essential Fish Habitat (EFH) for those species regulated under a federal fisheries management plan. EFH is defined as the waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. Specifically, the MSA requires: 1) Federal agencies to consult with NMFS on all actions or proposed actions authorized, funded, or undertaken by the agency that could adversely affect EFH; and 2) NMFS to provide conservation recommendations for any federal or state action that could adversely affect EFH.

3.6.2.1.3 Section 404 of the CWA

Pursuant to Section 404 of the CWA, the ACOE regulates the discharge of dredged and/or fill material into waters of the United States. Waters of the United States include navigable waterways and wetlands adjacent to navigable waterways, non-navigable waterways and wetlands adjacent to non-navigable waters that are contiguous with navigable waterways. The term "waters of the United States" is defined at 33 CFR Part 328 and currently includes: 1) all navigable waters (including all waters subject to the ebb and flow of the tide); 2) all interstate waters and wetlands; 3) all impoundments of waters mentioned above, 4) all tributaries to waters mentioned above; 5) the territorial seas; 6) and all wetlands adjacent to waters mentioned above.

On January 9, 2001 the U.S. Supreme Court ruled (in Solid Waste Agency of Northern Cook County V. U.S. Army Corps of Engineers) that the ACOE jurisdiction does not extend to previously regulated isolated waters, including but not limited to isolated ponds, reservoirs, and wetlands. Examples of isolated waters that are affected by this ruling include: vernal pools; stock ponds, lakes (without outlets); playa lakes; and desert washes that are not tributary to navigable or interstate waters or to other jurisdictional waters.

In the absence of wetlands, the limits of ACOE jurisdiction in non-tidal waters, including intermittent streams, extend to the ordinary high water mark (OHWM) which is defined at 33 CFR 328.3(e) as:

> *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

Wetlands are defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the ACOE published a manual to guide its field personnel in determining jurisdictional wetland boundaries. In 1989 the Federal Interagency Committee for Wetland Delineation developed an updated methodology which was adopted by the ACOE, USFWS, U.S. Environmental Protection Agency (USEPA), and U.S.D.A. Natural Resources Conservation Service and which replaced the 1987 Wetland Manual. The use of this 1989 manual was perceived by many to excessively increase the jurisdictional limits of wetlands. After several congressional hearings, USEPA, ACOE, U.S. Department of Agriculture Soil Conservation Service, and USFWS published proposed 1991 revisions to the 1989 manual. A few days afterwards, the President signed the Energy and Water Development Appropriations Act of 1992 which, in effect, prohibits the use of the 1989 manual. Because the 1991 proposed revisions to the 1989 manual have not yet been adopted, the only remaining valid methodology is the 1987 Wetland Manual.

The discharge of dredged or fill material (temporarily or permanently) into waters of the United States requires prior authorization from the ACOE pursuant to Section 404 of the CWA. Activities that usually involve a regulated discharge of dredged or fill materials include (but are not limited to) grading, placing of riprap for erosion control, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments), stockpiling excavated material, mechanized removal of vegetation, and driving of piles for certain types of structures.

3.6.2.1.4 Executive Order No. 11990

Executive Order No. 11990 requires that federal agencies minimize the destruction, loss, or degradation of wetlands; preserve and enhance the natural and beneficial value of wetlands; and avoid support of new construction in wetlands if a practicable alternative exists.

3.6.2.1.5 Executive Order No. 11988

Under 40 C.F.R. § 6.302(b), federal agencies are required to evaluate the potential effects of action they may take in a floodplain to avoid, to the extent possible, adverse effects associated with direct and indirect development of a floodplain.

3.6.2.1.6 Executive Order No. 13112

Executive Order 13112 requires federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem, whose introduction does or is likely to cause economic or environmental harm or harm to human health."

3.6.2.1.7 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 U.S.C. §§ 661–666c) was enacted to protect fish and wildlife when federal actions result in the control or structural modification of a natural stream or body of water. The statute requires federal agencies to take into consideration the effect a water-related project would have on fish and wildlife and take action to prevent loss or damage to these resources.

3.6.2.1.8 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) placed all birds listed in Section 10 of this act under federal jurisdiction and protection. It prohibits the capture, killing, or possession of any bird species identified by various international conventions. Conventions to protect migratory birds have been signed with Great Britain, Mexico, Japan, and Russia. In this act, the federal government is provided with the authority to establish threshold regulations that govern the hunting and management of MBTA listed species. The MBTA does not provide for acquisition of habitat.

3.6.2.2 State Authorities and Administering Agencies

3.6.2.2.1 Section 1600 (et seq.) of the California Fish and Game Code

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, the CDFG regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife.

CDFG defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or

other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFG's definition of "lake" includes "natural lakes or manmade reservoirs."

CDFG jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. In 1994, the CDFG Legal Advisor prepared the following opinion:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by (CDFG) as natural waterways...
- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

Thus, CDFG jurisdictional limits closely mirror those of the ACOE. Exceptions are CDFG's addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

3.6.2.2.2 California Endangered Species Act (CESA)

The CESA (Fish and Game Code Section 2050, et seq.) is administered by the CDFG, and generally parallels the FESA. CESA prohibits the "taking" of listed species, except as otherwise provided in state law. Unlike its federal counterpart, CESA applies the take prohibitions to species petitioned for listing (state candidates) during the one-year listing review period. "Take" is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" a protected species. Under Section 2081 of the Fish and Game Code, the CDFG may authorize the take of a state-listed endangered, threatened, or candidate species if the take is incidental to an otherwise lawful activity and any impacts to the species are minimized and fully mitigated.

A state lead agency (the agency that has principal responsibility for carrying out or approving a project) is required to consult with CDFG to ensure that any action it undertakes is not likely to jeopardize the continued existence of any state-listed endangered, threatened, or candidate species. A lead agency may also determine that species listed or proposed as threatened or endangered under the FESA warrant special review and consideration in CEQA documents. CEQA Guidelines Section 15380(d) allows a lead agency to consider a species as

a "de-facto" threatened or endangered species if information can be presented showing the species would qualify for listing. This can apply to proposed, candidate, or any other species not actually listed by the CDFG or USFWS as rare, threatened, or endangered.

The Natural Community Conservation Planning Act (NCCPA) was added to CESA in 1991 (Fish and Game Code sections 2800-2840), and provides for voluntary cooperation among CDFG, landowners, and other interested parties to develop natural community conservation plans which provide for early coordination of efforts to protect listed species or species that are not yet listed. The primary purpose of the NCCPA is to preserve species and their habitats, while allowing reasonable and appropriate development to occur on affected lands.

3.6.2.2.3 Native Plant Protection Act

The Native Plant Protection Act (California Fish and Game Code Sec. 1900-1913) prohibits the taking, possessing, or sale within the state of any rare, threatened or endangered plants as defined by CDFG, except as authorized by law and regulation. This applies to any plants with a state designation of rare, threatened, or endangered.

3.6.2.2.4 California Coastal Commission

Any person or public agency proposing development within the coastal zone must obtain a Coastal Development Permit. In general, the coastal zone extends from the state's three-mile seaward limit to an average of approximately 1,000 yards inland from the mean high tide of the sea. In the case of this project the coastal zone extends into the project site. The California Coastal Commission (CCC), made up of representatives from various coastal areas and state agencies, reviews the coastal development permits for conformity with the coastal policies of the California Coastal Act (CCA).

After using the operational draft for a couple of years and receiving public input, the USFWS amended its classification and revised its wetland definition (Cowardin et al., 1979). The following definition has served as the USFWS's official wetland definition for over 2 decades and continues to be used for wetland mapping.

> *Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land [emphasis added] is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydropytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season each year.*

To summarize, a one parameter Cowadin wetland is defined by one or more of three parameters (hydrophytic vegetation, hydric soils, and/or saturated or shallow water some time during the growing season) in areas where the water table is usually at or near the surface.

3.6.2.2.5 State Water Quality Control Board

The State Water Quality Control Board is Responsible for Enforcing the Federal CWA**.**

Section 401 of the CWA**.** A 401 water quality certification is required for those applicants who seek a federal permit to discharge fill material into a water of the United States (e.g., Section 404 permit, as described above). The ACOE will not grant authorization until the water quality certification has been obtained or has been waived. A water quality certification is issued by the RWQCB that states that the applicant will comply with all pertinent water quality standards (both federal and state water quality standards). The jurisdictional limits of the RWQCB pursuant to Section 401 of the Clean Water Act are identical as that defined above for the ACOE under Section 404 of the Clean Water Act.

If the applicant is not notified by the RWQCB within 60 days of the postmarked date of the application, the applicant may assume that the project meets the conditions of the certification.

Section 402 of the CWA**.** In 1972, the Clean Water Act was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful, unless the discharge is in compliance with a NPDES permit. In 1987, amendments to the CWA added Section 402 (p) which establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES program. In California, the State Water Resources Board has issued a general permit for stormwater discharges associated with construction activities statewide. Regulated construction activity includes clearing, grading, or excavation that results in soil disturbance of at least five acres of total land area.

3.6.2.3 Local Ordinances and Administering Agencies

3.6.2.3.1 City of Oxnard

Goals and policies contained in the Open Space and Conservation Element of the City of Oxnard 2020 General Plan are concerned with the conservation, development, and utilization of the natural resources occurring within the General Plan jurisdiction. These policies recommend the conservation of natural and sensitive biological resources by providing them a designation of Open Space. The General Plan has designated approximately 55 acres as Open Space or as sensitive within the Ormond Beach Specific Plan Study Area. The General Plan states at VIII-6 that the Ormond Beach area includes various habitats such as saltwater

marshes, brackish water marshes, freshwater marshes, and open water. These areas are collectively referred to by the general term "wetlands" for the purpose of regulations and preservation. The Ormond Beach wetlands are used extensively by migratory waterfowl and other water birds. A total of 19 special-status wildlife species and one special-status plant species are known to occur in the Study Area. Federal and/or state law protects all of these special-status species (see VIII-51 of the General Plan):

- Policy Number 2: The city should encourage the preservation and enhancement of wetlands in the Ormond Beach and Magu Lagoon.
- Policy Number 3: Sensitive habitat areas are to be designated as permanent open space on the Land Use Map.
- Policy Number 4: The City should limit the recreational activities in open space areas with sensitive habitats to those activities that have minimal impact on sensitive habitats.

3.6.2.3.2 California Environmental Quality Act (CEQA)

CEQA requires state and local agencies, in this case the City of Oxnard, to evaluate the environmental impacts of proposed projects and avoid or mitigate impacts on the environment. CEQA also provides that agencies can approve or undertake projects that will significantly impact the environment if the agency makes specific findings of overriding considerations.

The purpose of an Environmental Impact Report (EIR), as defined in section 15121 (a) of the State Guidelines for the implementation of the CEQA California Code of Regulations (CCR), Title 14, Division 6, Chapter 3 "Guidelines" is as follows:

> *An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effect and describe reasonable alternatives to the project.*

Significance threshold criteria for the City of Oxnard are based on standards that have been identified in the CEQA Guidelines. The following criteria were used to determine the significance of project impacts on biological resources within the project site.

Appendix G of the CEQA Guidelines states that a project will normally have a significant impact on biological resources if it will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, NCCP, or other approved local, regional, or state habitat conservation plan

Section 15065(a) of the CEQA Guidelines also states that a project may have a significant effect on the environment when the project has the potential to:

- Substantially degrade the quality of the environment
- Substantially reduce the habitat of a fish or wildlife species
- Cause a fish or wildlife population to drop below self-sustaining levels
- Threaten to eliminate a plant or animal community
- Reduce the number or restrict the range of a rare, threatened, or endangered plant or animal

For the purposes of this impact analysis, rare, threatened or endangered, refers to the following: any plant or animal species listed by CDFG or USFWS as a Threatened or Endangered species, proposed for listing as Threatened or Endangered, or considered as a candidate for listing as Threatened or Endangered; species listed by the USFWS as a federal Species of Concern; species considered by CDFG as a state Species of Special Concern or as a Fully Protected species; any plants listed by the CNPS as a List 1 or List 2 species; and, any species otherwise considered “rare, threatened, or endangered” as defined by Section 15380 of the CEQA guidelines.

An evaluation of whether or not an impact on biological resources would be “substantial” must consider both the resource itself and how that resource fits into a regional or local context. Impacts are sometimes adverse but not substantial under CEQA, because although they would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide, or region-wide, basis, nor would they obviously conflict with local, state, or federal resource conservation plans, goals, or regulations.

3.6.2.3.3 Local Coastal Plan

The California Coastal Act (CCA) requires that each local government within the Coastal Zone prepare a Local Coastal Plan. Local Coastal Plans (LCPs) identify the location, type, densities, and other ground rules for future development in the coastal zone portions for 73 cites and counties along the coast. LCPs are prepared by local government, these programs govern decisions that determine the short-term and long-term conservation and use of coastal resources. These coastal resources include: 1) sensitive species; 2) environmental sensitive habitat areas (see below); 3) and CCC-defined wetlands. Land uses in the Oxnard Coastal Zone are governed by a separate Coastal Land Use Plan and zoning regulations which were adopted by the CCC. Any development within the Coastal Zone requires a Coastal Development Permit. Only a small portion at the southern end of the project site is located within the coastal zone (see Figure 3.7-1), and that portion is located within the part of the Southern Subarea that will not be annexed at this time.

Environmental Sensitive Habitat Areas (ESHA's) are any areas in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development. ESHA's have been identified by the Coastal Land Use Plan as wetlands, dunes, riparian, and marine habitats, which include Ormond Beach dunes and wetlands. The CCA states that ESHA's shall be protected against significant disruption of habitat value. Development in areas adjacent to ESHA's shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat areas.

3.6.3 Project Impacts and Mitigation

The discussion of direct and indirect impacts focuses on the effects of implementation of the proposed project on plant and wildlife habitat and on both common and special-status resources. The level of significance of potential impacts on biological resources is determined by an evaluation of significance criteria (described below) with respect to the overall biological value of a habitat area and/or a specific resource. The relative value of each of the vegetation communities present onsite is measured by such factors as disturbance history, biological diversity, its importance to particular plant and wildlife species, its uniqueness or sensitivity status, the surrounding environment, and the presence or potential presence of special-status resources. These factors are evaluated based on the results of onsite biological surveys and studies, results of literature and database reviews, discussions with biological experts, and established and recognized ecological and biodiversity principles and assumptions. This information is then applied against the significance threshold criteria to determine the level of significance, as required by CEQA. For the purpose of this report, the

following impact analysis follows the same outline as the Existing Conditions section and has been categorized into "Northern Subarea" and "Southern Subarea."

3.6.3.1 Methods

3.6.3.1.1 Literature Review

Information on the biological resources within the Study Area was gathered through a variety of sources. A literature search was conducted prior to the field reconnaissance survey. A detailed description of the existing literature available for the project sites was prepared for the City in the Draft Baseline Report for this EIR (URS, 2005). In addition to literature review and consultation with local experts, a standard search for sensitive species through the California Natural Diversity Data Base (CNDDB) and California Native Plant Society's (CNPS) rare plant database was conducted in January 2005 for the Study Area. The CNDDB search for sensitive plant and wildlife species was within a five-mile radius of each project site. The CNPS rare plant search was conducted within the Oxnard, Camarillo, and Point Mugu USGS 7.5 minute quadrangles for the Study Area.

The adjoining resources and general area of Ormond Beach have been extensively studied over the past 20 years (including McClelland Engineers [1985], Impact Sciences [1996, 2000], Jones & Stokes Associates [1990, 1994, and 1995], as well as various unpublished studies and wetlands delineations, which are site-specific). Biological reports covering the vicinity of the Study Area vary in depth of analysis, but are mostly limited in scope to literature search and one-time, single-season or single-year surveys for plants and wildlife, with an emphasis on bird species. One of the most complete published biological resource inventory, by BioSystems Analysis (1993), was conducted for the South Ormond Beach Wetland Restoration and Management Plan (Jones & Stokes, 1995). The Point Mugu Final Integrated Natural Resource Management Program (Tetra Tech EM, Inc., 2002) provides a thorough inventory of natural resources to the southeast of the Study Area. Two recent studies present data specific to the Study Area, including a brief resource assessment of a portion of the Southern Subarea (BioResource Consultants 2002; CH2MHill, 2004). Both of these studies rely heavily on the previous data from adjoining sensitive resource areas. A restoration feasibility study is currently underway for the State Coastal Conservancy (Aspen Environmental, unpublished) that includes the 309-acre parcel to the southwest of the Study Area and the southernmost 230 acres of the Southern Subarea.

3.6.3.1.2 Field Surveys

A biological site reconnaissance survey was conducted within the Study Area on November 3, 2004, by URS biologist, Johanna Kisner. The purpose of the survey was to characterize habitats within the Study Area. All plants and wildlife observed were recorded. The field

reconnaissance survey provided limited information on plants and wildlife since it was conducted only one day during the non-breeding season for birds and non-blooming period for most plant species. Plant nomenclature follows Hickman (1993) and Smith (1998). Descriptions of the vegetative communities in the project area and their habitat values are based generally on *The Manual of California Vegetation* (Sawyer and Keeler-Wolfe, 1995) and the *Preliminary Description of the Terrestrial Natural Communities of California* (Holland, 1986).

3.6.3.2 Thresholds of Significance

Significance threshold criteria for the City of Oxnard are based on standards that have been identified in the CEQA Guidelines (see section 3.6.2.6.2). The City's Threshold Guidelines (February 1995) cite the CEQA Guidelines in identifying a significant biological impact as one that will do the following:

- Substantially affect a rare or endangered species of animal or plant, or the habitat of the species;
- Interfere substantially with the movement of any resident or migratory fish, or wildlife species;
- Substantially diminish habitat for fish, wildlife, or plants; or
- Covert prime agricultural land to a non-agricultural use, or impair the agricultural productivity of prime agricultural land.

For the purposes of this impact analysis, significant biological resources refers to the following.

3.6.3.2.1 Significant Biological Resources

Significant biological resources include any of the following:

- Habitats of endangered, threatened or rare species
- Wetland habitats
- Coastal habitats
- Migration corridors for fish or wildlife
- Locally important species/communities

Each significant biological resource is defined below.

3.6.3.2.2 Endangered Species

A species is considered "endangered" if it is:

a) Listed on State or federal endangered species lists

b) A species whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation predation, competition, disease, or other factor

3.6.3.2.3 Threatened Species

A species is considered "threatened" if it is:

a) Listed on State or federal threatened species lists

b) Any species, which is likely to become endangered in the foreseeable future

3.6.3.2.4 Rare

A species is considered "rare" if it is:

a) Listed on State or federal rare species lists.

b) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens or the species is likely to become endangered within the foreseeable future throughout all of a significant portion of its range and may be considered *threatened* as that term is used in the Federal Endangered Species Act.

3.6.3.2.5 Candidate

A species is considered "candidate" if it is:

a) Listed on Federal or State candidate species list (i.e., species is a candidate for listing as *threatened, endangered,* or *rare*

3.6.3.2.6 Wetland Habitat

Wetland habitat includes plant communities that are associated with lands that are transitional between terrestrial and aquatic systems, where the water table is usually at or near the surface, or the land is periodically covered with shallow water. The frequency of occurrence of water is sufficient to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.

Wetlands include marshes, bogs, sloughs, vernal pools, wet meadows, river and stream overflows, mudflats, ponds, springs and seeps.

3.6.3.2.7 Coastal Habitat

Coastal habitat is defined as environmentally sensitive habitat areas in the Coastal Zone that support plant or animal life, including coastal waters, intertidal areas, estuaries, lakes, wetlands and sand dunes.

3.6.3.2.8 Locally Important Plant Species

A Locally Important Plant is a taxa that is declining throughout the extent and has a maximum of five element occurrences in Ventura County.

3.6.3.2.9 Locally Important Animal Species

A Locally Important Animal Species is defined as an animal species that meets one or more of the following criteria:

a) Taxa for whom habitat in Ventura County is crucial for their existence either globally or in Ventura County. Either the population(s) in Ventura County represents at least 10 percent of the known extant global distribution or in Ventura County, there are: fewer than 6 element occurrences, fewer than 1,000 individuals, or less than 2,000 acres of habitat. (An element occurrence is a single extant habitat that sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element.)

b) Native taxa that are generally declining throughout their range and/or are in danger of extirpation in Ventura County.

c) Native taxa, that are not officially listed as state or federally threatened, endangered or rare, but that meet the definition of rare per CEQA Guidelines (Section 15380).

d) In some cases, to be determined on an individual basis, the population does not qualify as Locally Important Species; however, certain locations where a taxon occurs will be defined as Locally Important. This includes:

- If known, the published type locality for a holotype specimen.
- The edge of a taxon's range. This criterion does not apply to any taxon whose range and population size is expanding.

3.6.3.3 Ormond Beach Natural Resource Management Program and USFWS Consultation

Pursuant to a Development Agreement with the City, the project applicants are required to participate in implementation of the "Ormond Beach Natural Resource Management Program," prepared consistent with the framework outlined below and in consultation with, USFWS, MTC, SCC, TNC, and the City of Oxnard.

The purpose of the Natural Resource Management Program is to reduce or avoid indirect impacts to sensitive natural resources, particularly federal and state listed species and their habitats including Western snowy plovers and California least terns at Ormond Beach, Point Mugu, Ormond Lagoon, and The Nature Conservancy property that would result from expected increased visitation and household pets associated with the Ormond Beach Specific Plan development projects. A qualified biologist shall prepare a Natural Resource Management Program or update an existing management plan/program for special status species and their habitats at Ormond Beach. Although this program would be implemented for Ormond Beach, it would benefit other nearby sensitive habitat areas listed above. The Natural Resource Management Program shall be approved by USFWS. Funding to prepare and implement the management program shall be provided by the applicants. An approach to implement the program could be to expand the North Shore at Mandalay Ranger Program, create a similar program, or fund an existing program at Ormond Beach. The program will provide adequate funding for part-time law enforcement and volunteer docent coordination in order to implement the following resource protection measures at Ormond Beach:

- **Fencing:** Construction and maintenance of seasonal and/or permanent fencing adequate to delineate and protect snowy plover and least tern nesting areas and sensitive dune areas on Ormond Beach. Fencing is typically installed in March and removed in September based on nesting activity observations.

- **Signage:** Installation and maintenance of informational and directional signage at 100-foot intervals along the beach and perimeter of the property to direct and inform people of the sensitive resources on Ormond Beach. The signage shall emphasize regulations pertaining to dogs on Ormond Beach and shall cite local ordinances and state and federal laws as applicable (e.g., “leash laws”).

- **Predator Management:** Implementation of a predator management plan that would discourage potential predators and, if necessary, remove known predators from the area. The primary means of discouraging predators (e.g., gulls, crows, ravens, skunks, raccoons, and cats) would be to control trash and litter on the beach and in the immediate area. Trash cans with animal proof lids would be installed and maintained year-round. Specific targeted measures would be employed if snowy plover and/or

least tern nest predation increases significantly to a point of resulting in take as defined by the Endangered Species Act. The individual predator(s) would be targeted and removed by animal control under the direction of the docent coordinator, in consultation with appropriate agencies such as the California Department of Fish and Game (CDFG).

- **Invasive Plant Control:** To ensure that sensitive habitats on Ormond Beach are not degraded by non-native invasive plants, an invasive plant control program would be developed and implemented. The plan would require the control and/or removal of invasive exotic plants found in the Ormond Beach dunes. Hand removal would be preferred, but some species may require herbicide application for effective removal or control.

- **Public Information:** A program would be implemented that would inform the public about the unique and sensitive resources of the Ormond Beach area. Signs and pamphlets would be utilized to educate visitors on how to minimize human-caused impacts such as harassment of wildlife by dogs and cats, off-road vehicle (ORV) impacts, kites, beach grooming, trash, and water pollution. Public education should include information such as nearby "dog friendly" beaches.

- **Enforcement:** The City of Oxnard or their designee would enforce the provisions of the Ormond Beach NRMP. Active enforcement would be emphasized from March through September when sensitive species nesting activity occurs, but enforcement activities will occur year-round. Law enforcement would work in coordination with the docent coordinator and docent volunteers to ensure effective implementation of the program and to provide a safe environment for the coordinator, volunteers, and other visitors.

Although the Ormond Beach Natural Resource Management Program would reduce indirect impacts to the greatest extent feasible to nearby sensitive biological resources as a result of the proposed project, the USFWS and CDFG continue to exercise independent jurisdiction to protect federally-listed species under the ESA and state-listed species under the California Endangered Species Act (CESA), respectively. Consistent with this jurisdiction and the associated permitting processes, the project applicants and the resource agencies will consider possible application of the ESA and CESA to these projects. The timing and fair-share allocation of costs for any subsequent Biological Assessment/Opinion or Habitat Conservation Plan that might result from resource agency consultation are addressed in the development agreements.

3.6.3.4 Project Impacts

The following is a description of the impacts associated with development under the proposed specific plans for each of the two subareas based on the significance thresholds described in Section 3.6.3.2. For each subarea, the impacts are presented according to the following categories:

- Direct Impacts to Habitat and Vegetation
- Direct Impacts to Common Wildlife Species
- Direct Impacts to Special-status Wildlife
- Direct Impacts to Wildlife Corridors
- Indirect Impacts to Sensitive Habitats
- Indirect Impacts to Special-status Plants
- Indirect Impacts to Special-status Wildlife

3.6.3.4.1 Northern Subarea

Direct Impacts to Habitat and Vegetation

Impact BIO-1: Invasive Species. The Northern Subarea does not contain native vegetation; however, impacts to nearby native vegetation at Ormond Beach could potentially include invasive species used in landscaping that could escape into natural areas and displace native vegetation. The master plant palette from the specific plan for the Northern Subarea specifically excludes several invasive species, including Australian saltbush (*Atriplex semibaccata*), pampas grass (*Cortaderia selloana*), myoporum (*Myoporum laetum*), and olive (*Olea europaea*). With implementation of Mitigation Measure BIO-1, impacts from invasive plant species are, therefore, considered *less than significant (Class III).*

Impact BIO-2: Stormwater Runoff. An increase in impervious area in the developed portions of the project site would likely cause increased runoff into wetlands and waters of the U.S. and could potentially contain higher amounts of pollutants such as oil and gas runoff. Most of the stormwater runoff will be filtered and captured in the manmade lake that will connect with the Oxnard Industrial Drain as proposed in the specific plan for the Northern Subarea. Since most of the runoff will be required to be detained and filtered by wetland vegetation in the lake, increased runoff and pollution associated with the proposed project is expected to be *less than significant (Class III).*

Impact BIO-3: Waters of the U.S. The agricultural ditches will be replaced with bioswales that capture runoff from the proposed residential development into a lake that will connect with the Oxnard Industrial Drain. The lake and bioswales will be vegetated with native wetland species and include 18.3 acres of lake which would improve the habitat quality and

increase the acreage of waters of the U.S. from 6.5 to 18.3 acres. This would be a *beneficial impact (Class IV)*, increasing habitat for wetland bird species such as white-faced ibis, American bittern, migratory duck species and least tern. Although the lake will be located approximately a half-mile inland, least terns may forage in the lake if there is suitable prey.

Direct Impacts to Common Wildlife Species

Impact BIO-4: Bird Foraging Habitat. The Northern Subarea provides marginal habitat for foraging birds and raptors such as red-tailed hawk, red-shouldered hawk (*Buteo lineatus*), and American kestrel, as well as a variety of other common passerines and shorebirds listed in Appendix A-1. The habitat is marginal because it consists of agricultural crops and is adjacent to residential development. An estimated 295.5 acres of agricultural land and 6.5 acres of agricultural ditches will be impacted as a result of the proposed project in the Northern Subarea. Impacts to foraging habitat for birds would be *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-5: Displacement/Mortality of Wildlife. In addition to the loss of bird foraging habitat, the proposed development would directly disturb wildlife on the project site and potentially those areas adjacent to the site. Most species are expected to be displaced to adjacent areas of similar habitat, provided it is available at the onset of construction activity. However, wildlife that emigrate from the site are vulnerable to mortality by predation and unsuccessful competition for food and territory. In addition, species of low mobility (particularly burrowing mammals, amphibians, and reptiles) are expected to be destroyed during site preparation and construction.

Other than the diverse bird population that inhabits the project site, it has relatively low biological value for other wildlife species, so only a small number of wildlife species other than birds is expected to be displaced or destroyed as a result of construction. Since the wildlife species that would be displaced or inadvertently destroyed by construction activities are relatively common and low in number, implementation of the proposed project is not expected to reduce current populations of common wildlife species in the region to below self-sustaining levels or otherwise substantially affect common fish or wildlife species populations on or adjacent to the project site. Therefore, these impacts are *less than significant (Class III)*.

Impact BIO-6: Nesting Birds. Activities associated with grading and construction have the potential to disturb nesting birds on and adjacent to the site to the degree that the nests may be abandoned, resulting in a direct loss of an active bird nest. Bird nests with eggs or young are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Loss of active nests as a result of construction or other site-preparation activities may potentially be in conflict with these regulations and, depending upon the number of active

nests that would potentially be disturbed, could be considered a significant impact. Since the Northern Subarea has minimal trees or shrubs, nesting birds would be primarily ground-nesting birds such as killdeer or raptors in trees outside but near to the project site. Impacts to nesting birds would be *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-3.

Direct Impacts to Special-status Wildlife

Impact BIO-7: Special-status Bird Foraging Habitat. Direct impacts to special-status birds that have potential to occur in the Northern Subarea are limited to the loss of foraging habitat. None of the special-status species with potential to occur in the Northern Subarea, with the exception of California horned lark and burrowing owl are expected to use the project site for nesting because it lacks suitable habitat. The following special birds will be directly impacted by the loss of foraging habitat in the Northern Subarea: ferruginous hawk, merlin, peregrine falcon, white-tailed kite, Northern harrier, sharp-shinned hawk, Cooper's hawk, loggerhead shrike, California horned lark, short-eared owl, burrowing owl, tricolored blackbird, mountain plover and long-billed curlew.

Impact BIO-7a: White-tailed Kite. The white-tailed kite is a California Species of Special Concern and California fully protected species due to fragmentation and loss of habitat throughout most of its range. White-tailed kites are most often found on the west coast but can be seen along the Gulf Coast, Florida and throughout South America. Causes of their decline include car strike, loss and fragmentation of habitat, increased attacks by crows and ravens and reduction in prey items due to increased development. White-tailed kites require large areas of open space or grassland for foraging and secluded areas for nesting in trees or shrubs. White-tailed kites are expected to forage in the Northern Subarea as it has been seen in adjacent areas, including Ormond Beach and NBVC Point Mugu areas. Although the white-tailed kites are not expected to nest in the Northern Subarea due to lack of suitable habitat they may nest in the vicinity. Impacts to white-tailed kites are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7b: Northern Harrier. Nesting northern harriers are California Species of Special Concern. Northern harriers are uncommon but widespread throughout North America, found typically flying over marshes, farmland, and grasslands. They may be seen perched on low fenceposts or on the ground. Northern harriers nest on the ground in fields or marshes. They are not expected to nest within the Northern Subarea due to lack of suitable habitat but may nest in the vicinity. They may use the Northern Subarea for foraging. Impacts to northern harrier are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7c: Sharp-shinned Hawk. The sharp-shinned hawk is a California Species of Special Concern. It has potential to forage in the Northern Subarea, as it is known to occur near the project area in winter. It nests in mature mixed forest and is not expected to nest within the project area. Small birds are its main prey item, hunted from concealed perches. Impacts to sharp-shinned hawks are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7d: Cooper's Hawk. The Cooper's hawk is a California Species of Special Concern. Its range extends from southern Canada to the southern United States. The greatest reason for its decline that began in the 1960's is habitat destruction. Cooper's hawks are also affected by pesticide use. It is a woodland bird that has been known to occur in the project vicinity in the winter. Cooper's hawks nest in dense stands of riparian, oak woodlands which are absent from the Northern Subarea. There is potential for Cooper's hawks to nest in the adjacent areas like the riparian corridor within The Nature Conservancy preserve or within large trees in the urban area. Impacts to Cooper's hawks are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7e: Ferruginous Hawk. The ferruginous hawk is a California Species of Special Concern. The Northern Subarea is within its winter range. Ferruginous hawk are uncommon to rare in arid grasslands. An individual was observed at Point Mugu, three miles from the site, so there is potential that ferruginous hawks may forage in the Northern Subarea. Impacts to ferruginous hawk are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7f: Merlin. The merlin is a California Species of Special Concern found along the California coast and Central valley during winter and migratory months. This solitary and pugnacious falcon breeds in Canadian boreal forest and feeds on small birds and dragonflies, captured in mid-flight. Pesticides are the major reason for its decline due to resulting reproductive impairment. There is potential for the merlin to use the Northern Subarea as foraging grounds, however, the merlin is considered uncommon in open habitats. Impacts to merlins are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7g: Peregrine Falcon. The peregrine falcon is a state endangered species. The peregrine falcon occurs on almost every continent except Antarctica, and lives in a wide variety of habitats from tropics, deserts, and maritime to the tundra, and from sea level to 12,000 feet. Peregrines nest mainly on high cliffs. This species was observed in the Southern Subarea and likely forages there. Since the Northern Subarea is adjacent to this area there is potential for it to forage in the Northern Subarea although the likelihood is lower due to lower quality foraging habitat. There are no records of peregrine falcons breeding in the project vicinity. Impacts to peregrine falcons are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7h: Long-billed curlew. The long-billed curlew is a California Species of Special Concern that nests in dry grassland and winters in marshes, open fields, lawns and beaches. It may use the Northern Subarea for foraging, hunting grasshoppers and other insects. It has been known to occur near the project site but is not known to nest in the coastal California. Impacts to long-billed curlew are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7i. Mountain plover. The mountain plover is a proposed Federal Threatened Species and is a California Species of Concern that nests in shortgrass prairies and winters on barren ground. The mountain plover is known to occur on the project site (Pereksta, 2005). It will be impacted by increased human disturbance and domestic animals. An increase in predation by scavenger species such as skunk and raccoons may also increase mortality. Impacts to mountain plover are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7j: Short-eared Owl. Nesting short-eared owls are California Species of Special Concern. Reasons for their decline include the loss of marsh habitat, tall grasslands, and gunshot mortalities. Short-eared owls were previously common winter visitors in California. Due to their decline and lack of suitable habitat within the Northern Subarea, there is low potential for short-eared owls to use the Northern Subarea for foraging. Impacts to short-eared owls are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7k: Loggerhead Shrike: Nesting loggerhead shrike are California Species of Special Concern. The reasons for their decline are unclear but may be a combination of factors including the degradation and loss of native grassland and sagebrush habitats and pesticide bio-accumulation. In California, livestock grazing practices may reduce the abundance of prey items. Loggerhead shrikes often perch on powerlines and fences that are adjacent to roads and thus may be impacted by vehicle collisions. Loggerhead shrike is not expected to nest in the Northern Subarea due to lack of suitable habitat but may nest in nearby shrub habitat. The Northern Subarea may be used for foraging. Impacts to loggerhead shrikes are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-7l: California horned lark. The California horned lark is a Federal Species of Special Concern and a California Species of Special Concern. It occupies a variety of habitat, short grass prairie, agricultural fields, mountain meadows and open coastal plains. It is known to forage in the Southern Subarea and has been observed in the project vicinity, therefore there is high potential for it to forage in the Northern Subarea. There is potential for it to nest in the Northern Subarea as it typically breeds in open grasslands, fields and rangeland. Impacts to California horned lark are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measures BIO-2 and BIO-3.

Impact BIO-7m: Tricolored blackbird. Nesting tricolored blackbirds are a California Species of Special Concern. They have potential to forage in the Northern Subarea. Tricolored blackbirds prefer freshwater marsh and open grassland habitats but also occupy urban areas. Tricolored blackbirds are colonial nesters in marshlands. In winter, they forage in large flocks in marshes and farmland. Impacts to tricolored blackbirds are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-8: Burrowing Owl. The burrowing owl is a federal and state species of concern. The decline of this species was recognized as early as the 1940s. The decline is attributable to the conversion of grasslands and pasturelands to agriculture and to the destruction of ground squirrel colonies by plowing and poisoning. The burrowing owl is unique because it lives in the abandoned burrows of ground squirrels, modifying the burrows to suit their needs by digging. It is one of the few diurnal owls and can be seen in the day perched on fence posts or near the entrance to their burrow.

While no burrowing owls were observed during the survey and they are not known to occur in the Northern Subarea, there is a low potential for this owl to occur to forage onsite since it has been observed in the adjacent sod farms. Breeding is unlikely due to a lack of suitable burrows. The site provides foraging opportunities that include lizards, grasshoppers, and likely, small rodents. Impacts to burrowing owls are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measures BIO-2 and BIO-4.

Direct Impacts to Wildlife Corridors

Impact BIO-9 Wildlife Corridors. The Northern Subarea is positioned adjacent to existing residential development to the north and is bordered by a major road to the south. Although it provides some connectivity to other wildlife habitat south of Hueneme Road, the connectivity is limited by Hueneme Road and surrounding development. Therefore, the disruption to wildlife movement in the area would be *less than significant (Class III).*

Indirect Impacts to Sensitive Habitats

Impact BIO-10 Sensitive Offsite Habitats. Indirect impacts to nearby sensitive habitats and foraging habitat for several sensitive bird species listed in Appendix A-1 are possible as a result of the proposed project. Marginal bird and raptor foraging habitat is present in the agricultural lands immediately east of Olds Road at the eastern boundary of the Northern Subarea and south of Hueneme Road. Indirect impacts to sensitive bird foraging habitat as a result of the proposed project include increased presence of domestic cats, which are documented to have significant impacts to bird populations in the U.S. Some data suggests that free-ranging cats living in small towns kill an average of 14 wild animals each year, and when present in large numbers can reduce the prey for native predators such as raptors. They may also transmit new diseases to wild animals (Coleman et al, 1997). Nationwide, cats are

contributing to the endangerment of populations of birds such as least terns, piping plovers (*Charadrius melodus*), and loggerhead shrikes (Coleman et al, 1997). Agricultural lands in the project vicinity are important to many of the sensitive birds because although degraded it provides habitat structure similar to the historical grasslands that have been significantly reduced in the region. There are several sensitive bird species that depend on grasslands such as white-tailed kites and burrowing owls. There are approximately 9 to 12 federally listed and 5 to 8 state listed grassland-associated threatened and endangered species in Ventura County (Chadden et al, 2004). The proposed lake at the southern edge of the Northern Subarea development would provide a barrier effect along with Hueneme Road that would inhibit domestic cats from crossing Hueneme Road and eventually reaching habitat areas in the southern part of the Southern Subarea and areas farther to the south. While the 78-foot Olds Road right-of-way and a 20-foot landscaped agricultural buffer on the west side of Olds Road will separate the developed part of the Northern Subarea from the agricultural land east of Olds Road, there is no physical barrier or fencing proposed along the eastern project boundary that would prevent cats from entering bird foraging habitat east of Olds Road and potentially traveling through agricultural lands farther south to more sensitive areas at Ormond Beach.

The Ormond Beach and Point Mugu areas support a wide array of sensitive plant and wildlife species and sensitive habitats that could be impacted indirectly by increased development in the nearby upland areas. For example, residential development close to these areas would likely result in higher human use of the area which would cause negative impacts to native species such as trampling and competition with non-native plant and animal populations. An increase in impervious surfaces associated with the project development may adversely affect the water quality of run-off entering adjacent sensitive habitats. Southern coastal salt marsh, freshwater and brackish water marsh, tidal flats, southern foredune and coastal dune scrub are sensitive habitats within the project vicinity, supporting special status plants and animal species, could be indirectly impacted by the proposed project.

With implementation of the Ormond Beach Natural Resource Management Program and Mitigation Measure BIO-5, indirect impacts to sensitive habitats are *significant but feasibly mitigated (Class II).*

Indirect Impacts to Special-status Wildlife

Impact BIO-11: Western Snowy Plover. The western snowy plover is a small shorebird distinguished from other plovers (family *Charadriidae*) by its small size, pale brown upper parts, dark patches on either side of the upper breast, and dark gray to blackish legs. Snowy plovers weigh between 1.2 and 2 ounces. They are about 5.9 to 6.6 inches long.

The Pacific coast population of the western snowy plover breeds primarily on coastal beaches from southern Washington to southern Baja California, Mexico. The nesting season

extends from early March through late September. The breeding season generally begins earlier in more southerly latitudes, and may be two to four weeks earlier in southern California than in Oregon and Washington.

Snowy plovers are primarily visual foragers, using the run-stop-peck method of feeding typical of *Charadrius* species. They forage on invertebrates in the wet sand and amongst surf-cast kelp within the intertidal zone, in dry, sandy areas above the high tide, on salt pans, on spoil sites, and along the edges of salt marshes, salt ponds, and lagoons. They sometimes probe for prey in the sand and pick insects from low-growing plants.

The Pacific coast population of the western snowy plover is defined as those individuals that nest beside or near tidal waters, and includes all nesting colonies on the mainland coast, peninsulas, offshore islands, adjacent bays and estuaries from southern Washington to southern Baja California, Mexico. Habitats used by nesting and non-nesting birds include sandy coastal beaches, salt pans, coastal dredged spoils sites, dry salt ponds, salt pond levees and gravel bars. Historic records suggest that nesting western snowy plovers were once more widely distributed in coastal California.

Snowy plovers are present at Ormond Beach and are not expected to occur in the Northern Subarea. Therefore, no direct impacts as a result of the proposed project would result to snowy plovers. Indirect impacts, including increased human presence and domestic animals, would be reduced by the lake and open space/greenbelt buffer included in the proposed project, as well as the Ormond Beach Natural Resource Management Program and implementation of Mitigation Measure BIO-5. These impacts would, therefore, be *significant but feasibly mitigated (Class II).*

***Impact BIO-12: California Least Tern*.** The California Least Tern is a state and federally endangered species. The historical breeding range of this species is along the Pacific coast from Monterey County, California to southern Baja California, Mexico. Nesting locations are in dry sand or dirt near lagoons or estuaries with a dependable food supply. Due to decreasing habitat, terns are often forced to nest on manmade structures such as airports or landfills. They usually arrive around mid-April and breed in colonies from mid-May to early August and then migrate south over the winter. This species is known to forage along the Oxnard Canal No. 3 adjacent to the Southern Subarea and to breed at Ormond Beach (WRA, 2005; BioResources Consultants, 2002; Jones & Stokes, 1995). No direct impacts are expected as a result of the proposed project. Indirect impacts, including increased human presence and domestic animals, would be *significant but feasibly mitigated (Class II)* through implementation of the Ormond Beach Natural Resource Management Program and Mitigation Measure BIO-5.

3.6.3.4.2 Southern Subarea

Direct Impacts to Habitat and Vegetation

Impact BIO-13: Invasive Species. The Southern Subarea has minimal native vegetation; however, impacts to nearby native vegetation at Ormond Beach could potentially include invasive species used in landscaping that could escape into natural areas and out compete native vegetation. The plant palette proposed in the specific plan for the Southern Subarea is primarily native species; however, there are a few species that could be potentially invasive such as *Limonium* sp., *Eucalyptus* sp., and Queen palm (*Syagrus romanzoffiana*). Impacts from invasive species are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-1.

Impact BIO-14: Stormwater Runoff. An increase in impervious area in the developed portions of the project site would likely caused increased runoff into wetlands and waters of the U.S. and could potentially contain higher amounts of pollutants such as oil and gas runoff. Most of the stormwater runoff will be filtered and captured in bioswales proposed in the specific plan for the Southern Subarea. Therefore, increased runoff and pollution associated with the proposed project is expected to be minor and *less than significant (Class III).*

Impact BIO-15: Waters of the U.S. The agricultural ditches will be replaced with bioswales that capture runoff from the proposed industrial development. The bioswales will be vegetated with native wetland species and will be part of a 51-acre open space/greenbelt area including pedestrian trails and outdoor eating areas. This would improve the habitat quality an increase the acreage of wetlands and waters of the U.S. from 5 to just over 50 acres. This would be a *beneficial impact (Class IV).*

Direct Impacts to Common Wildlife Species

Impact BIO-16: Bird Foraging Habitat. Approximately 370 acres of agricultural lands and 5 acres of agricultural ditches would be impacted by the proposed development in the Southern Subarea. Approximately 230 acres would be agriculture and would remain transitional habitat to adjacent to Ormond Beach wetlands. The Southern Subarea is known as a foraging habitat for many shorebirds, passerines, and raptors. Impacts to foraging habitat for birds would be *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-17: Displacement/Mortality of Wildlife. In addition to the loss of bird foraging habitat, the proposed development would directly disturb wildlife on the project site and potentially those areas adjacent to the site. Most species are expected to be displaced to

adjacent areas of similar habitat, provided it is available at the onset of construction activity. However, wildlife that emigrate from the site are vulnerable to mortality by predation and unsuccessful competition for food and territory. Mountain lion tracks have been observed west of Arnold Road (Pariseau, 2008). Human presence is a serious impact on mountain lion territory as safety concerns can result in extirpation. In addition, species of low mobility (particularly burrowing mammals, amphibians, and reptiles) are expected to be destroyed during site preparation and construction.

Other than the diverse bird population that inhabits the Southern Subarea, it has relatively low biological value for other wildlife species, so only a small number of wildlife species other than birds are expected to be displaced or destroyed as a result of construction. Since the wildlife species that would be displaced or inadvertently destroyed by construction activities are relatively common and low in number, implementation of the proposed project is not expected to reduce current populations of common wildlife species in the region to below self-sustaining levels or otherwise substantially affect common fish or wildlife species populations on or adjacent to the project site. Therefore, these impacts are *less than significant (Class III).*

Impact BIO-18: Nesting Birds. Further, activities associated with grading and construction have the potential to disturb nesting birds on and adjacent to the site to the degree that the nests may be abandoned, resulting in a direct loss of an active bird nest. Bird nests with eggs or young are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Loss of active nests as a result of construction or other site-preparation activities may potentially be in conflict with these regulations and, depending upon the number and extent of active nests that would potentially be disturbed, could be considered a significant impact. Since the Southern Subarea has minimal trees or shrubs, nesting birds would be primarily ground-nesting birds such as killdeer or raptors in trees nearby but outside of the project site. Impacts to nesting birds would be *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-3.

Direct Impacts to Special-status Wildlife

Impact BIO-19: Special-status Birds. Direct impacts to special-status wildlife are limited to sensitive bird species that are known to occur or could potentially occur in the Southern Subarea (see Table 3.6-7). The project site is known to be used by these sensitive species for foraging only, and breeding is not expected, except for the low probability of breeding burrowing owls. Evaluating the loss of foraging habitat to one single species as a result of the proposed project would be considered less than significant because it would not reduce the foraging opportunities to a point that would significantly impact the foraging opportunities for these species; however, evaluated collectively the loss of this foraging habitat to a large diversity of sensitive birds of prey, raptors, and shorebirds would be significant. Impacts to

special-status birds are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measures BIO-2. Following are species-by-species explanations of Special-status birds that could be affected by development in the Southern Subarea.

Impact BIO-19a: American bittern. The American bittern is a federal species of concern that is known to occur at the project site in winter. Cryptic plumage allows the American bitter to hide in areas with dense emergent vegetation, as is found in the Oxnard Canal No.3. Development of the Southern Subarea may impact its foraging habits. Impacts to American bittern are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19b: White-tailed Kite: The white-tailed kite is a California Species of Special Concern and California Fully Protected species due to fragmentation and loss of habitat throughout most of its range. White-tailed kites are most often found on the west coast but can be seen along the Gulf Coast, Florida and throughout South America. Causes of their decline include car strike, loss and fragmentation of habitat, increased attacks by crows and ravens and reduction in prey items due to increased development. White-tailed kites require large areas of open space or grassland for foraging and secluded areas for nesting in trees or shrubs. White-tailed kites are expected to forage in the Southern Subarea as they have been seen in adjacent areas, including Ormond Beach and NBVC Point Mugu areas. Although they are not expected to nest in the Southern Subarea due to lack of suitable habitat, they may nest in the vicinity. Disturbances generated by construction activities have the potential to impact nesting activities. Impacts to white-tailed kites are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2 and BIO-3.

Impact BIO-19c: Bald Eagle. The bald eagle was delisted as a federal endangered species in August of 1907, but remains a California endangered species. It primarily feeds on fish, water fowl and small mammals, hunted or scavenged. There is potential for bald eagle to use the Southern area for foraging. Historically, bald eagles were known to nest in the project vicinity, however, due to lack of suitable habitat none are expected to nest within the Southern Subarea. Impacts to bald eagle are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19d: Northern Harrier: Nesting northern harriers are California Species of Special Concern. Northern harriers are uncommon but widespread throughout North America, found typically flying over marshes, farmland, and grasslands. They may be seen perched on low fenceposts or on the ground. Northern harriers nest on the ground in fields or marshes. They are not expected to nest within the Southern Subarea due to lack of suitable habitat but may nest in the vicinity. They may use the Southern Subarea for foraging. Impacts to northern harrier are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19e: Sharp-shinned Hawk. Nesting sharp-shinned hawks are California Species of Special Concern that have the potential to forage in the Southern Subarea, as they are known to occur near the project area in winter. It nests in mature mixed forest and is not expected to nest within the project area. Small birds are its main prey item, hunted from concealed perches. Impacts to sharp-shinned hawks are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19f: Cooper's Hawk. Nesting Cooper's hawks are California Species of Special Concern. Their range extends from southern Canada to the southern United States. The greatest reason for its decline that began in the 1960's is habitat destruction. Cooper's hawks are also affected by pesticide use. It is a woodland bird that has been known to occur in the project vicinity in the winter. Cooper's hawks nest in dense stands of riparian, oak woodlands which are absent from the Southern Subarea. There is potential for Cooper's hawks to nest in the adjacent areas like the riparian corridor within The Nature Conservancy preserve. Impacts to Cooper's hawks are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19g: Ferruginous Hawk. Wintering ferruginous hawks are California state species of special concern. The Southern Subarea is within its winter range. The ferruginous hawk is uncommon to rare in arid grasslands. It has been observed at Point Mugu, three miles from the site and has potential to forage in the Southern Subarea. Impacts to ferruginous hawk are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19h: Merlin. The merlin is a California Species of Special Concern. This solitary and pugnacious falcon breeds in Canadian boreal forest and is found along the California coast and Central valley during winter and migratory months. Small birds are its main diet, along with dragonflies captured in mid-flight. Pesticides, causing reproductive impairment are considered the main reason for its decline. There is potential for merlins to use the Southern Subarea as foraging grounds, however, the merlin is considered uncommon in open habitats. Merlins are more commonly found in boreal forests, coastal forests and prairies. Impacts to merlins are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19i: Peregrine Falcon. The peregrine falcon is a state endangered species. The peregrine falcon occurs on almost every continent except Antarctica, and lives in a wide variety of habitats from tropics, deserts, and maritime to the tundra, and from sea level to 12,000 feet. Peregrines nest mainly on high cliffs. This species was observed in the Southern Subarea and likely forages there. There are no records of peregrine falcons breeding in the project vicinity. Impacts to peregrine falcons are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19j: Light-footed Clapper Rail: The light-footed clapper rail is a federal and state endangered species in California. It is found in salt marshes and tidal sloughs and has the potential to forage in the Oxnard Canal, adjacent to the Southern Subarea. It is known to occur in the salt marshes of Mugu Lagoon, 2.4 miles southwest of the project site. Impacts to light-footed clapper rails are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19k: Long-billed curlew. The long-billed curlew is a California Species of Special Concern. Its populations have declined due to non-native predators such as feral cats and red fox, habitat destruction and changes to the hydrology of coastal wetlands. It nests in dry grassland and winters in marshes, open fields, lawns and beaches. It may use the Southern Subarea for foraging, hunting grasshoppers and other insects. It has been known to occur near the project site but is not known to nest in the Southern Subarea. Impacts to long-billed curlews are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19l: Mountain plover. The mountain plover is a proposed Federal Threatened Species and is a California Species of Concern. It nests in shortgrass prairies and winters on barren ground. The mountain plover is known to occur on the project site (Pereksta, 1905). It will be impacted by a loss of foraging habitat, increased human disturbance and domestic animals. An increase in predation by scavenger species such as skunk and raccoons may also increase mortality. Impacts to mountain plover are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measures BIO-2 and BIO-3.

Impact BIO-19m: Short-eared Owl. Nesting short-eared owls are California Species of Special Concern. Reasons for their decline include the loss of marsh habitat, tall grasslands, and gunshot mortalities. Short-eared owls were previously common winter visitors in California. Due to their decline and the lack of suitable habitat within the Southern Subarea, the short-eared owl has a low potential to occur and use the Southern Subarea for foraging. Impacts to short-eared owls are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19n: Loggerhead Shrike: Nesting loggerhead shrikes are California Species of Special Concern. The reasons for their decline are unclear but may be a combination of factors including the degradation and loss of native grassland and sagebrush habitats and pesticide bio-accumulation. In California, livestock grazing practices may reduce the abundance of prey items. Loggerhead shrikes often perch on powerlines and fences that are adjacent to roads and thus may be impacted by car strikes. The loggerhead shrike is not expected to nest in the Southern Subarea due to lack of suitable habitat but may nest in nearby shrub habitat. The Southern Subarea may be used for foraging. Impacts to loggerhead

shrikes are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19o: Bank Swallow. Nesting bank swallows are federal species of concern and state threatened species in California. They are migrants in riparian lowlands and nests in colonies along cliffs with fine textured sandy soil in riparian areas. It is known to occur on the project site but is not expected to nest due to a lack of suitable habitat. Impacts to bank swallow are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19p: Purple martin. The purple martin is a California Species of Special Concern. It is a very rare visitor in southern California, generally only seen during migration. It has been observed within the project vicinity during spring migration (Pereksta, 2005). Purple martins forage over any open habitat and have the potential to forage over the Southern Subarea. Impacts to purple martin are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19q: California horned lark. The California horned lark is a Federal Species of Special Concern and a California Species of Special Concern. It occupies a variety of habitat, short grass prairie, agricultural fields, mountain meadows and open coastal plains. It is known to forage in the Southern Subarea and has been observed in the project vicinity. There is potential for it to nest in the Southern Subarea as it typically breeds in open grasslands, fields and rangeland in southern California. Impacts to California horned lark are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2 and BIO-3.

Impact BIO-19r: Belding's Savannah Sparrow. Belding's Savannah Sparrow is a subspecies of the widespread savannah sparrow, listed as endangered by the California Department of Fish and Game in 1974. This subspecies breeds in large contiguous patches of pickleweed (*Salicornia virginica*) dominated coastal salt marshes of northwestern Mexico to as far north as Goleta, California. It favors pickleweed marsh, and nests in the upper littoral of these marshes, where their nests are safe from the highest tides that occur during the nesting season. The species utilizes pickleweed for nesting, perching, and singing. Although nesting habitat is not present within the Southern Subarea, Belding's Savannah Sparrows are fairly regular foragers at the sod farms. Impact to Belding's Savannah Sparrows, through reduction in foraging habitat, would be *significant but feasibly mitigated (Class II)* by implementation of Mitigation Measure BIO-2.

Impact BIO-19s: Large-billed Savannah Sparrow. The large-billed savannah sparrow is a California Species of Special Concern, generally found in areas with sparse vegetation and adjacent water. It has been known to occur at the project site (Pereksta, 2005). Impacts to

large-billed savannah sparrow are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-19t: Lark Sparrow. The lark sparrow is a Federal Species of Special Concern that occurs in areas with herbaceous vegetation with scattered trees and shrubs. There is low potential for the larks sparrow to occur in the Southern Subarea. Impacts to lark sparrow are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2

Impact BIO-19u: Tricolored blackbird. The tricolored blackbird is a Species of Concern in California when nesting. It has potential to forage in the Southern Subarea. It prefers freshwater marsh and open grassland habitats but also occupies urban areas. Tricolored blackbirds are colonial nesters in marshlands. In winter, they forage in large flocks in marshes and farmland. Impacts to tricolored blackbirds are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measure BIO-2.

Impact BIO-20: Burrowing Owl. The burrowing owl is a federal and state species of concern. The decline of this species was recognized as early as the 1940's. The decline is attributable to the conversion of grasslands and pasturelands to agriculture, and to the destruction of ground squirrel colonies by plowing and poisoning. The burrowing owl is unique because it lives in the abandoned burrows of ground squirrels. They modify the burrows to suit their needs by digging. It is one of the few diurnal owls and can be seen in the day perched on fence posts or near the entrance to their burrow.

While no burrowing owls were observed during the survey, there is a low potential for this owl to become resident and potentially breed at the site. Potential areas include abandoned ground squirrel burrows and sandy berms. The site provides foraging opportunities that include lizards, grasshoppers, and likely, small rodents. Impacts to burrowing owls are *significant but feasibly mitigated (Class II)* through implementation of Mitigation Measures BIO-2 and BIO-4.

Direct Impacts to Wildlife Corridors

Impact BIO-21 Wildlife Corridors. As discussed earlier, the Study Area serves as a wildlife corridor for animals passing between the Ormond Beach wetlands to the south, open space areas of federal, state, and local parklands located to the southwest, agricultural lands from the northwest to the south, Santa Monica Mountains to the east, and Ventura County Game Preserve, Point Mugu Game Preserve, and NBVC Point Mugu to the southeast. The proposed development would limit the use of this area as a wildlife corridor. However, this is not a significant impact because the development is positioned adjacent to existing development to the north and proposes open space/agriculture for the southern portion of the Southern

Subarea adjacent to Ormond Beach, which would still serve as a wildlife corridor. The disruption to wildlife movement in the area would therefore be *less than significant (Class III).*

Indirect Impacts to Sensitive Habitats

Impact BIO-22 Sensitive Offsite Habitats. Indirect impacts to adjacent sensitive habitats are possible as a result of the proposed project. The Ormond Beach and Point Mugu areas support a wide array of sensitive plant and wildlife species and sensitive habitat that could be impacted indirectly by increased development in the adjacent upland areas. Sensitive habitats that could be indirectly impacted by the proposed project include southern coastal saltmarsh, freshwater and brackish water marsh, tidals flats, southern foredune and coastal dune scrub. For example, industrial development close to these areas would likely result in higher human use of the area which would cause negative impacts to native species such as trampling, introduction of non-native and invasive plant and animal populations, particularly increased domestic animal presence in the area. Since these sensitive habitats support several special-status plant and wildlife species, there is a potential for these indirect impacts to be significant. The proposed project incorporates some measures to reduce indirect impacts such as lighting, noise, and human intrusion by including a 200-foot wide greenbelt to serve as a buffer between the development and the 230-acre agricultural area.

With implementation of the Ormond Beach Natural Resource Management Program and Mitigation Measures BIO-1, BIO-2, and BIO-5, indirect impacts to sensitive habitats are *significant but feasibly mitigated (Class II).*

Indirect Impacts to Special-status Plants

Impact BIO-23 Special-status Plants. Most of the project area is dominated by non-native species, so impacts to special-status plants as a result of the proposed project are limited to potential indirect impacts associated with the development of lands adjacent to the location of two sensitive species: the spiny rush (*Juncus acutus* ssp. *leopoldii*) and salt marsh bird's beak. Spiny rush, known to occur along Oxnard Canal No. 3 that borders the southern edge of the project site, has potential to be indirectly impacted by the proposed project. Salt marsh bird beak occurs at Ormond Beach and could be indirectly impacted by increased development at the project site. Indirect impacts that could potentially affect both of these species include increased runoff due to increased impervious layers, increased exotic species, and trampling associated with increased human use. These impacts would be reduced by the wetlands restoration buffers and bioswales that are included in the proposed project. Indirect impacts to special-status plants are *significant but feasibly mitigated (Class II)* through implementation of Ormond Beach Natural Resource Management Program and Mitigation Measure BIO-1 and BIO-5.

Indirect Impacts to Special-status Wildlife

Impact BIO-24: Tidewater Goby (Eucyclobius Newberryi). The tidewater goby is designated an endangered species by the USFWS. It occurs in coastal brackish lagoons along the central and southern California coast. Local resident populations are present in the nearby J Street Drain at Ormond Beach 1.3 miles west of the Southern Subarea. There are no known records of tidewater goby in the Southern Subarea; however, due to the proximity to a known population and presence of suitable habitat nearby there is a moderate potential for it to occur in wetland habitats at Ormond Beach and Oxnard Canal No. 3. No direct impacts to the Oxnard Canal No. 3 are anticipated from the proposed project and, therefore, there are no direct impacts to the tidewater goby. Indirect impacts would include increased pollution and runoff due to increased impervious areas and development; however, this would be *less than significant (Class III)* with implementation of bioswales and stormwater detention areas as proposed in the specific plan for the Southern Subarea and Mitigation Measure BIO-5.

Impact BIO-25: Threespined Unarmored Stickleback (Gasterosteus aculeatus williamsoni). The threespined unarmored stickleback is a small, scaleless fish that is a Federal and State Endangered species. Its known populations are restricted to the Santa Clara drainage in Los Angeles and Ventura counties, the San Antonio Creek on Vandenburg Airforce Base, San Luis Obispo county, San Felipe Creek in San Diego county and Shay Creek in San Bernardino county. Habitat degradation, including stream channelization, urbanization, agriculture, and groundwater pumping are critical factors in the decline of the threespine unarmored stickleback. A population has been observed in the drainage ditch at Ormond Beach (General Plan, 1990). Suitable habitat is not present in the Southern Subarea, therefore, there are no direct impacts to the threespined unarmored stickleback. Indirect impacts would include increased pollution and runoff due to increased impervious areas and development; however, this would be *less than significant (Class III)* with implementation of bioswales and stormwater detention areas as proposed in the specific plan for the Southern Subarea and Mitigation Measure BIO-5.

Impact BIO-26: Western Snowy Plover (Charadrius alexandrinus nivosus). The western snowy plover is a small shorebird distinguished from other plovers (family Charadriidae) by its small size, pale brown upper parts, dark patches on either side of the upper breast, and dark gray to blackish legs. Snowy plovers weigh between 1.2 and 2 ounces. They are about 5.9 to 6.6 inches long.

The Pacific coast population of the western snowy plover breeds primarily on coastal beaches from southern Washington to southern Baja California, Mexico. The nesting season extends from early March through late September. The breeding season generally begins earlier in more southerly latitudes, and may be two to four weeks earlier in southern California than in Oregon and Washington.

Snowy plovers are primarily visual foragers, using the run-stop-peck method of feeding typical of *Charadrius* species. They forage on invertebrates in the wet sand and amongst surf-cast kelp within the intertidal zone, in dry, sandy areas above the high tide, on salt pans, on spoil sites, and along the edges of salt marshes, salt ponds, and lagoons. They sometimes probe for prey in the sand and pick insects from low-growing plants.

The Pacific coast population of the western snowy plover is defined as those individuals that nest beside or near tidal waters, and includes all nesting colonies on the mainland coast, peninsulas, offshore islands, adjacent bays and estuaries from southern Washington to southern Baja California, Mexico. Habitats used by nesting and non-nesting birds include sandy coastal beaches, salt pans, coastal dredged spoils sites, dry salt ponds, salt pond levees, and gravel bars. Historic records suggest that nesting western snowy plovers were once more widely distributed in coastal California.

Snowy plovers are present at Ormond Beach and are not expected to occur in the Southern Subarea. Therefore, no direct impacts as a result of the proposed project would result to snowy plovers. Indirect impacts associated with increased human presence would be reduced by the open space/greenbelt buffer that is included in the proposed project, the Ormond Beach Natural Resource Management Program, and Mitigation Measures BIO-1 and BIO-5. Indirect impacts to western snowy plovers are, therefore, *significant but feasibly mitigated (Class II).*

Impact BIO-27: California Least Tern. The California Least Tern is a state and federally endangered species. The historical breeding range of this species is along the Pacific Coast from Monterey County, California to southern Baja California, Mexico. Nesting locations are in dry sand or dirt near lagoons or estuaries with a dependable food supply. Due to decreasing habitat, terns are often forced to nest on manmade structures such as airports or landfills. They usually arrive around mid-April and breed in colonies from mid-May to early August and then migrate south over the winter. This species is known to forage along the Oxnard Canal No. 3 within the Study Area and to breed at Ormond Beach (WRA, 2005; BioResources Consultants, 2002; Jones & Stokes, 1995). No direct impacts are expected as a result of the proposed project. Indirect impacts, including increased human presence and domestic animals, would be reduced by the open space/greenbelt buffer that is included in the proposed project, the Ormond Beach Natural Resource Management Program, and Mitigation Measures BIO-1 and BIO-5. Indirect impacts to California Least Terns are, therefore, *significant but feasibly mitigated (Class II).*

Impact BIO-28: White-faced ibis. The white-faced ibis is a California Species of Special Concern that breeds in isolated wetlands throughout western central and southeastern North America and into Central America. Mugu Lagoon and associated wetlands are important wintering areas for the white-faced ibis. Indirect impacts, including increased human

presence and domestic animals, would be reduced by the open space/greenbelt buffer that is included in the proposed project. Indirect impacts to the white-faced ibis are *significant but feasibly mitigated (Class II)* through implementation of the Ormond Beach Natural Resource Management Program and Mitigation Measure BIO-5.

3.6.3.4.3 Cumulative Impacts

***Impact BIO-29: Cumulative Impacts*.** Past development in the region has been cumulatively reducing the amount of open area and wildlife habitats, and has been constricting regional wildlife movement. This conversion has been occurring in the Oxnard coastal area for many years, resulting in a highly fragmented area consisting of scattered natural open space areas (primarily along the coast) interspersed with urban development and agricultural areas. Some natural habitat in the project vicinity is of high value and supports several sensitive species, while much of the natural habitat areas in the site vicinity have limited value for plant and wildlife species, due to habitat fragmentation and various disturbances.

In the immediate vicinity of the proposed project site, no substantial development projects are proposed that would be included in a cumulative impacts analysis. The development of the project site would result in the net loss of approximately 697 acres of agricultural land which functions as moderate-value wildlife habitat, since the site is used by several special-status bird species for foraging and is part of a regional wildlife movement corridor. Because of the relatively fragmented nature of remaining natural habitat areas in the immediate region, and because little or no development is proposed in the region, the impacts on vegetation and wildlife habitat as a result of the proposed project would not cumulatively contribute to the loss of these resources in the region. Therefore, cumulative impacts are *less than significant (Class III).*

3.6.3.5 Mitigation Measures

The following describes six measures proposed to avoid, minimize, or reduce the adverse and potentially significant impacts of this project on biological resources. These mitigation measures are directly tied to the adverse and potentially significant impacts discussed in the previous section. These measures, if successfully implemented, would reduce the magnitude of project impacts on biological resources to a level that is considered less than significant. All mitigation measures described below are designed to minimize the potential for the project to conflict with state and federal laws and regulations protecting certain plant and animal species and other sensitive biological resources.

Mitigation Measure BIO-1: Invasive Plant Species Control. To reduce the impacts of non-native plants colonizing adjacent native habitats, the landscaping plan for the proposed Northern Subarea and Southern Subarea projects shall be revised so as to exclude invasive

plants that frequently escape into native habitats, particularly those identified on the California Invasive Plant Council's website (http://www.cal-ipc.org/pest_plant_list/) under the current Invasive Plant Inventory. The specific plan for the Southern Subarea lists potentially invasive species in the master plant palette including but not limited to *Limonium* sp., *Eucalyptus* sp., and queen palm (*Syagrus romanzoffiana*) that shall be replaced with non-invasive species, preferably locally native species, examples of which can be found in the plant palette in the specific plan for the Southern Subarea. The revised plant palettes shall be reviewed by a qualified biologist for final approval prior to issuing building permits. Using local native plants and trees in the landscaping design will also reduce impacts to wildlife by providing perching and nesting habitat for raptors and passerines that use the adjacent agricultural lands and wetlands for foraging.

The landscaping plans for the project shall include provisions for the control of invasive plant species and shall be reviewed by a qualified biologist for final approval prior to issuing building permits. Landscaping plans subject to this requirement include erosion-control plans, and any landscaping associated with the project. Provisions for the control of invasive plant species would include: 1) review and screening of proposed plant palette and planting plans to identify and avoid the use of such species, especially near developed/natural interface areas; 2) weed removal during the initial planting of landscaped areas; 3) the frequency and method of monitoring for invasive species; and 4) the monitoring for and removal of weeds and other invasive plant species as part of ongoing landscape maintenance activities. A list of plant species appropriate for inclusion in landscaping within private landowner lots, as well as a list of those species to avoid, shall be included in the codes, covenants, and restrictions (CC&Rs) for the proposed project in order to encourage landowners to utilize non-invasive plant species.

Although the above measures will help to minimize invasive species in the project area it is difficult to enforce. Therefore, to ensure that nearby sensitive habitats are not degraded by non-native invasive plants, the Ormond Beach Natural Resource Management Program includes a non-native invasive plant species control element.

This mitigation addresses impacts BIO-1, 10, 11, 12, 13, 22, 23, 26, and 27.

Mitigation Measure BIO-2: Foraging Habitat Creation/Restoration. The proposed project will result in the loss of 677 acres of agricultural lands that function as foraging habitat, comparable to grasslands and open shrublands, for raptors, shorebirds, migratory waterfowl, and other birds. The foraging habitat acreage consists of 302 acres of the Northern Subarea and 375 acres of the Southern Subarea (not including the portions of the development planned as open space). CDFG considers raptor foraging habitat to be sensitive habitat, particularly if it supports sensitive species such as burrowing owls or white-tailed kites. White-tailed kites are known to forage in both the Northern and Southern Subareas, and burrowing owls have been observed in the Southern Subarea, which provides generally

higher quality habitat than the Northern Subarea. CDFG, thus, calls for loss of such habitat to be adequately mitigated. Suitable mitigation would include the restoration or enhancement of coastal native grassland and open shrubland foraging habitat for raptors and other birds. Ideally, the mitigation land would be in the vicinity of the project site and near coastal wetlands.

Based on mitigation typically required by CDFG, the City has determined that a mitigation ratio of 0.1 to 1 is warranted. This ratio recognizes the degraded foraging value of the Study Area and is, thus, lower than would be desired from a habitat standpoint for undisturbed natural foraging areas.

The application of the 0.1 to 1.0 ratio would result in a mitigation requirement of 30.2 acres, or 10 percent, of the 302 acres of habitat being converted for the Northern Subarea. Development in the Southern Subarea would result in the loss of 375 acres of habitat, so the mitigation requirement would be 37.5 acres. Mitigation shall consist of the applicants for the proposed projects contributing funds to restore bird and raptor foraging habitat at a higher functional quality, to one or more local conservation organizations such as The Nature Conservancy, State Coastal Conservancy, National Fish and Wildlife Foundation, or Mountains Restoration and/or Conservation Authority. This habitat would mitigate for the loss of raptor and other bird foraging habitat and would consists of grassland/open shrubland foraging habitat and at least 6.8 acres of open mud flat and/or low herbaceous wetland habitat for shorebirds.

Based on an agricultural land value of $65,000 per acre, the City is requiring a mitigation contribution for initial restoration of $1,963,000 for the Northern Subarea and $2,437,500 for the Southern Subarea. These funds would be paid to the City, which would in turn contribute them to a suitable conservation organization or combination of organizations to implement a project or projects. In addition, a cash contribution shall be required of each developer to provide for maintenance and monitoring costs for a period of seven years. Based on an estimated annual cost of $3,500 per acre, the amounts required would be $739,900 for the Northern Subarea developer and $918,750 for the Southern Subarea developer. These funds would be paid to the City, to be contributed to a suitable conservation organization or combination of organizations to maintain a project or projects. Therefore the total mitigation contribution for the Northern Subarea would be $2,702,900 and the Southern Subarea would be $3,356,250.

In order for a restoration project to qualify for mitigation funds, it must meet the following criteria:

1) At least half of the funds must be applied to restoration or enhancement of native grassland and the remaining portion could be applied to restoration or enhancement of native grassland and/or coastal dune habitats.
2) The restoration site must be adjacent to or within close proximity (less than 1 mile) to coastal wetland habitats. Coastal sites are preferred.
3) The restoration site must be within the region of the project site (within 15 miles).
4) The restoration project should be initiated prior to the completion of the development.
5) The funds can apply to more than one restoration project but each project must be at least 5 acres or more in order to cause a beneficial increase in prey abundance and diversity.
6) Each restoration project must be monitored and maintained for a minimum of a two-year period and until success criteria are met. If success criteria are not achieved by the end of the second year, maintenance and monitoring shall continue until success criteria are met.
7) Success criteria include the following:
    a) There shall be no more than 10 percent weed cover at any given time during the maintenance period of the project.
    b) Native cover shall be 50 percent after the second year and 70 percent after the third year.
    c) Dominant vegetation cover shall consist of a minimum of 5 different native plant species.
8) A restoration implementation, maintenance, and monitoring plan shall be developed for each restoration project that receives the funds. A portion of the funds may be used to develop the restoration plan.
9) The habitat restoration shall focus on improving foraging habitat for sensitive species.

The land acquisition or restoration project shall be initiated prior to the onset of construction of the proposed development to ensure there is no significant temporal loss of foraging habitat for shorebirds and raptors, consistent with the provisions of the Oxnard GP LU Element policies described in Section 3.7.

This mitigation addresses impacts BIO-4, 7, 8, 10, 16, 19, 20, 22.

Mitigation Measure BIO-3: Pre-Construction Survey for Nesting Birds. Site preparation, grubbing, and vegetation clearing shall occur during the non-breeding season, if practicable. In the event this is not practicable, a pre-construction survey for nesting birds will be

conducted by a qualified biologist to determine if active nests of special-status birds, or common bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, are present in the construction zone or within 100 feet (200 feet for raptors) of the construction zone. The survey shall be conducted no earlier than 45 days and no sooner than 20 days prior to construction or site preparation activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February through July). If active nests are found, a minimum 50-foot (this distance may be greater depending on the bird species and construction activity, as determined by the biologist) fence barrier shall be erected around the nest site and clearing and construction within the fenced area shall be postponed or halted, at the discretion of the biological monitor, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. The biologist shall serve as a construction monitor during the breeding season to ensure that there are no inadvertent impacts to nesting birds.

This mitigation addresses impacts BIO-7l, 18, 19b, 19l, and 19q.

Mitigation Measure BIO-4: Pre-Construction Survey for Burrowing Owl. Since burrowing owls are known to forage in the Study Area and are likely to nest near the Southern Subarea, the following measures shall be implemented in order to avoid take of burrowing owls. A qualified biologist will survey for burrowing owl activities within the Study Area and a 250-foot buffer area 30 days prior to the commencement of grading to assess burrowing owl presence and need for further mitigation. If owls are found nesting in or near the Study Area, the nest will be protected by establishing a minimum of a 250-foot buffer where no construction activities will occur. A biological monitor would be present to ensure the nest is not disturbed by construction activities until it is fledged and determined inactive. Burrowing owls typically breed from late March to July. The burrowing owl protection areas will be marked with temporary construction fencing. Where avoidance cannot be fully implemented, additional measures may need to be implemented consistent with CDFG approved methods. Occupied burrows will not be disturbed during the nesting season. If necessary, occupied burrows may be removed only if a qualified biologist determines through non-invasive methods that either: 1) the birds have not begun egg-laying and incubation; or 2) that juveniles from occupied burrows are foraging independently and are capable of independent survival. If it is determined that the burrow is meeting either of these conditions and must be removed, suitable burrows for burrowing owls would be installed in nearby suitable habitat at least 250 feet from the construction zone as determined by a qualified biologist to mitigate for the loss of potential nesting habitat in the proposed development portions of the Study Area.

This mitigation addresses impacts BIO-8 and 20.

Mitigation Measure BIO-5: Wetland Runoff Control. Increased runoff and pollution from the proposed development in the Southern Subarea would impact wetlands at Ormond Beach and potentially other wetlands they connect to such as Mugu Lagoon. These wetlands are considered sensitive habitats that support special status species. Although bioswales are incorporated into the project design to reduce pollution and runoff, their function is limited, so additional measures must be implemented to minimize runoff and pollution from entering nearby wetlands. Therefore, in addition to the long-term water quality monitoring program proposed in Mitigation Measure Water-10, trash traps shall be installed at all entrances to bioswales and a maintenance program to remove trash on a routine basis shall be implemented by the City. If the water quality program determines that there are higher levels of pollutants that exceed standard thresholds after the development is built compared to the baseline, the City must investigate the source of pollution and if possible require the responsible party to stop and clean the pollution, and the City shall install additional stormwater cleaning devices such as Continuous Deflective Separation (CDS) units, grease traps, or ultraviolet radiation units appropriate for treating the specific pollution problem identified.

This mitigation addresses impacts BIO-10, 12, 22, 23, 24, 25, 26, 27, and 28.

3.6.3.6 Residual Impacts

Residual impacts to biological resources as a result of the proposed developments in the Northern and Southern Subareas would be mitigated to a less-than-significant level with incorporation of mitigation measures BIO-1 through BIO-5, the Ormond Beach Natural Resource Management Program, and issuance of an incidental take permit by USFWS. Since the FESA incidental take permitting approval process requires implementation of conservation strategies to avoid, minimize, or compensate for adverse effects of the project to fully mitigate for impacts and leave a species in as good or better condition than it was before the project, the indirect impacts to listed species at Ormond Beach is Class II, *significant but mitigable*.

3.7
LAND USE AND PLANNING

3.7 LAND USE AND PLANNING

This section addresses existing and proposed land uses related to the proposed Ormond Beach specific plans. It describes existing and proposed land uses; discusses applicable land use policies and regulations; assesses impacts of the proposed uses; and recommends mitigation measures to reduce potential project impacts related to land use.

3.7.1 Existing Conditions

3.7.1.1 Regional Overview, Existing Jurisdictions, and Governing Land Use Plans

This EIR addresses two planning subareas within an approximately 917-acre Study Area. The Study Area is bounded generally by the easterly extension of West Pleasant Valley Drive on the north, a stepped boundary that crosses back and forth across the Coastal Zone boundary on the south, the Olds Road and Arnold Road alignments on the east, and an irregular line that includes the Edison Drive alignment on the west (see Figure 3.7-1). A small section of the Study Area is within the City of Oxnard jurisdiction. The proposed project is otherwise entirely within the unincorporated area of Ventura County. Land use in the County is regulated by the Ventura County General Plan and Zoning Ordinance. However, the area of the two specific plans adjoins the existing Oxnard City limits and is within the City's Sphere of Influence. Upon approval of the specific plans, most of the area would be annexed by the Local Agency Formation Commission (LAFCO) to the City of Oxnard. Related districts deannexations and annexations would also occur through a LAFCO reorganization of the area. Approximately five acres of the Southern Subarea is within the Coastal Zone and is under the jurisdiction of the California Coastal Commission, although this area is not proposed for development

3.7.1.1.1 Existing Land Use

Presently, the agricultural land within the Study Area is almost exclusively devoted to the cultivation of sod and production of strawberries. Sod-farming operations occupy a majority of these cultivated lands, while strawberry and other agricultural row crops are produced in the northeast portion of the site. Existing adjacent uses include Naval Base Ventura County (NBVC) Point Mugu to the east, single family residential (Tierra Vista neighborhood) to the north, light industrial uses (vehicle preparation centers) to the west, and the Reliant Energy Ormond Beach Generating Station to the south.

The Study Area is also located within two miles (to the east) of the Port of Hueneme. The Port of Hueneme is the only deep water harbor between Los Angeles and the San Francisco Bay area. The facility serves as the U.S. Port of Entry for California's central coast region, accommodating international businesses and ocean carriers from the Pacific Rim and Europe. The Port of Hueneme ranks among the top seaports in California for general cargo throughput and competes with the port of San Diego for the import and export of automobiles, fresh fruit and produce, and forest products.

Located approximately three miles east of the Study Area, the Naval Base Ventura County (NBVC) Point Mugu serves as home to the Naval Weapons Test Squadron, the Center for Naval Aviation Technical Training Detachment, and several additional squadrons performing aerial military missions. As a result of the Base Realignment and Closure (BRAC) actions taken in 2000, the base is now part of the Naval Base Ventura County (NBVC), a consolidated organization including the former Construction Battalion Center Port Hueneme and Naval Air Station Point Mugu. Point Mugu serves as the main base complex for the NBVC and consists of 4,500 acres of support facilities. The main base complex includes the Naval Air Weapons Station (NAWS), which maintains two runways. Its proximity to urbanized areas, interaction with civil air traffic, and other non-aviation mission constraints present operational challenges to Point Mugu's aviation missions. Some of these influences arise from the recent rapid growth of surrounding communities and community concerns for natural coastal resources.

3.7.1.1.2 General Plan

The area is currently designated Agricultural under the Ventura County General Plan. However, the area is within the Sphere of Influence of the City of Oxnard (see discussion below) and is also depicted as the Ormond Beach Proposed Specific Plan area on the City of Oxnard 2020 General Plan. The City's General Plan states "a specific plan will be required for any development in this area." The specific plans for the Northern and Southern subareas would be subject to approval by the Oxnard City Council and all except the southernmost 220 acres of the Southern Subarea would be annexed to the City upon their approval. The City of Oxnard's 2020 General Plan Land Use Map recommends a mix of residential, commercial, public, and open space uses. Figure 3.7-1 depicts the General Plan's proposed uses for the area and Table 3.7-1 shows the acreage distribution for the two subareas.

In general, these designations were created to respond to the pattern of existing uses surrounding the Study Area, as well as to address the following concerns:

- Protection of the significant wetlands
- Aesthetics in relation to present blighted conditions
- Beach access and recreational use opportunities consistent with Coastal Act resource protection policies
- Need for visitor-serving facilities
- Desirability for a variety of housing types
- Desirability of relocating certain existing land uses in the Study Area

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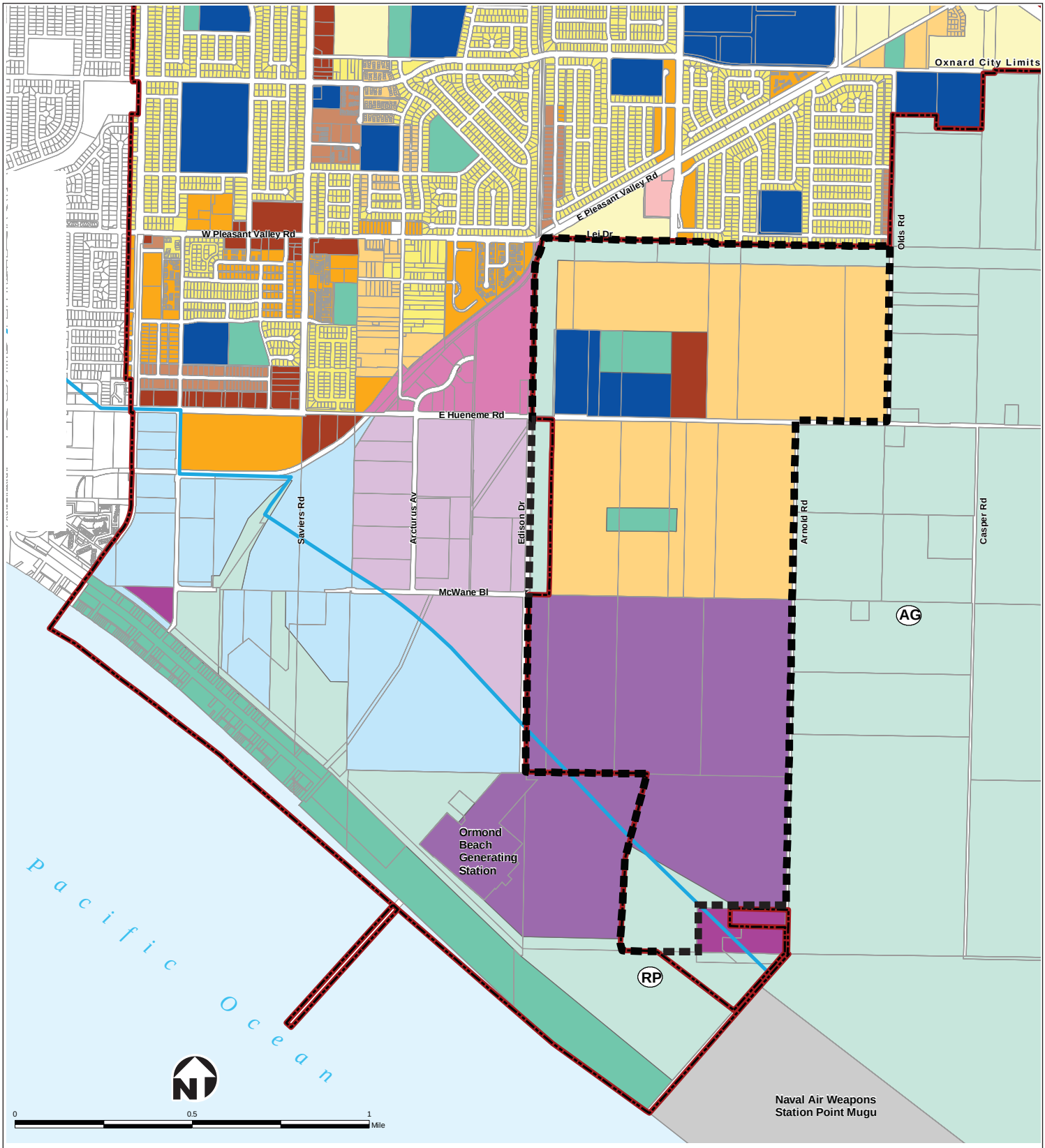

Legend

Residential
- Factory Built (1-7 DU/Acre)
- Low (3-7 DU/Acre)
- Low Medium (8-12 DU/Acre)
- Medium (13-18 DU/Acre)
- High (19-30 DU/Acre)

Commercial
- Neighborhood
- General
- Visitor Serving

Industrial
- Limited
- Light
- Coastal Dependent
- Public Utility/Energy Facility

Other
- Open Space
- Park
- School
- RP Resource Protection Open Space
- AG Agricultural Open Space

- City Limits
- Ormond Beach Specific Plan Project Area
- Naval Air Weapons Station Point Mugu
- Coastal Zone Boundary Line

Ormond Beach Specific Plan EIR URS Corporation	**Source:** City of Oxnard 2020 General Plan	Figure 3.7-1. **2020 GENERAL PLAN LAND USE**	Nov. 2009

TABLE 3.7-1
OXNARD GENERAL PLAN DESIGNATIONS

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**% of Total**	**Acres**	**% of Total**	**Acres**	**% of Total**
Residential-Low Medium	200	62.1	207	34.8	407	44.4
General Commercial	15	4.7			15	1.6
School	37	11.5			37	4.0
Park	70	21.7	27	4.5	97	10.6
Public Utility/Energy Facility			327	55.0	327	35.7
Misc. Open Space (Resource Protection)			34	5.7	34	3.7
Total	**322**	**100.0**	**595**	**100.0**	**917**	**100.0**

Source: City of Oxnard 2020 General Plan, November 1990, amended through July 2004

The 2020 General Plan Ormond Beach Specific Plan Area includes approximately 1,380 acres, extending into the industrial area to the west within existing City limits (see Figure 3.7-2). According to the General Plan, the "specific plan will identify development standards and requirements for the preservation of wetlands and habitat environments, aesthetics and architectural guidelines for development and will require appropriate supplemental environmental impact reviews, including a hydrology study to prevent urban runoff from affecting adjacent wetlands." The General Plan further called for the specific plan land uses and policies to contribute to achieving the objectives listed in Table 3.7-2.

The City's General Plan Housing Element is a five-year plan addressing the period from 2000-2005. It is currently being updated as part of the General Plan update process. The City adopted the element in December 2000 and the State Department of Housing and Community Development (HCD) certified it in May 2001 as compliant with state law. The Element identifies policies, programs, and objectives to provide adequate housing sites, promote equal housing opportunities for all segments of the City's population, and preserve and encourage construction of affordable housing. The Element examines specific housing needs of the City's population through extensive review of socio-economic data, as well as an assessment of the City's existing housing stock and a vacant land inventory within the City that is available for residential uses. The Housing Element did not assume that the Ormond Beach area would contribute to satisfying the City's housing needs within the time frame that it covered (i.e., through 2005).

TABLE 3.7-2
GENERAL PLAN POLICIES: ORMOND BEACH STUDY AREA

A. New development shall be comprehensively planned in a balanced and orderly manner, providing for housing, employment, retail, and recreation opportunities, while assuring timely and cost-effective provision for needed public services and infrastructure facilities.

B. New development shall address historic functional issues and management problems, including:

Scattered, uncoordinated industrial and residential uses in the area

Inappropriate and environmentally damaging use of ocean front area

The lack of public access to beach areas suited to public use and enjoyment

Poor water management in the study area and related adverse effects on wetlands resources.

C. New development shall be designated and located to improve the appearance and function of this area by provisions for:

Buffering and landscaping adjacent to the Southern California Edison power plant site

Relocation or removal of the Halaco Engineering Company facility and restoration of the site

A broad mix of residential, commercial and open space uses that will create an overall appearance comparable to, or superior to the northern portion of the City.

D. New development shall protect existing public access to the shoreline, create new opportunities for access and enhance recreational opportunities for residents and visitors by:

Providing for a broad range of public recreation and visitor-serving commercial activities for residents and visitors

Creating new coastal access ways and public use areas

Improving access to the beachfront consistent with resource protection needs

E. New development shall minimize adverse impacts on sensitive coastal resources, and protect significant coastal resources within the study area by:

Restoration and enhancement of wetlands and other sensitive habitats

Mitigating wetland resources and resource impacts, in a manner consistent with Coastal Act policies and U.S. Army Corps of Engineers 404 requirements (e.g., “no net loss”)

Preparing a long-term habitat management program consistent with CEQA monitoring, Coastal Act and U.S. Army Corps 404 requirements.

F. New development shall be located and designed to minimize or avoid adverse impacts on regional resources (e.g., air and water quality) and facilities (e.g., roadway, waste treatment facilities) consistent with regional growth management goals and objectives.

G. New development shall be sited and designed in a manner that will mitigate potential use conflicts and protect the ongoing operations of Southern California Edison Ormond Beach power station and the Navy’s Point Mugu facilities.

H. New development shall be located and designed so as to assure continued consideration of the development of a new regional airport facility in the area if further analysis indicates that such a facility would be appropriate in this location.

I. New development shall provide a diversity of housing types to allow for a greater range of housing than currently is typical in the City, including mixed-use residential/commercial areas such as those in Mandalay Beach and Channel Islands Marina.

Source: City of Oxnard 2020 General Plan, November 1990, amended through July 2004.

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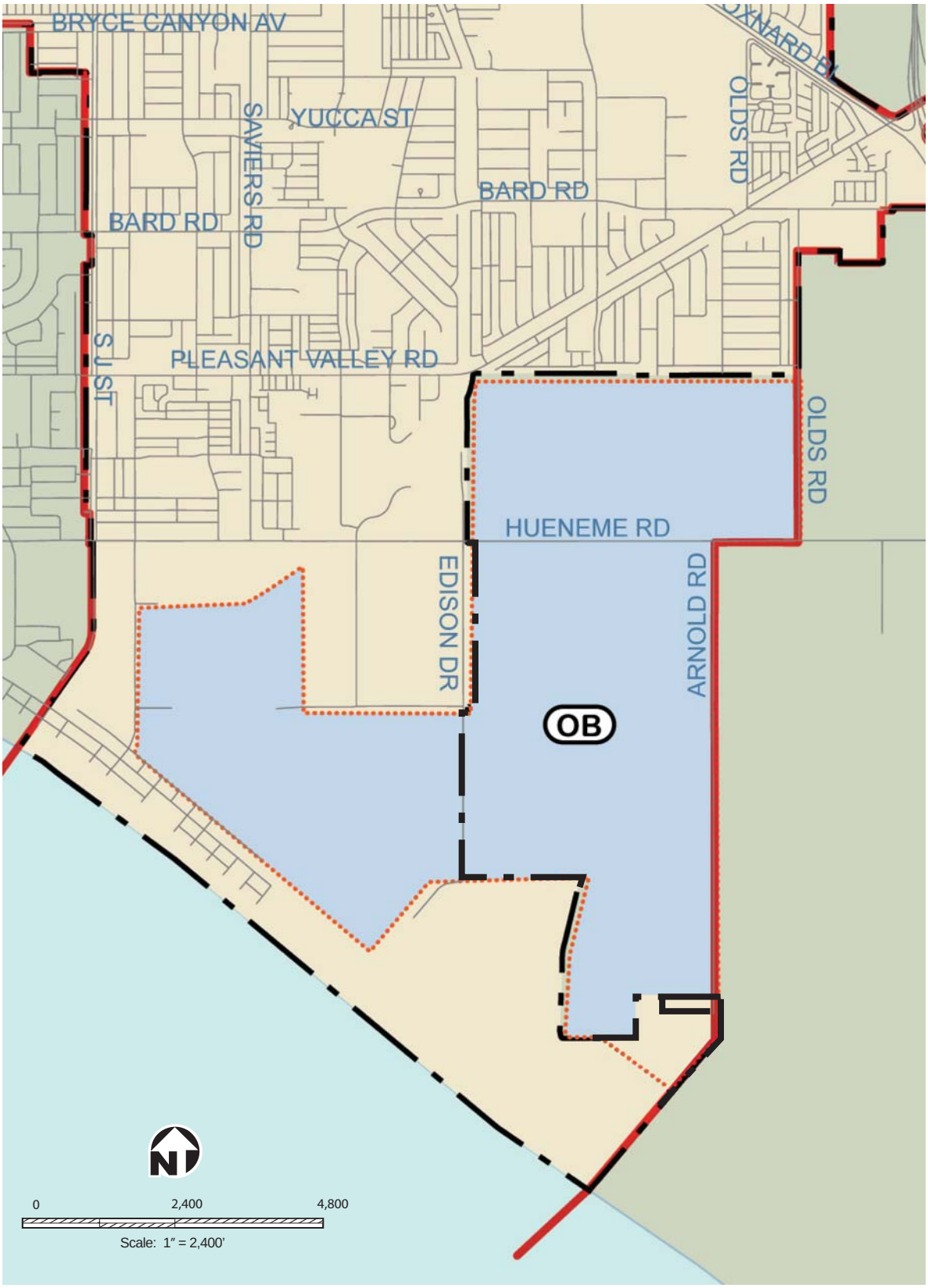

Legend

- OB — Ormond Beach Proposed Specific Plan Area
- Oxnard Sphere of Influence
- Oxnard City Limits
- Areas Outside City Limits

Ormond Beach Specific Plan EIR URS Corporation	**Adapted From:** *City of Oxnard-Salvador Mancha Dated July 2004*	Figure 3.7-2. **2020 GENERAL PLAN ORMOND BEACH STUDY AREA**	Nov. 2009

3.7.1.1.3 Zoning

With the exception of the approximately 18 acres that is within the city limits, the Study Area is governed by County of Ventura zoning. The Study Area is zoned Agricultural Exclusive (A-E) under the Ventura County Zoning Ordinance, except for approximately 45 acres at southern edge of the area that is designated Coastal Agricultural (C-A) under the County's Coastal Zoning Ordinance. The A-E zoning designation is intended to preserve and protect agricultural lands, to preserve and maintain agriculture as a major industry in Ventura County, and to protect these areas from the encroachment of incompatible uses that might challenge the viability of the agriculture industry. Similarly, the C-A zone is intended to preserve and protect commercial agricultural lands, to preserve and maintain agriculture as a major industry, and to protect areas zoned C-A from the encroachment of nonresidential uses that would have detrimental effects on the agriculture industry.

The area currently within the city limits consists of approximately 18 acres immediately east of Edison Drive between Hueneme Road and McWane Boulevard. This area is zoned Community Reserve (CR) under the City's Zoning Ordinance.

The land to the east of the Study Area, in unincorporated Ventura County, is almost exclusively zoned A-E (Agricultural Exclusive). The area to the north, which is within the city limits, is zoned for a variety of residential uses, while the area to the west, which is also in the city, is zoned for industrial uses.

3.7.1.1.4 City Urban Restriction Boundary (CURB)

In 1998, the voters of the City of Oxnard adopted an initiative, known as the Oxnard SOAR (Save Open Space and Agricultural Resources) Ordinance, which established the City Urban Restriction Boundary (CURB) for the City of Oxnard until December 31, 2020. This initiative also enacted several changes to the City's 2020 General Plan. Any change to the CURB line requires approval of the voters of Oxnard. Similar measures were adopted for several other cities and the unincorporated area of Ventura County at the same time.

The purpose of the CURB is to define a boundary within which development is planned to take place through the term of the General Plan (2020). During this time, the City of Oxnard will restrict urban services and urbanized land uses to land located within the CURB. The City will grant no discretionary entitlements for "urban uses" outside of this boundary. Urban uses are identified as "any development which would require the establishment of new sewer service systems; or the significant expansion of existing sewer infrastructure; or would create residential lots less than 10 acres in area per primary residence; or would result in the establishment of commercial or industrial uses which are neither exclusively related to agriculture nor exclusively related to the production of mineral resources." The County of Ventura SOAR ordinance requires countywide voter approval of any change to the County General Plan involving the Agricultural, Open Space, or Rural land use map designations.

The entire Ormond Beach Specific Plan Study Area falls within the City of Oxnard CURB line. Unincorporated property inside the CURB line may be annexed to the City of Oxnard. In order for property to be annexed to a city, it must be located within the city's "sphere of influence" (see below). No voter approval would be required for the two specific plans.

3.7.1.1.5 Sphere of Influence

Every county in the State of California has a Local Agency Formation Commission (LAFCO) that adopts spheres of influence (SOI) for each city within that county. These SOIs represent "the probable ultimate physical boundaries and service area" of that city (Government Code Section 56425). The Ventura LAFCO has adopted such an SOI for the City of Oxnard. Land use outside the current City jurisdiction, but within the SOI, is controlled by Ventura County in formal consultation or by joint action with the City. The Study Area is entirely within the City of Oxnard's SOI.

3.7.1.1.6 Population and Household Forecasts

The Southern California Association of Governments (SCAG) most recent population forecasts were published in 2008. As shown in Table 3.7-3, those forecasts call for Oxnard to grow to a population of 274,226 by 2035, an increase from the 2005 population of over 85,000 (45.0 percent). Household growth during the same period is forecast to be approximately 29,000, a 60.6 percent increase. The more rapid increase in households compared with population reflects a decrease in household size.

TABLE 3.7-3
POPULATION AND HOUSEHOLD PROJECTIONS

		Oxnard		Ventura County	
	Year	Number	CAGR	Number	CAGR
Population	2010	205,462		860,607	
	2015	219,554	1.34%	900,356	0.91%
	2020	237,415	1.58%	937,372	0.81%
	2025	252,528	1.24%	968,697	0.66%
	2030	265,752	1.03%	996,104	0.56%
	2035	274,266	0.63%	1,013,753	0.35%
Total Change		68,804	33.49%	153,146	17.80%
Households	2010	51,984		275,117	
	2015	57,131	1.91%	290,996	1.13%
	2020	63,201	2.04%	302,949	0.81%
	2025	68,266	1.55%	312,925	0.65%
	2030	72,763	1.28%	321,782	0.56%
	2035	77,031	1.15%	330,189	0.52%
Total Change		25,047	48.18%	55,072	20.02%
Employment	2010	63,118		373,444	
	2015	67,351	1.31%	395,936	1.18%
	2020	71,199	1.12%	416,936	1.04%
	2025	74,498	0.91%	434,937	0.85%
	2030	77,247	0.73%	449,937	0.68%
	2035	79,683	0.62%	463,227	0.58%
Total Change		16,565	26.24%	89,783	24.04%

CAGR=Compound Annual Growth Rate

Source: Southern California Association of Governments, City Forecasts, 2008

3.7.1.2 Proposed Land Use Designations and Zoning

The proposed uses for the two subareas (Northern and Southern) are described below and shown in Table 3.7-4. In addition, the proposed Land Use plans are shown in Figures 2.3-1 and 2.3-2 (Project Description).

3.7.1.2.1 Northern Subarea

The Northern Subarea consists of the approximately 322 acres of the project area that lies north of Hueneme Road. It is proposed to accommodate a mix of uses including up to 1,283 residential dwelling units of various types and densities; an elementary school; a high school; a community park; neighborhood parks; an 18-acre lake; a mixed-use commercial marketplace; light industrial uses; and open space and trails.

TABLE 3.7-4
SPECIFIC PLAN LAND USE DESIGNATIONS

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**% of Total**	**Acres**	**% of Total**	**Acres**	**% of Total**
Residential-Low	56.5	17.5%			56.5	6.2%
Residential-Low Medium	37.3	11.6%			37.3	4.1%
Residential-Medium	40.9	12.7%			40.9	4.5%
Mixed-Use (Commercial)	4.2	1.3%			4.2	0.5%
Business/Research Park			61.3	10.3%	61.3	6.7%
Light Industrial	37.2	11.6%	217.5	36.6%	254.7	27.8%
School	63.5	19.7%			63.5	6.9%
Park	39.6	12.3%			39.6	4.3%
Agriculture			228.6	38.4%	228.6	24.9%
Misc. Open Space	25.4	7.9%	51.0	8.6%	76.4	8.3%
Other	17.4	5.4%	36.4	6.1%	53.8	5.9%
Total	322.0	100.0%	594.8	100.0%	916.8	100.0%

3.7.1.2.2 Southern Subarea

The Southern Subarea consists of approximately 595 acres south of Hueneme Road. Approximately 315 acres of this area would be developed, primarily with light industrial (217.5 acres) and business/research park (61.3 acres) uses; the remaining developed areas would include detention/biofiltration areas and a greenbelt area. A new overlay zone is being proposed to identify parts of the subarea that would be appropriate for port-related uses serving the Port of Hueneme. The southernmost 229 acres are proposed to remain in agricultural production and would not be annexed by the City as part of this project. This

property may be sold to the California Coastal Conservancy or partner organization for inclusion in the larger Ormond Beach Wetland Restoration Project. The existing Ventura County Agriculture Exclusive (A-E) zoning would remain in place.

3.7.2 Regulatory Framework

3.7.2.1 Federal Authorities and Administering Agencies

There are no federal regulations, authorities, or administering agencies that regulate the proposed project pertaining to land use.

3.7.2.2 State Authorities and Administering Agencies

California Government Code Section 65450 authorizes cities to adopt specific plans. A specific plan is a tool for the systematic implementation of the general plan. It establishes a link between implementing policies of the general plan and the individual development proposals in a defined area. To an extent, the range of issues contained in a specific plan is left to the discretion of the decision-making body. However, specific plans must comply with Sections 65450 – 65457 of the Government Code.

No local public works project may be approved, no tentative map, final map or parcel map may be approved, and no zoning ordinance may be adopted or amended within an area covered by a specific plan unless it is consistent with the adopted specific plan.

3.7.2.2.1 CEQA, Public Resources Code §21000 et seq.

The basic goal of the California Environmental Quality Act (CEQA) is to develop and maintain a high-quality environment now and in the future. The CEQA Guidelines provide a framework for the analysis of impacts to land use.

3.7.2.2.2 California Coastal Act (California Public Resource Code §30000 et seq.).

The California Coastal Act was enacted by the State Legislature in 1976 to provide long-term protection of California's 1,100-mile coastline for the benefit of current and future generations. Two parcels in the Southern Subarea, 231-0-040-195 and 231-0-040-200, 0.5 and 4.5 acres, respectively, lie within the Coastal Zone. None of the land within the Coastal Zone is proposed for development as part of the Specific Plan and the applicants are not seeking to subdivide the parcels as part of their current application. The land is proposed for continued agricultural production. The City does not anticipate any change in its Local Coastal Plan or the need for any sort of coastal development permit to accommodate development under the specific plans.

3.7.2.3 Local and Regional Authorities and Administering Agencies

Other permits or actions that may be required as part of the proposed project are listed below. Regulatory agencies may identify the need for additional permits as the implementation of the project progresses.

3.7.2.3.1 City of Oxnard General Plan

The specific plans for the Northern and Southern subareas will require amendments to the City of Oxnard's 2020 General Plan. These amendments will consist of changes to the Land Use Map and modifications to the text of the General Plan to reflect the land uses and policy content of the specific plans.

3.7.2.3.2 City of Oxnard Zoning Ordinance

The Study Area for the specific plans is outside of the City of Oxnard city limits and, thus, is not covered by the City's Zoning Ordinance. In conjunction with approval of the specific plans and annexation to the City, the applicants for both the subareas will be submitting requests for rezoning of the annexed land to establish consistency with the proposed project.

3.7.2.3.3 Ventura LAFCO

The Ventura LAFCO was formed and operates under the provisions of state law, specifically what is now known as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. (California Government Code Section 56000 et seq.). LAFCO implements state law requirements and state and local policies relating to boundary changes for cities and most special districts, including spheres of influence, incorporations, annexations, reorganizations and other changes of organization. In this capacity the Ventura LAFCO is the boundary agency for cities and most special districts in Ventura County. The Commission is composed of seven voting members, with four alternate members who vote only in the absence or abstention of a voting member. The seven members and their alternates represent all levels of local government: Two members and one alternate member are members of the Ventura County Board of Supervisors; two members and one alternate member are members of the city councils of the cities in Ventura County; two members and one alternate member are members of the boards of the independent special districts in Ventura County; and one member and one alternate member are members of the public at large who are not elected officials. The specific plans being analyzed in this EIR call for the Northern Subarea and part of the Southern Subarea to be annexed to the City of Oxnard, as well as to the Calleguas Municipal Water District. These annexations would require approval by LAFCO.

In October 2007, Ventura LAFCO published an updated Commissioner's Handbook. Pursuant to state law, the Handbook is "a compilation of all of the written policies and

procedures adopted by the Ventura LAFCO." The policies and procedures presented in the Handbook are intended to supplement, rather than reiterate or interpret, state law. For purposes of the specific plans being reviewed in this DEIR, the following provisions of the Handbook are particularly relevant:

- **Consistency with General and Specific Plans:** Unless exceptional circumstances are shown, LAFCO will not approve a proposal unless it is consistent with the applicable general plan and any applicable specific plan. (Section 2.5.1.1)

- **Greenbelts:** The County of Ventura and various cities in the County have adopted Greenbelt Agreements for the purposes of preserving agriculture and/or open space, providing separation between cities, and/or limiting the extension of urban services. The Ventura LAFCO is not a direct party to these Greenbelt Agreements, but has endorsed them as statements of local policy. As such, LAFCO will not approve a proposal from a city that is in conflict with any Greenbelt Agreement unless exceptional circumstances are shown to exist. LAFCO encourages that Greenbelt Agreements be amended by all parties involved prior to the filing of any proposal that may be in conflict with the Agreements is considered by LAFCO (Section 2.5.3).

- **Agriculture and Open Space Preservation**

  Findings and criteria for prime agricultural and open space land conversion: LAFCO will approve a proposal for a change of organization or reorganization which is likely to result in the conversion of prime agricultural or open space land use to other uses only if the Commission finds that the proposal will lead to planned, orderly, and efficient development. For the purposes of this policy, a proposal for a change of organization or reorganization leads to planned, orderly, and efficient development only if all of the following criteria are met (Section 3.1.5.1):

  i. The territory involved is contiguous to either lands developed with an urban use or lands which have received all discretionary approvals for urban development.

  ii. The territory is likely to be developed within 5 years and has been prezoned for non-agricultural or open space use. In the case of very large developments, annexation should be phased wherever possible.

  iii. Insufficient non-prime agricultural or vacant land exists within the existing boundaries of the agency that is planned and developable for the same general type of use.

  iv. The territory involved is not subject to voter approval for the extension of services or for changing general plan land use designations. Where such voter approval is

required by local ordinance, such voter approval must be obtained prior to LAFCO action on any proposal unless exceptional circumstances are shown to exist.

v. The proposal will have no significant adverse effects on the physical and economic integrity of other prime agricultural or open space lands.

Findings that insufficient non-prime agricultural or vacant land exists: The Commission will not make affirmative findings that insufficient non-prime agricultural or vacant land exists within the boundaries of the agency unless the applicable jurisdiction has prepared a detailed alternative site analysis which at a minimum includes (Section 3.1.5.2):

i. An evaluation of all vacant, non-prime agricultural lands within the boundaries of the jurisdiction that could be developed for the same or similar uses.

ii. An evaluation of the re-use and redevelopment potential of developed areas within the boundaries of the jurisdiction for the same or similar uses.

iii. Determinations as to why vacant, non-prime agricultural lands and potential re-use and redevelopment sites are unavailable or undesirable for the same or similar uses, and why conversion of prime agricultural or open space lands are necessary for the planned, orderly, and efficient development of the jurisdiction.

Impacts on adjoining prime agricultural or open space lands: In making the determination whether conversion will adversely impact adjoining prime agricultural or open space lands, the Commission will consider the following factors (Section 3.1.5.3):

i. The prime agricultural and open space significance of the territory and adjacent areas relative to other agricultural and open space lands in the region.

ii. The economic viability of the prime agricultural lands to be converted.

iii. The health and well being of any urban residents adjacent to the prime agricultural lands to be converted.

iv. The use of the territory and the adjacent areas.

v. Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of prime agricultural or open space land outside of the agency's sphere of influence, or will be extended through prime agricultural or open space lands outside the agency's sphere of influence.

vi. Whether natural or man-made barriers serve to buffer prime agricultural or open space lands outside of the agency's sphere of influence from the effects of the proposal.

vii. Applicable provisions of local general plans, applicable ordinances that require voter approval prior to the extension of urban services or changes to general plan designations, Greenbelt Agreements, applicable growth-management policies, and statutory provisions designed to protect agriculture or open space.

viii. Comments and recommendations by the Ventura County Agricultural Commissioner.

- **School Capacity:** In addition to the factors and determinations required by state law, LAFCO will consider whether or not the territory involved in a proposal for a change of organization or reorganization can be served by affected school districts. LAFCO will not favor any change of organization or reorganization proposal where any affected school district certifies that there is not sufficient existing school capacity, or will not be sufficient school capacity at the time of development, to serve the territory involved. (Section 3.1.6.)

- **Annexation to City of Oxnard and Calleguas Municipal Water District:** Any annexation to the City of Oxnard shall only be considered and approved if the subject territory is already within the Calleguas Municipal Water District, or is approved concurrently with an annexation to the Calleguas Municipal Water District, unless it is clearly demonstrated that the subject territory has no foreseeable need for potable water service. (Section 3.2.2.)

- **Standards for Annexation to Cities and Districts (Section 3.3.1)**

  Factors favorable to approval:

  i. The proposal would eliminate islands, corridors, or other distortion of existing boundaries.

  ii. The affected territory is urban in character or urban development is imminent, requiring municipal or urban-type services.

  iii. The affected territory can be provided all urban services by the city or district as shown by the city's or district's service plans and the proposal would enhance the efficient provision of urban services.

  iv. The proposal is consistent with state law, adopted spheres of influence, applicable general and specific plans, and these policies.

  v. The proposal is for the annexation of city or district owned property, used or to be used for public purposes.

Factors unfavorable to approval:

i. The proposal would create or result in corridors, peninsulas, or flags of city or district area or would otherwise cause or further the distortion of existing boundaries.

ii. The proposal would result in a premature intrusion of urbanization into a predominantly agricultural or rural area.

iii. The proposal is inconsistent with state law, adopted spheres of influence, adopted general or specific plans, or these policies.

iv. For reasons of topography, distance, natural boundaries, or like considerations, the extension of services would be financially infeasible, or another means of supplying services by acceptable alternatives is preferable.

v. Annexation would encourage a type of development in an area that due to terrain, isolation, or other economic or social reason, is not in the public interest.

vi. The proposal appears to be motivated by inter-agency rivalry or other motives not in the public interest.

vii. The proposed boundaries do not include logical service areas or are otherwise improperly drawn.

The Ventura County Guidelines for Orderly Development were adopted in 1996 by the Ventura County Board of Supervisors, all City Councils within Ventura County, and Ventura LAFCO. The intent of the Guidelines, which are incorporated by reference into the LAFCO Commissioner's Handbook and included as an appendix to the Handbook, is "to clarify the relationship between the cities and the County with respect to urban planning, serve to facilitate a better understanding regarding development standards and fees, and identify the appropriate governmental agency responsible for making determinations on land use requests." They refine the guidelines originally adopted in 1969 and maintain the consistent theme that urban development should be located within incorporated cities whenever or wherever practical. The key policies for purposes of the projects being analyzed in this DEIR are as follows:

General Policies:

1. Urban development should occur, whenever and wherever practical, within incorporated cities which exist to provide a full range of municipal services and are responsible for urban land use planning.
2. The cities and the County should strive to produce general plans, ordinances and policies which will fulfill these guidelines.

Policies within Spheres of Influence: The following policies shall apply within City Spheres of Influence (Spheres of Influence are created by LAFCO, as required by State law, to identify the probable boundaries of cities and special districts, realizing that spheres may be amended from time to time as conditions warrant):

1. Applicants for land use permits or entitlements for urban uses shall be encouraged to apply to the City to achieve their development goals and discouraged from applying to the County.
2. The City is primarily responsible for local land use planning and for providing municipal services.
3. Prior to being developed for urban purposes or to receiving municipal services, land should be annexed to the City.
4. Annexation to the City is preferable to the formation of new or expansion of existing County service areas.
5. Land uses which are allowed by the County without annexation should be equal to or more restrictive than land uses allowed by the City.
6. Development standards and capital improvement requirements imposed by the County for new or expanding developments should not be less than those that would be imposed by the City.

3.7.2.3.4 Southern California Association of Governments (SCAG)

SCAG is a Joint Powers Agency established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments, a Regional Transportation Planning Agency, and a Metropolitan Planning Organization. SCAG's mandated roles and responsibilities include the following:

- SCAG is designated by the federal government as the Region's Metropolitan Planning Organization and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program. SCAG is also the designated Regional Transportation Planning Agency and as such is responsible for both preparation of the Regional Transportation Plan and Regional Transportation Improvement Program.
- SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the South Coast Air Quality Management Plan. SCAG is also designated as a Co-Lead Agency for air quality planning for the Central Coast and Southeast Desert Air Basin District.

- SCAG is responsible under the Federal Clean Air Act for determining Conformity of Projects, Plans, and Programs to the State Implementation Plan.
- SCAG is responsible for reviewing all Congestion Management Plans for consistency with regional transportation plans. SCAG must also evaluate the consistency and compatibility of such programs within the region.
- SCAG is the authorized regional agency for Inter-Governmental Review of Programs proposed for federal financial assistance and direct development activities.
- SCAG reviews Environmental Impacts Reports of projects of regional significance for consistency with regional plans.
- SCAG is responsible for preparation of the Regional Housing Needs Assessment.

In fulfilling its responsibility for review of local plans, projects, and programs for consistency with regional plans, SCAG provides guidance for localities in evaluating such consistency as it relates to CEQA. This includes review of the relevant policies of SCAG's Regional Comprehensive Plan and Guide. For the proposed project, this includes the following:

- 3.01: The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review (see Table 3.7-3).
- 3.03: The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.
- 3.04: Encourage local jurisdictions' efforts to achieve a balance between the types of jobs they seek to attract and housing prices.
- 3.05: Encourage patterns of urban development and land use which reduce costs on infrastructure construction and make better use of existing facilities.
- 3.09: Support local jurisdictions' efforts to minimize the cost of infrastructure and public services delivery, and efforts to seek new sources of funding for development and the provision of services.
- 3.10: Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.
- 3.12: Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.

- 3.13: Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and development.
- 3.14: Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.
- 3.15: Support local jurisdictions' strategies to establish mixed-use clusters and other transit-oriented developments around transit stations and along transit corridors.
- 3.17: Support and encourage development pattern that contain a range of urban densities.
- 3.18: Encourage planned development in locations least likely to cause adverse environmental impact.
- 3.20: Support the protection of vital resources, such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.
- 3.21: Encourage the implementation of measures aimed at the preservation and protection of the recorded and unrecorded cultural resources and archaeological sites.
- 3.22: Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.
- 3.23: Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.
- 3.24: Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment.
- 3.27: Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.
- 5.11: Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.
- 9.01: Provide adequate land resources to meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region.
- 9.02: Increase the accessibility to open space lands for outdoor recreation

- 9.03: Promote self-sustaining regional recreation resources and facilities
- 9.04: Maintain open space for adequate protection to lives and properties against natural and manmade hazards.
- 9.05: Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipments.
- 9.06: Minimize public expenditure for infrastructure and facilities to support urban type uses in areas where public health and safety could not be guaranteed.

SCAG has also sponsored a regional growth visioning process (Compass Growth Visioning), the fundamental goal of which is to make the SCAG region a better place to live, work and play for all residents regardless of race, ethnicity or income class. SCAG encourages decisions regarding growth, transportation, land use, and economic development to promote and sustain the region's mobility, livability, and prosperity. The following regional growth principles and strategies from the Compass Growth Visioning process provide a framework for local and regional decision making:

- Principle 1: Improve mobility for all residents
  - Encourage transportation investments and land use decisions that are mutually supportive. Locate new housing near existing jobs and new jobs near existing housing.
  - Encourage transit-oriented development.
  - Promote a variety of travel choices.
- Principle 2: Foster livability in all communities
  - Promote infill development and redevelopment to revitalize existing communities. Promote developments, which provide a mix of uses.
  - Promote "people scaled," walkable communities.
  - Support the preservation of stable, single-family neighborhoods.
- Principle 3: Enable prosperity for all people
  - Provide, in each community, a variety of housing types to meet the housing needs of all income levels. Support educational opportunities that promote balanced growth.
  - Ensure environmental justice regardless of race, ethnicity or income class.
  - Support local and state fiscal policies that encourage balanced growth.

  - Encourage civic engagement.

- Principle 4: Promote sustainability for future generations
  - Preserve rural, agricultural, recreational and environmentally sensitive areas.
  - Focus development in urban centers and existing cities.
  - Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.
  - Utilize "green" development techniques.

In overseeing the implementation of the Regional Transportation Plan, SCAG also reviews plans, projects, and programs for their consistency with the following regional transportation goals:

- Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of our transportation system.
- Protect the environment, improve air quality and promote energy efficiency.
- Encourage land use and growth patterns that complement our transportation investments.

3.7.3 Project Impacts and Mitigation

3.7.3.1 Thresholds of Significance

As suggested by Appendix G of the CEQA Guidelines, a project may have a significant impact related to Land Use if it will:

a) Physically divide an established community; or

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

c) Conflict with any applicable habitat conservation plan or natural community conservation plan

Thresholds a) and c) do not apply to the proposed Project, because the proposed specific plans would not divide an established community and there are no habitat conservation plans

or natural community conservation plans in place for the Study Area. With regard to threshold b), the City of Oxnard's Threshold Guidelines (February 1995) provide further articulation of the issues that are of particular importance. The City's Guidelines frame the following questions to guide the assessment of Land Use and Planning Impacts:

- Is the project inconsistent, or in conflict, with the environmental goals, policies, or action programs in the General Plan?
- Is the project inconsistent, or in conflict, with the General Plan Land Use Map?
- Is the project inconsistent, or in conflict, with the Zoning Ordinance or Zoning Map?
- Is there evidence of substantial land use incompatibility between the proposed project and neighboring land uses?
- Is the project inconsistent, or in conflict, with the goals, policies, or action programs of the Housing Element or the Comprehensive Housing Affordability Strategies Program (CHAS)?

These questions are addressed in the impact assessment and recommended mitigation measures in this EIR.

3.7.3.2 Project Impacts

Impact Land-1: Consistency with General Plan Land Use Policy. Table 3.7-2 outlines a series of policies from the General Plan Land Use Element that are focused specifically on the Ormond Beach Study Area. These policies address the following issues:

A. Balanced Development
B. Historical Issues and Management Problems
C. Aesthetic Appearance
D. Recreational and Open Space Amenities, including Shoreline Access
E. Minimized Impacts on Sensitive Natural Resources
F. Minimized or Avoid Impacts on Regional Resources and Facilities
G. Minimized Conflicts with Power Station and the Naval Facilities
H. Continued consideration of a new regional airport facility
I. Provision of Diverse Housing Types

Of these issues, item E is addressed under Water Resources (Section 3.3) and Biological Resources (Section 3.6) and item F is addressed under Water Resources (Section 3.3), Air Quality (Section 3.4), and Public Facilities and Services (Section 3.9). Items G and I are addressed as separate Land Use Planning impacts. This balance of subjects provides the basis for determination of consistency of the project with existing General Plan land use policy, as discussed below.

***Balanced Development*.** This policy focuses on ensuring that new development will "be comprehensively planned in a balanced and orderly manner, providing for housing, employment, retail, and recreation opportunities, while assuring timely and cost-effective provision for needed public services and infrastructure facilities." The specific plans for the proposed Project reflect a broad range of development types, and they include policy commitments to the phased provision of the public services and infrastructure necessary to serve development in the area.

Historical Functional Issues/Management Problems. This policy focuses primarily on the historical problems in the industrial and coastal areas to the west and southwest of the Study Area. One of the subissues mentioned does, however, relate to the Study Area. That is, "Poor water management in the Study Area and related adverse effects on wetlands resources." This issue relates primarily to the Southern Subarea, which—in response—proposes to retain the area in agricultural uses for the near term, with the expectation that it will eventually restored as wetlands by a subsequent owner. Furthermore, the specific plans for both subareas include commitments to managing both the quantity and quality of surface water using techniques that protect adjacent, offsite resources, including coastal wetlands.

Aesthetic Appearance. This policy relates to two specific facilities, the Reliant Energy Ormond Beach Generating Station and the Halaco facility, neither of which is located in the Study Area. It also calls for a commitment to "a broad mix of residential, commercial and open space uses that will create an overall appearance comparable to, or superior to the northern portion of the City." The design guidelines included in the specific plans reflect commitments to consistent design approaches that reflect high quality landscape architecture and building design. For the Northern Subarea, this includes specification of residential design elements consistent with those of California's traditional seaside towns, including Oxnard. Architectural design in the Southern Subarea will focus on Contemporary Industrial Style, with an emphasis on responsiveness to the natural context and commitments to sustainable or green building principles. While the two subareas will develop independently and with fundamentally different types of development, they will be unified by the Hueneme Road Scenic Corridor, which will include a parkway design and generously landscaped setbacks.

Recreational and Open Space Amenities. This policy calls for new development to "protect existing public access to the shoreline, create new opportunities for access and enhance recreational opportunities for residents and visitors." The two subareas, based on their locational circumstances, address this policy in different ways. The Northern Subarea focuses on active recreational uses for residents and visitors, with a community park and smaller neighborhood parks, as well as passive open space areas, particularly those associated with the proposed lake. In addition to committing to the eventual restoration of 220 acres of coastal wetlands, the plan for the Southern Subarea includes a network of naturally

landscaped greenbelts. These greenbelts will include bicycle and pedestrian facilities that could eventually link to trails systems providing public access to the shoreline.

Regional Airport Facility. When the City's General Plan was adopted in 1990, there was ongoing discussion of the potential for a regional airport in South Oxnard. That discussion is no longer active.

As detailed above, the specific plans for the Northern and Southern subareas would be consistent with the policies of the City of Oxnard 2020 General Plan Land Use Element. Therefore, under CEQA and City of Oxnard thresholds for assessment of Land Use Planning impacts, the projects' impacts are considered *less than significant (Class III).*

Impact Land-2: Consistency with General Plan Land Use Map. Table 3.7-5 compares the land use designations for the Study Area with those of the City of Oxnard 2020 General Plan Land Use Map (note that the specific plan designations have been equated with analogous General Plan designations). As the table shows, there are some substantial differences between the projects and the General Plan. These differences are described below for the Northern and Southern subareas, respectively.

Northern Subarea. The proposed land use map for the Northern Subarea provides a higher level of articulation in terms of location and specification of use type than the General Plan Land Use Map, but is generally consistent with the General Plan, with one notable exception. The light industrial uses (self-storage and commercial/incubator) west of Rose Avenue along the northern and western edges of the Study Area designations are not consistent with the General Plan's Open Space Buffer designation. Since the project includes a proposal to amend the City's General Plan Land Use Map to reflect proposed designations, under CEQA and City thresholds for assessment of Land Use Planning impacts, the Northern Subarea impacts are considered *less than significant (Class III).*

Southern Subarea. The proposed land use map for the Southern Subarea represents a fundamental shift in the type and distribution of uses in the area, compared with the Oxnard 2020 General Plan Map. Whereas the adopted General Plan calls for residential and energy-related uses, the plan for the Southern Subarea calls for a mix of light industrial and open space uses. Since the project includes a proposal to amend the City's General Plan Land Use Map to reflect proposed designations, under CEQA and City thresholds for assessment of Land Use Planning impacts, the Southern Subarea impacts are considered *less than significant (Class III).*

TABLE 3.7-5
PROJECT AND 2020 GENERAL PLAN LAND USE DESIGNATIONS

	Project		2020 General Plan	
Land Use Designation	**Acres**	**% of Total**	**Acres**	**% of Total**
Northern Subarea				
Residential-Low	56.5	17.5%	--	--
Residential-Low Medium	37.3	11.6%	196.4	61.0%
Residential-Medium	40.9	12.7%	--	--
General Commercial	--	--	15.8	4.9%
Mixed-Use (Commercial)	4.2	1.3%	--	--
Light Industrial	37.2	11.6%	--	--
School	63.5	19.7%	35.6	11.1%
Park	39.6	12.3%	15.3	4.8%
Misc. Open Space (Resource Protection)	25.4	7.9%	54.9	17.1%
Other	17.4	5.4%	3.9	1.2%
Northern Subarea Subtotal	**322.0**	**100.0%**	**321.9**	**100.1%**
Southern Subarea				
Residential-Low Medium	--	--	209.5	35.2%
Business/Research Park	61.3	10.3%	--	--
Light Industrial	217.5	36.6%	--	--
Visitor-Serving (Environmental Visitor Center)	--	--	19.9	3.3%
Park			8.3	1.4%
Misc. Open Space (Resource Protection)	51.0			
Public Utility/Energy Facility (undeveloped buffer)	--	--	302.4	50.8%
Agriculture	228.6	38.4%	54.7	9.2%
Other	36.4	6.1%	0.3	0.1%
Southern Area Subtotal	**594.8**	**100.0%**	**594.8**	**100.0%**
Total Study Area				
Residential-Low	56.5	6.2%	--	--
Residential-Low Medium	37.3	4.1%	405.9	44.3%
Residential-Medium	40.9	4.5%	--	--
General Commercial	--	--	15.8	1.7%
Mixed-Use (Commercial)	4.2	0.5%	--	--
Business/Research Park	61.3	6.7%	--	--
Light Industrial	254.7	27.8%	--	--
School	63.5	6.9%	35.6	3.9%
Visitor-Serving (Environmental Visitor Center)			19.9	2.2%
Park	39.6	4.3%	23.6	2.6%
Misc. Open Space (Resource Protection)	76.4	8.3%	54.9	6.0%
Public Utility/Energy Facility (undeveloped buffer)	--	--	302.4	33.0%
Agriculture	228.6	24.9%	54.7	6.0%
Other	53.8	5.9%	4.2	0.5%
Total	**916.8**	**100.1%**	**917.0**	**100.0%**

Impact Land-3: Consistency with Zoning Ordinance and Map. As discussed in Section 3.7.1 under Zoning, because the Study Area lies outside of the current City limits, the City of Oxnard has not yet zoned the area according to its Zoning Ordinance. Instead, it is under the jurisdiction of Ventura County and its Zoning Ordinance, which designates the area Agricultural Exclusive (A-E). Following are descriptions of the proposed zoning for the two subareas as it relates to the current County zoning for the Study Area.

Northern Subarea. The specific plan for the Northern Subarea calls for the application of six City zoning categories: R-1 (Detached Residential); R-2 (Detached Residential); R-3 (Attached Residential); C-2 (General Commercial); M-L (Light Manufacturing); and C-R (Community Reserve). None of these zones, as applied in this subarea, would be consistent with the County's current zoning for the area. As part of the project approval process, the applicants are seeking annexation of most of the Study Area to the City of Oxnard. With annexation, the applicants will need to establish zoning for the annexed land consistent with the above description, which, in response to State Planning Law, will also establish consistency with the proposed General Plan amendments. With such zoning, under CEQA and City thresholds for assessment of Land Use Planning impacts, the Northern Subarea impacts are considered *less than significant (Class III).*

Southern Subarea. The specific plan for the Southern Subarea calls for the application of three City zoning categories: M-1 (Light Industrial); BRP (Business Research Park); and Agriculture Neither the M-1 nor the BRP designations would be consistent with the County's current zoning for the area, but the C-R designation, as applied (i.e., for wetlands restoration) could be. As part of the project approval process, the applicants are seeking annexation of most of the Study Area to the City of Oxnard. With annexation, the applicants will need to establish zoning for the annexed land consistent with the above description, which, in response to State Planning Law, will also establish consistency with the proposed General Plan amendments. With such zoning, under CEQA and City thresholds for assessment of Land Use Planning impacts, the Southern Subarea impacts are considered *less-than-significant (Class III).*

Impact Land-4: Land Use Compatibility. The determination of the compatibility of land uses can be very subjective. For purposes of this analysis, the concept focuses on the interaction between uses, both existing and proposed, and the extent to which one use might adversely affect another.

Northern Subarea. The areas immediately adjacent to the Northern Subarea consist of residential neighborhoods (to the north), agricultural uses (to the east and south), and industrial uses (to the west). Except for the area to the south, which would convert to light industrial uses, all neighboring areas are expected to retain their existing development types. Along the northern edge of the Northern Subarea, east of Rose Avenue, the Tierra Vista

neighborhood will be adjacent to the proposed community park, which could pose compatibility problems associated with potential spillover of activity into the residential area. The park's sports fields will not be night-lighted, so potential impacts associated with evening activity will be minimized. The neighborhood west of Rose Avenue on the northern edge of the Study Area, Villa Capri, will be adjacent to the self-storage uses to the immediate south, but the specific plan includes provisions to control lighting in a manner that avoids effects on nearby residents. On the eastern edge of the Northern Subarea, along Olds Road, there is potential for incompatibility between the proposed high school and the ongoing agricultural uses east of Olds Road. The design for the Northern Subarea, however, includes an agricultural shelterbelt on the west side of Olds Road to buffer future uses from the agricultural uses, which would ensure the protection of future uses on both sides of Olds Road. On the southern edge of the Northern Subarea, the proposed lake and Hueneme Road Scenic Corridor will ensure sufficient separation between the proposed residential uses to the north and proposed light industrial and business park uses to the south. On the western edge of the Northern Subarea, the proposed uses are similar to the existing uses, so there should be no impacts associated with incompatibility. Based on CEQA and City thresholds for assessment of Land Use Planning impacts, the Northern Subarea impacts are considered *less than significant (Class III).*

Southern Subarea. The areas immediately adjacent to the Southern Subarea consist of agricultural uses (to north and east), industrial uses (to the southwest and west), and open space (to the southeast). Except for the area to the north, which would convert to residential uses, all neighboring areas are expected to retain their existing development types. In terms of incompatibility between proposed uses within the Southern Subarea and existing uses, the main concern is for the agricultural area east of Arnold Road, where future business park and light industrial uses could conflict with the agricultural uses. The design for the Southern Subarea, however, includes an agricultural shelterbelt on the west side of Arnold Road to buffer future uses from the agricultural uses, and vice versa. On the northern edge of the Southern Subarea, the Hueneme Road Scenic Corridor would ensure sufficient separation between the proposed residential uses to the north and proposed light industrial and business park uses to the south. On the western edge of the Southern Subarea, the proposed uses are similar to the existing uses, so there should be no impacts associated with incompatibility. In addition to compatibility concerns associated with existing uses, the Southern Subarea also faces potential incompatibilities between two proposed future uses, the 220-acre agricultural area and the future light industrial uses. The project has, however, included design features (greenbelt and bioswale) that would address those incompatibilities. Based on CEQA and City thresholds for assessment of Land Use Planning impacts, the Southern Subarea impacts are considered *less than significant (Class III).*

Impact Land-5: Consistency with Housing Element. The City's Housing Element includes a variety of policies and programs concerning housing, including identification of suitable sites

to accommodate the City's regional fair share of affordable housing for the five-year period covered by the Element.

***Northern Subarea*.** The specific plan for the Northern Subarea includes a policy commitment to complying with the City's Affordable Housing Ordinance. As noted in Section 3.7.1 under General Plan, the Housing Element's evaluation of sites does not include the Ormond Beach area, so there would be no effect on the Element's fair share objectives. Based on CEQA and City thresholds for assessment of Land Use Planning impacts, the Northern Subarea impacts are considered *less than significant (Class III).*

***Southern Subarea*.** Since there is no housing proposed within the Southern Subarea, there would be no issues related to policy consistency with the Housing Element. The project will, however, result in the reduction in housing potential as a result of the substitution of residential designations with business park and light industrial designations. This reduction will not, however, affect the attainment of the Housing Element's quantified regional fair share objectives because the Study Area was not included the analysis of adequate sites. Based on CEQA and City thresholds for assessment of Land Use Planning impacts, the Southern Subarea impacts are, thus, considered *less than significant (Class III).*

***Impact Land-6: Consistency with LAFCO Policy*.** The Northern Subarea and all but 220 acres of the Southern Subarea will be seeking annexation to the City of Oxnard and the Calleguas Municipal Water District. In October 2007, Ventura LAFCO published an updated LAFCO Commissioner's Handbook. Pursuant to state law, the Handbook is "a compilation of all of the written policies and procedures adopted by the Ventura LAFCO." This includes several broad policy statements, several of which are addressed elsewhere in this DEIR.

- Consistency with General and Specific Plans: See Impacts Land-1, Land-2, and Land-5.
- Greenbelts: LAFCO will not approve a proposal that is in conflict with any Greenbelt Agreement unless exceptional circumstances are shown to exist. Since the entire Study Area is within the City of Oxnard's Sphere of Influence and the City Urban Restriction Boundary (CURB) established under the Oxnard SOAR (Save Open Space and Agricultural Resources) Ordinance. (please complete this sentence)
- Agriculture and Open Space Preservation: Prior to approval of requests, LAFCO requires findings concerning prime agricultural and open space land conversion, insufficiency of non-prime agricultural or vacant land, and impacts on adjoining prime agricultural or open space lands. Section 3.8 (Agricultural Resources) of this DEIR addresses these subjects.
- School Capacity: LAFCO disfavors annexations where any affected school district certifies that there is not sufficient existing school capacity, or will not be sufficient

school capacity at the time of development, to serve the territory involved. Section 3.9 of this DEIR (Public Facilities and Services) of this DEIR addresses this subject.

- Annexation to City of Oxnard and Calleguas Municipal Water District: LAFCO requires any annexation to the City of Oxnard be approved concurrently with an annexation to the Calleguas Municipal Water District (CMWD), unless it is clearly demonstrated that the subject territory has no foreseeable need for potable water service. The projects under consideration in this DEIR include concurrent annexation to CMWD.

As noted above, these LAFCO policy statements are either addressed elsewhere in this DEIR or they do not pertain to the projects under consideration.

The LAFCO Commissioner's Handbook also includes standards for review of proposals for annexations, including both favorable and unfavorable factors, as follows:

- Factors favorable to approval:
  - The proposal would eliminate islands, corridors, or other distortion of existing boundaries.
  - The affected territory is urban in character or urban development is imminent, requiring municipal or urban-type services.
  - The affected territory can be provided all urban services by the city or district as shown by the city's or district's service plans and the proposal would enhance the efficient provision of urban services.
  - The proposal is consistent with state law, adopted spheres of influence, applicable general and specific plans, and these policies.
  - The proposal is for the annexation of city or district owned property, used or to be used for public purposes.
- Factors unfavorable to approval:
  - The proposal would create or result in corridors, peninsulas, or flags of city or district area or would otherwise cause or further the distortion of existing boundaries.
  - The proposal would result in a premature intrusion of urbanization into a predominantly agricultural or rural area.
  - The proposal is inconsistent with state law, adopted spheres of influence, adopted general or specific plans, or these policies.
  - For reasons of topography, distance, natural boundaries, or like considerations, the extension of services would be financially infeasible, or another means of supplying services by acceptable alternatives is preferable.

- Annexation would encourage a type of development in an area that due to terrain, isolation, or other economic or social reason, is not in the public interest.
- The proposal appears to be motivated by inter-agency rivalry or other motives not in the public interest.
- The proposed boundaries do not include logical service areas or are otherwise improperly drawn.

The Ventura County Guidelines for Orderly Development were adopted in 1996 by the Ventura County Board of Supervisors, all City Councils within Ventura County, and Ventura LAFCO. The Guidelines, which are incorporated by reference into the LAFCO Commissioner's Handbook, include broad policy direction concerning development within adopted spheres of influence, as follows:

- Applicants for land use permits or entitlements for urban uses shall be encouraged to apply to the City to achieve their development goals and discouraged from applying to the County.
- The City is primarily responsible for local land use planning and providing municipal services.
- Prior to being developed for urban purposes or to receiving municipal services, land should be annexed to the City.
- Annexation to the City is preferable to the formation of new or expansion of existing County service areas.
- Land uses allowed by the County without annexation should be equal to or more restrictive than land uses allowed by the City.
- Development standards and capital improvement requirements imposed by the County for new or expanding developments should not be less than those imposed by the City.

Northern Subarea. Annexation of the Northern Subarea to the City of Oxnard would conform to LAFCO's standards and the Guidelines for Orderly Development. As stated in Section 3.9, urban services will be provided by the City of Oxnard to the Study Area. The specific plan is consistent with state law and, as stated above, is within the City's adopted SOI and consistent with the City of Oxnard General Plan.

The exceptions to conformity with LAFCO's standards would be with those related to imminence of urban development (Item ii under "Factors favorable to approval") and premature intrusion of urban uses into an agricultural or rural area (Item ii under "Factors unfavorable to approval"). While the Study Area cannot be characterized as "urban," it is within the City's SOI and Urban Restriction Boundary (CURB). The Study Area has been

designated for urban development since adoption of the current General Plan in 1990. It is thus reasonable to characterize the urban development of the area as imminent. The conversion of land from agricultural uses is addressed in Section 3.8 of this document.

Based on CEQA and City thresholds for assessment of Land Use Planning impacts, the Northern Subarea impacts are, thus, considered *less than significant (Class III).*

Southern Subarea. Annexation of 375 acres of the Southern Subarea to the City of Oxnard would conform with the LAFCO's standards and the Guidelines for Orderly Development. As stated in Section 3.9, urban services will be provided by the City of Oxnard to the Study Area. The Specific Plan is consistent with state law, and as stated above, is within the City's adopted SOI and consistent with the City of Oxnard General Plan.

The exceptions to conformity with LAFCO's standards would be with those related to imminence of urban development (Item ii under "Factors favorable to approval") and premature intrusion of urban uses into an agricultural or rural area (Item ii under "Factors unfavorable to approval"). While the Study Area cannot be characterized as "urban," it is within the City's SOI and Urban Restriction Boundary (CURB). The Study Area has been designated for urban development since adoption of the current General Plan in 1990. It is thus reasonable to characterize the urban development of the area as imminent. The conversion of land from agricultural uses is addressed in Section 3.8 of this document.

Based on CEQA and City thresholds for assessment of Land Use Planning impacts, these Southern Subarea impacts are considered *less than significant (Class III).*

Impact Land-7: Consistency with SCAG Goals and Policies. Table 3.7-6 summarizes relevant goals and policies from SCAG's Regional Comprehensive Plan and Guide and Regional Transportation Plan that may be applicable to the proposed project. For each item, the table also describes how the proposed specific plans are either consistent or in conflict.

As Table 3.7-6 shows, development under the specific plans would comply with the SCAG's regional planning goals and policies, to the extent that they apply. Thus, from a CEQA standpoint, the impacts of the proposed projects as they relate to consistency with SCAG goals and policies are considered *less than significant (Class III).*

TABLE 3.7-6
CONSISTENCY WITH SCAG GOALS AND POLICIES

Regional Comprehensive Plan and Guide Provisions		Project Consistency Evaluation
3.01	The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.	SCAG's forecast for Oxnard (see Table 3.7-3) assumes development according to the City's current General Plan, which would have accommodated a higher level of population growth than the proposed specific plans.
3.03	The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.	SCAG can implement regional growth policies using the specific plans and this EIR. Refer to the Public Services section of this document.
3.04	Encourage local jurisdictions' efforts to achieve a balance between the types of jobs they seek to attract and housing prices.	Northern Subarea. The Northern Subarea specific plan provides balanced housing options along with mixed-use development and commercial space. Southern Subarea. The Southern Subarea provides business park space and light industrial space, which would fortify the City's employment base and balance uses in South Oxnard.
3.05	Encourage patterns of urban development and land use which reduce costs on infrastructure construction and make better use of existing facilities.	The Study Area is immediately adjacent to existing urban development and is within the City's CURB line. Thus, development in accord with the specific plans represents a logical extension of urban development and associated infrastructure.
3.09	Support local jurisdictions' efforts to minimize the cost of infrastructure and public services delivery, and efforts to seek new sources of funding for development and the provision of services.	The Study Area is immediately adjacent to existing urban development and is within the City's CURB line. Thus, development in accord with the specific plans represents a logical extension of urban development and associated public services. Furthermore, the proposed projects will contribute to funding the provision of services.
3.10	Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.	Once approved, the specific plans and this EIR will be used to cover broad project approvals, thus expediting the development review process in a manner that will contribute to maintenance of the City's economic vitality and competitiveness.
3.12	Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.	Together, the proposed projects provide a mix of residential, employment, public, and open space uses that would support transit investments and ridership. The specific plans also incorporate a system of connected pathways that would promote walking and cycling.
3.13	Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and development.	While the City of Oxnard promotes infill development, the proposed projects cannot be characterized as such.

TABLE 3.7-6 (CONTINUED)
CONSISTENCY WITH SCAG GOALS AND POLICIES

Regional Comprehensive Plan and Guide Provisions		Project Consistency Evaluation
3.14	Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.	The proposed projects are not situated along a regional commuter rail line, but they do encourage the future development of transit services to the activity centers that they will create.
3.15	Support local jurisdictions' strategies to establish mixed-use clusters and other transit-oriented developments around transit stations and along transit corridors.	The proposed projects together will constitute a new mixed-use cluster that will support transit investments and ridership.
3.17	Support and encourage development pattern that contain a range of urban densities.	The proposed projects provide for a mix of residential uses at various densities (Northern Subarea) and employment uses (Southern Subarea).
3.18	Encourage planned development in locations least likely to cause adverse environmental impact.	While the proposed projects are located in areas that have been disturbed by historical agricultural uses and the specific plan for the Southern Subarea sets aside land for wetland restoration, the projects may cause adverse environmental impacts, as evaluated elsewhere in this document.
3.20	Support the protection of vital resources, such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.	Same as above response.
3.21	Encourage the implementation of measures aimed at the preservation and protection of the recorded and unrecorded cultural resources and archaeological sites.	As cited elsewhere in this document, the proposed projects are not expected to pose risk to cultural resources and archaeological sites.
3.22	Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.	The Study Area is flat and is located neither in a high fire hazard area nor in an earthquake fault zone. It is, however, subject to flooding and potential Tsunami run-up. These issues and potential mitigation measures are described elsewhere in this document.
3.23	Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.	The proposed projects and this EIR include commitments to address noise (Section 3.11); biological and ecological resources, including buffers (Section 3.6); seismic hazards (including tsunamis); and emergency and response and recovery plans (Section 3.2). Refer to the Summary of Impacts and Mitigation Measures (Tables ES-A & ES-B) for a description of these mitigation measures.

TABLE 3.7-6 (CONTINUED)
CONSISTENCY WITH SCAG GOALS AND POLICIES

Regional Comprehensive Plan and Guide Provisions		Project Consistency Evaluation
3.24	Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment.	Northern Subarea. The specific plan for the Northern Subarea includes a commitment to provide affordable housing per the requirements of the City of Oxnard's Affordable Housing Ordinance. Affordable housing may be located within any R-3 (SSP) Land Use District, which will accommodate 154 rental units within Attached Residential Planning Area (AR-1). Southern Subarea. The specific plan for the Southern Subarea does not propose any residential development.
3.27	Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.	In compliance with the City's General Plan, the proposed specific plans incorporate commitments to promote social equity and environmental sustainability.
5.11	Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.	This DEIR addresses these issues and their relationships.
9.01	Provide adequate land resources to meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region.	The proposed projects comply with City requirements for provision of parkland and anticipates preservation of coastal resources that could support tourism.
9.02	Increase the accessibility to open space lands for outdoor recreation	The proposed projects promote preservation of coastal resources and appropriate access to such resources.
9.03	Promote self-sustaining regional recreation resources and facilities	The Study Area includes no regional recreational resources and facilities proposed projects do not propose to include such resources or facilities.
9.04	Maintain open space for adequate protection to lives and properties against natural and manmade hazards.	The Study Area is subject to a variety of natural and manmade hazards. These issues, including mitigation measures for potential impacts, are addressed elsewhere in this document.

TABLE 3.7-6 (CONTINUED)
CONSISTENCY WITH SCAG GOALS AND POLICIES

Regional Comprehensive Plan and Guide Provisions		Project Consistency Evaluation
9.05	Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipments.	Same as above response.
9.06	Minimize public expenditure for infrastructure and facilities to support urban type uses in areas where public health and safety could not be guaranteed.	The proposed projects would not result in such expenditure of public funds.
Regional Transportation Plan Goals		
	• Maximize mobility and accessibility for all people and goods in the region.	While the proposed projects are not transportation improvements in themselves, they will contribute the development of regional roadway improvements that improve overall mobility and accessibility.
	• Ensure travel safety and reliability for all people and goods in the region.	Same as above response.
	• Preserve and ensure a sustainable regional transportation system.	Same as above response.
	• Maximize the productivity of our transportation system.	Same as above response.
	• Encourage land use and growth patterns that complement our transportation investments.	The proposed projects include commitments to ensure that proposed development is consistent with proposed improvements to the transportation system.
	• Protect the environment, improve air quality, and promote energy efficiency.	The specific plans for the proposed projects and this EIR include commitments to environmental protection, air quality protection, and promotion of energy efficiency.
Compass Growth Visioning		
	Principle 1: Improve mobility for all residents	The proposed projects they will contribute the development of regional roadway improvements that improve overall mobility and accessibility
	Principle 2: Foster livability in all communities	The proposed projects include features that will foster livability for future residents.
	Principle 3: Enable prosperity for all people	The proposed projects will contribute to enabling prosperity for current and future residents of Oxnard.
	Principle 4: Promote sustainability for future generations	The proposed projects include features that will promote sustainability.

3.7.3.3 Cumulative Impacts

Impact Land-8: Long-Term Changes in Land Use Patterns and Growth Inducement. From a land use perspective, the Ormond Beach specific plans, including the required general plan amendments and rezonings, in combination with other proposed development in South Oxnard, would potentially affect the existing regional land use setting by displacing agricultural uses with residential, commercial, industrial, public, and open space uses. Because the area is within the City Urban Restriction Boundary (CURB) and the immediately adjacent areas are not, there is little potential for inducement of new urban growth as a result of approval of and development under the specific plans. The potential long-term impacts of the Ormond Beach specific plans on land use patterns and potential growth-inducing effects of the project are considered *less than significant (Class III)*.

3.7.3.4 Mitigation Measures

Because no significant impacts were identified, no mitigation measures would be required.

3.7.3.5 Residual Impacts

All impacts would remain less than significant *(Class III)*.

3.8
AGRICULTURAL RESOURCES

3.8 AGRICULTURAL RESOURCES

3.8.1 Existing Conditions

3.8.1.1 Agriculture in Ventura County and in the City of Oxnard

Ventura County's agriculture plays a vital role in the local economy and consistently ranks among the most profitable in California. The estimated gross value for Ventura County agriculture for calendar year 2007 was more than $1.5 billion. Strawberries were the leading commodity, with a value of more than $366 million. The top 10 crops in Ventura County in 2007 also included nursery stock, lemons, celery, tomatoes, avocados, raspberries, cut flowers, Valencia oranges, and peppers. This prolific production was made possible by the presence of high-quality soils, adequate water supply, favorable climate, long growing season, and level topography. The combination of these five factors makes Ventura County one of the world's most favored agricultural areas (Ventura County, 2005). According to the 2000 US Census, farming, fishing, and forestry account for approximately 3.1 percent of total employment in the County.

The California Department of Conservation has developed the Farmland Mapping and Monitoring Program (FMMP) to provide land-use data for assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. According to the California Farmland Conversion Report, 2006-2008, the FMMP identified 122,500 acres of important farmland within Ventura County (soils that are classified as prime farmland, unique farmland, farmland of statewide importance or farmland of local importance). It also identified 195,700 acres of grazing land, for a total of 318,200 acres of agricultural land.

Agricultural areas are found in the northeastern and eastern edges of the City of Oxnard, as well as in large pockets in the northwestern portion of the City of Oxnard Planning Area. These green buffers surround the developed areas and are marked by tall eucalyptus and cypress windrows. Of the approximately 46,000 acres within the City's Planning Area, according to the City of Oxnard 2020 General Plan, there are currently about 22,600 acres of agricultural land.

3.8.1.2 Existing Land Use Near the Study Area

The Study Area is almost exclusively used for agricultural activities. The crop map for Ventura County shows that farmers grow row crops and sod within the Study Area. Sod-farming operations occupy the majority of these cultivated lands, while strawberry and other agricultural row crops are produced in the northeast portion of the site.

The Study Area is surrounded by non-agricultural uses to the north, west, and south. Existing adjacent uses include single family residential (Villa Capri and Tierra Vista neighborhoods)

to the north and light industrial uses (vehicle preparation centers) to the west. A green waste composting facility (Agromin Wood Products), the Reliant Energy Ormond Beach Generating Station, and natural features including wetland, dune, and beach areas adjoin the Study Area to the south. Naval Base Ventura County Point Mugu is located less than ¼ mile southeast of the property. Existing adjacent uses also include agricultural operations to the east and southwest. The predominant crops within the properties east and southwest of the Study Area are row crops and sod. Further east, there are strawberry and lemon plantations as well.

The Study Area is located approximately two miles east of the Port of Hueneme. The Port of Hueneme is the only deep water harbor between Los Angeles and the San Francisco Bay area. The facility serves as the U.S. Port of Entry for California's central coast region, accommodating international businesses and ocean carriers from the Pacific Rim and Europe. The Port of Hueneme ranks among the top seaports in California for general cargo throughput and competes with the Port of San Diego for the import and export of fresh fruit and produce, forest products, and automobiles.

3.8.1.3 General Plan and Zoning

The Study Area is currently within the unincorporated area of Ventura County, adjacent to the City of Oxnard. The Study Area is within the City of Oxnard Sphere of Influence and would be annexed into the City as part of the proposed project, with the exception of the southernmost 220 acres.

The Ventura County General Plan, Land Use Appendix, shows that the land use designation for the Study Area is Agriculture (Ventura County General Plan, Land Use Appendix, Figure 3.3-18, 11-15-05 Edition). However, upon annexation into the City of Oxnard, the Oxnard 2020 General Plan would supersede the Ventura County General Plan for the Study Area. The City of Oxnard's 2020 General Plan (adopted in 1990) identifies the Study Area as part of a proposed Specific Plan Area and recommends a mix of low/medium density residential (8 to 12 dwelling units per acre), general commercial, school, and park uses in the area north of McWane Boulevard. For the portion of the Study Area south of McWane Boulevard, the General Plan proposes Public Utility/Energy Facility, Visitor Serving, and Miscellaneous Open Space (Resource Protection) designations. In general, these designations were created to respond to the pattern of existing uses near the Study Area, within the City of Oxnard (Figures 3.7-1 – 2020 General Plan Land Use and 3.7-2 – 2020 General Plan Ormond Beach Study Area).

The existing zoning within the Study Area is Ventura County Zone Agricultural Exclusive (A-E), with the exception of some small areas zoned Community Reserve (City of Oxnard) and Coastal Agricultural (County of Ventura) in the southern portion. The purpose of the A-E zone is to preserve and protect commercial agricultural lands, to preserve and maintain

agriculture as a major industry in Ventura County, and to protect these areas from the encroachment of incompatible uses that might challenge the viability of the agriculture industry (Ventura County Non-Coastal Zoning Ordinance, 12-06-05 Edition).

The Study Area also includes a small portion of land in the extreme southern portion designated as Ventura County Zone Coastal Agricultural (C-A). The purpose of this zone is to preserve and protect commercial agricultural lands as a limited and irreplaceable resource, to preserve and maintain agriculture as a major industry in the coastal zone of Ventura County, and to protect these areas from the encroachment of nonresidential uses which, by their nature, would remove high quality farm land from agricultural production (Ventura County Coastal Zoning Ordinance, 06-03-03 Edition). This portion of the Study Area is within the approximately 220-acre area that is not proposed to be annexed at this time. The 220 acres would be pre-designated Open Space-Agriculture and agricultural uses would continue.

Upon annexation into the City of Oxnard, the zoning designated within the specific plans will supersede the Ventura County Zone for the Study Area. The City of Oxnard's adoption of the Specific Plan zoning shall implement, and be compatible with, the land uses proposed by the Ormond Beach Northern and Southern Subarea Specific Plans.

Properties to the east of the Study Area, in unincorporated Ventura County, are almost exclusively within Ventura County Zone A-E (Agricultural Exclusive). To the west and north of the Study Area, lands within the City of Oxnard have a wide variety of zoning designations, including the following: Single Family Residential (R-1), Mobile Home Planned Development (MH-PD), Limited Manufacturing (M-L), Light Manufacturing (M-1), Heavy Manufacturing (M-2), Community Reserve (C-R), Coastal Dependent Industrial (CDI), and Coastal Energy Facilities (EC).

3.8.1.4 Agricultural Soils

3.8.1.4.1 Important Farmlands

The California Department of Conservation (Farmland Mapping and Monitoring Program) inventories farmland by categorizing it in classes based on the productive capability of the land. In the Important Farmlands Inventory (IFI) used by Ventura County, the areas with the highest agricultural potential are classified as "Prime" or "Statewide Importance," followed by "Unique," "Local Importance," "Grazing," and "Urban". The conversion of farmlands classified as Prime, Unique, and/or of Statewide Importance to non-agricultural uses is identified as a threshold of significant effect in Appendix G of the CEQA Guidelines.

Prime farmlands are irrigated soils over 40 inches deep with water holding capacity of 4 inches or more. They are generally well drained and free from frequent flooding. Soil

reaction is neither extremely acid nor strongly alkaline and the soils do not have salt or alkali problems. The erosion hazard is only slight and farming is not limited by cobbly surface layers, very slow subsoil permeability, or freezing soil temperatures. In Ventura County, lands classified as prime farmland occupy approximately 43,790 acres.

Farmlands of statewide importance are lands other than Prime that have a good combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops. The criteria are basically like that for prime but there is no minimum soil depth limitation and no permeability restriction. They have broader water holding capacity, soil reaction may be slightly saline and alkali affected, with a moderate erosion hazard. In Ventura County, lands classified as farmland of statewide importance occupy approximately 33,840 acres.

Unique farmlands are lands other than prime or of statewide importance that are currently used for the production of specific high-value food and fiber crops as listed in the annual report of the Department of Food and Agriculture. In Ventura County, this generally means hillside citrus and avocado plantings and represents approximately 28,640 acres.

Farmlands of local importance include uses such as production of food, fiber, forage and oilseed crops on lands that are not identified as having statewide importance. Farmlands of local importance include dryfarmed lands and unirrigated prime or statewide importance lands, per the criteria developed by the Soil Conservation Service (SCS) Field Office in Somis and reviewed by the Ventura County Agricultural Advisory Committee, Approximately 16,220 acres fall into this category.

According to the Farmland Mapping and Monitoring Program (Important Farmland in California, July 2009), most of the project area is designated as Prime Farmland or Farmland of Statewide Importance. Within the 917 acres of the Study Area, 905 acres, or 99 percent of the total lands, are designated as Prime Farmland or Farmland of Statewide Importance. (Farmland Mapping and Monitoring Program, Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Ventura County, updated 12/05/05).

3.8.1.4.2 Study Area Soil Classification

The majority of the information presented in this section was obtained from the U.S. Department of Agriculture's (USDA) Soil Survey of Ventura County, California (NRCS, 2005). Soils present in the Study Area can be grouped into associations that have formed on alluvial fans, plains, and basins. Approximately five mapped soil units have been identified within the Study Area. These soils are listed in Table 3.8-1.

TABLE 3.8-1
STUDY AREA SOIL CLASSIFICATION

Soil Designation	Name/Texture	Acres	SCS Capability Class[1]	Flood Hazard	Water Table Depth (ft)	Prime Farm-land	Farmland of Statewide Importance
Cd	Camarillo loam, 0 to 2 percent slope	181	IIw-2	Infrequent	< 2	-	Yes
Ce	Camarillo loam, sandy substratum, 0 to 2 percent slope	33	IIw-2	Infrequent	< 2	-	Yes
Hn	Hueneme sandy loam, 0 to 2 percent slope	458	IIw-2	Infrequent	2 to 5	Yes, if drained	-
Pa	Pacheco silty clay loam, 0 to 2 percent slope	233	IIw-2	Infrequent	2 to 3	-	Yes
Ts	Tidal Flats, 0 to 2 percent slope	12	NR[2]	Frequent	0 to 0.5	NR[2]	NR[2]

Source: U. S. Department of Agriculture, National Resource Conservation Service, SSURGO GIS database.

[1] Class IIw-2 soils – Class II soils have moderate limitations that reduce the choice of plants or require special conservation practices, or both. The "w" indicates that water in or on the soil interferes with plant growth or cultivation and the "2" indicates the limitation is a result of poor drainage or overflow hazard.

[2] NR – Soil characteristic not rated by the USDA National Resource Conservation Service, SSURGO GIS database.

Camarillo soils form on alluvial fans and plains in stratified alluvium and Pacheco soils formed in basins or on alluvial plains. Both the Camarillo and Pacheco soils form on slopes ranging from 0 to 2 percent, derived predominantly from sedimentary rocks. Both the Camarillo and Pacheco series have moderate shrink-swell potential. Moderate shrink-swell potential can be a limitation for urban development. Permeability is moderate for the Camarillo and moderately slow for the Pacheco series. The Camarillo series has slow and the Pacheco series has very slow runoff. Both soil series are noted by the USDA to have no erosion hazard.

The Hueneme Series forms in basins and alluvial plains from highly stratified alluvium derived from sedimentary rocks. The slopes range from 0 to 2 percent in basins. Hueneme soils have low shrink-swell potential, moderately rapid permeability, very slow surface runoff, and no erosion hazard.

Tidal Flat soils form in tidal flats, coastal beaches, and river wash sediments on slopes ranging from 0 to 2 percent. The USDA estimates that Tidal Flat soils have very slow runoff with soils experiencing ponding throughout the year, but does not describe the shrink-swell potential, permeability, or erosion hazard.

In addition to these soil types, some unengineered fill materials are assumed to occur throughout the Study Area as a result of past agricultural operations. These Xerorthents cut-and-fill areas (Xa) consist of mechanically manipulated soils where the original soil profile is no longer discernible. Some areas may have been cut, either to supply fill material or to remove uneven high spots. Other areas may have been covered by fill to provide drainage for agricultural purposes. Permeability, ability to drain, and erosion are typically variable for fill materials.

3.8.1.4.3 Site-Specific Soils by Subarea

Northern Subarea. The Northern Subarea includes approximately 34 acres of Camarillo loam (Cd) and 288 acres of Hueneme sandy loam (Hn) (Table 3.8-2).

TABLE 3.8-2
NORTHERN SUBAREA SOIL CLASSIFICATIONS AND DISTRIBUTION

Soil Designation	Name/Texture	Acres
Camarillo loam (Cd)	Farmland of statewide importance	34
Hueneme sandy loam (Hn)	Prime farmland if irrigated	288
	Total	**322**

Southern Subarea. The Southern Subarea includes approximately 147 acres of Camarillo loam (Cd), 33 acres of Camarillo loam, sandy substratum (Ce), 170 acres of Hueneme sandy loam (Hn), and 233 acres of Pacheco silty clay loam (Pa) (Table 3.8-3). The southernmost portion of the Southern Subarea is located within Tidal Flat (Ts) soil.

TABLE 3.8-3
SOUTHERN SUBAREA SOIL CLASSIFICATIONS AND DISTRIBUTION

Soil Designation	Name/Texture	Acres
Camarillo loam (Cd)	Farmland of statewide importance	147
Camarillo loam, sandy substratum (Ce)	Farmland of statewide importance	33
Hueneme sandy loam (Hn)	Prime farmland if irrigated	170
Pacheco silty clay loam (Pa)	Farmland of statewide importance	233
Tidal Flat (Ts)	Not prime farmland	12
	Total	**595**

3.8.1.5 Agricultural Water

The Ventura County Water Resources District database (2006) indicates that there are five active water wells within the Study Area. The Fox Canyon Groundwater Management Agency (FCGMA) manages the region's groundwater supply by protecting the quantity and quality of local groundwater resources and by balancing supply and demand for groundwater resources.

When irrigated agricultural land changes to a municipal and industrial (M&I) use, the groundwater extraction allocation is transferred to the M&I water supply provider. The amount of allocation available for transfer from agricultural land is based on the water produced during the 1985 through 1989 base period. Two acre-feet per year (AFY) can be transferred to the M&I provider for each acre of land irrigated for agricultural uses during the base period. Any remaining amount of the historic extraction allocation is eliminated. The FCGMA also allows the assignment of an extraction allocation from one M&I operator to another.

Upon implementation of the proposed project, the existing active water wells within the Study Area would no longer be used for agricultural irrigation and the groundwater pumping rights would be transferred to the City of Oxnard.

A second source of agricultural water has been the United Water Conservation District Oxnard-Hueneme (O-H) 14-inch Ocean View line.

3.8.2 Proposed Project

3.8.2.1 Northern Subarea

The Northern Subarea consists of approximately 322 acres of Study Area north of Hueneme Road which is currently used for agricultural operations. This area is proposed to accommodate a mix of uses including up to 1,283 residential units of various types and densities; an elementary school; a community park; neighborhood parks; an 18-acre lake; a mixed-use commercial marketplace; light industrial uses; and open space and trails.

3.8.2.2 Southern Subarea

The Southern Subarea consists of approximately 595 acres south of Hueneme Road that are currently used for agricultural operations. The southernmost 230 acres (approximately) of this area would remain undeveloped and available for continued agricultural production. This 230-acre area would not be annexed as part of this project (see discussion in Section 3.7, Land Use). The remainder of the Southern Subarea would be developed, primarily with light industrial and business/research park uses. A portion of the developed areas would include detention/biofiltration areas and a greenbelt area.

3.8.3 Regulatory Framework

3.8.3.1 Ventura County

3.8.3.1.1 Ventura County General Plan and Zoning

The Resources Appendix of the Ventura County General Plan states that water resource planning, land use planning policies and regulations, and maintenance of minimum parcel sizes are the most positive actions the County could take to support long-term economic viability of commercial agriculture and the preservation of agricultural land. The General Plan identifies the following policies and programs, adopted or supported by the County, which contribute to agricultural resources preservation and agriculture economic viability:

- Adoption or support of water policies, regulations and programs, which would protect water quantity and quality. Examples include: encourage the use of reclaimed water for agriculture, water conservation measures, support of the Fox Canyon Groundwater Management Agency, Well Ordinance, Abandoned Well Study, Saticoy Diversion and Pumping Trough Pipeline, and Hillside Erosion Control Ordinance.
- Long range circulation plans with measures to reduce traffic conflicts with agricultural vehicles, such as planning to reduce traffic on primary farm roads and provision of over-crossings, frontage roads and extra lanes.
- Adoption of planning goals, policies, and regulations which identify and protect existing agricultural land to ensure the continued availability of these lands for agricultural uses. These include:
    - Protection of agricultural lands to save farmers the costs of relocation and the costs associated with urban encroachment.
    - Establishing buffer standards for residential uses which abut agricultural areas to mitigate conflicts between these uses.
    - Establishing sufficiently large enough minimum parcel sizes to support agricultural operating efficiency and the ability to vary crop types, and discourage ranchette type development and land speculation for non-agricultural purposes. The minimum parcel size for irrigated farms should be at least 40 acres, and should be at least 80 acres for non-irrigated farms and grazing.
    - Land Conservation Act Program, Greenbelt Agreements, and Land Use designation are examples of agricultural land protection measures. Land Conservation Act Program and Greenbelt Agreements are discussed below. The General Plan Land Use Chapter establishes an Agriculture designation for lands identified in the Important Farmlands Inventory. This designation establishes a forty-acre minimum parcel size and subjects all parcels to the Agricultural Exclusive (A-E) zone.

The Study Area is currently zoned A-E by Ventura County, except for approximately 45 acres at southern edge of the area that is designated Coastal Agricultural (C-A) under the County's Coastal Zoning Ordinance. The A-E zoning designation is intended to preserve and protect agricultural lands, to preserve and maintain agriculture as a major industry in Ventura County, and to protect these areas from the encroachment of incompatible uses that might challenge the viability of the agriculture industry. Similarly, the C-A zone is intended to preserve and protect commercial agricultural lands, to preserve and maintain agriculture as a major industry, and to protect these areas from the encroachment of nonresidential uses that would have detrimental effects on the agriculture industry.

3.8.3.1.2 California Land Conservation Act (LCA) – Williamson Act Contract.

The California Land Conservation Act (LCA) is a voluntary land conservation program adopted by the California Legislature and administered by the County of Ventura. The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.

At the heart of the LCA Program is a contract between a county and qualifying landowners that restricts contracted land to agricultural uses for either 10 years (LCA Contract) or 20 years (Farmland Security Zone Act, "FSZA"). In exchange for the land-use restriction, the contracting landowner is assessed property taxes for the land at a rate lower than the potential market value. The contract renews automatically annually unless the nonrenewal process is initiated. A notice of nonrenewal starts the 9-year nonrenewal period. During the nonrenewal process, the annual tax assessment gradually increases. At the end of the 9-year nonrenewal period, the contract is terminated. Cancellation of the contract is also available to the landowner in extremely limited circumstances.

To partially compensate for the loss of property taxes from enrollment in LCA contracts, local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971. This payment is based upon the amount of acreage and type of land under contract.

An estimated 3,363 acres in the City of Oxnard Planning Area are covered by Williamson Act contracts that help to preserve these areas from urban development. Proposals have been made to locate certain public institutional uses within agricultural areas adjacent to the City that are not covered by a Greenbelt Agreement (see Section 3.8.3.1.3 below).

The Study Area is not under a Williamson Act Contract. According to the Ventura County Land Conservation Act Program Planner (Meeting with Julie Bulla, October 2006), the closest properties under contract are located approximately ¼ mile east of the property.

3.8.3.1.3 Greenbelt Agreements

Greenbelt agreements are joint or co-adopted policy agreements between a county and one or more interested cities. These policy agreements have the effect of protecting open space and agricultural lands and of reassuring property owners located within these areas that lands will not be prematurely converted to agriculturally incompatible land uses. These greenbelts ensure that cities will not annex land within the subject areas, resulting in the preservation of open space buffers between cities. In addition, the county pledges not to permit urban development within these areas. The City of Oxnard is a participant in the following two greenbelt agreements:

- **Oxnard-Camarillo Greenbelt Agreement**. During the 1980s the City signed a joint resolution with the City of Camarillo and the County of Ventura to create the Oxnard-Camarillo Greenbelt Agreement. This agreement calls for the preservation of a large agricultural area (approximately 27,000 acres) between the cities of Oxnard and Camarillo. The Greenbelt is located generally northeast of the Study Area.
- **Oxnard-Ventura Greenbelt Agreement**. Located in the northwest portion of the Planning Area, Oxnard entered into an agreement with the City of Ventura in 1994 for the preservation of 2,460 acres of agricultural land between the two entities. This Greenbelt is located generally northwest of the City of Oxnard.

The City of Oxnard 2020 General Plan (Open Space and Conservation Element, Figure VIII 6) also identifies the area at the southeast corner of Hueneme Road and Arnold Road, between the Study Area and Naval Air Station Point Mugu, as a potential greenbelt expansion area.

The Study Area does not contain Greenbelt Agreement areas.

3.8.3.1.4 Right to Farm Ordinance

The Ventura County Board of Supervisors has adopted a "Right to Farm Ordinance" intended to protect the farming community from developments that would inhibit their ability to continue agricultural production. Such things as agricultural wind machines, odors, dust, and noise are the subjects of nuisance complaints by adjoining property owners.

The "Right to Farm Ordinance" is contained in the Ventura County Coastal and Non Coastal Zoning Ordinance (Sec. 8183-4.1 and Sec. 8114-2.1.1 respectively). It serves to notify a new purchaser of property in proximity to existing agricultural operations that agricultural

operations inherently have noise, odor, and other potentially annoying activities that are associated with accepted agricultural operations.

The proposed project would be located adjacent to existing agricultural uses and 220 acres of the Study Area would remain available for agricultural operations. These areas are not proposed for annexation and, thus, would remain under the jurisdiction of Ventura County. Compliance with the right to farm ordinance would help to reduce impacts of the proposed development on existing and future agricultural operations (see Impact AG-4 and Mitigation Measure AG-1).

3.8.3.1.5 County of Ventura Agricultural/Urban Buffer Policy (Revised 7/19/06)

The Ventura County Office of the Agricultural Commissioner created this policy to protect the public health, safety and welfare of the citizens of Ventura County and protect the economic viability and long-term sustainability of the Ventura County agricultural industry. According to this policy, new urban developments (and non-farming activities) should be required to lessen public and animal exposure to agricultural chemicals, dust, noise, and odors, and to protect agricultural operations and land from vandalism, pilferage, trespassing, and complaints against standard legal agricultural practices.

This policy provides guidelines to prevent and/or mitigate conflicts that may arise at the agricultural/urban interface. It applies where urban structures or ongoing non-farming activities are permitted adjacent to land 1) in crop or orchard production; or 2) classified by the California Department of Conservation Important Farmland Inventory as Prime, Statewide Importance, Unique or Local Importance farmland. These guidelines apply to development projects that require discretionary approval by the county or a city; and where the proposed non-farming activity is abutting or on land zoned AE, OS or RA, and the farming activity is located outside of a Sphere of Influence, as adopted by LAFCO. The Agricultural Policy Advisory Committee (APAC) or the Agricultural Commissioner may grant an exemption to these policies on a case-by-case basis, where physical factors prevent or alleviate the need for compliance. Where applicable, urban developments or non-agricultural uses are conditioned to provide and maintain a 300-foot setback and chain-link fence on the non-agricultural property between the urban use and the agriculture use, or a 150-foot buffer/setback on the non-agricultural property if a vegetative screen is implemented and maintained. The vegetative buffer should be consistent with the guidelines included in the policy.

The City of Oxnard Standard Conditions of Approval described in the following section require urban developments to provide and maintain a 150-foot buffer/setback (“shelter belt”) on the non-agricultural property if a vegetative screen is implemented. The vegetative buffer should be consistent with the guidelines included in the policy.

3.8.3.1.6 Local Agency Formation Commission

As described in Section 3.7 (Land Use), the Ventura Local Agency Formation Commission (LAFCO) was formed and operates under what is now known as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. (California Government Code Section 56000 et seq.). In implementing state laws and state and local policies relating to boundary changes for cities and special districts, LAFCO must consider the effect of such changes on agricultural and open space lands.

In October 2007, Ventura LAFCO published an updated Commissioner's Handbook. Pursuant to state law, the Handbook is "a compilation of all of the written policies and procedures adopted by the Ventura LAFCO." The policies and procedures presented in the Handbook are intended to supplement, rather than reiterate or interpret, state law. For purposes of the specific plans being reviewed in this DEIR, the following provisions of the Handbook are particularly relevant to agriculture:

> ***Findings and criteria for prime agricultural and open space land conversion:*** *LAFCO will approve a proposal for a change of organization or reorganization which is likely to result in the conversion of prime agricultural or open space land use to other uses only if the Commission finds that the proposal will lead to planned, orderly, and efficient development. For the purposes of this policy, a proposal for a change of organization or reorganization leads to planned, orderly, and efficient development only if all of the following criteria are met (Section 3.1.5.1):*
>
> *i. The territory involved is contiguous to either lands developed with an urban use or lands which have received all discretionary approvals for urban development.*
>
> *ii. The territory is likely to be developed within 5 years and has been prezoned for non-agricultural or open space use. In the case of very large developments, annexation should be phased wherever possible.*
>
> *iii. Insufficient non-prime agricultural or vacant land exists within the existing boundaries of the agency that is planned and developable for the same general type of use.*
>
> *iv. The territory involved is not subject to voter approval for the extension of services or for changing general plan land use designations. Where such voter approval is required by local ordinance, such voter approval must be obtained prior to LAFCO action on any proposal unless exceptional circumstances are shown to exist.*
>
> *v. The proposal will have no significant adverse effects on the physical and economic integrity of other prime agricultural or open space lands.*

Findings that insufficient non-prime agricultural or vacant land exists: *The Commission will not make affirmative findings that insufficient non-prime agricultural or vacant land exists within the boundaries of the agency unless the applicable jurisdiction has prepared a detailed alternative site analysis which at a minimum includes (Section 3.1.5.2):*

i. An evaluation of all vacant, non-prime agricultural lands within the boundaries of the jurisdiction that could be developed for the same or similar uses.

ii. An evaluation of the re-use and redevelopment potential of developed areas within the boundaries of the jurisdiction for the same or similar uses.

iii. Determinations as to why vacant, non-prime agricultural lands and potential re-use and redevelopment sites are unavailable or undesirable for the same or similar uses, and why conversion of prime agricultural or open space lands are necessary for the planned, orderly, and efficient development of the jurisdiction.

Impacts on adjoining prime agricultural or open space lands: *In making the determination whether conversion will adversely impact adjoining prime agricultural or open space lands, the Commission will consider the following factors (Section 3.1.5.3):*

i. The prime agricultural and open space significance of the territory and adjacent areas relative to other agricultural and open space lands in the region.

ii. The economic viability of the prime agricultural lands to be converted.

iii. The health and well being of any urban residents adjacent to the prime agricultural lands to be converted.

iv. The use of the territory and the adjacent areas.

v. Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of prime agricultural or open space land outside of the agency's sphere of influence, or will be extended through prime agricultural or open space lands outside the agency's sphere of influence.

vi. Whether natural or man-made barriers serve to buffer prime agricultural or open space lands outside of the agency's sphere of influence from the effects of the proposal.

vii. Applicable provisions of local general plans, applicable ordinances that require voter approval prior to the extension of urban services or changes to general plan designations, Greenbelt Agreements, applicable growth-management policies, and statutory provisions designed to protect agriculture or open space.

viii. Comments and recommendations by the Ventura County Agricultural Commissioner.

3.8.3.2 City of Oxnard

3.8.3.2.1 SOAR Ordinance

SOAR stands for "Save Open Space and Agricultural Resources" initiatives or ordinances. Generally, SOAR ordinances and initiatives establish a City Urban Restriction Boundary (CURB) around each city and require city voter approval before any land located outside the CURB lines can be developed under the city's jurisdiction for urban purposes. The Ventura County SOAR ordinance requires countywide voter approval of any change to the County General Plan involving the "Agricultural," "Open Space," or "Rural" land use map designations, or any change to a General Plan goal or policy related to those land use designations.

The Study Area is not within the boundaries of the City of Oxnard SOAR program. According to the City of Oxnard SOAR Ordinance, the CURB is located along the eastern boundary of the Study Area. The ordinance determines that the City of Oxnard shall restrict urban services (except temporary mutual assistance with other jurisdictions) and urbanized uses of land to within the CURB until December 31, 2020. Therefore, the area immediately east of the Study Area will likely remain under agricultural uses for this period.

3.8.3.2.2 City of Oxnard 2020 General Plan

The City of Oxnard 2020 General Plan includes the following development objectives in its Land Use Element (LUE):

> *Objective 1. Limit the urbanized area of the City and facilitate a permanent greenbelt between Oxnard and neighboring cities*.
>
> *Objective 3. Preserve permanent agricultural land within the Oxnard Planning Area*.

The General Plan LUE identified the Ormond Beach Study Area as one of sixteen *Major Study Areas*. Over time, the City of Oxnard has commissioned many studies to determine feasible development options for the Ormond Beach area. The results have indicated that increased public access is needed to realize the full potential of the Ormond Beach area and to maximize recreational opportunities. The General Plan states that, through detailed and specific planning in the Ormond Beach area, there is a potential to develop coastal-oriented recreational opportunities while concurrently safeguarding sensitive wetlands and other habitats.

Buildout of the 2020 General Plan Land Use Map within the Study Area would result in approximately 4,000 dwelling units at low-medium density and approximately 200,000 square feet of associated commercial uses (Figure 3.7-1, 2020 General Plan Land Use). An

elementary school, high school and neighborhood park would also be located north of Hueneme Road. The property south of McWane Road within the Study Area is designated Public Utility/Energy Facilities, as is the adjacent Ormond Beach Generating Station just outside of the Study Area. The area along the coast is designated Resource Protection. The area to the east of the Study Area falls outside of the City's Sphere of Influence and the CURB line and is designated Agriculture.

The General Plan requires the approval of a specific plan prior to any development within the Study Area. As discussed in Section 3.7 (Land Use), it also calls for the specific plan land uses and policies to contribute to implementation of series of policies specific to the Ormond Beach Study Area, none of which address agricultural resources (see Table 3.7-2).

3.8.4 Project Impacts

3.8.4.1 Thresholds of Significance

3.8.4.1.1 CEQA Guidelines

The California Environmental Quality Act (CEQA) Guidelines pose the following questions to determine thresholds for significance of impacts to agriculture.

Would the project:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

The California Land Evaluation and Site Assessment (LESA) Model, discussed below, was utilized to evaluate these thresholds for the subject property.

3.8.4.1.2 California Department of Conservation-LESA Model

Land Evaluation and Site Assessment (LESA) is a term used to define an approach for rating the relative quality of land resources based upon specific measurable features. The formulation of the California Agricultural LESA Model is the result of Senate Bill 850 (Chapter 812/1993), which charges the Resources Agency, in consultation with the Governor's Office of Planning and Research, to develop an amendment to Appendix G of the CEQA Guidelines. Such an amendment is intended "to provide lead agencies with an optional methodology to ensure significant effects on the environment of agricultural land

conversions are quantitatively and consistently considered in the environmental review process" (Public Resources Code Section 21095).

The LESA Model defines and measures two separate sets of factors. The first set, Land Evaluation, includes two different factors (Land Capability Classification Rating and Storie Index Rating) that are intended to measure the inherent, soil-based qualities of land as they relate to agricultural suitability. The second set, Site Assessment, includes four factors that are intended to measure social, economic, and geographic attributes that also contribute to the overall value of agricultural land. These factors are size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. For a given project, each of these six factors is separately rated in a 100-point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. This final project score becomes the basis for making a determination of a project's potential impacts level of significance, based upon a range of established scoring thresholds.

The California Agricultural Evaluation and Site Assessment Model Instruction Manual (1997) and the tables prepared for the proposed project are included in Appendix D of this document.

***Land Evaluation Factors*.** The California LESA Model includes two Land Evaluation factors that are separately rated:

- **The Land Capability Classification Rating (LCC).** The LCC indicates the suitability of soils for most kinds of crops. Groupings are made according to the limitations of the soils when used to grow crops, and the risk of damage to soils when used in agriculture. Soils are rated from Class I to Class VIII, with soils having the fewest limitations receiving the highest rating (Class I). Specific Subclasses are also utilized to further characterize soils (refer to Table 1A and Table 2 in Appendix D).
- **The Storie Index Rating.** The Storie Index provides a numeric rating (based upon a 100 scale) of the relative degree of suitability or value of a given soil for intensive agriculture. The soils with the highest degree of suitability for intensive agriculture receive a higher score. The rating is based upon soil characteristics only. Four factors that represent the inherent characteristics and qualities of the soil are considered in the Storie Index rating. The factors are: profile characteristics, texture of the surface layer, slope, and other factors such as drainage or salinity. In some situations, only the United States Department of Agriculture's LCC information may be available. In those cases, the Storie Index ratings can be calculated from information contained in soil surveys by qualified soil scientists. If, however, limitation of time and/or resources restrict the derivation of the Storie Index rating for a given project, it may be possible to adapt the Land Evaluation by relying solely upon the LCC rating.

***Site Assessment Factors*.** The four Site Assessment factors that are separately rated and included in the California LESA Model are:

- **The Project Size Rating.** The Project Size rating is based upon identifying acreage figures for three separate grouping of soil classes within the project site, and then determining with grouping generates the highest Project Size score. The Project Size Rating relies upon acreage figures that were tabulated under the Land Capability Classification Rating (refer to Table 1B and Table 3 in Appendix D).
- **The Water Resources Availability Rating.** The Water Resources Availability rating is based upon identifying the various water sources that may supply a given property, and then determining whether different restrictions in supply are likely to take place in years that are characterized as being periods of drought and non drought (refer to Table 4 and Table 5 in Appendix D).
- **The Surrounding Agricultural Land Rating.** Determination of the Surrounding Agricultural Land rating is based upon identification of a project's Zone of Influence (ZOI), which is defined as that land near a given project, both directly adjoining and within a defined distance away, that is likely to influence, and be influenced, by the agricultural land use of the subject project site. The Surrounding Agricultural Land rating is designed to provide a measurement of the level of agricultural land use for lands in close proximity to a given project. The California Agricultural LESA Model rates the potential significance of the conversion of an agricultural parcel that has a large proportion of surrounding land in agricultural production more highly than one that has relatively small percentage of surrounding land in agricultural production. The definition of the ZOI that accounts for surrounding lands up to a minimum of one quarter mile from the project boundary is the result of several iterations during model development for assessing an area that will generally be a representative sample of surrounding land use (refer to Table 6 in Appendix D).
- **The Surrounding Protected Resource Land Rating.** The Surrounding Protected Resource Land rating is essentially an extension of the Surrounding Agricultural Land rating, and it is scored in a similar manner (refer to Table 7 in Appendix D). Protected resource lands are those lands with long-term use restrictions that are compatible with or supportive of agricultural uses of land. Included among them are the following:
  - Williamson Act contracted lands
  - Publicly owned lands maintained as a park, forest, or watershed resources
  - Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban and industrial uses

Final LESA Scoring. A single LESA score is generated for a given project after all the individual Land Evaluation and Site Assessment factors have been scored and weighted. The California Agricultural LESA Model is weighted so that 50 percent of the total LESA score of a project is derived from the Land Evaluation factors and 50 percent from the Site Assessment factors. Individual factor weights are listed in Table 3.8-4, with the sum of the factor weights required to equal 100 percent.

TABLE 3.8-4
LESA EVALUATION AND SITE ASSESSMENT FACTORS AND WEIGHTING

Factor	Individual Factor Weight
Land Evaluation Factors	
Land Capability Classification (LCC)	25%
Storie Index Rating	25%
Land Evaluation Subtotal	50%
Site Assessment Factors	
Project Size Rating	15%
Water Resource Availability Rating	15%
Surrounding Agricultural Lands Rating	15%
Surrounding Protected Resource Lands Rating	5%
Site Assessment Subtotal	50%
Total LESA Factor Weighting	**100%**

Several tables follow that summarize the final LESA scores for the entire Study Area, and for each subarea. The LESA modeling results for the Study Area, Northern Subarea, and Southern Subarea are included in Appendix D.

Table 3.8-5 shows the final LESA score for the entire Study Area; Table 3.8-6 shows the score for the Northern Subarea; and Table 3.8-7 shows the score for the Southern Subarea.

LESA Threshold of Significance. The California LESA Model is designed to make determinations of the potential significance of a project's conversion of agricultural lands as part of the CEQA process. Scoring thresholds are based upon both the total LESA score and the component Land Evaluation (LE) and Site Assessment (SA) separate subscores. In this manner the scoring thresholds are dependent upon the attainment of a minimum score for the LE and SA subscores so that a single threshold is not the result of heavily skewed subscores (i.e., a site with a very high LE score but a very low SA score, or vice versa). The California Agricultural LESA Model scoring thresholds are shown in Table 3.8-8.

TABLE 3.8-5
LAND EVALUATION AND SITE ASSESSMENT SCORING
STUDY AREA

Factor Name	Factor Rating (0-100 Points)	Factor Weighting (Total=1.0)	Weighted Factor Rating
Land Evaluation			
Land Capability Classification	79.2	0.50	39.6
Storie Index Rating	-	-	-
Site Assessment			
Project Size	100	0.15	15
Water Resource Availability	80	0.15	12
Surrounding Agricultural Lands	20	0.15	3
Protected Resource Lands	20	0.05	1
Total LESA Score – Study Area			**70.6**

Source: LESA model, included in Appendix D of this document.

TABLE 3.8-6
LAND EVALUATION AND SITE ASSESSMENT SCORING
NORTHERN SUBAREA

Factor Name	Factor Rating (0-100 Points)	Factor Weighting (Total=1.0)	Weighted Factor Rating
Land Evaluation			
Land Capability Classification	78.4	0.50	39.2
Storie Index Rating	-	-	-
Site Assessment			
Project Size	100	0.15	15
Water Resource Availability	80	0.15	12
Surrounding Agricultural Lands	30	0.15	4.5
Protected Resource Lands	0	0.05	0
Total LESA Score – Northern Subarea			**70.7**

Source: LESA model, included in Appendix D of this document.

TABLE 3.8-7
LAND EVALUATION AND SITE ASSESSMENT SCORING
SOUTHERN SUBAREA

Factor Name	Factor Rating (0-100 Points)	Factor Weighting (Total=1.0)	Weighted Factor Rating
Land Evaluation			
Land Capability Classification	80	0.50	40
Storie Index Rating	-	-	-
Site Assessment			
Project Size	100	0.15	15
Water Resource Availability	80	0.15	12
Surrounding Agricultural Lands	40	0.15	6
Protected Resource Lands	10	0.05	0.5
Total LESA Score – Southern Subarea			**73.5**

Source: LESA model, included in Appendix D of this document.

TABLE 3.8-8
LAND EVALUATION AND SITE ASSESSMENT
SCORING THRESHOLDS

Total LESA Score	Scoring Decision
0 to 39 points	Not considered significant
40 to 59 points	Considered significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 points	Considered significant unless either LE or SA subscore is less than 20 points
80 to 100 points	Considered Significant

Source: LESA model, included in Appendix D of this document.

According to the California Agricultural LESA Model Threshold of Significance, the total score of 70.6 points for the Study Area, as well as the score of 70.7 for the Northern Subarea and 73.5 for the Southern Subarea, would be considered a potentially significant environmental impact resulting from the conversion of agricultural properties to non-agricultural uses. This is due to the soil quality, availability of water, acreage, and surrounding agricultural lands, including land protected by the City of Oxnard SOAR ordinance.

Each impact is discussed in detail below.

3.8.4.2 Discussion of Impacts

3.8.4.2.1 Applicable to Both the Northern and Southern Subareas

Impact AG-1: Ag Zoning/Williamson Act Conflicts. The proposed project is not under a Williamson Act Contract. The existing zoning within most of the Study Area is Agricultural Exclusive (A-E) (Ventura County Non-Coastal Zoning Ordinance, 12-06-05 Edition). The Study Area also includes approximately 45 acres of land in its extreme southern portion designated as Coastal Agricultural (C-A).

Adoption of the specific plans would make the land use designation and development standards contained within these specific plans regulatory in nature and equal to, but separate from, the existing City of Oxnard zoning ordinance.

Upon specific plan adoption, rezoning, and annexation into the City of Oxnard, the zoning requested by the specific plan applicants would supersede the existing County zoning. Since the southernmost 220 acres are not proposed to be annexed at this time, no land use or zone change would occur and agricultural operations would continue. These 220 acres would remain within the County and, therefore, would remain zoned A-E and C-A.

Concurrent and additional approvals required for implementation of the specific plans include:

- Approval of General Plan Amendments consisting of changes to the 2020 Land Use Map designation for the Study Area and changes to the text of the Land Use Element of the General Plan. The specific plans are required to be consistent with the 2020 General Plan policies for the Study Area.
- A zone change/rezone of the Study Area.

The Study Area has been within the City of Oxnard Sphere of Influence since 1981, and the City's 2020 General Plan has designated the area for broad mix of urban uses since 1990. The adoption of the specific plans and the other approvals required for implementation will reconcile the City's General Plan and zoning with the proposed projects. Impact AG-1 would be *less than significant (Class III).*

Impact AG-2: Induced Farmland Conversion. The proposed project is not expected to directly or indirectly result in conversion of adjacent farmlands to non-agricultural use. Agricultural lands east of the Study Area would be protected from conversion to urban or other uses by the existing SOAR ordinance. Although the existing SOAR ordinance expires on December 31, 2020, the City of Oxnard 2020 General Plan indicates that the area at the southeast corner of Hueneme Road and Arnold Road, between the Study Area and Naval Air Station Point Mugu, is considered a potential greenbelt expansion area, which would further

protect this area from conversion to urban uses. Thus, the potential inducement of farmland conversion resulting from the project is considered a *less than significant impact (Class III).*

Impact AG-3: Ag Water Supply. According to the Water Supply Assessments prepared for the Northern and Southern subareas (2008), the SOAR initiative created the CURB with the objective of preserving most agricultural properties east of the Study Area. These lands are expected to continue to be used for agricultural operations after implementation of the proposed project. These agricultural properties receive water from individual groundwater sources.

The Fox Canyon Groundwater Management Agency (FCGMA) manages the region's groundwater supply by protecting the quantity and quality of local groundwater resources and by balancing supply and demand for groundwater resources.

When irrigated agricultural land changes to a municipal and industrial (M&I) use, the groundwater extraction allocation is transferred to the M&I water supply provider. The amount of allocation available for transfer from agricultural land is based on the water produced during the 1985 through 1989 base period. Up to 2 AFY can be transferred to the M&I provider for each acre of land irrigated for agricultural uses during the base period. Any remaining amount of the historic extraction allocation is eliminated.

In compliance with these allocation requirements, prior to issuance of site improvement permits, the City of Oxnard applies a standard condition of approval requiring demonstration that water rights and groundwater allocations have been appropriately transferred. Thus the existing active water wells within the Study Area would no longer be used for agricultural irrigation and the groundwater pumping rights would be transferred to the City of Oxnard for M&I uses. The transfer of the groundwater allocation to the City for urban uses is not expected to result in a significant impact to agricultural water supply, as it would follow FCGMA's allocation transfer restrictions.

Water resources allocated to meet the City's needs would have a *less than significant impact (Class III)* on groundwater to the agricultural interests, located generally outside the City.

Impact AG-4: Dust Impacts to Local Crops. Dust generated during construction could be deposited on adjacent agricultural lands with planted crops, temporarily reducing productivity. In addition, increase in traffic may result in permanent increase in emissions that could affect crops in adjacent agricultural lands. Dust mitigation measures are required for all discretionary construction activities regardless of the significance in impacts, based on policies in the County's Air Quality Assessment Guidelines Document. Impact AG-4 is *potentially significant, but feasibly mitigated (Class II),* as it can be reduced to less-than-significant levels with implementation of dust control measures included in Section 3.4 (Air Quality) and with implementation of shelter belts along Olds Road and Arnold Road,

consistent with Agricultural Commissioner policy and City of Oxnard Standard Conditions of Approval.

Both specific plans propose minimum 150-foot "shelter belts" as a buffer between the existing adjacent agricultural operations and the new developments. The Northern Subarea shelter belt would extend the length of the project boundary along Olds Road and would include the 78-foot Olds Road right of way. The shelter belt would include trees, a meandering trail, and landscaped medians along and within the roadway. The Southern Subarea shelter belt would extend along the Arnold Road boundary for the length of the developed area. In addition to windbreak trees, the shelter belt would include a north-south oriented meandering bioswale for stormwater, and a pedestrian walk. Based on preliminary review by the Ventura County Agricultural Policy Advisory Committee (APAC), these proposed shelter belt concepts meet APAC standards (APAC Approved Minutes, Meeting of March 8, 2006).

3.8.4.2.2 Applicable to Northern Subarea

Impact AG-5: Direct Farmland Conversion. Development of the Northern Subarea would convert approximately 322 acres of land currently used for agricultural operations to urban and open space uses. The proposed project includes up to 1,283 residential units, schools, parks, an 18-acre lake, and commercial uses.

According to the Farmland Mapping and Monitoring Program, all of the 322 acres of the Northern Subarea that would be converted to non-agricultural uses are designated as Prime Farmland or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Based on the California Agricultural LESA Model Threshold of Significance, the score of 70.7 points for the Northern Subarea would be considered a potentially significant environmental impact resulting from the conversion of agricultural properties to non-agricultural uses.

The City of Oxnard has reviewed a variety of actions that might offset the effects of the loss of productive agricultural land. This includes requirements for direct preservation of agricultural land elsewhere in the region and/or financial contribution to efforts to acquire conservation easements or deed restrictions on land currently used for production. The City has also considered imposition of other requirements such as stockpiling of high quality topsoil and offering it as soil amendments for marginally viable agricultural land; converting nearby areas not used for farmland to farmland (e.g., open space or industrial lands); and/or financially contributing to an organization that performs agricultural conservation. Based on its evaluation of these and other potential measures, the City has concluded that they would not be feasible for the Ormond Beach Specific Plan projects. (For purposes of this evaluation, feasibility is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and

technological factors," per section 21061.1 of the California Public Resources Code.) This conclusion is based on the following considerations:

- The change from agricultural uses to urban uses was set in motion in 1981, when the Ventura LAFCO updated the City's Sphere of Influence (SOI) to include the Study Area. With the adoption of the SOI, LAFCO explicitly acknowledged that the Study Area would ultimately develop with urban uses, with services to be provided by the City of Oxnard. The City reaffirmed this vision in 1990, with the adoption of the City's 2020 General Plan and certification of the General Plan's Environmental Impact Report, along with adoption of a Statement of Overriding Consideration concerning agricultural land conversion.
- The financial contribution to either direct preservation through purchase or conservation through other means is infeasible based upon local and regional economics. According to information provided by the project applicants, the current comparable sales for agricultural land are in the range of $75,000 to $100,000 per acre, which represents a significant increase in recent years. Based on the acreage proposed for conversion to urban uses within the Northern Subarea (322), this equates to a purchase price range of $24,150,000 to $32,200,000. Similarly, with agricultural rents in the area ranging from $2,800 to $3,300 per acre per year, the costs to purchase conservation easements would also be prohibitively high. Assuming a conservative capitalization rate of 8.0%, the intrinsic agricultural land value would range from $35,000 to $41,250 per acre. The cost of a conservation easement limiting land to only agricultural uses would be the difference between the open market value and the intrinsic agricultural value, or between $33,750 and $65,000 per acre.
- While there are entities within Ventura County that could conceivably manage agricultural conservation programs (e.g., the Ventura County Resource Conservation District and the Ventura Agricultural Land Trust), there are currently no such programs in place.
- The City currently has no transferable development right (TDR) programs in place that could be invoked to offset the loss of productive agricultural land.

Therefore, the proposed project would convert Prime Farmland and Farmland of Statewide Importance, to non-agricultural use and would result in a significant impact. *This is a significant and unavoidable impact (Class I).*

***Impact AG-6: Land Use Conflicts*.** The Northern Subarea is presently used for agricultural operations. Properties east of the Northern Subarea are also used for agriculture and would remain in agricultural use after completion of the proposed project. The development of urban uses with sensitive receptors (such as residential lots and school uses) close to the agricultural operations could create conflicts between these land uses. These conflicts may include:

- Residents/students may experience dust, noise, odor and other nuisances that may be associated with commercial agriculture.
- Conversion of farmland may impact nearby growers by placing restrictions and limitations on pesticides, fungicides, and herbicides used on the crops. Restrictions could also be placed on noise, burning, and dust generation. In addition, vandalism and theft of farm equipment may occur due to the increase in urban uses adjacent to agricultural operations.

Land use conflict impacts can be mitigated through the implementation of buffer and/or fencing requirements at the perimeter of urban development areas, and through implementation of the Standard City of Oxnard buyer notification condition. Prior to issuance of site improvement permits, the City of Oxnard applies a standard condition of approval requiring that new residents are made aware that the surrounding lands will remain in commercial agriculture. Buyer notifications are commonly used in rural residential areas and are generally effective in minimizing land use conflicts between agriculture and residential uses. In addition, the proposed Northern Subarea specific plan includes a minimum 150-foot "shelter belt" – a buffer between the urban uses and the adjacent agricultural uses – that would further reduce land use conflict impacts.

The number of days and the choice of days available for farmers to use chemical applications within one-quarter mile (1,320 linear feet) of the high school and elementary school will decrease when the two proposed schools are constructed. The Ventura County Agricultural Commissioner currently prohibits chemical applications within one-quarter mile of a school on any day that the school is in session. Any benefits to the farmers, exercised or potential, to extend a fumigation buffer from the east side of Olds Road and Hueneme Road across the developer's land, which is currently designated as farmland, will be foreclosed upon commencement of the proposed project. This impact is considered less than significant because a) the potential benefit is not a right and b) the land to be developed has been within the City of Oxnard Sphere of Influence for many years, with ample notice to the agricultural property owners that any agreements to extend fumigation buffers across the developer's property were temporary.

Overall, the potential impacts related to land use conflicts in the Northern Subarea are considered *less than significant (Class III).*

3.8.4.2.3 Applicable to Southern Subarea

Impact AG-7: Direct Farmland Conversion. The proposed project would convert approximately 366 acres of land currently used for agricultural operations to non-agricultural uses. The remaining 229 acres included in the Southern Subarea would continue to be available for agricultural production. The proposed project includes light industrial uses, a

business/research park, trails, and open space, including detention/biofiltration and greenbelt areas.

According to the Farmland Mapping and Monitoring Program, all of the 366 acres of the Southern Subarea that would be converted to non-agricultural uses are designated as Prime Farmland or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program. Based on the California Agricultural LESA Model Threshold of Significance, the score of 73.5 points for the Southern Subarea would be considered a potentially significant environmental impact resulting from the conversion of agricultural properties to non-agricultural uses.

The City of Oxnard has reviewed a variety of actions that might offset the effects of the loss of productive agricultural land. This includes requirements for direct preservation of agricultural land elsewhere in the region and/or financial contribution to efforts to acquire conservation easements or deed restrictions on land currently used for production. The City has also considered imposition of other requirements such as stockpiling of high quality topsoil and offering it as soil amendments for marginally viable agricultural land; converting nearby areas not used for farmland to farmland (e.g., open space or industrial lands); and/or financially contributing to an organization that performs agricultural conservation. Based on its evaluation of these and other potential measures, the City has concluded that they would not be feasible for the Ormond Beach Specific Plan projects. (For purposes of this evaluation, feasibility is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors," per section 21061.1 of the California Public Resources Code.) This conclusion is based on the following considerations:

- The change from agricultural uses to urban uses was set in motion in 1981, when the Ventura LAFCO updated the City's Sphere of Influence (SOI) to include the Study Area. With the adoption of the SOI, LAFCO explicitly acknowledged that the Study Area would ultimately develop with urban uses, with services to be provided by the City of Oxnard. The City reaffirmed this vision in 1990, with the adoption of the City's 2020 General Plan and certification of the General Plan's Environmental Impact Report, along with adoption of a Statement of Overriding Consideration concerning agricultural land conversion.
- The financial contribution to either direct preservation through purchase or conservation through other means is infeasible based upon local and regional economics. According to information provided by the project applicants, the current comparable sales for agricultural land are in the range of $75,000 to $100,000 per acre, which represents a significant increase in recent years. Based on the acreage proposed for conversion to urban uses within the Southern Subarea (366), this equates to a purchase price range of $27,450,000 to $36,600,000. Similarly, with agricultural rents

in the area ranging from $2,800 to $3,300 per acre per year, the costs to purchase conservation easements would also be prohibitively high. Assuming a conservative capitalization rate of 8.0%, the intrinsic agricultural land value would range from $35,000 to $41,250 per acre. The cost of a conservation easement limiting land to only agricultural uses would be the difference between the open market value and the intrinsic agricultural value, or between $33,750 and $65,000 per acre.

- While there are entities within Ventura County that could conceivably manage agricultural conservation programs (e.g., the Ventura County Resource Conservation District and the Ventura Agricultural Land Trust), there are currently no such programs in place.
- The City currently has no transferable development right (TDR) programs in place that could be invoked to offset the loss of productive agricultural land.

Therefore, the proposed project would convert Prime Farmland and Farmland of Statewide Importance, to non-agricultural use and would result in a *significant and unavoidable impact (Class I).*

Impact AG-8: Land Use Conflicts. The Southern Subarea is presently used for agricultural operations. Properties east and southwest of the Study Area are also agricultural land. The development of urban uses close to the agricultural operations adjacent to the proposed project site could create conflicts between these land uses. These conflicts may include:

- People working in or visiting the Southern Subarea may experience excessive dust, noise, odor and other nuisances that may be associated with commercial agriculture.
- Conversion of farmland may impact nearby growers by placing restrictions and limitations on pesticides, fungicides, and herbicides used on the crops. Restrictions could also be placed on noise, burning, and dust. In addition, vandalism and theft of farm equipment may occur due to the increase in urban uses adjacent to agricultural operations.

Land use conflict impacts can be mitigated through the implementation of buffer and/or fencing requirements at the perimeter of urban development areas, and through implementation of the Standard City of Oxnard buyer notification condition as discussed in Impact AG-6 above. In addition, the proposed Southern Subarea specific plan includes a "shelter belt" – a buffer between the urban uses and the adjacent agricultural uses – that would further reduce land use conflict impacts. Therefore, the potential impacts related to land use conflicts are considered *less than significant (Class III)*.

3.8.4.3 Cumulative Impacts

Impact AG-9: Cumulative Conversion of Ag Lands to Non-Ag Uses. The proposed Project would result in conversion of existing agriculturally-designated land into urban uses. When considered in combination with other pending urban development projects in the City of Oxnard, the cumulative effect could be an overall loss in agriculturally viable land in an area that has historically been largely dedicated to agricultural uses.

Fragmentation of agricultural lands into properties too small to sustain agricultural operations, land use conflicts between agricultural and urban land uses, and rising land prices may impact the viability of agriculture in Ventura County. The proposed Project would not fragment farmlands, as properties east of the Study Area would remain within SOAR boundaries and continue to be used for agricultural operations. Land use conflicts between agricultural and urban land uses would cumulatively occur to some extent as a result of the proposed project in combination with other developments in the area, but would be mitigated by implementation of guidelines included in the County of Ventura Agricultural/Urban Buffer Policy (Revised 7/19/06). This policy, as detailed in Section 3.8.3.1.5 above, provides guidelines to prevent and/or mitigate conflicts that may arise at the agricultural/urban interface. Finally, rising land prices may continue to pressure famers to convert their lands into urban uses. City and County agricultural land preservation policies and regulations would need to continue to be enforced in order to minimize this potential cumulative impact.

The proposed project is consistent with the City of Oxnard 2020 General Plan's policies relative to preservation of agricultural uses in conjunction with County policies. While consistency with the City of Oxnard 2020 General Plan, the SOAR ordinances and initiatives, Greenbelt Agreements, and Williamson Act contracts, and implementation of mitigation measures for land use conflicts would somewhat reduce these impacts, individual and cumulative impacts would not be reduced to less than significant levels.

The proposed urban uses would be subject to the development standards of the City of Oxnard zoning ordinance, which would limit the extent and type of residential uses that could occur in proximity to ongoing agricultural operations. In addition, setbacks or buffers shall be implemented where urban development adjoins agriculture operations. These setbacks or buffers will be consistent with the County of Ventura Agricultural/Urban Buffer Policy (Ventura County Office of the Agricultural Commissioner, revised 7/19/06) and will minimize land use conflicts and impacts to agricultural operations. Additional feasible mitigation, such as a buyer notification requirement, would further reduce the potential for land use conflicts between agricultural and residential land uses. However, the projects' potential cumulative effects on agricultural resources are considered *significant and unavoidable (Class I).*

3.8.4.4 Mitigation Measures

3.8.4.4.1 Applicable to Both the Northern and Southern Subareas

Mitigation Measure AG-1: Buyer Notification. The following buyer notification shall be recorded on a separate information sheet with the final map pursuant to City of Oxnard Standard Conditions:

IMPORTANT: BUYER NOTIFICATION

The property was formerly used for agricultural purposes, and is near or adjacent to, land that is currently used for agricultural operations; and

The buyers may be subject to inconvenience or discomfort arising from agricultural operations on such nearby or adjacent land including, but not limited to, frost protection measures, noise, odors, fumes, dust, smoke, insects, operation of machinery (including aircraft) at any hour of the day or night, storage of equipment and materials necessary to agricultural operations, slow-moving farm equipment, and spraying or other application of chemical fertilizers, soil amendments (such as manure, compost materials and mulches) and pesticides (such as herbicides, insecticides and fumigants); and

If the buyers complete the purchase of the property, the buyers should be prepared to accept such inconvenience and discomfort as a normal and necessary aspect of living near or adjacent to agricultural operations.

This mitigation addresses Impacts AG-6 and AG-8.

Mitigation Measure AG-2: Agricultural Property Owners and School Agreement. Prior to occupancy of the proposed high school, the project applicant shall 1) obtain a written agreement from all agricultural property owners and farm operators whose property line is within 300 feet of the proposed high school buildings or recreation areas to implement Appendix C "Voluntary Guidelines for Use of Agricultural Pesticides Adjacent to Schools" of the Ag Futures Alliance document entitled Farming Near Schools, and 2) obtain an agreement from the site administrator of the proposed high school to implement Appendix D "Recommended Guidelines for School Emergency Procedures for Pesticide Drift." This measure partially mitigates adjacent farmers' loss of flexibility to apply chemicals. When combined with the proposed setback of 150 feet and vegetative barrier with chemical absorbing tree and shrub species, the measure is considered sufficient to lower the impact to less than significant levels for indirect effects to adjacent farmland.

This mitigation addresses Impact AG-2.

Mitigation Measure AG-3: Records of Contact and Communication. The proposed project shall have the following Condition of Approval: In the event that the agricultural property owners, farm operators, and school site administrators referenced above fail to execute the agreement to implement Appendix C, Appendix D, or Appendix E of Farming Near Schools, prior to the application for final occupancy of the school, the project applicant shall submit a detailed report to the City of Oxnard Planning Director setting forth the steps taken and contacts made to obtain the agreement. In addition, the project applicant shall send by registered mail a copy of the referenced appendices to the relevant owners, operators, and administrators and recommend adoption of these measures.

This mitigation addresses Impact AG-2.

Impacts AG-1, AG-2 and AG-3 are determined to be *less than significant (Class III),* and therefore no mitigation is required.

3.8.4.5 Residual Impacts

With implementation of Mitigation AG-1, and the air quality mitigation measures included in Section 3.4, Impact AG-4, Dust Impacts to Crops, Impact AG-6, Northern Subarea Land Use Conflicts, and Impact AG-8, Southern Subarea Land Use Conflicts would be reduced to less-than-significant levels.

Impacts AG-5 and AG-7, Northern and Southern Subareas Conversion of Prime Farmland or Farmland of Statewide Importance to Non-Agricultural Uses, are significant, unavoidable, and irreversible impacts that cannot feasibly be fully mitigated. Impact AG-9, Cumulative Conversion of Agriculturally Designated Lands to Non-Agricultural Uses, is also a significant, unavoidable, and irreversible impact that cannot feasibly be fully mitigated.

3.9
PUBLIC FACILITIES AND SERVICES

3.9 PUBLIC FACILITIES AND SERVICES

3.9.1 Existing Conditions

3.9.1.1 Public Schools

The Ormond Beach Study Area falls within the Ocean View School District (OVSD) and the Oxnard Union High School District (OUHSD). These districts will provide public education services to the proposed project. OVSD provides public school facilities for students from kindergarten through eighth grade, and OUHSD serves ninth through twelfth grade students. The location of school districts and facilities is shown in Figure 3.9-1.

3.9.1.1.1 Ocean View School District

OVSD serves the public educational needs within an approximate 80-square mile area extending from the Pacific Ocean inland to the City of Oxnard, and from the eastern boundary of Ventura County to the City of Port Hueneme. Existing district facilities consist of three elementary schools (K-5), one junior high school (6-8), and two early childhood education preschools.

According the California Department of Education (CDE), within OVSD in 2008-2009 school year, there were 2,001 students in grades K-6 and 507 in grades 7-8, for a total of 2,508 students. When enrollment is compared to capacity aggregated by grade level, an estimated capacity surplus of approximately 332 seats has been identified for grades K-8. Table 3.9-1 summarizes these capacity estimates.

TABLE 3.9-1
OVSD CAPACITY AND ENROLLMENT FIGURES

School (Grade Level)	Capacity	Enrollment (2008-2009)	Surplus/(Shortage)
Elementary (K-6)	2,304	2,001	303
Middle School (7-8)	520	507	13
District Total	2,824	2,508	316

Sources: OVSD SFNA 2007, and California Department of Education, 2008-2009 CBEDS

3.9.1.1.2 Oxnard Union High School District

OUHSD serves an approximate area bounded on the north generally by the Santa Clara River, on the east by the City of Camarillo, and on the southwest by the Pacific Ocean. Serving approximately 16,200 students during the school year of 2005/06, the District operates six comprehensive high schools and several special facilities within its service area.

The Ormond Beach Specific Plan Study Area currently lies within the enrollment boundary of the Channel Islands High School, which serves a diverse student body of over 2,600 students from Port Hueneme, Oxnard, and the Point Mugu Naval Air Station.

When enrollment is compared to capacity, a shortage of 262 seats is identified at Channel Islands High School and 3,052 seats districtwide in grades 9-12. Table 3.9-2 summarizes these capacity estimates.

TABLE 3.9-2
OUHSD CAPACITY AND ENROLLMENT FIGURES

School (Grade Level)	Capacity	Enrollment (2005-2006)	Surplus/(Shortage)
Channel Islands HS (9-12)	2,346	2,608	(262)
District Total (9-12)	13,086	16,138	(3,052)

Sources: OUHSD SFNA 2006, and California Department of Education, 2005-2006 CBEDS

Legal Framework for School Impact Fees.

Senate Bill 50 (SB 50 or "Leroy Green School Facilities Act"), enacted in 1998 as emergency legislation, represents the most significant school facility finance and developer fee reform legislation for school facilities construction and modernization since the adoption of the 1986 School Facilities Act. SB 50 establishes a new comprehensive program for funding school facilities based on 50 percent funding from the State and 50 percent funding from local districts, while limiting the obligation of developers to mitigate the impact of projects on school facilities.

Government Code Section 65995 establishes the construction fees, also known as "developer's fees." The legislation has recognized the need for the fees to be adjusted periodically to keep pace with inflation; therefore, the State Allocation Board increases the maximum fees according to the adjustment for inflation in the statewide cost index for Class B construction (buildings constructed primarily of reinforced concrete, steel frames, concrete floors, and roofs). The current maximum rates are $0.42 per square foot of new commercial/industrial construction and $2.63 per square foot of new residential construction.

A district meeting certain criteria can impose a higher fee (Level II), which theoretically represents 50 percent of the cost of building new facilities necessitated by new residential development. Level II was legislated so that the local developer fees could provide the 50 percent match for state funding. Level III fees are double Level II fees and go into effect only if the state has no state construction funding available. This condition has not occurred since the passage of SB 50. In March 2007, the OVSD Board authorized the collection a Level II fee of $3.04 per square foot of new residential construction.

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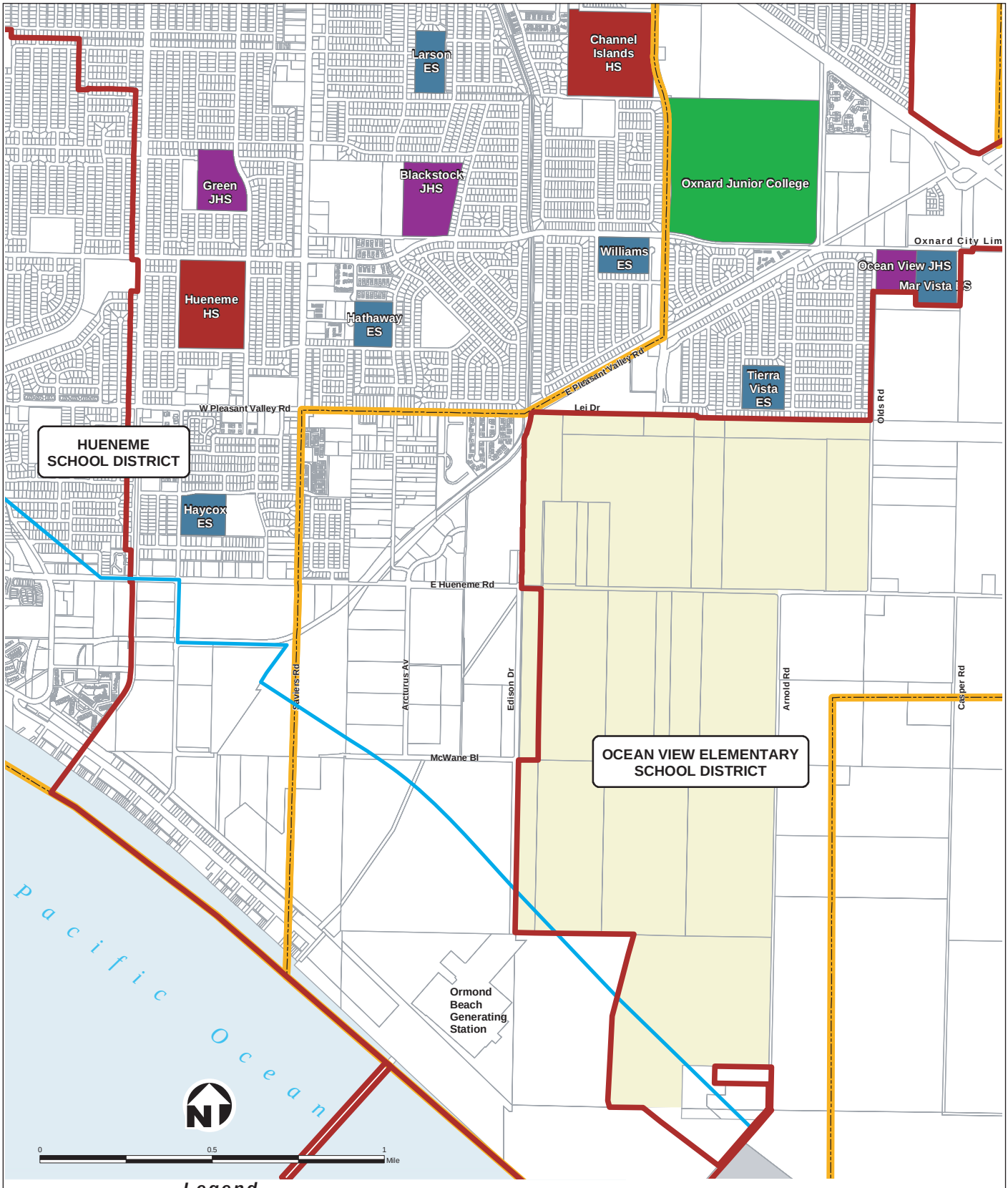

Legend

- Elementary School (ES)
- Junior High School (JHS)
- High School (HS)
- Junior College
- School District Boundary
- City Limits
- Specific Plan Project Area
- Naval Air Weapons Station Point Mugu
- Coastal Zone Boundary Line

Note: Oxnard Union High School District boundary encompasses a large portion of Ventura County, including all of the City of Oxnard Sphere of Influence, and extending east to the City of Camarillo and south to Point mugu.

Ormond Beach Specific Plan EIR	Figure 3.9-1. **SCHOOLS AND SCHOOL DISTRICTS**	Nov. 2009
URS Corporation		

The payment of school mitigation impact fees authorized by SB 50 is deemed to provide "full and complete mitigation of impacts" from the development of real property on school facilities (Government Code 65995). SB 50 provides that a state or local agency may not deny or refuse to approve the planning, use or development of real property on the basis of a developer's refusal to provide mitigation in amounts in excess of that established by SB 50.

SB 50 authorized statewide bonds in the amount of $9.2 billion, with $2.9 billion for K-12, for new construction, to add capacity to local school districts. In 2002, Assembly Bill 16 (AB 16) modified the School Facility Program and authorized two additional statewide bond measures, including $11.4 billion for K-12 approved by the voters in November ($8.05 billion for new construction) and a second bond measure for $10 billion for K-12 ($7.7 billion for new construction) approved by voters in March 2004. In November 2006, Proposition 1D was approved by voters and provides $7.3 billion for K-12 schools.

3.9.1.1.3 Higher Education Facilities

California State University Channel Islands

As Ventura County's first four-year public university, the California State University Channel Islands (CSUCI) opened in 2002 and enrolled its first freshman class in 2003 to become the California State University's twenty-third campus. CSUCI is located on 670 acres in the foothills and agricultural lands of Camarillo approximately nine miles east of the Study Area. Originally built in the early part of the 20th Century as the former Camarillo State Hospital, the University renovated many of the 1930s Spanish revival buildings to accommodate the new state-of-the-art campus. In 2003, CSCUI welcomed 2,366 students to campus. Enrollment for the 2005-2006 school year increased to 2,549, and enrollment is projected to rise to 4,000 students by 2007 and to 15,000 students by 2025. The University currently offers 18 majors. Other programs include extended education, service-learning opportunities for students, and a Center for Excellence providing technical assistance, training, and evaluation to enhance the quality and expertise of early childhood providers within Ventura County.

Oxnard College

Oxnard College is part of the Ventura County Community College District, which is a public community college district serving the residents of Ventura County. The district provides programs for students to transfer to four-year colleges and universities, occupational and vocational training, basic skills instruction, and continuing education opportunities at three colleges: Moorpark, Ventura, and Oxnard.

Founded in 1975, Oxnard College is located approximately one mile north of the Study Area. The newest of the three colleges in the Ventura County Community College District, it is located on 118 acres and is accessible via the Ventura Freeway or Highway 1. According to Spring 2006 enrollment figures, there were 6,143 students enrolled in classes at the campus.

Recently, Oxnard College established a Program for Accelerated College Education (PACE) in partnership with the California State University at Channel Islands. Under this program, Oxnard College will seek to improve student success for under-represented students using technology and staff development. This program will be developed using funds from a $1.8 million Title V grant over the next five years. In addition, plans to support future student growth include construction of a 32,000-square-foot collaborative building, "The Commons," which will be used for community and economic development programs and student union activities.

3.9.1.2 Fire Protection

The Oxnard Fire and Emergency Services Department provides fire protection services within the city limits, and outside the city limits in accordance with mutual aid agreements with neighboring jurisdictions, such as Ventura County. The existing fire station that currently serves the area is Oxnard's Fire Station No. 2, located on East Pleasant Valley Road less than ½ mile west of the Study Area. Other agencies in the area also include the Ventura County Federal Fire Department that provides fire protection services for the Port of Hueneme Naval Construction Battalion Base and the Point Mugu Naval Air Station. Figure 3.9-2 shows the location of Fire Station No. 2.

The Oxnard Fire Department has one of the lowest staffing ratios in the nation for a city of comparable size. Currently, there are 94 uniformed personnel translating to a ratio of approximately 0.5 firefighters per 1,000 residents. In California, the average staffing ratio is 1 firefighter per 1,000 residents, and the national average is 1.5 firefighters per 1,000 persons (Oxnard Fire Department, 2006).

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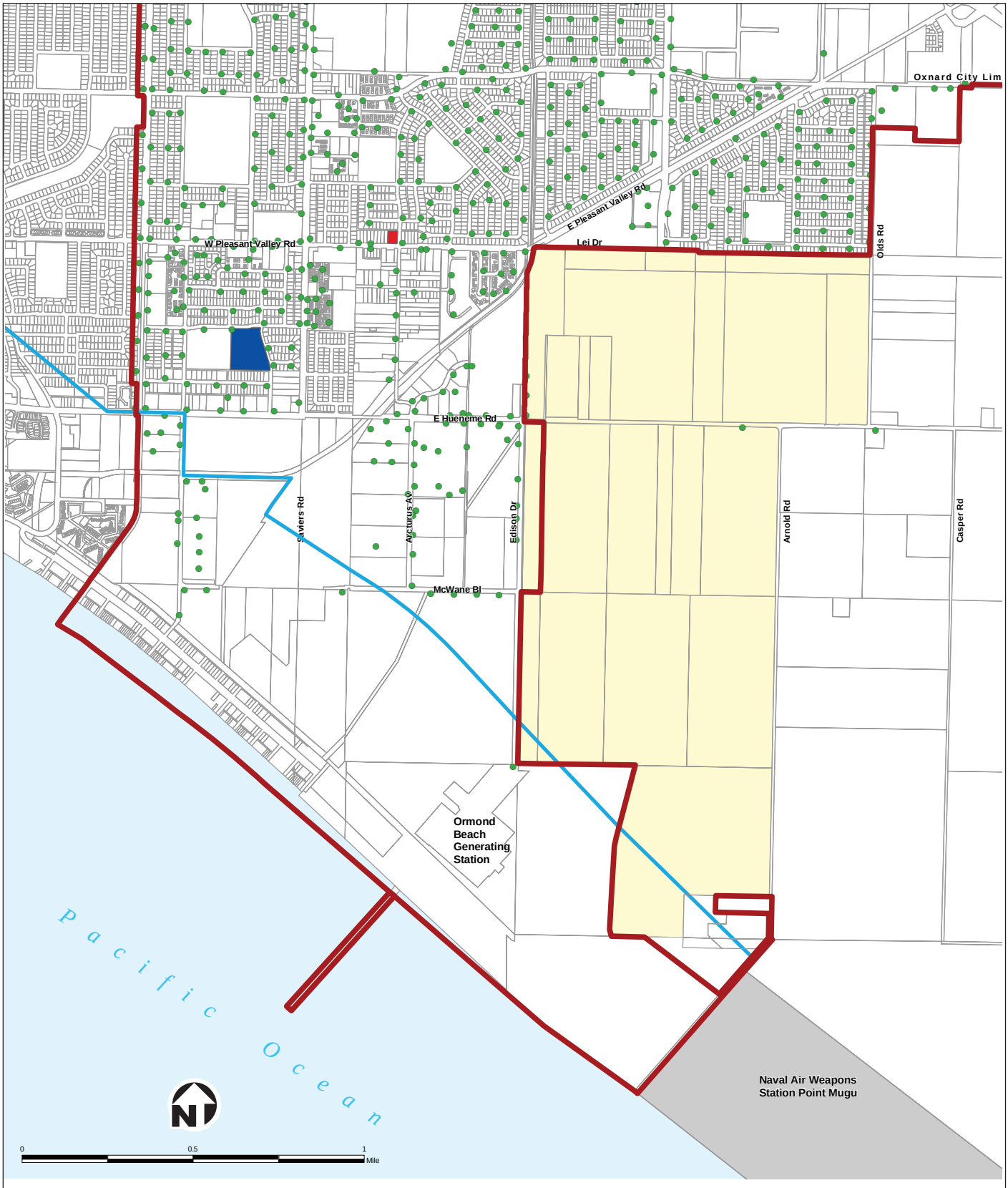

Legend

- Fire Station #2
- Storefront Police Station (Associated with Southwinds Park)
- Fire Hydrant
- City Limits
- Specific Plan Project Area
- Naval Air Weapons Station Point Mugu
- Coastal Zone Boundary Line

Ormond Beach Specific Plan EIR URS Corporation	Figure 3.9-2. **FIRE PROTECTION AND PUBLIC SAFETY FACILITIES**	Nov. 2009

As of March 2006 the City of Oxnard Fire Department opened its seventh station. Each fire station within the department has a primary service area, as well as secondary and tertiary service areas based on the nature of the call for service. For example, Station 1 specializes in aircraft firefighting and urban search and rescue (USAR). Station 3 also focuses on USAR. Stations 1 and 3 respond to USAR emergencies together and form Oxnard's USAR team, "Oxnard 61." USAR equipment is housed at both stations. Station 4 focuses on wildland firefighting and mutual aid response. Station 6 handles water rescue in the City of Oxnard. Station 1 also serves as the city's HAZMAT focus station and responds to hazardous materials events within the City, and in accordance with all mutual aid agreements, to all cities and unincorporated areas of Ventura County as needed. Response times vary across the City. The average response time is 5 minutes and 7 seconds. The fire department arrives on the scene within 5 minutes 66 percent of the time.

Other services provided by the City of Oxnard Fire Department include disaster preparedness, fire prevention education including a Kid's Safety House and Fire Line television show, review of new development, and records management and regulation of hazardous materials.

3.9.1.3 Law Enforcement

The Study Area, due to its unincorporated status, currently lies within the service area of the Ventura County Sheriff's Department. However, upon annexation the responsibilities for service provision will transition to the City of Oxnard. The Oxnard Police Department provides law enforcement services within city limits. The primary police station is located in the Public Safety building located at the intersection of Third and "C" Streets downtown. Figure 3.9-2 shows public safety facilities near the proposed project area. The Police Department Services consists of a staff of 221 sworn officers and 136 civilian personnel. Currently, the Department maintains a ratio of 1.22 officers per 1,000 residents (Oxnard Police Department, 2004). This ratio is below the national average of 2.3 officers per 1,000 residents.

The City of Oxnard divides its police protection services into three divisions: Field Services, Investigations, and Administrative Services. The Field Services division is divided into four districts, with each district divided into two smaller response beats patrolled 24 hours a day. Other functions provided by the Oxnard Police Department include the collection of crime statistics, distribution of crime prevention information, Neighborhood Watch Program, animal control, and code enforcement services.

The California Highway Patrol (CHP) and the Port Hueneme Police Department (PHPD) provide additional public safety support to the City of Oxnard. The CHP maintains jurisdiction over the freeway and state highway system, and the PHPD serves the City of Port

Hueneme to the west. Both agencies provide additional public safety support to the City of Oxnard as needed. Response times vary across the city, with the average being 5.8 minutes.

3.9.1.4 Parks and Recreation

The City's Parks and Recreation Services and Public Works Department maintains 48 park, recreation, and community facilities throughout Oxnard, with the goal of providing a variety of recreational activities for Oxnard residents. Utilizing a five-category classification system (based on the park's primary purpose and service area), the City is able to define its existing needs and forecast its future demand. These categories are Mini-Parks, Neighborhood Parks, Community Playfields, Community Parks, and Special Purpose Facilities. The City's 2020 General Plan describes these categories as follows:

- Mini-Parks are typically located within close proximity to apartment complexes, townhouse developments, or senior citizen housing. The size and scope of this type of facility lends itself well to private development and maintenance by homeowners' associations and apartment complexes.
- Neighborhood Parks are designed to provide surrounding neighborhoods with an area for intense recreational activities. The facility should be positioned in the middle of the neighborhood providing easy accessibility to neighboring residents. Free play areas are emphasized for a variety of recreational purposes including softball, soccer, kite flying, Frisbee games, and other similar activities. A playground with various pieces of play equipment is also a central feature of most Neighborhood Parks. Facilities are generally not lighted with minimal improvements made to activity surfaces (i.e., ball fields with raised mounds, infield markings, or spectator equipment). The minimum land area for a Neighborhood Park is between 5 and 10 acres. These parks may be city-owned facilities or developed as a joint use facility with school districts.
- Community Playfields are large recreational areas, usually athletic complexes, designed to provide areas for organized recreation. Amenities include off-street parking facilities, limited spectator facilities, and can potentially be lighted for evening use. Community Playfields are designed to serve a larger spectrum of the City's population.
- Community Parks provide diverse recreational opportunities for several surrounding neighborhoods. Amenities are geared for intense use and include sports complexes, large swimming pools, group picnic areas, gardens, and bandstands. Larger than Neighborhood Parks, Community Parks usually comprise at least 20 to 30 acres accommodating both active and passive recreational opportunities.
- Special Purpose Facilities are areas set aside for specific or single-purpose activities, such as golf courses, nature centers, marinas, zoos, rifle ranges, historical sites, wildlife/ conservation areas, etc.

The 2020 General Plan divides the City of Oxnard into five Recreation Planning Areas (RPAs) for the assessment of recreational needs within each area. The Study Area is located within the South RPA. Currently, there are nine parks within the South RPA: Lathrop Park, Lemonwood Park, College Park, College Estates Park, Johnson Creek Park, Carty Park, Pleasant Valley Park, Cypress Park, and Southwinds Park. The parks nearest to the Study Area are Pleasant Valley Park (approximately a mile and a half to the northwest) and Southwinds Park (approximately a mile to the west) as shown on Figure 3.9-3. The 2020 General Plan recommends four future additional parks to be located within the South RPA.

Other City-sponsored recreational opportunities that will be available to the future population of the Study Area include the Oxnard Tennis Center, River Ridge Public Golf Course, and the Oxnard Performing Arts and Convention Center. Also located near Oxnard are the state-owned and operated Point Mugu State Park, approximately 10 miles from the Study Area and the McGrath State Beach, approximately 8 miles from the Study Area. The main entrance to the Channel Islands National Park, operated by the National Park Service, is located 12 miles from the Study Area.

The provision of parks is typically guided by location and size standards based on the existing and forecast population of their intended service area. According to the 2020 General Plan, the standard for the provision of neighborhood and community parks is 1.5 acres per 1,000 persons. Although this standard is much lower than the 3.0 to 5.0 acres per 1,000 persons originally designated by the Quimby Act (passed in 1975), the City standard factors in its adjacency of the Pacific Ocean and beaches that offset the need for traditional community park facilities. The City does not identify standards for Mini-Parks, Community Playfields, or Special Purpose Parks. Residential development proposed within the Study Area will need to consider its impact on existing parks and provide additional park facilities pursuant to the standards identified in the 2020 General Plan.

3.9.1.5 Solid Waste Management

The collection, disposal and reuse of solid waste are issues of statewide and regional significance. As municipalities continue to realize the hazards imposed by the continued use of traditional landfills, including air emissions and leachate into water tables, alternative solid waste disposal/reuse methods are being employed. The regulatory and environmental issues associated with landfills prompted the state legislature to enact the California Integrated Waste Management Act, Assembly Bill 939 (AB939). The legislation directs the state, through the California Integrated Waste Management Board, to oversee the design and implementation of local integrated waste management plans. AB939 mandated that local jurisdictions meet landfill diversion goals of 25 percent by 1995 and 50 percent by 2000. Diversion goals and other requirements are implemented by local governments through disposal-based reporting systems.

The City of Oxnard is responsible for refuse collection and recycling for 30,000 homes, 6,000 businesses, and over 100 industrial complexes within its incorporated area. (Oxnard Solid Waste Services, 2004). In addition to collecting residential, commercial and industrial refuse and recyclables, the Solid Waste Division operates an aggressive code enforcement program aimed at minimizing illegal dumping within the City.

Since the closure of the City's Bailard landfill in August 1996, collected refuse and recyclables are transported to the Del Norte Regional Recycling and Transfer Station. Located at the southwest corner of Del Norte and Sturgis (approximately seven miles northeast of the Study Area), the station is owned by the City of Oxnard and operated privately. Del Norte processes approximately 1,200 tons of refuse and recyclables per business day (which is about 350,000 tons each year) and its permitted capacity is 2,779 tons per day (California Integrated Waste Management Board, 2006). Del Norte serves as a regional transfer station and material recovery facility. It was developed to provide for the disposal needs of the community, support solid waste reduction and meet the State's AB939 mandate to divert 50 percent of the solid waste stream from landfills. Features of the facility include a self-haul and transfer station, a recycling and buy-back center, a household hazardous waste collection facility, an educational center, and administrative offices. On June 15, 2004, the California Integrated Management Board approved Oxnard's Diversion Rate of 67 percent for calendar year 2002. Not only was the City's rate the highest for all communities within Ventura County, it was also one of the highest rates achieved statewide.

In 1991, the City adopted a Source Reduction and Recycling program designed as a comprehensive strategy to meet the mandates of AB939's waste reduction provisions. Since 1991, the City has taken aggressive steps towards the provision of services and programs designed to reduce waste and encourage recycling. Existing services include:

- Curbside recycling in the City's Residential Zones.
- Household hazardous waste collection events for residential and Conditionally Exempt Small Quantity Generator business (CESQGs).
- CRV Beverage Container Recycling Program where consumers can receive cash for recycling empty aluminum, glass, plastic, and bimetal beverage containers at 13 locations within the City of Oxnard.
- Implementation of a Waste Reduction and Education Program providing information to residents, businesses, schools, and other local organizations on source reduction, composting, household hazardous waste management, public outreach and environmental education. This program also supports the Economic Development Corporation and the Recycling Market Development Zone Program. It encourages the development of new recycling-related businesses and the use of recycled materials by existing businesses in their manufacturing processes.

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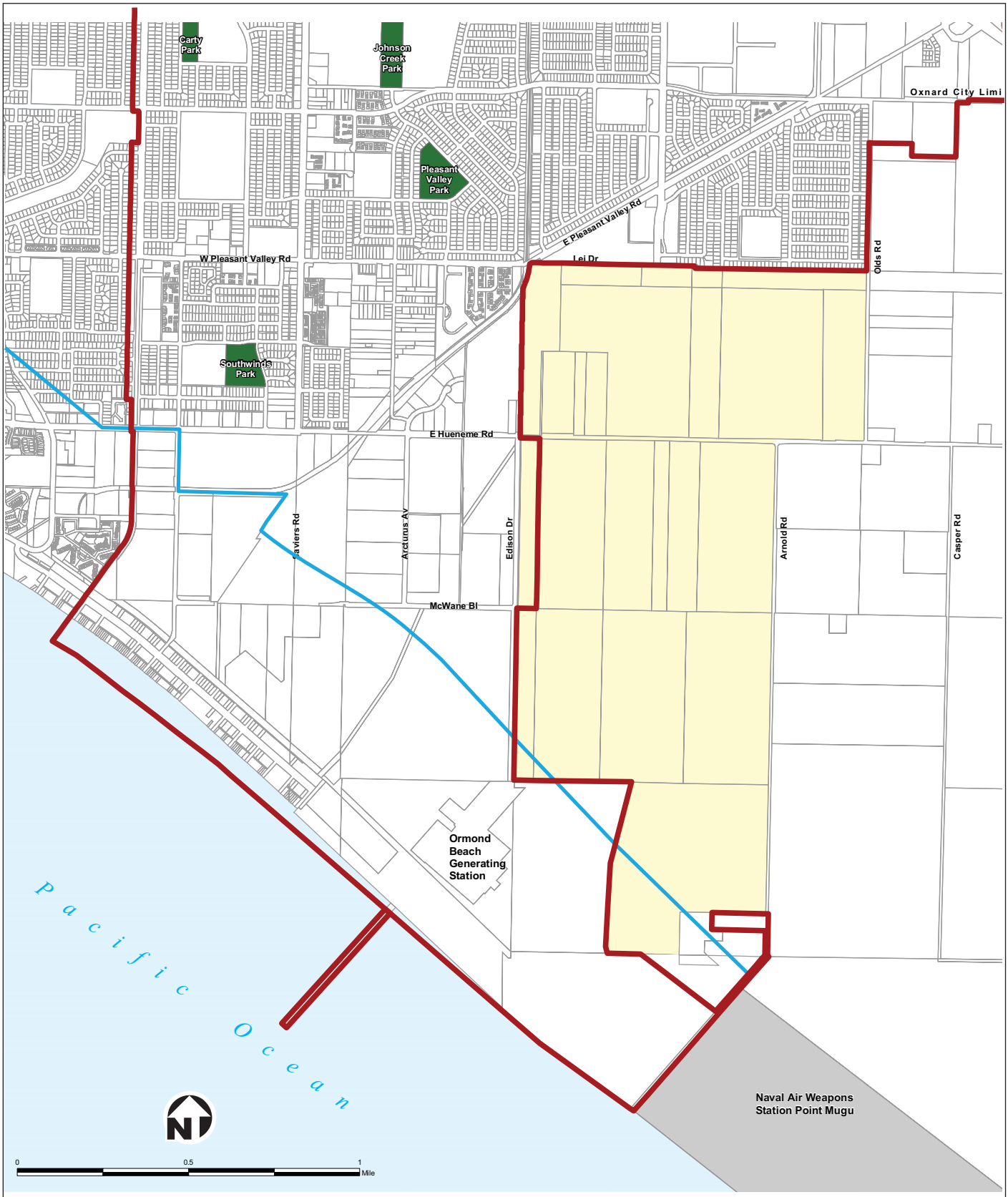

Legend

- Existing Neighborhood Park
- City Limits
- Specific Plan Project Area
- Naval Air Weapons Station Point Mugu
- Coastal Zone Boundary Line

Ormond Beach Specific Plan EIR **URS Corporation**	Figure 3.9-3. **EXISTING PARK FACILITIES**	Nov. 2009

3.9.1.6 Library Services

The Oxnard Public Library operates three library facilities that provide a wide variety of services including: a collection of over 370,000 books, videos, books on tape, and CDs; state-of-the-art technology and resources (including internet access); free programs for children and adults; literacy information for adults; materials for beginning readers; and meeting spaces for nonprofit groups (Oxnard Public Library, 2004). The main branch of the library is located in the Oxnard Civic Center on A Street. The most accessible library to the Study Area is the South Oxnard Library (200 East Bard Road), which is one of the two branch libraries (Figure 3.9-4). The other branch library is located at 1500 Camino del Sol.

A five-member advisory board directs Public Library operations. A Strategic Plan of Service was developed for the Oxnard Public Library in April of 2001. This plan provides future direction to the system with focus on the following issues: maintaining community focus, enhancing technology and electronic information systems, providing services representative of the community's diverse cultural composition, providing teaching and learning services, evaluating existing library conditions, and developing marketing strategies designed to promote awareness of library facilities, resources, and events.

3.9.1.7 Energy/Public Utilities

The provision of energy includes the availability of electricity and natural gas supplies and the associated distribution facilities. These services are provided by Southern California Edison (SCE) and Southern California Gas Company (TGC), respectively. These public utility providers are regulated by the California Public Utilities Commission (CPUC), which is responsible for the provision of safe, reliable utility service at reasonable rates, customer protection from fraud, and promotion of the State's economic health.

3.9.1.7.1 Electrical Service

Within Ventura County, SCE operates two major generating facilities: one near Mandalay Bay and the other at Ormond Beach. Power lines run along the SCE transmission corridor along the northerly and westerly edges of the Study Area.

SCE distributes electricity throughout the City and the Study Area through an interconnected system of generating plants, transmission lines, and power substations. Electrical generation is produced at the Reliant Energy Ormond Beach Generating Station, located at 6635 South Edison Drive, and the Mandalay Generating Station, located at 393 North Harbor Boulevard. The Reliant Energy Ormond Beach Generating Station is a gas fired, 1,500 Megawatt facility and provides electricity, which is conveyed through the network of 220 kV lines located on the eastern side of Edison Drive to the three 66 kV distribution substations in Oxnard: the Levi substation, located at U.S. 101 and Dempsey Road, which serves the Port of Hueneme

and the southern section of the City of Oxnard; the Gonzales substation, at the northeast corner of Oxnard Boulevard and Vineyard Avenue, which serves the north and northwest sections of the City of Oxnard; and the Channel Islands substation, at the corner of Hemlock and Victoria streets in Port Hueneme, which serves Port Hueneme and the southwest section of the City of Oxnard.

Electrical power is distributed to individual customers from the substations through distribution lines operating at 16 kV or 4 kV. These lines are normally extended underground from the substations and integrated with the existing distribution network of the area.

3.9.1.7.2 Natural Gas Service

TGC transports natural gas supplies to Ventura County and

its cities through its fixed intra-state transmission and distribution system. There are also several locations in the City to access Compressed Natural Gas supplies for automobiles, including 100 Del Norte Boulevard and 1600 Patton Court, which are 2.5 to 3.0 miles north of the Plan Study Area.

TGC supplies gas resources to the City of Oxnard and the Study Area. A “high pressure” gas transmission line runs along the westerly side of the Study Area.

3.9.1.8 Other Public Utilities

3.9.1.8.1 Telephone

Verizon Communications provides telephone and internet service to the Study Area via the neighborhoods to the north of the project.

3.9.1.8.2 Cable Television

Adelphia provides television and internet service to the Study Area via the neighborhoods to the north and service connections to the west, on Hueneme Road. Time Warner recently purchased Adelphia and is undergoing changeover negotiations with the City of Oxnard.

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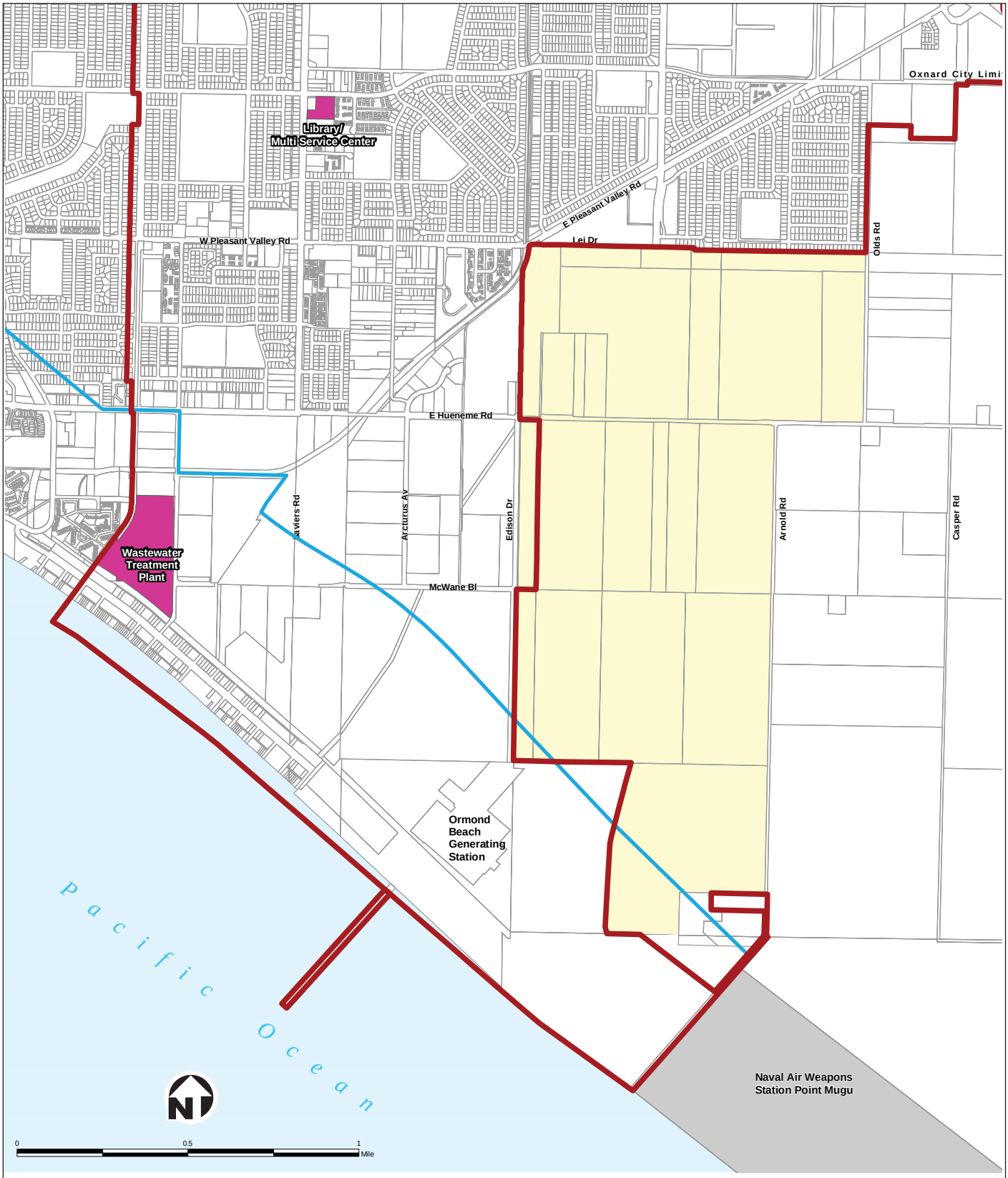

Legend

- Community Facility
- City Limits
- Specific Plan Project Area
- Naval Air Weapons Station Point Mugu
- Coastal Zone Boundary Line

Ormond Beach Specific Plan EIR URS Corporation	Figure 3.9-4. **EXISTING COMMUNITY FACILITIES**	Nov. 2009

3.9.2 Regulatory Framework

The regulatory framework for public facilities and services generally consists of a requirement to provide an adequate supply of services (as defined uniquely by each type of service) to present and future customers. General Plans at the local level require developers to account for the provision of adequate public services and utilities prior to implementing a development project. Oversight of the public service and utility providers is provided by an assortment of Boards, Commissions, and other types of local and regional institutions and agencies.

3.9.2.1 California Environmental Quality Act

The basic goal of the California Environmental Quality Act (CEQA) is to develop and maintain a high-quality environment now and in the future. The CEQA Guidelines provide a framework for the analysis of impacts to Public Services and Facilities.

3.9.2.2 City of Oxnard 2020 General Plan – Public Facilities Element

The Public Facilities Element of the City of Oxnard 2020 General Plan includes the following Goals, Objectives, and Policies:

Goals. Public facilities and services adequate to serve existing and future development within the City's Urban Service Area.

Objectives

1. Ensure a water distribution and storage system adequate for existing and future development.
2. Ensure adequate sanitary sewer and wastewater treatment plant capacity to accommodate existing and future development.
3. Reduce solid waste requiring disposal at local landfills and encourage recycling.
4. Provide adequately sized storm drain systems to accommodate existing and future needs.
5. Provide adequate police and fire facilities.

Policies

Schools

34. The City shall continue to collect development fees for school district use from commercial, industrial and residential development.

35. The City will work with the school district to select sites for new facilities to assure that the number, type and location of school facilities is commensurate with City growth.

Fire Protection

38. The City shall consider establishing new fire stations as shown on the Public Facilities Map as needed. The specific timing and staffing of such stations shall be incorporated into the City's Five-Year Development Plan.

Police Services

36. The City will monitor the need for additional facilities as part of the Five-Year Development Plan.

Solid Waste

1. Resource recovery shall be utilized to reduce the amount of solid waste that needs disposal.
3. The City shall require applicants for discretionary development approval to employ practices that reduce the quantities of wastes generated and promote resource recovery.
7. The City shall implement or participate in appropriate source reduction and recycling programs to meet mandated waste reduction of 25 percent by 1995 and 50 percent by 2000 in accordance with the California Integrated Waste Management Act of 1989.

Public Utilities

29. The General Telephone Company will acquire the necessary right-of-way for its lines. Any special requests, other than for the provision of services, such as undergrounding, would be at the expense of the developer for each different development.
30. Any services and facilities will be built in accordance with the Southern California Edison Company's policies and extension rules on file with the California Public Utilities Commission.
31. All services and facilities built will be in accordance with the company's policies and extension rules on file with the California Public Utilities Commission and federal regulatory agencies.
33. Encourage the use of solar space and water heating technologies to lessen the demand for fossil fuels.

3.9.2.3 City of Oxnard 2020 General Plan – Parks and Recreation Element

The Parks and Recreation Element of the City of Oxnard 2020 General Plan includes the following Goals, Objectives, and Policies, which are applicable to the proposed project:

Goals. Provide a variety of quality recreation facilities and resources for Oxnard residents.

Objectives

1. Expand the variety of park types developed by the City
2. Build sufficient Neighborhood Parks, Community Parks and Special Purpose Facilities to meet the needs of the future residents of the City by the year 2020
6. Reduce overuse of neighborhood parks where possible
7. Create a physical link for pedestrian and bicycle traffic between facilities
8. Provide all Oxnard residents with access to natural/scenic areas such as the Santa Clara River Greenbelt, Ormond Beach, and Oxnard Dunes
9. Rehabilitate deteriorated facilities

Policies

13. The City shall consider including specialized recreational facilities in the Ormond Beach Specific Plan Area.
18. Prior to incorporation of additional land into the City, park provision shall be assessed and potential additional parkland identified.

3.9.2.4 Solid Waste

3.9.2.4.1 California Integrated Waste Management Act (Assembly Bill 939)

Solid waste disposal is an issue of regional and statewide importance. Because of the environmental concerns associated with landfills, Assembly Bill 939 (AB 939) was enacted by the state legislature to add Section 40050, et seq., to the State Public Resources Code. The legislation, also known as the California Integrated Waste Management Act, mandates that all local and county governments adopt a Source Reduction and Recycling Element (SRRE) to identify means of reducing the amount of solid waste reaching landfills. The law requires that landfill disposal be reduced by 25 percent by the year 1995 and 50 percent by the year 2000.

3.9.2.4.2 City of Oxnard Source Reduction and Recycling Element (SRRE)

In 1991, the City of Oxnard adopted an SRRE to provide a comprehensive strategy to meet the mandates of AB 939. Waste reduction programs from the SRRE include recycling programs, reuse programs, and regional materials recovery. In support of the City's efforts to reduce the volume of solid waste entering local landfills, a Special Use Permit for a Regional Materials Recovery and Waste Transfer Facility (MRF) was approved in 1993. The facility opened in 1995. The MRF is an integral part of the source reduction and recycling program. The principal activity of the facility is to remove recoverable material before transferring the refuse to a landfill for disposal.

3.9.2.4.3 City of Oxnard Household Hazardous Waste Element (HHWE)

The Household Hazardous Waste Element (HHWE) for the City of Oxnard seeks to maximize the removal of household hazardous waste from the waste stream, thereby enhancing the environment and quality of life.

3.9.2.5 Energy/Public Utilities

3.9.2.5.1 Deregulation

The Electricity Utility Industry Restructuring Act of 1996 allowed the generation of electricity to become a competitive market in the State of California. This law was intended to benefit consumers by allowing energy companies to become competitive with one another, lowering prices of energy and creating competition to develop better technologies. In the year 2000 retail prices hit all time highs in California and generation capacity shortages forced temporary power outages in northern California. The energy problem involved a combination of large increases in wholesale electricity prices, intermittent power shortages during peak demand periods and deterioration of the financial stability of California's three major investor-owned utilities: Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric.

The State of California developed a three-part plan to address the situation, consisting of increasing power supplies, improving energy conservation, and stabilizing the electricity industry in California.

3.9.2.5.2 Title 24 of the California Code of Regulations

In response to the energy crisis of 2000, the California Assembly passed AB 970 or the California Energy and Reliability Act of 2000. The legislation modified Title 24 of the California Government Code in order to promote energy efficiency in new construction. The new energy reducing standards were issued and implemented into building permits issued

after June 1, 2000. Since AB 970 was adopted, there have been additions to the requirements in order to save energy (Residential Manual for Compliance with California's 2001 Energy Efficiency Standards, 2001).

3.9.3 Project Impacts

3.9.3.1 Thresholds of Significance

3.9.3.1.1 CEQA

The CEQA Environmental Checklist (Appendix G) states that a project would have significant impacts on public services or on utilities and service systems if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - Fire protection
  - Police protection
  - Schools
  - Parks
  - Other public facilities
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB)
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Not have sufficient water supplies available to serve the project from existing entitlements and resources, and new or expanded entitlements would be needed
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

- Not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs
- Not comply with federal, state, and local statutes and regulations related to solid waste

In addition, the CEQA Environmental Checklist (Appendix G) states that a project would have significant impacts on parks and recreation facilities if the project:

- Would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated
- Includes recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment

3.9.3.1.2 City of Oxnard

In addition to CEQA, the City of Oxnard has its own criteria for determining significant project impacts, detailed below by issue area.

Fire Protection

The City of Oxnard considers a project to have a significant impact on fire protection services if:

- Adequate response times to handle calls for services cannot be maintained
- Special fire protection problems are associated with the proposed project or general area
- There would be substantial interference with an evacuation plan

Law Enforcement

The City of Oxnard considers the impact of the project on police services significant if the project would result in:

- Inadequate police staffing
- A substantial increase in response times to handle calls for services
- Substantial interference with an evacuation plan

Parks and Recreation

The City of Oxnard considers the impact of a project to be significant if sufficient park space is not provided based on the following standards:

- Neighborhood parks: 1.5 acres per 1,000 new residents
- Community parks: 1.5 acres per 1,000 residents

The City does not identify standards for mini-parks, community playfields, or special purpose parks.

Solid Waste Management

The City of Oxnard considers the impact of a project on solid waste collection services and disposal facilities to be significant if:

- It would hinder the City's capability to implement or participate in appropriate source reduction and recycling programs to meet mandated waste reduction of 50 percent past the year 2000 in accordance with the California Integrated Waste Management Act of 1989.

Library Services

Based on the goals contained in the Public Facilities Element of the General Plan, the City of Oxnard considers the impact of a project on library services to be significant if:

- The City's library system does not have the capacity to serve the project.

3.9.3.2 Public Schools Impacts

Proposed development within the Study Area within the OVSD and OUHSD shall be subject to new development fees pursuant to Government Code Section 65995. Under State law, payment of the developer fees provides full and complete mitigation of the project's impacts on school facilities. A total of 551 single-family detached (SFD) and 732 single-family attached (SFA) homes are proposed for development in the Northern Subarea. The impact of the proposed project on each of the school districts is discussed below.

3.9.3.2.1 Applicable to Both Northern Subarea and Southern Subarea

Oceanview Elementary School District

To evaluate school impacts, student generation rates identified for SFD and MFA units in the *2006-2007 School Facility Needs Analysis* have been applied to the anticipated development in the Study Area. Table 3.9-3 shows the yields broken down by grade level.

TABLE 3.9-3
2006-2007 OVSD STUDENT GENERATION RATES

Dwelling Unit Type	K-5	6-8	Total
Single Family Detached	0.2340	0.1135	**0.3475**
Single Family Attached	0.1017	0.1186	**0.2203**

Source: OVSD School Facility Needs Analysis, February 2009.

Based on these generation rates, the construction of 1,283 new units within the Study Area would generate approximately 353 additional K-8 students, as shown in Table 3.9-4.

TABLE 3.9-4
STUDENT GENERATION

Dwelling Unit Type	Number of Units	Number of Students		
		K-5	6-8	K-8
Single Family Detached	551	129	63	192
Single Family Attached	732	74	87	161
Total	**1,283**	**203**	**150**	**353**

Impact PFS/Schools-1: Elementary Schools. Development of the Ormond Beach Specific Plan Study Area may generate a partial need for a new elementary school. A 10-acre (net) elementary school site has been designated as a potential use within the Northern Subarea, adjacent to West Park. The applicant for the Northern Subarea, which includes the new residential units and thus generates the demand for schools, and OVSD are working cooperatively on a mitigation agreement to facilitate the land acquisition, site improvements and construction of a new school. If OVSD and the applicant do not reach a mutually satisfactory agreement, the project will be subject to the statutory requirement to pay developer fees pursuant to Government Code Section 65995, which would thus reduce the impacts of the Northern Subarea component to less than significant. The developer of the Southern Subarea component will also be required to pay the statutory developer fees for commercial/industrial development. Payment of the developer fees will reduce the impact of the Southern Subarea on school facilities to less than significant.

Based on the foregoing analysis, implementation of the specific plans would generate additional students in the OVSD. Payment of the statutory development fees pursuant to Government Code Section 65995 or the agreements between OVSD and the project applicants to execute mitigation agreements would reduce these impacts to a level considered *less than significant (Class III).*

Oxnard Union High School District

To evaluate school impacts, student generation rates identified in the *2006 School Facility Needs Analysis* have been applied to the anticipated development in the Study Area. Table 3.9-5 identifies these student generation rates.

TABLE 3.9-5
2006 OUHSD STUDENT GENERATION RATES

Dwelling Unit Type	9-12
Single Family Detached	0.1958
Single Family Attached	0.1326

Source: OUHSD School Facility Needs Analysis, 2006

Based on these generation rates, the construction of 1,283 new units within the Study Area would generate approximately 205 additional 9-12 students, as shown in Table 3.9-6.

TABLE 3.9-6
STUDENT GENERATION

Dwelling Unit Type	Number of Units	Number of Students
Single Family Detached	551	108
Single Family Attached	732	97
Total	**1,283**	**205**

Development of the Northern Subarea will contribute to the districtwide need for a new high school. A 48.5-acre (net) high school site has been designated as a potential use within the Northern Subarea, near the northwest corner of Hueneme Road and Olds Road.

The OUHSD is currently operating with a shortage of over 3,000 seats for grades 9-12. Thus, even without development of the Ormond Beach Study Area, the OUHSD would require either the provision of new or physically altered facilities. As noted above, the Northern Subarea has identified a potential site for a new high school which could be acquired by OUHSD.

Impact PFS/Schools-2: High Schools. Current school capacity does not adequately accommodate the anticipated number of students generated from the Ormond Beach Study Area, resulting in a potentially significant impact. This impact would be reduced to a level considered less than significant through payment of state-mandated new development fees (Government Code Section 65995) by the applicants for development of the Northern and Southern Subareas of the Ormond Beach Study Area.

Based on the foregoing analysis, implementation of the proposed project would generate additional students in the OUHSD. Payment of required new development fees pursuant to Government Code Section 65995 would reduce these impacts to a level considered *less than significant (Class III)*.

3.9.3.2.2 Cumulative Public Schools Impacts

Impact PFS/Schools-3: Cumulative Schools. Potential project impacts to school services would be less than significant through implementation of existing plans, programs and policies. The proposed project includes two potential school sites within the Study Area. No significant cumulative impacts related to schools are anticipated to occur; therefore, the impact would not be cumulatively considerable.

3.9.3.2.3 Mitigation Measures

No mitigation measures are recommended, as no significant impacts have been identified.

3.9.3.2.4 Residual Impacts

No significant residual impacts to school facilities will result from the proposed project.

3.9.3.3 Fire Protection Impacts

Although the Study Area is located in unincorporated County of Ventura, it is currently served by the City of Oxnard Fire Department and will continue to be so served following annexation. A new fire station will be built in the south Oxnard area (outside the Study Area) to accommodate the proposed project and other nearby development under terms of the Development Agreement for the proposed project.

3.9.3.3.1 Applicable to Both Northern Subarea and Southern Subarea

Impact PFS/Fire Protection-4: Construction-related Fire Hazards. There are no special fire protection problems associated with the proposed projects. A large amount of wood framing would occur within the Study Area during construction. In association with the framing operations, electrical, plumbing, communications, and ventilation systems would be installed in each structure. It is expected that these systems would be properly installed during framing operations, as they would be subject to City Codes and inspection by City personnel. In addition, construction sites would also be subject to City requirements relative to water availability and accessibility for firefighting equipment. Therefore, adherence to City Codes and requirements during construction would reduce the potential for fire hazards within the Study Area to *less than significant levels (Class III)*. Future office and industrial uses will also be required to comply with all City Codes and fire safety requirements, which would

also reduce the potential for fire hazards within the Study Area to *less than significant levels (Class III).*

Impact PFS/Fire Protection-5: Delays in Emergency Response. Construction of the proposed project would increase traffic both on and adjacent to the Study Area during work hours. Slow-moving construction-related traffic on local adjacent roads may temporarily affect traffic flows on local roadways and delay emergency vehicles traveling through the area. The use of flagmen and other standard construction practices would also contribute to reduce the potential for emergency vehicle delay. This impact is considered *less than significant* given the periodic and short-term nature of construction-related traffic *(Class III).*

With regard to emergency plans and evacuation routes, the proposed project would be required to comply with all standards and policies included in the City of Oxnard General Plan Safety Element and appropriate sections of the City's Zoning Ordinance. Therefore, *no impacts* to emergency plans and evacuation routes would occur.

The City of Oxnard has compiled a Fire Protection Planning Guide of general development requirements which involve fire prevention and protection measures. All development within the city must comply with the guide's requirements. All development will also be subject to a detailed review by Fire Department staff to ensure compliance with the requirements. Specific measures for individual development projects would be identified during the review of development plans by the Fire Department.

The City of Oxnard Fire Department will be responsible for fire protection and emergency medical services to the project area. As described in the Existing Conditions section, the Oxnard Fire Department has one of the lowest staffing ratios in the nation for a city of comparable size. Currently, there are 94 uniformed personnel translating to a ratio of approximately 0.5 firefighters per 1,000 residents. The Oxnard Fire Department's response time objective is to arrive at the scene within 5 minutes 90 percent of the time. Currently, the fire department arrives at the scene within 5 minutes only 66 percent of the time. With the increase in service demand resulting from development of the Study Area, fire and emergency services staff may have even more difficulty maintaining adequate response times.

A new fire station is proposed in the south Oxnard area to accommodate future development, including these projects. This topic is discussed in more detail separately for the Northern and Southern subareas below.

3.9.3.3.2 Applicable to Northern Subarea

The proposed project would allow for development of up to 1,283 residences, along with commercial buildings, school facilities, parks, and light industrial uses. Based on US Census data, typical household size in Oxnard is 3.85 persons. Based on the typical household size and the number of residential units, the proposed development will add approximately 4,940 people to the area. The addition of approximately 4,940 residents would affect the ratio of firefighters per 1,000 residents in the City of Oxnard. With the increase in service demand resulting from development of the Northern Subarea, fire and emergency services personnel may have even more difficulty maintaining adequate response times to handle calls for services. The Development Agreement between the City of Oxnard and the developer of the Northern Subarea require the developer to pay the City $2,000,000 prior to the issuance of the 750th building permit for the Project. This payment represents one-half of the City's current estimate of the cost to fully construct and equip a proposed fire station that will serve, among other areas, the Northern Subarea. If the actual cost to construct and equip the fire station is less than $4,000,000, the City will reimburse the difference.

Impact PFS/Fire Protection-6: Community Fire Protection Service (Northern Subarea). The demand for fire protection services would increase as the Northern Subarea develops over time. As described above, the Development Agreement between the City of Oxnard and the developer will require payment of funds to support construction of a new fire station, ensuring that the development permitted under the proposed project does not adversely affect the City's ability to provide adequate fire protection services. Compliance with the Development Agreement will reduce impacts to less-than-significant levels. Therefore, this impact is considered *less than significant (Class III).*

3.9.3.3.3 Applicable to Southern Subarea

The proposed project would allow for development of business/research park and light industrial uses. In addition, the Southern Subarea will include parks and open space areas. As with the Northern Subarea, with the increase in the number of structures and people working onsite, fire and emergency services staff may have even more difficulty maintaining adequate response times to handle calls for services. Under the terms of the development agreement governing development of the Southern Subarea, the developers will be required to pay a Fire Station Improvement and Maintenance Fee to support construction and operation of a fire station to provide fire protection services to area. This will include $1,000,000 to cover capital improvement costs and an annual maintenance fee to cover 25 percent of the operating costs of the new station (not to exceed $250,000 annually for 15 years). The fee will be phased-in and allocated to each parcel within the Southern Subarea based on the square footage of the parcel divided by the total square footage of parcels in the Project, which is currently estimated to be +/- 278 acres.

Impact PFS/Fire Protection-7: Community Fire Protection Service (Southern Subarea). The demand for additional fire protection services would increase as the Southern Subarea develops over time. The Development Agreement between the City of Oxnard and the developer will require the payment of fees to support both capital improvement and operating costs for a new fire station, ensuring that the development permitted under the proposed project does not adversely affect the City's ability to provide adequate fire protection services. Compliance with the Development Agreement will reduce impacts to less-than-significant levels. Therefore, this impact is considered *less than significant (Class III).*

3.9.3.3.4 Cumulative Fire Protection Impacts

Impact PFS/Fire Protection-8: Cumulative Fire Protection. Development of the land uses allowed by the 2020 General Plan will increase demand on fire protection services. The City of Oxnard has maintained a Class II fire rating by conducting pro-active firefighting. The maintenance of the fire fighting programs and the requirement of developer impact fees for all new development would ensure the continued ability of the Fire Department to meet the cumulative demand for fire and emergency services. Therefore, this impact is considered *less than significant (Class III).*

3.9.3.3.5 Mitigation Measures

No mitigation measures are required as no significant impacts have been identified.

3.9.3.3.6 Residual Impacts

No significant impacts to fire protection services will result from the proposed project after mitigation.

3.9.3.4 Law Enforcement Impacts

Law enforcement services in the Study Area are currently provided by the City of Oxnard Police Department and the County of Ventura Sheriff's Department. Once annexed by the City, the property will be served exclusively by the City of Oxnard Police Department. Office space (amount to be determined) for Police Department personnel for report-writing would be provided in the new fire station proposed under terms of the Development Agreements for the Northern and Southern subarea projects as described in Section 3.9.3.3 (Fire Protection). In addition, the specific plan for the Northern Subarea includes an approximately 1,000-square-foot police substation to be included within the recreation center that will be included with the proposed attached residential housing developed in Phase I of the project.

3.9.3.4.1 Applicable to Both Northern Subarea and Southern Subarea

Impact PFS/Law Enforcement-9: Construction-related Police Service. The proposed project would require police protection services. The City of Oxnard Police Department will be responsible for police protection service to the project area.

The construction phase of the proposed project would not normally require police protection services, except in cases of trespassing, theft, and vandalism. Such activities are not unusual at a construction site, but are only occasional, and the impact to police services would be *less than significant (Class III).* In addition, construction sites usually hire private security firms, so which would further reduce the need for police services during construction.

Impact PFS/Law Enforcement-10: Construction-related Traffic. Construction of the proposed project would increase traffic both on and adjacent to the Study Area during work hours. Slow-moving construction-related traffic on local adjacent roads may temporarily impact traffic flows on local roadways, contribute to vehicle accidents, and delay emergency vehicles traveling through the area. This impact is considered less than significant given the periodic and short-term nature of construction-related traffic. In addition, the use of flaggers and other standard construction practices would contribute to reduce the potential for emergency vehicle delay to *less than significant levels (Class III).*

All proposed development is subject to a detailed review by the Police Department staff for conformance with the Police Department's design standards to reduce demands for police protection services onsite.

As described in Section 3.9.1.3, the Police Department currently maintains a ratio of 1.22 officers per 1,000 residents. This ratio is below the national average of 2.3 officers per 1,000 residents. Response times vary across the City, and the average response time is 5.8 minutes.

3.9.3.4.2 Applicable to Northern Subarea

The proposed project would allow for development of up to 1,283 residences, along with commercial buildings, school facilities, parks, and light industrial uses. Based on the typical household size and the number of residential units, the proposed development will add approximately 4,940 people to the area. With the increase in the number of structures and residents onsite, police services staff would have to handle more calls for services and the addition of approximately 4,940 people would further reduce the ratio of police officers per 1,000 people.

Impact PFS/Law Enforcement-11: Community Police Service (Northern Subarea). The demand for additional police protection services would increase as the Northern Subarea develops over time. The specific plan for the Northern Subarea includes an approximately

1,000-square-foot police substation to be included within the recreation center that will be included with the proposed attached residential housing developed in Phase I of the project. An adequately staffed substation would ensure that the development permitted under the proposed project would not adversely affect the City's ability to provide adequate police protection services. Therefore, this impact is *less than significant (Class III)*.

3.9.3.4.3 Applicable to Southern Subarea

The proposed project includes development of business/research park and light industrial uses. In addition, the Southern Subarea will include parks and open space areas. With the increase in the number of structures and people working onsite, police services staff would have to handle more calls for services.

Impact PFS/Law Enforcement-12: Community Police Service (Southern Subarea). The demand for police protection services would increase as the Southern Subarea develops over time. With the projected addition of the approximately 1,000-square-foot police substation included with the proposed attached residential housing developed in Phase I of the Northern Subarea Specific Plan, the development permitted under the proposed project would not adversely affect the City's ability to provide adequate police protection services. Therefore, this impact is *less than significant (Class III)*.

3.9.3.4.4 Cumulative Law Enforcement Impacts

Impact PFS/Law Enforcement-13: Cumulative Community Police Service. The population increase associated with development of the land uses allowed by the 2020 General Plan will increase the demand for law enforcement services throughout the city. As police officers are deployed in specific beat areas throughout the city, response time for calls would remain adequate as long as additional officers and vehicles are provided proportionate with population increases to accommodate the corresponding increase in service calls. Funding for police department staffing comes from the City General Fund, and funding is allocated to the department through the City's budget process. Maintenance of adequate funding to the department to meet its service obligations would ensure that cumulative impacts would be *less than significant*.

3.9.3.4.5 Mitigation Measures

No mitigation measures are required as no significant impacts have been identified.

3.9.3.4.6 Residual Impacts

No significant impacts to police protection services will result from the proposed project after mitigation.

3.9.3.5 Parks and Recreation Impacts

3.9.3.5.1 Applicable to Northern Subarea

The Northern Subarea would allow for development of up to 1,283 residences, along with commercial buildings, school facilities, parks, and light industrial uses. Based on the typical household size and the number of residential units, the proposed development will add approximately 4,940 people to the area. Based on the City's park planning standards, approximately 7.5 acres of neighborhood parkland and 7.5 acres of community parkland would be required.

Impact PFS/Parks and Recreation-14: Parkland Standards (Northern Subarea). The Northern Subarea plans for approximately 8.0 acres (net) of neighborhood parkland, a 25.6-acre (net) community park, a 17.5-acre lake, and 7.3 acres of other open space. Therefore, the proposed project meets or exceeds park and recreation area requirements, so this impact is *less than significant (Class III).*

3.9.3.5.2 Applicable to Southern Subarea

Bicycle trails and pedestrian paths would be integrated into parkways and multi-purpose trail corridors that parallel arterial roads and collector streets for commuter and recreational purposes. Approximately 2-1/4 miles of pedestrian trails are planned to link the Northern and Southern subareas, as well as the neighborhoods to the north of the Study Area and the beach and wetlands areas southwest of the Study Area.

The Southern Subarea includes approximately 230 acres of agricultural land that could eventually be acquired for restoration purposes by the Coastal Conservancy or another similar entity. Restoration plans could include an interconnected trail system that would connect with the Southern Subarea's greenbelts, allowing the public to walk to a series of habitat viewing areas. Observation decks would be located at the terminus of each greenbelt to allow public viewing without disturbing agricultural uses or sensitive habitat.

Impact PFS/Parks and Recreation-15: Parkland Standards (Southern Subarea). The Southern Subarea does not include residential uses and is not expected to have a significant impact on park and recreation facilities. However, the Southern Subarea has approximately 51 acres of developed open space (e.g., greenbelts, bioswales) and 230 acres of agricultural open space. Therefore, the Southern Subarea will contribute to the amount of parks and open space in the project area, so this impact is *less than significant (Class III).*

3.9.3.5.3 Cumulative Parks and Recreation Impacts

The Parks and Recreation Element of the 2020 General Plan contains a projection of the amount of neighborhood and community parkland needed to meet the needs of the population generated by the development of all residential uses allowed by the General Plan. This element of the General Plan also defines measures to acquire and develop the required sites. As discussed above, the proposed project exceeds the acreage of neighborhood and community parkland to meet the needs of the Study Area population at build-out. *No adverse cumulative impacts would occur*.

3.9.3.5.4 Mitigation Measures

No mitigation measures are required as no significant impacts have been identified.

3.9.3.5.5 Residual Impacts

No significant impacts to park and recreation areas will result from the proposed project.

3.9.3.6 Solid Waste Management Impacts

The City of Oxnard-owned Del Norte Regional Recycling and Transfer Station will provide solid waste disposal services to the Study Area. Any remaining refuse from the Study Area that cannot be accommodated by the transfer station will be hauled to other landfill sites in Ventura County. Study Area residents and business owners will pay user fees for solid waste collection and disposal services.

Development of the proposed project would temporarily generate construction-related solid waste. In the long term, additional solid waste will also be generated as the project is built out. Construction waste generation rates are projected to be 15 cubic yards of waste per residential unit and 70 cubic yards of waste per 20,000 square feet of commercial uses. In support of the City of Oxnard's efforts to reduce the volume of solid waste entering local landfills, a Special Use Permit for a Regional Materials Recovery and Waste Treatment Facility (MRF) was approved in June 1993. The facility opened in 1996. The MRF is an integral part of the City's source reduction and recycling program. Construction waste would be processed at the MRF, which can adequately handle the waste from construction of the proposed project.

Waste generation rates per household are estimated at 2.04 tons per unit per year for single-family homes and 1.17 tons per unit per year for multi-family homes. The estimated waste generation rate for office and light industrial uses is approximately 0.0108 tons per square feet per year and the generation rate for retail commercial is 0.0024 tons per square feet per

year. (California Integrated Waste Management Board Database). Total estimated waste for all uses would be less than 56,000 tons per year (152 tons per day).

All new development will be required to comply with the city-wide programs and to implement site-specific source reduction, recycling, and reuse programs. All waste generated by the proposed project will be transported and handled at the Del Norte Transfer Station. This facility currently accepts an approximate daily volume of 1,200 tons per day. The facility's permitted capacity is 2,779 tons per day. Therefore, the facility is approximately 43 percent below the current capacity, and the addition of solid waste from the proposed project would leave the facility well below its capacity.

The proposed project is not expected to have a significant impact on the City of Oxnard's solid waste disposal system. The Del Norte Transfer Station has adequate capacity to serve the Northern and Southern subareas. The City of Oxnard's SRRE, designed to reduce waste and to encourage recycling, would apply to both the Northern and the Southern subareas. The proposed project is not expected to have a significant impact on the City's ability to meet the mandates of AB939's waste reduction provisions. In addition, residents and business owners will be required to pay user fees for collection and disposal services.

3.9.3.6.1 Applicable to Northern Subarea

Impact PFS/Solid Waste-16: Construction Waste (Northern Subarea). Site preparation and construction activities would generate approximately 19,245 cubic yards of construction waste for residential development, assuming no diversion of construction wastes. In addition, construction activities would generate 16,686 cubic yards of construction waste for commercial, office, and light industrial development. Construction waste would be processed at the MRF, which can adequately handle the waste from construction of the proposed project.

Based on the proposed number of residential units within the Northern Subarea and on the proposed square footage of commercial, business/research park, and light industrial uses, total waste generated would be approximately 8,266 tons per year, as shown in Table 3.9-7. All waste generated by the proposed project will be transported and handled at the Del Norte Transfer Station, which has more than sufficient capacity, as detailed above.

The proposed project would have *less than significant impacts* to solid waste disposal and management *(Class III)*.

3.9.3.6.2 Applicable to Southern Subarea

Impact PFS/Solid Waste-17: Construction Waste (Southern Subarea). Site preparation and construction activities would generate 17,457 cubic yards of construction waste for office

and light industrial development. Construction waste would be processed at the MRF, which can adequately handle the waste from construction of the proposed project.

Based on the proposed square footage of light industrial and business/research park, and light industrial uses, total waste generated would be approximately 42,601 tons per year, as shown in Table 3.9-8. This additional solid waste can be adequately handled at the Del Norte facility, as mentioned above. Impacts of the proposed project to solid waste disposal and management would be *less than significant (Class III).*

TABLE 3.9-7
ESTIMATED SOLID WASTE GENERATION – NORTHERN SUBAREA

Use	Generation Factor	# Units or Square Feet	Waste Generated Per Year
Single Family Residential	2.04 tons per unit per year	551	1,124.0
Multi-Family Residential	1.17 tons per unit per year	732*	856.4*
Retail	0.0024 tons per sq. ft. per year	62,276	150.5
Office/Industrial	0.0108 tons per sq. ft. per year	568,052	6,135.0
Schools	0.0013 tons per sq. ft. per year	Not available	Not available
Total			**8,265.9**

* The number of units included in the Medium Density Residential category for the Northern Subarea was considered multi-family residential development. If a portion or all of these units were developed as single-family homes, the total amount of waste generated per year would increase.

TABLE 3.9-8
ESTIMATED SOLID WASTE GENERATION – SOUTHERN SUBAREA

Use	Generation Factor	# Units or Square Feet	Waste Generated Per Year
Office/Industrial	0.0108 tons per square feet per year	3,944,576	42,601.4
Total			**42,601.4**

3.9.3.6.3 Cumulative Solid Waste Management Impacts

Impact PFS/Solid Waste-18: Cumulative Construction Waste. Build-out of all uses allowed by the City of Oxnard 2020 General Plan will generate additional solid waste. The City's SRRE programs have thus far been successful in reducing the City's total volume of solid wastes requiring landfill disposal. Any future projects will be required to comply with the SRRE. Continued implementation of the SRRE, operation of the MRF, and cooperation by new developments in implementing site-specific solid waste management programs are expected to reduce cumulative impacts to *less than significant (Class III)* levels.

3.9.3.6.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified.

3.9.3.6.5 Residual Impacts

No significant impacts to solid waste disposal services will result from the proposed project.

3.9.3.7 Library Services Impacts

The Oxnard Library System provides library services in the City of Oxnard. The new South Oxnard Library building at the intersection of Bard and Saviers Road will provide library services to the Study Area community.

3.9.3.7.1 Applicable to Northern Subarea

The Northern Subarea would allow for development of up to 1,283 residences, along with schools, parks, commercial buildings, offices, and light-industrial uses. Based on the typical household size and the number of residential units, the proposed development will add approximately 4,940 people to the area. This increase in residents would result in an increase in the demand for library materials and space. In addition, the two proposed schools within the project area are also expected to contribute to an increase in demand for library services.

Impact PFS/Library Services-19: Libraries (Northern Subarea). The City's Public Library system currently has adequate capacity to serve the City. The impact to library services is expected to be *less than significant (Class III).*

3.9.3.7.2 Applicable to Southern Subarea

The Southern Subarea includes business/research park, light industrial and open space uses. These uses are not expected to contribute significantly to increase the demand for library services in the area.

Impact PFS/Library Services-20: Libraries (Southern Subarea). The City's Public Library system currently has adequate capacity to serve the City. The impact to library services is expected to be *less than significant (Class III).*

3.9.3.7.3 Cumulative Library Services Impacts

Impact PFS/Library Services-21: Cumulative Libraries. Development of the land uses allowed by the 2020 General Plan would result in an increase in residents and an associated increase in demand for library services. The 2020 General Plan indicates that the City plans to meet this increased demand by establishing additional mini-branch libraries. These mini-branch libraries are identified in the 2020 General Plan Northwest Community and Northwest Community Specific Plan areas. The cumulative impact to library services is expected to be *less than significant (Class III).*

3.9.3.7.4 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified.

3.9.3.7.5 Residual Impacts

No significant impacts to library services will result from the proposed project.

3.9.3.8 Energy/Public Utilities Impacts

***Electrical Service*.** Existing SCE facilities will serve as primary sources of electrical supply for both the Northern and Southern subareas. All future electrical additions located within the project boundaries will be placed underground, with the layout determined at the design development phase.

***Natural Gas Service*.** The existing TGC facilities will serve as primary sources of gas supply for the proposed project. All future gas service additions located within the project boundaries will be placed underground. TGC will review the proposed gas piping layout at the design development phase.

3.9.3.8.1 Applicable to Both the Northern Subarea and the Southern Subarea

Impact PFS/Utilities-22: Electricity Consumption (Construction). Electrical energy would be consumed on a temporary basis during construction activities. Construction activities are not expected to consume significant amounts of energy, because the proposed project would be developed in phases over 10 to 15 years. Development of the uses allowed by the project would place new demands on electrical service provided by SCE, and would require new or upgraded delivery infrastructure to transmit the energy to uses within the Study Area.

Anticipated growth within the State of California is expected to increase the total demand to approximately 309,868 GWh in 2010 (California Energy Commission [CEC] Technical Report to California Energy Outlook 2000). A total of 14 large-scale power plants have been approved by the CEC throughout the state to meet future demand. The additional electrical demand of the project can be accommodated within the long-term source and distribution planning. In addition, individual building projects within the proposed project Study Area will be required to comply with the Energy Building Regulations adopted by the CEC. The construction-related electricity consumption impact is thus expected to be *less than significant (Class III).*

Impact PFS/Utilities-23: Natural Gas Consumption (Construction). Due to the nature of construction activities, natural gas would not be consumed during development of the

proposed project. As the proposed project is built and occupied, new demands for natural gas would occur.

The total resource base for the lower 48 states is estimated to be 975 trillion cubic feet, enough to continue current production levels for more than 50 years. Technology enhancements will continue to enlarge the resource base; however production capacity remains less certain. The proposed project can be accommodated within the long-term source and distribution planning of TGC. Future uses within the project site will be required to comply with Title 24 of the California Administrative Code. The construction-related electricity consumption impact is thus expected to be *less than significant (Class III)*.

3.9.3.8.2 Applicable to Northern Subarea

Impact PFS/Utilities-24: Electricity Consumption (Northern Subarea). Considering that residential uses consume 10,000 Watts per unit per year and commercial, office, and light industrial uses consume 10 Watts per square foot per year, it is estimated that the proposed project would consume a total of 19,137,780 Watts per year (see Table 3.9-9). Given the existing and planned electrical facilities (detailed above under Project Impacts for Northern Subarea only, Southern Subarea only, or combined subareas), the project-related electricity consumption impact is expected to be *less than significant (Class III)*.

TABLE 3.9-9
ESTIMATED ELECTRICITY CONSUMPTION – NORTHERN SUBAREA

Land Use	Quantity	Unit	Usage Rate (watts/unit/year)	Total (Watts/year)
Residential	1,283	Unit	10,000	12,830,000
Commercial/Office/Industrial	630,778	Square Foot	10	6,307,780
Total				**19,137,780**

Impact PFS/Utilities-25: Natural Gas Consumption (Northern Subarea). Total natural gas consumption at project build-out is estimated at 79,327,947 cubic feet per year (see Table 3.9-10). The project-related natural gas consumption impact is thus expected to be *less than significant (Class III)*.

TABLE 3.9-10
ESTIMATED NATURAL GAS CONSUMPTION – NORTHERN SUBAREA

Land Use	Quantity	Unit	Usage Rate (ft^3/year)	Total (ft^3/year)
Single Family Residential	551	Unit	79,980	44,068,980
Multi Family Residential	732	Unit	48,138	35,237,016
Commercial/Office/Industrial	630,778	KSF	34.8	21,951
Total				**79,327,947**

3.9.3.8.3 Applicable to Southern Subarea

Impact PFS/Utilities-26: Electricity Consumption (Southern Subarea). Considering that commercial, office, and light industrial uses consume 10 Watts per square foot per year, it is estimated that the proposed project would consume a total of 39,445,758 Watts per year (see Table 3.9-11). Given the existing and planned electrical facilities (detailed above under Project Impacts for Northern Subarea only, Southern Subarea only, or Northern and Southern subareas combined), the project-related electricity consumption impact is expected to be *less than significant (Class III).*

TABLE 3.9-11
ESTIMATED ELECTRICITY CONSUMPTION – SOUTHERN SUBAREA

Land Use	Quantity	Unit	Usage Rate (watts/unit/year)	Total (Watts/year)
Commercial/Office/Industrial	3,944,576	SF	10	39,445,758

Impact PFS/Utilities-27: Natural Gas Consumption (Southern Subarea). Total natural gas consumption at project build-out is estimated at 137,271 cubic feet per year (see Table 3.9-12). As mentioned above, the impact of the project on natural gas consumption is expected to be *less than significant (Class III).*

TABLE 3.9-12
ESTIMATED NATURAL GAS CONSUMPTION – SOUTHERN SUBAREA

Land Use	Quantity	Unit	Usage Rate (ft^3/year)	Total (ft^3/year)
Commercial/Office/Industrial	3,944,576	KSF	34.8	137,271

3.9.3.8.4 Cumulative Energy/Public Utilities Impacts

Impact PFS/Utilities-28: Cumulative. Buildout of the 2020 General Plan land uses will result in additional demand for electricity and natural gas services. Such development would contribute to a cumulative increase in energy demand within the City and region. However, energy supply projections prepared by the CEC indicate that supplies will be sufficient to meet anticipated demands for the foreseeable future. Based on these projections, the impact of the project on cumulative energy consumption is expected to be *less than significant (Class III).*

3.9.3.8.5 Mitigation Measures

No mitigation measures are required, as no significant impacts have been identified.

3.9.3.8.6 Residual Impacts

No significant impacts to energy supplies or distribution networks will result from the proposed project.

3.9.3.9 Other Public Utilities

3.9.3.9.1 Applicable to Both the Northern Subarea and the Southern Subarea

Telephone. The proposed development will be served by Verizon Communications for telephone and internet needs; however, additional lines and increased capacity for high speed fiber optics (not currently available in the area) will be required to serve the project. Verizon Communication's long-range plans include augmented service in the Study Area and would accommodate the proposed development's needs.

Telephone service lines will parallel the electrical service lines underground, with the final design for telephone/internet service determined by the utility provider at the design development phase.

Cable Television. Adelphia/Time Warner will serve the Study Area for its cable television and internet needs. The final design for cable/internet service facilities will be determined by the utility provider. Television cable lines will parallel the electrical service lines underground.

Impact PFS/Utilities-29: Other Utilities. Verizon Communication's and Adelphia/Time Warner's projections indicate that telephone, internet, and cable service will be available to accommodate the needs of the proposed Northern and Southern subarea developments. Therefore, the impact on these utilities is expected to be *less than significant (Class III).*

3.10
TRANSPORTATION AND CIRCULATION

3.10 TRANSPORTATION AND CIRCULATION

This section summarizes the potential impacts of Northern and Southern subarea development on the City's transportation infrastructure, including: roadways and traffic; goods movement; passenger rail; transit; bicycle and pedestrian facilities; and airports.

The transportation analysis includes the immediate vicinity of the Ormond Beach Specific Plan Study Area and the surrounding roadways within Oxnard and unincorporated Ventura County that could potentially be affected by demand generated by the proposed project. The approved traffic impact analysis for this project was completed in May 2006.

3.10.1 Existing Conditions

The following discussions describe the existing conditions for all modes of travel within the Study Area.

3.10.1.1 Roadways and Traffic

This section describes key study roadway segments, reports existing daily roadway traffic volume information, and summarizes Level of Service (LOS) analysis results. Consistent with the traffic impact analysis previously conducted for the OBSP, the traffic assessment is based on roadway LOS. Figure 3.10-1 illustrates the intersections that would be affected by development within the Study Area.

3.10.1.1.1 Key Roadways

Each of the key roadways, including associated study intersections within the project area, discussed below.

- **Auto Center Drive** – Auto Center Drive is a four-lane divided roadway with a raised median and left-turn channelization at intersections trending in an east-west direction. The posted speed limit on Auto Center Drive is 40 miles per hour; on-street parking is prohibited. Auto Center Drive terminates on the east at Santa Clara Avenue and on the west at Rose Avenue.
- **Bard Road** – Bard Road serves as a secondary arterial from Saviers Road to Pleasant Valley Road. Bard Road provides east-west access to Oxnard's south central and southeast neighborhoods and also serves as a route from the City of Port Hueneme and the Navy's Construction Battalion Center to Highway 1.

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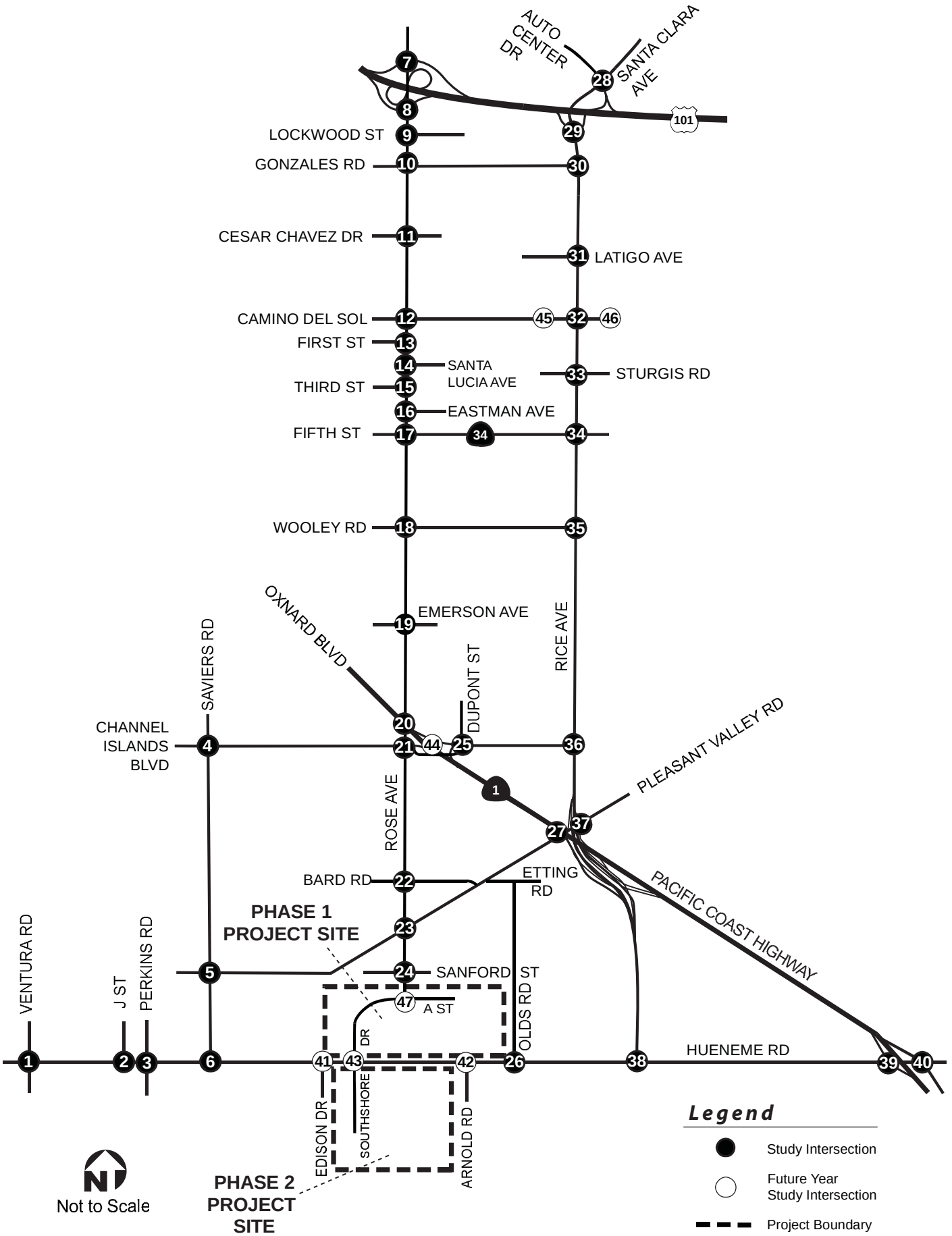


Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-1. **STUDY INTERSECTION LOCATIONS**	Nov. 2009

- **Camino Del Sol** – Camino Del Sol is a four-lane divided roadway with a raised median within the Study Area, trending in an east-west direction. The posted speed limit on Camino Del Sol is 40 miles per hour; on-street parking is permitted in certain areas. Camino Del Sol transitions to a four-lane divided roadway with a painted median from Rose Avenue to Gibraltar Street. Between Gibraltar Street and Rice Avenue, Camino Del Sol transitions to a four-lane roadway with a raised median.
- **Cesar Chavez Drive** – Cesar Chavez Drive is a two-lane undivided roadway trending in an east-west direction. The posted speed limit on Cesar Chavez Drive is 25 miles per hour; on-street parking is permitted.
- **Channel Islands Boulevard** – From Harbor Boulevard in Oxnard through the City of Port Hueneme to Rice Avenue, Channel Islands Boulevard is primarily a four-lane street with limited driveway access in commercial and residential areas.
- **Dupont Street** – Dupont Street is a two-lane undivided roadway trending in a north-south direction. The posted speed limit on Dupont Street is 25 miles per hour; on-street parking is permitted. Dupont Street terminates on the south at Channel Islands Boulevard.
- **Eastman Avenue.** Eastman Avenue is a two-lane undivided roadway trending in an east-west direction. The posted speed limit on Eastman Avenue is 40 miles per hour; on-street parking is prohibited. Eastman Avenue terminates on the east at Rice Avenue and on the west at Rose Avenue.
- **Emerson Avenue** – Emerson Avenue is a local arterial that provides access to the Channel Islands Business Center from Rose Avenue and Highway 1 via Statham Boulevard. East of Rose Avenue, Emerson Avenue functions as a two-lane collector street for the Lemonwood neighborhood. West of Rose Avenue, it has four lanes with left-turn channelization.
- **Fifth Street (State Route 34)** – Fifth Street is the principal east-west street serving the Central Business District of Oxnard and the mid-Oxnard region on both the east and west sides of Oxnard. Fifth Street is currently designated SR-34 east of Oxnard Boulevard. Fifth Street functions as a secondary arterial except for the segments between Victoria Avenue and H Street and Oxnard Boulevard and Rose Avenue, which presently function as four-lane primary arterials.
- **First Street.** First Street is a two-lane undivided roadway trending in an east-west direction. The posted speed limit on First Street is 25 miles per hour; on-street parking is permitted. First Street terminates on the east at Rose Avenue.
- **Gonzales Road** – From Victoria Avenue to Rice Avenue in Oxnard, Gonzales Road is a four lane divided primary arterial serving mostly residential and commercial areas. From Victoria Avenue to Entrada Drive it has four lanes, and between Entrada Drive and Rice Avenue it has six lanes.

- **Hueneme Road** – From Ventura Road in the City of Port Hueneme to Edison Drive in Oxnard, Hueneme Road is a four-lane divided roadway, with the exception of a small stretch between Saviers Road and the J Street Drain, which narrows to two lanes. From Edison Drive east to Las Posas Road, Hueneme Road is primarily a two-lane road serving agricultural areas. Hueneme Road is part of the National Highway System and is a Port of Hueneme access route.
- **J Street** – J Street presently functions as a two-lane local arterial with on-street parking from Vineyard Avenue to Channel Islands Boulevard.
- **Latigo Avenue** – Latigo Avenue is a two-lane undivided roadway trending in an east-west direction. Latigo Avenue terminates on the east at Rice Avenue and on the west at Kohala Street. No speed limit is posted on Latigo Avenue.
- **Lockwood Street** – Lockwood Street is a two-lane divided roadway with a continuous left-turn lane trending in an east-west direction. Lockwood Street terminates on the west at Rose Avenue. On-street parking is permitted on Lockwood Street. The posted speed limit on Lockwood Street is 25 miles per hour.
- **Olds Road** – Olds Road is a two-lane undivided roadway trending in a north-south direction. Olds Road terminates on the south at Hueneme Road. The posted speed limit on Olds Road is 25 miles per hour; on-street parking is permitted within City limits, but is prohibited within unincorporated County of Ventura limits.
- **Oxnard Boulevard (State Route 1)** – Oxnard Boulevard is one of the principal entrances to Oxnard. Oxnard Boulevard is also the principal north-south access to the Central Area and continues southerly through the Five Points intersection to southeast commercial and residential areas. Although Oxnard Boulevard's development as a commercial strip is an obstacle, its location in the center of Oxnard has led to its functioning as a primary arterial. Oxnard Boulevard is currently designated as State Route 1 (Highway 1) and the State of California is responsible for operations and maintenance. Oxnard Boulevard is one of the three major arterials that create the Five Points Intersection (Oxnard Boulevard/Saviers Road/Wooley Road).
- **Perkins Road** – Perkins Road is a two-lane undivided roadway trending in a north-south direction. The posted speed limit on Perkins Road is 25 miles per hour; on-street parking is permitted. Perkins Road terminates on the north at Pleasant Valley Road.
- **Pleasant Valley Road** – From US-101 in the City of Camarillo south to Highway 1 in Oxnard, Pleasant Valley Road is a two-lane road serving light industrial and agricultural areas. South of Highway 1 to Ventura Road in the City of Port Hueneme, Pleasant Valley Road is a four-lane city street serving residential and commercial areas.
- **Raytheon Road** – Raytheon Road is a two-lane undivided roadway trending in a north-south direction for less than a mile through unincorporated Ventura County, just east of

Highway 1 near Hueneme Road. On-street parking is prohibited and no speed limit is posted on Raytheon Road.

- **Rice Avenue** – From US-101 south to Fifth Street in Oxnard, Rice Avenue is primarily a six-lane city street with limited access, serving light industrial areas. South of Fifth Street to Highway 1, Rice Avenue is a four-lane divided rural highway. Rice Avenue is part of the National Highway System and is a Port of Hueneme access route.
- **Rose Avenue** – From US-101 south to Cesar Chavez Road and from Third Street to Fifth Street, Rose Avenue has six lanes. Other segments have three lanes in one direction and two lanes in the other.
- **Sanford Street** – Sanford Street is a two-lane undivided roadway trending in an east-west direction. The posted speed limit on Sanford Street is 25 miles per hour; on-street parking is permitted. Sanford Street terminates on the west at Rose Avenue.
- **Santa Clara Avenue** – From Highway 118 to north of US-101 in Oxnard, Santa Clara Avenue is a two-lane rural road through agricultural areas.
- **Santa Lucia Avenue** – Santa Lucia Avenue is a two-lane undivided roadway trending in an east-west direction. The posted speed limit on Santa Lucia Avenue is 25 miles per hour; on-street parking is permitted. Santa Lucia Avenue terminates on the east at Kohala Street and on the west at Rose Avenue.
- **Saviers Road** – For most of the stretch from Oxnard Boulevard to Hueneme Road, Saviers Road is a four-lane city street serving primarily commercial and residential areas. From Wooley Road to Bryce Canyon Road, however, it has three southbound lanes and from Yucca Street to Laurel Street, it has three northbound lanes. Saviers Road is one of the three major arterials that create the Five Points Intersection (Oxnard Boulevard/Saviers Road/Wooley Road).
- **Sturgis Road** – Sturgis Road is a four-lane divided roadway with a continuous left-turn lane trending in an east-west direction. The posted speed limit on Sturgis Road is 40 miles per hour; on-street parking is prohibited. Sturgis Road transitions to a two-lane divided roadway with a continuous left-turn lane west of Rice Avenue. Sturgis Road terminates on the east at Pleasant Valley Road and on the west at Lombard Street.
- **Third Street** – Third Street is a four-lane east-west divided roadway with a raised median east of A Street, and a two-lane facility with on-street parking west of A Street. The posted speed limit on Third Street is 40 miles per hour between Rose Avenue and Juanita Avenue; 30 miles per hour between Juanita Avenue and A Street; and 25 miles per hour between A Street and H Street. Third Street terminates on the east at Rose Avenue.
- **Ventura Road** – From US-101 in Oxnard south to Hueneme Road in the City of Port Hueneme, Ventura Road is a four-lane city street, except between Fifth Street and

Seventh Street, where it has six lanes. Ventura Road serves commercial and residential areas with limited driveway access.

- **Wooley Road** – In Oxnard from Victoria Avenue east to Rose Avenue, Wooley Road is a divided four-lane city street serving residential, commercial areas and light industrial areas. Wooley Road is one of the three major arterials that create the Five Points Intersection (Oxnard Boulevard/Saviers Road/Wooley Road).

Table 3.10-1 lists the 40 intersections selected for analysis in this study and their approximate speed limits. These intersections were selected based on direction from City of Oxnard staff.

3.10.1.1.2 Existing Conditions Peak-hour Traffic

To determine the existing operation of the study intersections, AM and PM peak-hour intersection movement counts were taken in February 2005. The AM peak-period intersection counts were taken from 7:00 a.m. to 9:00 a.m.; the PM peak-period intersection counts were taken from 4:00 p.m. to 6:00 p.m. The peak-hour traffic counts used in this analysis were taken from the highest hour within the peak period counted.

Figures 3.10-2 and 3.10-3 show existing conditions AM and PM peak-hour volumes at the study intersections. Figures 3.10-4 and 3.10-5 show the existing study intersection geometry.

Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The Intersection Capacity Utilization (ICU) analysis method is utilized in this study to determine the operating LOS of the signalized study intersections; the Highway Capacity Manual (HCM) analysis methodology is utilized to determine the operating LOS of the unsignalized study intersections.

The ICU analysis methodology describes the operation of a signalized intersection using a range of LOS from LOS A (free flow conditions) to LOS F (severely congested conditions), based on corresponding volume to capacity (V/C) ratios. The City of Oxnard goal for peak-hour intersection operation is LOS A through C. Table 3.10-2 illustrates the LOS and V/C ratios for signalized intersections based on the Transportation Research Board values.

The 2000 HCM Operational Analysis Methodology describes the operation of an unsignalized intersection using a range of LOS from LOS A (free flow conditions) to LOS F (severely congested conditions), based on delay experienced per vehicle. Table 3.10-3 illustrates the LOS and delay ranges for unsignalized intersections based on the Highway Capacity Manual values.

TABLE 3.10-1
PROJECT STUDY AREA INTERSECTIONS AND SPEED LIMITS

#	North/South Street	East/West Street	Intersection Type	Approximate Speed Limit
1	Dupont Street	Channel Islands Blvd/Oxnard Blvd (Highway 1) NB Ramps	Signalized	25/40
2	J Street	Hueneme Road	Signalized	30/45
3	Olds Road	Hueneme Road	Signalized	25/45
4	Oxnard Blvd (Highway 1) NB Ramps	Hueneme Road	Signalized	40/45
5	Oxnard Blvd (Highway 1) SB Ramps	Hueneme Road	Two-way stop	40/45
6	Oxnard Blvd (Highway 1) SB Ramps	Pleasant Valley Road	Signalized	40/45
7	Perkins Road	Hueneme Road	Signalized	25/45
8	Rice Avenue	Camino Del Sol	Signalized	50/40
9	Rice Avenue	Channel Islands Blvd	Signalized	50/40
10	Rice Avenue	Fifth Street (SR-34)	Signalized	50
11	Rice Avenue	Gonzales Road	Signalized	50/45
12	Rice Avenue	Hueneme Road	Signalized	50/45
13	Rice Avenue	Latigo	Signalized	50
14	Rice Avenue	Pleasant Valley Road	Signalized	50/45
15	Rice Avenue	Sturgis Road	Signalized	50/40
16	Rice Avenue	US-101 SB Ramps	Signalized	50
17	Rice Avenue	Wooley Road	Signalized	50/40
18	Rose Avenue	Bard Road	Signalized	40/35
19	Rose Avenue	Camino Del Sol	Signalized	45/40
20	Rose Avenue	Cesar Chavez Drive	Signalized	45/25
21	Rose Avenue	Channel Islands Blvd/Oxnard Blvd (Highway 1) SB Ramps	Signalized	40
22	Rose Avenue	Eastman Avenue	Signalized	40
23	Rose Avenue	Emerson Avenue	Signalized	40
24	Rose Avenue	Fifth Street (SR-34)	Signalized	40/50
25	Rose Avenue	First Street	Signalized	40/25
26	Rose Avenue	Gonzales Road	Signalized	45
27	Rose Avenue	Lockwood Street	Signalized	40/25
28	Rose Avenue	Oxnard Blvd (Highway 1)	Signalized	40
29	Rose Avenue	Pleasant Valley Road	Signalized	40/45
30	Rose Avenue	Sanford Street	One way stop controlled	40/25
31	Rose Avenue	Santa Lucia Avenue	Signalized	40/25
32	Rose Avenue	Third Street	Signalized	40
33	Rose Avenue	US-101 NB Off-Ramp	Signalized	40
34	Rose Avenue	US-101 SB Ramp	Signalized	40
35	Rose Avenue	Wooley Road	Signalized	40
36	Santa Clara Avenue	Auto Center Drive	Signalized	35/40
37	Saviers Road	Channel Islands Blvd	Signalized	40
38	Saviers Road	Hueneme Road	Signalized	40/45
39	Saviers Road	Pleasant Valley Road	Signalized	40/45
40	Ventura Road	Hueneme Road	Signalized	35/45

Source: City of Oxnard Traffic Engineering Department Speed limits
Note: NB = Northbound, SB = Southbound

TABLE 3.10-2
SIGNALIZED INTERSECTIONS LOS AND V/C RATIOS

LOS	V/C Ratio
A	≤ 0.600
B	0.601 – 0.700
C	0.701 – 0.800
D	0.801 – 0.900
E	0.901 – 1.000
F	> 1.000

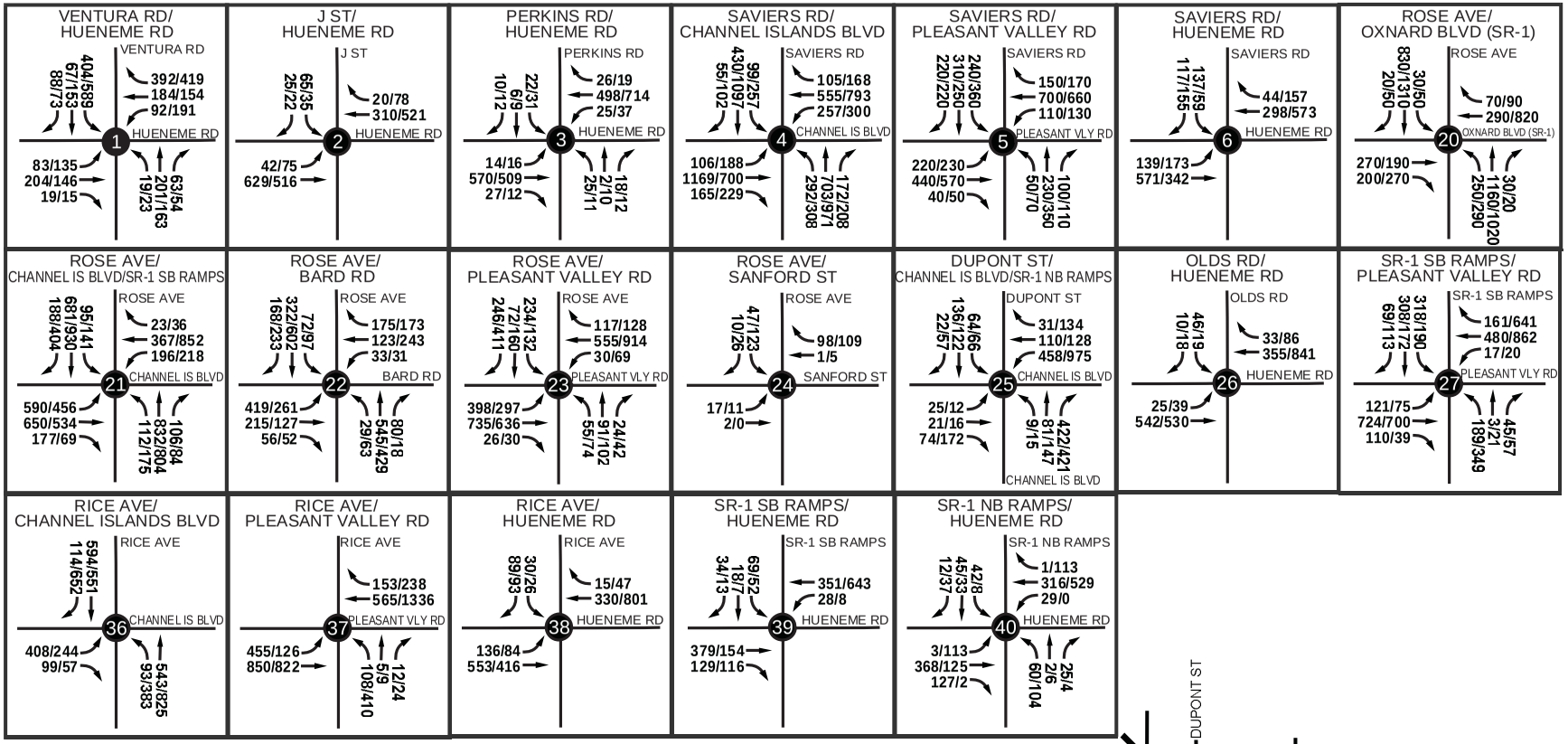
Source: 1990 Transportation Research Board

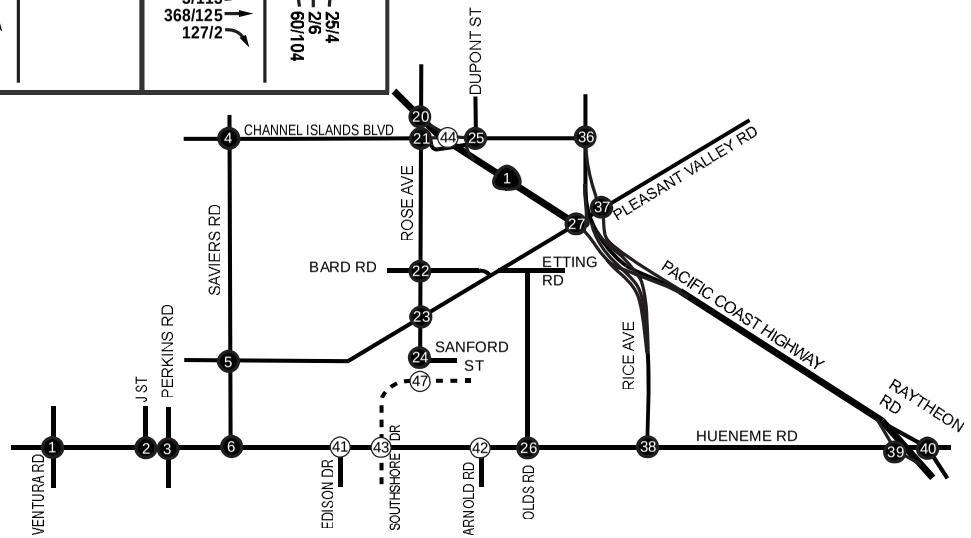
TABLE 3.10-3
UNSIGNALIZED INTERSECTIONS LOS AND DELAY RANGES

LOS	Delay (sec)
A	≤ 10.0
B	10.01 – 15.0
C	15.01 – 25.0
D	25.01 – 35.0
E	35.01 – 50.0
F	> 50.0

Source: 2000 Highway Capacity Manual

To determine the existing operation of the study intersections, AM peak-hour (7:00 a.m. to 9:00 a.m.) and PM peak-hour (4:00 p.m. to 6:00 p.m.) intersection movement counts were taken in February 2005. The peak-hour traffic counts used in this analysis were taken from the highest hour within the peak period counted. Morning and evening peak-period LOS values are shown in Table 3.10-4 for existing conditions in Oxnard. Table 3.10-5 lists the key study intersections that do not currently operate at acceptable levels of service (LOS A through C) during either the AM or PM peak-hour.





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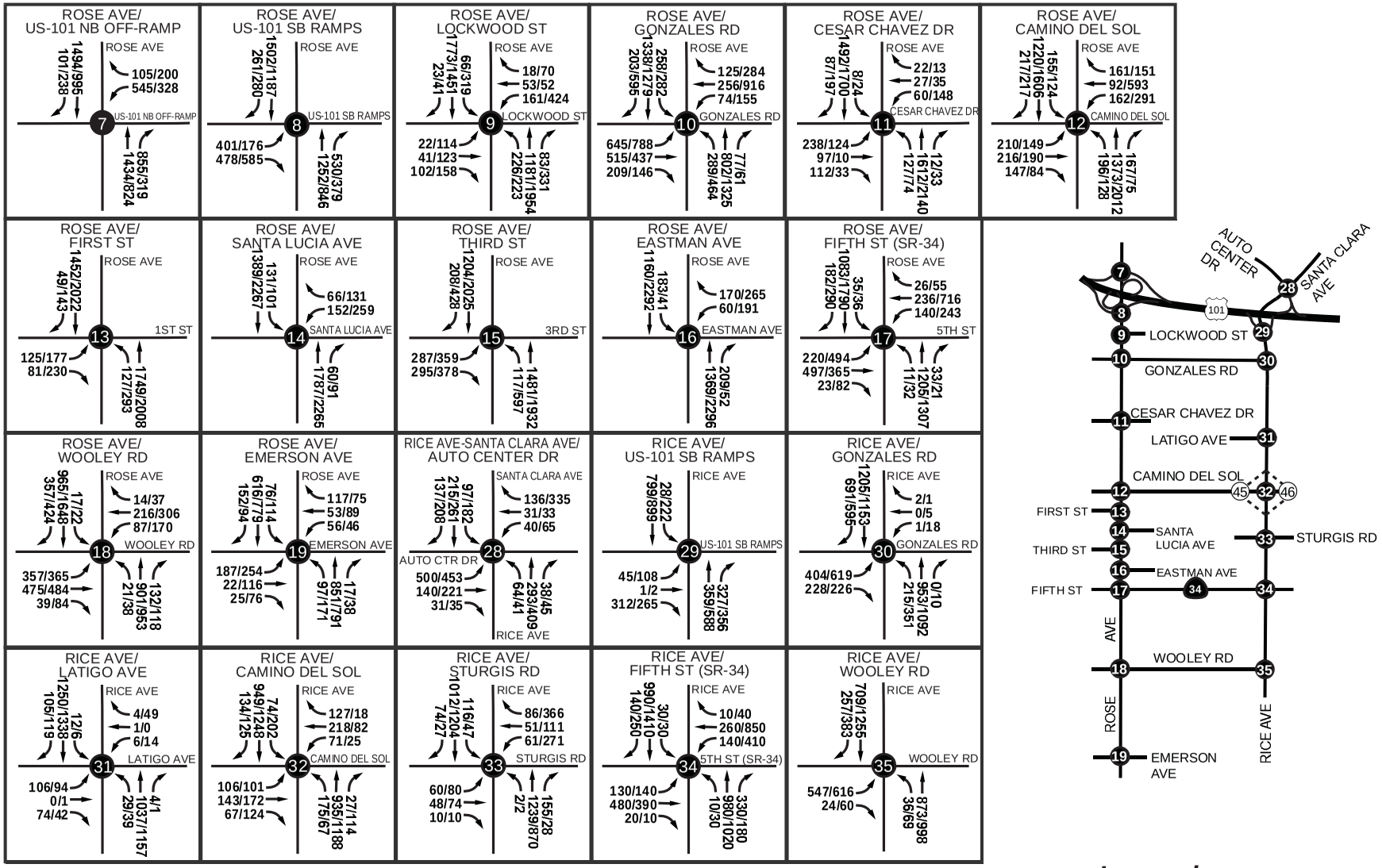
XX/XX AM/PM Peak Hour Volumes

(XX) Future Study Intersection

Future Project Roadway

Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-2. **EXISTING AM/PM PEAK HOUR INTERSECTION VOLUMES**	Nov. 2009



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Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-3. **EXISTING AM/PM PEAK HOUR INTERSECTION VOLUMES**	Nov. 2009

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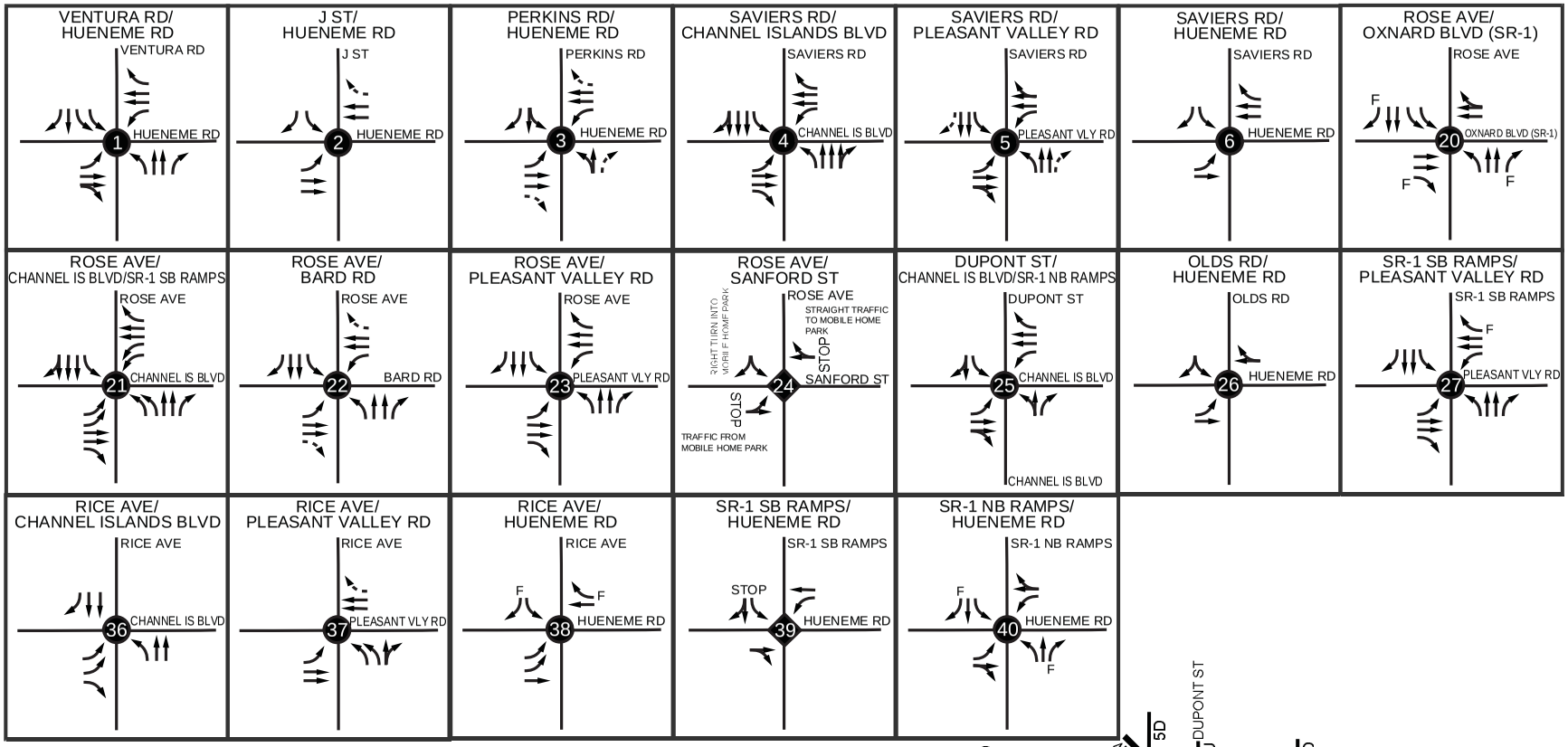

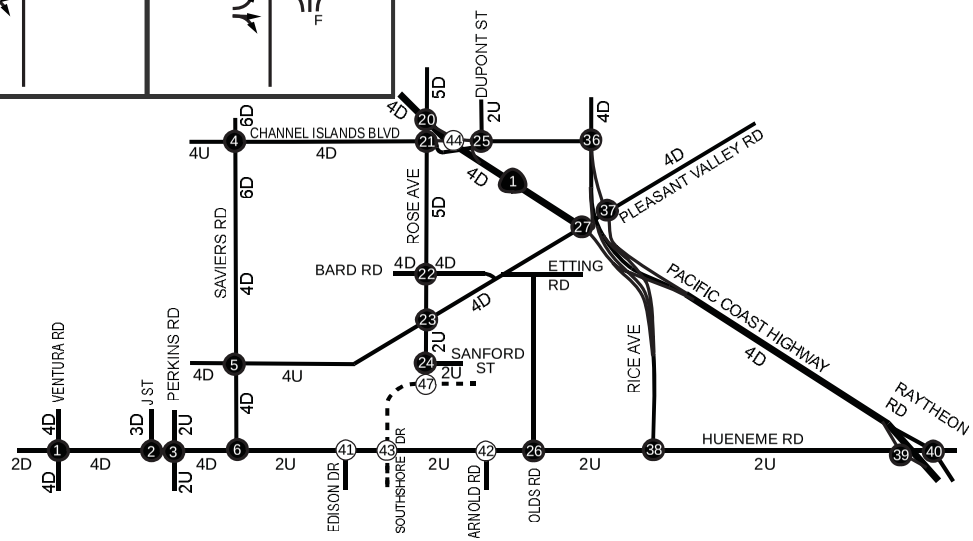

Legend

←	Existing Lane	2U	2-lane Undivided roadway
F	Free-Right Turn Lane	2D	2-lane Divided roadway
	Defacto Right Turn Lane	3D	3-lane Divided roadway (1 north, 2 south)
XX	Stop-Controlled Intersection	4U	4-lane Undivided roadway
XX	Signal-Controlled Intersection	4D	4-lane Divided roadway
XX	Future Study Intersection	5D	5-lane Divided roadway (3 north, 2 south)
- - -	Future Project Roadway	6D	6-lane Divided roadway
		STOP	Stop-Controlled Approach

Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-4. **EXISTING INTERSECTION/ ROADWAY GEOMETRY**	Nov. 2009

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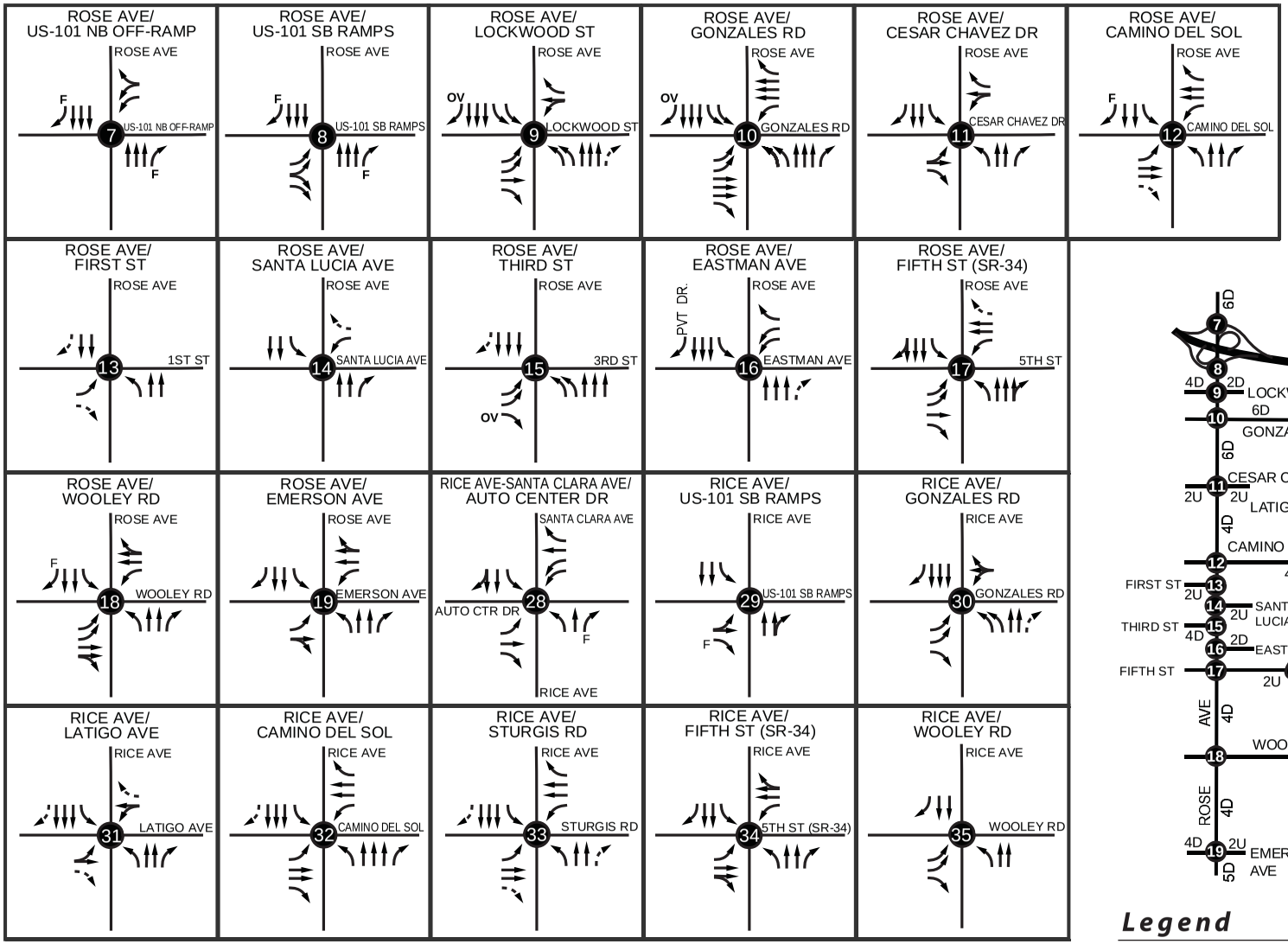

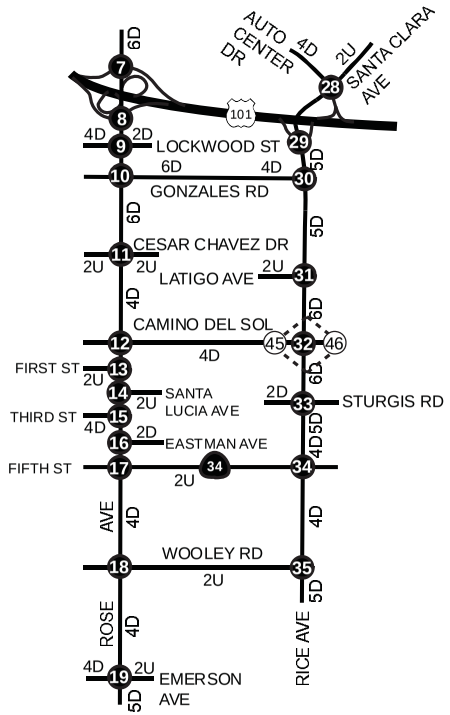

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←	Existing Lane	2U	2-lane Undivided roadway
F	Free-Right Turn Lane	2D	2-lane Divided roadway
-	Defacto Right Turn Lane	4D	4-lane Divided roadway
OV	Overlap Right Turn Lane	5D	5-lane Divided roadway (2 north, 3 south)
XX	Signal-Controlled Intersection	6D	6-lane Divided roadway
		XX	Future Study Intersection

Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-5. **EXISTING INTERSECTION/ ROADWAY GEOMETRY**	Nov. 2009

TABLE 3.10-4
EXISTING INTERSECTION LOS – AM AND PM PEAK PERIODS

#	Study Intersection	AM Peak-hour			PM Peak-hour		
		V/C	Delay	LOS	V/C	Delay	LOS
1	Ventura Rd/Hueneme Rd	*0.493*	*N/A*	*A*	*0.600*	*N/A*	*A*
2	J St/Hueneme Rd	*0.247*	*N/A*	*A*	*0.260*	*N/A*	*A*
3	Perkins Rd/Hueneme Rd	*0.348*	N/A	*A*	*0.393*	*N/A*	*A*
4	Saviers Rd/Channel Islands Blvd	***0.809***	**N/A**	***D***	***0.849***	***N/A***	***D***
5	Saviers Rd/Pleasant Valley Rd	*0.625*	N/A	*B*	*0.738*	*N/A*	*C*
6	Saviers Rd/Hueneme Rd	*0.443*	N/A	*A*	*0.384*	*N/A*	*A*
7	Rose Ave/US-101 NB Off-Ramp	*0.514*	N/A	*A*	*0.372*	*N/A*	*A*
8	Rose Ave/US-101 SB Ramps	*0.496*	N/A	*A*	*0.430*	*N/A*	*A*
9	Rose Ave/Lockwood St	*0.638*	N/A	*B*	***0.903***	***N/A***	***E***
10	Rose Ave/Gonzales Rd	*0.649*	N/A	*B*	***0.849***	***N/A***	***D***
11	Rose Ave/Cesar Chavez Dr	***0.805***	**N/A**	***D***	***0.917***	***N/A***	***E***
12	Rose Ave/Camino Del Sol	*0.758*	N/A	*C*	***0.985***	***N/A***	***E***
13	Rose Ave/First St	*0.625*	N/A	*B*	***0.959***	***N/A***	***E***
14	Rose Ave/Santa Lucia Ave	*0.735*	N/A	*C*	***0.933***	***N/A***	***E***
15	Rose Ave/Third St	*0.493*	N/A	*A*	***0.845***	***N/A***	***D***
16	Rose Ave/Eastman Ave	*0.506*	N/A	*A*	*0.694*	*N/A*	*B*
17	Rose Ave/Fifth St (SR-34)	*0.706*	N/A	*C*	***0.863***	***N/A***	***D***
18	Rose Ave/Wooley Rd	*0.567*	N/A	*A*	***0.849***	***N/A***	***D***
19	Rose Ave/Emerson Ave	*0.503*	N/A	*A*	*0.579*	*N/A*	*A*
20	Rose Ave/Oxnard Blvd (Hwy 1)	*0.528*	N/A	*A*	***0.875***	***N/A***	***D***
21	Rose Ave/Channel Islands Blvd/Hwy 1 SB Ramps	*0.618*	N/A	*B*	*0.748*	*N/A*	*C*
22	Rose Ave/Bard Rd	*0.587*	N/A	*A*	*0.509*	*N/A*	*A*
23	Rose Ave/Pleasant Valley Rd	*0.638*	N/A	*B*	*0.774*	*N/A*	*C*
24	Rose Ave/Sanford St	*N/A*	10.2	*A*	*N/A*	*12.4*	*B*
25	Dupont St/Channel Islands Blvd/Hwy 1 NB Ramps	*0.646*	N/A	*B*	***1.030***	***N/A***	***F***
26	Olds Rd/Hueneme Rd	*0.389*	N/A	*A*	*0.679*	*N/A*	*B*
27	Hwy 1 SB Ramps/Pleasant Valley Rd	*0.503*	N/A	*A*	*0.605*	*N/A*	*B*
28	Santa Clara Ave/Auto Center Dr	*0.641*	N/A	*B*	***0.862***	***N/A***	***D***
29	Rice Ave/US-101 SB Ramps	*0.300*	N/A	*A*	*0.364*	*N/A*	*A*
30	Rice Ave/Gonzales Rd	*0.642*	N/A	*B*	*0.745*	*N/A*	*C*
31	Rice Ave/Latigo Ave	*0.440*	N/A	*A*	*0.455*	*N/A*	*A*
32	Rice Ave/Camino Del Sol	*0.453*	N/A	*A*	*0.501*	*N/A*	*A*
33	Rice Ave/Sturgis Rd	*0.563*	N/A	*A*	*0.600*	*N/A*	*A*
34	Rice Ave/Fifth St (SR-34)	*0.600*	N/A	*A*	***0.872***	***N/A***	***D***
35	Rice Ave/Wooley Rd	*0.444*	N/A	*A*	*0.635*	*N/A*	*B*
36	Rice Ave/Channel Islands Blvd	*0.371*	N/A	*A*	*0.723*	*N/A*	*C*
37	Rice Ave/Pleasant Valley Rd	*0.511*	N/A	*A*	*0.624*	*N/A*	*B*
38	Rice Ave/Hueneme Rd	*0.401*	N/A	*A*	*0.609*	*N/A*	*B*
39	Hwy 1 SB Ramps/Hueneme Rd	*N/A*	*18.9*	*C*	*N/A*	*18.3*	*C*
40	Hwy 1 NB Ramps/Hueneme Rd	*0.480*	*N/A*	*A*	*0.607*	*N/A*	*B*

Source: RBF Consulting, Ormond Beach Traffic Impact Study, 2006.
Note: N/A = Not Applicable. Deficient intersection operations are shown in **bold**.
Delay is average delay per vehicle in seconds. SB = Southbound. NB = Northbound.

TABLE 3.10-5
EXISTING INTERSECTIONS OPERATING AT A DEFICIENT INTERSECTION LOS

#	Study Intersection	AM Peak-hour			PM Peak-hour		
		V/C	Delay	LOS	V/C	Delay	LOS
4	Saviers Rd/Channel Islands Blvd	***0.809***	**N/A**	***D***	***0.849***	***N/A***	***D***
9	Rose Ave/Lockwood St	*0.638*	N/A	*B*	***0.903***	***N/A***	***E***
10	Rose Ave/Gonzales Rd	*0.649*	N/A	*B*	***0.849***	***N/A***	***D***
11	Rose Ave/Cesar Chavez Dr	***0.805***	**N/A**	***D***	***0.917***	***N/A***	***E***
12	Rose Ave/Camino Del Sol	*0.758*	N/A	*C*	***0.985***	***N/A***	***E***
13	Rose Ave/First St	*0.625*	N/A	*B*	***0.959***	***N/A***	***E***
14	Rose Ave/Santa Lucia Ave	*0.735*	N/A	*C*	***0.933***	***N/A***	***E***
15	Rose Ave/Third St	*0.493*	N/A	*A*	***0.845***	***N/A***	***D***
17	Rose Ave/Fifth St (SR-34)	*0.706*	N/A	*C*	***0.863***	***N/A***	***D***
18	Rose Ave/Wooley Rd	*0.567*	N/A	*A*	***0.849***	***N/A***	***D***
20	Rose Ave/Oxnard Blvd (Highway 1)	*0.528*	N/A	*A*	***0.875***	***N/A***	***D***
25	Dupont St/Channel Islands Blvd/Highway 1 NB Ramps	*0.646*	N/A	*B*	***1.030***	***N/A***	***F***
28	Santa Clara Ave/Auto Center Dr	*0.641*	N/A	*B*	***0.862***	***N/A***	***D***
34	Rice Ave/Fifth St (SR-34)	*0.600*	N/A	*A*	***0.872***	***N/A***	***D***

Source: RBF Consulting, Ormond Beach Traffic Impact Study, 2006.
Note: N/A = Not Applicable. Deficient intersection operations are shown in **bold**.
Delay is average delay per vehicle in seconds. SB = Southbound. NB = Northbound.

3.10.1.1.3 Forecast Year 2020 Without Project Conditions (Baseline)

To establish the baseline for the analysis of project impacts, forecast Year 2020 conditions without project conditions were examined. Forecast Year 2020 traffic volumes are based on long-term traffic volumes provided by the Oxnard Traffic Model (OTM) for use in this analysis. This forecast assumes the following roadway circulation modifications:

- Rice Avenue (Highway 1)/US-101 interchange will be widened and reconfigured.
- Rice Avenue (Highway 1) will be modified to include a grade-separated highway between Gonzales Road and Wooley Road. As part of the grade separation, northbound and southbound Rice Avenue (Highway 1) interchanges will be installed at Camino Del Sol. As a result, existing at-grade intersections along Rice Avenue (Highway 1) at Latigo Avenue, Sturgis Road, and Fifth Street-SR-34 will be eliminated. In addition, Rice Avenue (Highway 1) will be designated as State Route 1 north of Pleasant Valley Road.
- Channel Islands Blvd, between Rose Avenue and Dupont Street, will be reconfigured to intersect with Oxnard Blvd. In addition, the south leg of the Dupont Street/Channel Islands Blvd intersection is planned to be eliminated resulting in a T-intersection.

Figures 3.10-6 and 3.10-7 show forecast Year 2020 baseline conditions based on peak-hour volumes at study intersections. Table 3.10-6 summarizes forecast existing plus pending projects LOS conditions during the AM and PM peak-hours and Table 3.10-7 lists the 16 intersections with deficient operations (i.e., LOS D or worse) during either peak period.

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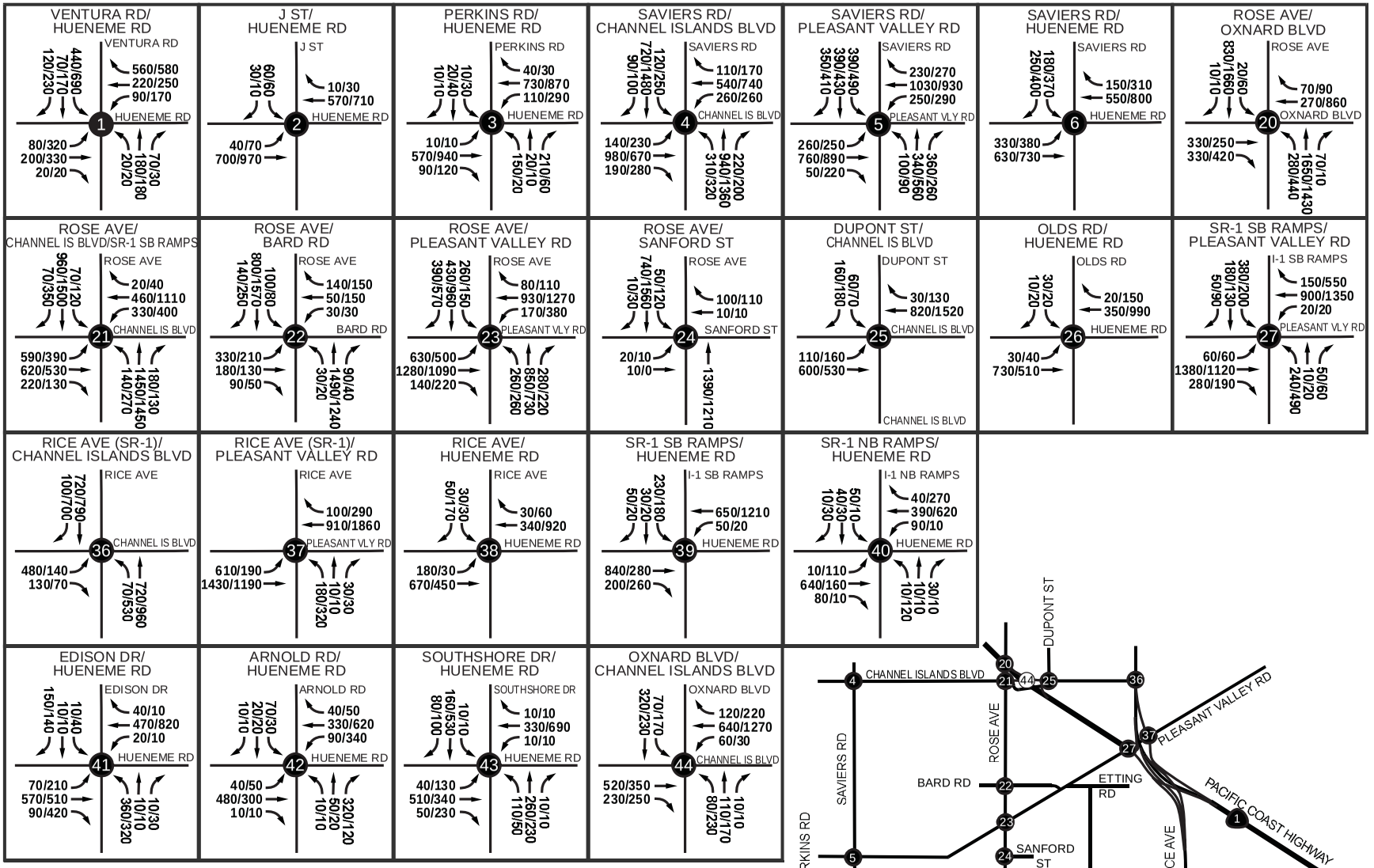


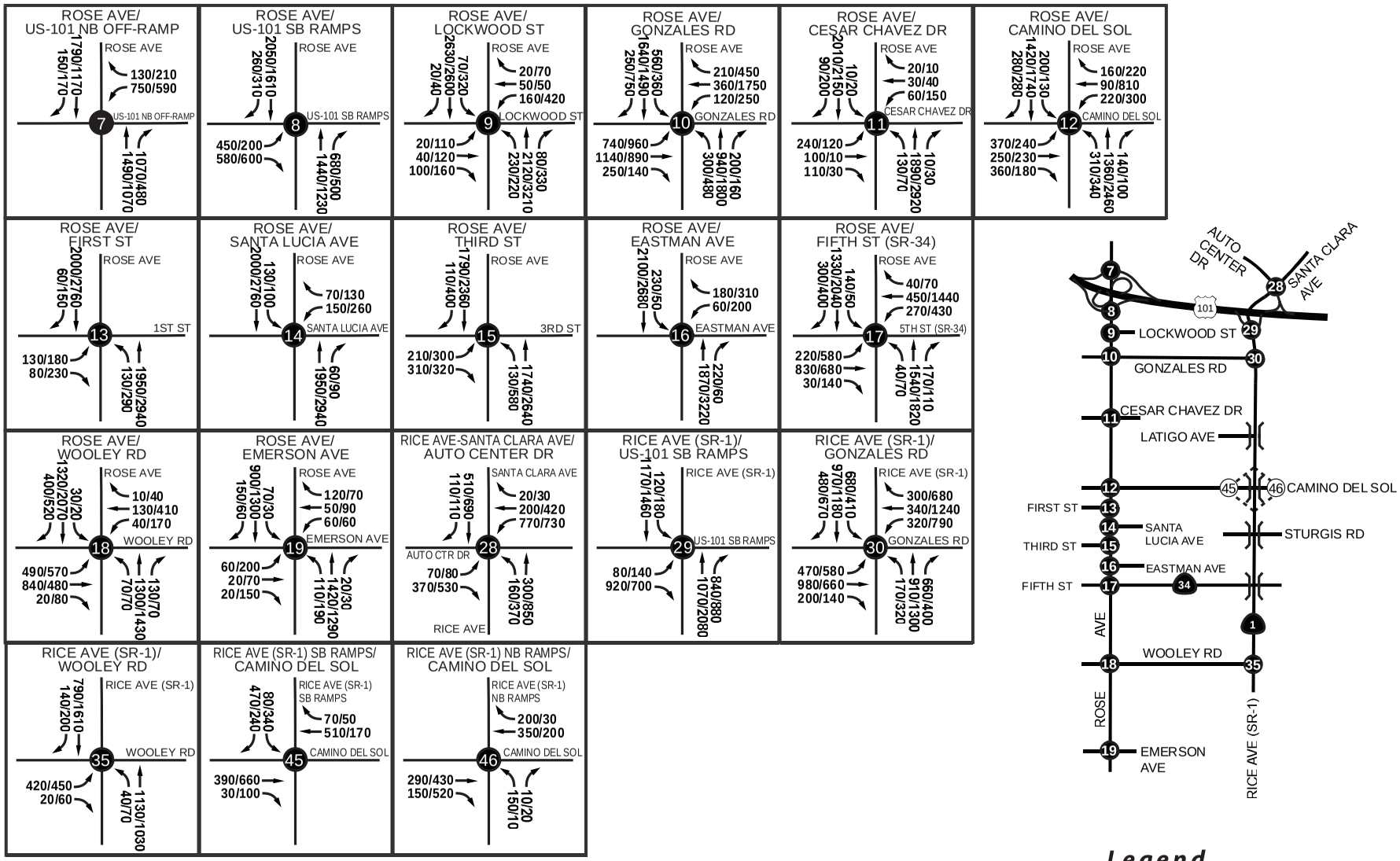
Legend

XX/XX AM/PM Peak Hour Volumes

(XX) Future Study Intersection

Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-6. **YEAR 2020 PEAK HOUR VOLUMES WITHOUT PROJECT (Existing General Plan)**	Nov. 2009



Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-7. **YEAR 2020 PEAK HOUR VOLUMES WITHOUT PROJECT (Existing General Plan)**	Nov. 2009

TABLE 3.10-6
FORECAST YEAR 2020 WITHOUT PROJECT (EXISTING GENERAL PLAN) INTERSECTION LOS – AM AND PM PEAK PERIODS

#	Study Intersection	AM Peak-hour			PM Peak-hour		
		V/C	Delay	LOS	V/C	Delay	LOS
1	Ventura Rd/Hueneme Rd	*0.608*	*N/A*	*A*	***0.848***	***N/A***	***D***
2	J St/Hueneme Rd	*0.269*	*N/A*	*A*	*0.353*	*N/A*	*A*
3	Perkins Rd/Hueneme Rd	*0.428*	*N/A*	*A*	*0.563*	*N/A*	*A*
4	Saviers Rd/Channel Islands Blvd	***0.831***	***N/A***	***D***	***0.901***	***N/A***	***E***
5	Saviers Rd/Pleasant Valley Rd	***0.894***	***N/A***	***D***	***0.890***	***N/A***	***D***
6	Saviers Rd/Hueneme Rd	*0.534*	*N/A*	*A*	*0.738*	*N/A*	*C*
7	Rose Ave/US-101 NB Off-Ramp	*0.648*	*N/A*	*B*	*0.494*	*N/A*	*A*
8	Rose Ave/US-101 SB Ramps	*0.642*	*N/A*	*B*	*0.523*	*N/A*	*A*
9	Rose Ave/Lockwood St	***0.814***	***N/A***	***D***	***1.163***	***N/A***	***F***
10	Rose Ave/Gonzales Rd	*0.798*	*N/A*	*C*	***1.152***	***N/A***	***F***
11	Rose Ave/Cesar Chavez Dr	*0.762*	*N/A*	*C*	***0.858***	***N/A***	***D***
12	Rose Ave/Camino Del Sol	***0.852***	***N/A***	***D***	***0.997***	***N/A***	***E***
13	Rose Ave/First St	*0.592*	*N/A*	*A*	***0.931***	***N/A***	***E***
14	Rose Ave/Santa Lucia Ave	*0.581*	*N/A*	*A*	***0.838***	***N/A***	***D***
15	Rose Ave/Third St	*0.617*	*N/A*	*B*	***0.873***	***N/A***	***D***
16	Rose Ave/Eastman Ave	*0.646*	*N/A*	*B*	***0.915***	***N/A***	***E***
17	Rose Ave/Fifth St (SR-34)	*0.785*	*N/A*	*C*	***1.040***	***N/A***	***F***
18	Rose Ave/Wooley Rd	*0.644*	*N/A*	*B*	*0.800*	*N/A*	*C*
19	Rose Ave/Emerson Ave	*0.471*	*N/A*	*A*	*0.577*	*N/A*	*A*
20	Rose Ave/Oxnard Blvd	*0.500*	*N/A*	*A*	***0.918***	***N/A***	***E***
21	Rose Ave/Channel Is Bl/Highway 1 SB Ramps	*0.718*	*N/A*	*C*	***0.939***	***N/A***	***E***
22	Rose Ave/Bard Rd	*0.667*	*N/A*	*B*	*0.602*	*N/A*	*A*
23	Rose Ave/Pleasant Valley Rd	***1.016***	***N/A***	***F***	***1.096***	***N/A***	***F***
24	Rose Ave/Sanford St	***N/A***	***205.9***	***F***	***N/A***	***OVRFL***	***F***
25	Dupont St/Channel Is Bl/Highway 1 NB Ramps	*0.425*	*N/A*	*A*	*0.688*	*N/A*	*B*
26	Olds Rd/Hueneme Rd	*0.278*	*N/A*	*A*	*0.409*	*N/A*	*A*
27	Highway 1 SB Ramps/Pleasant Valley Rd	*0.750*	*N/A*	*C*	***0.834***	***N/A***	***D***
28	Santa Clara Ave/Auto Center Dr	*0.575*	*N/A*	*A*	*0.791*	*N/A*	*C*
29	Rice Ave (Highway 1)/US-101 SB Ramps	*0.363*	*N/A*	*A*	*0.540*	*N/A*	*A*
30	Rice Ave (Highway 1)/Gonzales Rd	***1.242***	***N/A***	***F***	***1.158***	***N/A***	***F***
35	Rice Ave (Highway 1)/Wooley Rd	*0.367*	*N/A*	*A*	*0.526*	*N/A*	*A*
36	Rice Ave (Highway 1)/Channel Islands Blvd	*0.350*	*N/A*	*A*	***0.819***	***N/A***	***D***
37	Rice Ave (Highway 1)/Pleasant Valley Rd	*0.722*	*N/A*	*C*	***0.800***	***N/A***	***D***
38	Rice Ave/Hueneme Rd	*0.259*	*N/A*	*A*	*0.388*	*N/A*	*A*
39	Highway 1 SB Ramps/Hueneme Rd	***N/A***	***706.5***	***F***	***N/A***	***415.3***	***F***
40	Highway 1 NB Ramps/Hueneme Rd	*0.626*	*N/A*	*A*	*0.770*	*N/A*	*C*
41	Edison Dr/Hueneme Rd	*0.462*	*N/A*	*A*	*0.578*	*N/A*	*A*
42	Arnold Rd/Hueneme Rd	*0.493*	*N/A*	*A*	*0.450*	*N/A*	*A*
43	SouthShore Dr/Hueneme Rd	*0.325*	*N/A*	*A*	*0.647*	*N/A*	*B*
44	Oxnard Blvd/Channel Islands Blvd	*0.363*	*N/A*	*A*	*0.612*	*N/A*	*B*
45	Rice Ave (Highway 1) SB Ramps/Camino Del Sol	*0.450*	*N/A*	*A*	*0.500*	*N/A*	*A*
46	Rice Ave (Highway 1) NB Ramps/Camino Del Sol	*0.225*	*N/A*	*A*	*0.140*	*N/A*	*A*

Source: RBF Consulting, Ormond Beach Traffic Impact Study, 2006.
Note: N/A = Not Applicable. Deficient intersection operations are shown in **bold**.
Delay is average delay per vehicle in seconds. SB = Southbound. NB = Northbound.

TABLE 3.10-7
FORECAST YEAR 2020 WITHOUT PROJECT (EXISTING GENERAL PLAN) INTERSECTIONS OPERATING AT A DEFICIENT LOS

#	Study Intersection	AM Peak-hour			PM Peak-hour		
		V/C	Delay	LOS	V/C	Delay	LOS
1	Ventura Rd/Hueneme Rd	*0.608*	*N/A*	*A*	***0.848***	***N/A***	***D***
4	Saviers Rd/Channel Islands Blvd	***0.831***	***N/A***	***D***	***0.901***	***N/A***	***E***
5	Saviers Rd/Pleasant Valley Rd	***0.894***	***N/A***	***D***	***0.890***	***N/A***	***D***
9	Rose Ave/Lockwood St	***0.814***	***N/A***	***D***	***1.163***	***N/A***	***F***
10	Rose Ave/Gonzales Rd	*0.798*	*N/A*	*C*	***1.152***	***N/A***	***F***
11	Rose Ave/Cesar Chavez Dr	*0.762*	*N/A*	*C*	***0.858***	***N/A***	***D***
12	Rose Ave/Camino Del Sol	***0.852***	***N/A***	***D***	***0.997***	***N/A***	***E***
13	Rose Ave/First St	*0.592*	*N/A*	*A*	***0.931***	***N/A***	***E***
14	Rose Ave/Santa Lucia Ave	*0.581*	*N/A*	*A*	***0.838***	***N/A***	***D***
15	Rose Ave/Third St	*0.617*	*N/A*	*B*	***0.873***	***N/A***	***D***
16	Rose Ave/Eastman Ave	*0.646*	*N/A*	*B*	***0.915***	***N/A***	***E***
17	Rose Ave/Fifth St (SR-34)	*0.785*	*N/A*	*C*	***1.040***	***N/A***	***F***
20	Rose Ave/Oxnard Blvd	*0.500*	*N/A*	*A*	***0.918***	***N/A***	***E***
21	Rose Ave/Channel Is Bl/Highway 1 SB Ramps	*0.718*	*N/A*	*C*	***0.939***	***N/A***	***E***
23	Rose Ave/Pleasant Valley Rd	***1.016***	***N/A***	***F***	***1.096***	***N/A***	***F***
24	Rose Ave/Sanford St	***N/A***	***205.9***	***F***	***N/A***	***OVRFL***	***F***
27	Highway 1 SB Ramps/Pleasant Valley Rd	*0.750*	*N/A*	*C*	***0.834***	***N/A***	***D***
30	Rice Ave (Highway 1)/Gonzales Rd	***1.242***	***N/A***	***F***	***1.158***	***N/A***	***F***
36	Rice Ave (Highway 1)/Channel Islands Blvd	*0.350*	*N/A*	*A*	***0.819***	***N/A***	***D***
37	Rice Ave (Highway 1)/Pleasant Valley Rd	*0.722*	*N/A*	*C*	***0.800***	***N/A***	***D***
39	Highway 1 SB Ramps/Hueneme Rd	***N/A***	***706.5***	***F***	***N/A***	***415.3***	***F***

Source: RBF Consulting, Ormond Beach Traffic Impact Study, 2006.
Note: N/A = Not Applicable. Deficient intersection operations are shown in **bold**.
Delay is average delay per vehicle in seconds. OVRFL = Delay exceeds calculation of software program
SB = Southbound. NB = Northbound.

3.10.1.2 Freight Movement

Freight is moved within through Oxnard both by rail and commercial vehicles. Following are brief summaries of the character of that movement, first for rail and then for trucks.

3.10.1.2.1 Freight Rail

The Union Pacific Railroad (UPRR) Coast Main Line is the only intercity freight rail provider operating in Oxnard, entering the city from the north and paralleling Oxnard Boulevard before entering the industrial areas around Fifth Street and Wooley Road. It does not extend far enough south to affect the Study Area.

The Ventura County Railroad (VCRR) is a subsidiary shortline railroad that is part of RailAmerica's Sunset Division. RailAmerica began operating the railroad on September 1, 1998. The VCRR currently extends for just over twelve miles on four branches, serving the industrial areas of south Oxnard, the Port of Hueneme, and the U.S. Naval Construction Battalion Center. It connects with the UPRR Coast Main Line in downtown Oxnard. Both the UPRR and VCRR alignments have potential for adding passenger service as well as increasing freight use.

3.10.1.2.2 Port of Hueneme

The Port of Hueneme is the only deep-water harbor between Los Angeles and the San Francisco Bay area. The facility serves as the U.S. Port of Entry for California's central coast region, accommodating international businesses and ocean carriers from the Pacific Rim and Europe. It ranks among the top seaports in California for general cargo throughput and competes with the Port of San Diego for the import and export of automobiles, fresh fruit and produce, and forest products. The Port of Hueneme is served by both local roads and the VCRR line, which connects to the UPRR Coast Main Line. The two primary access routes for the port are Rice Avenue/Hueneme Road and Victoria Avenue. Victoria Avenue's bridge over the Santa Clara River has been widened to reduce the impacts of what was previously a major bottleneck.

The Port of Hueneme Intermodal Corridor project is the reconstruction of the Highway 1/ Rice Avenue/Pleasant Valley Road interchange, which was built in conjunction with the Rice Avenue extension to Hueneme Road. The reconstructed Rice Avenue/US-101 interchange is designed to complete the link from the Port of Hueneme to US-101, the major route connecting the City of Oxnard to adjoining regions.

3.10.1.2.3 Trucks

There has been a shift in goods movement from rail to trucks, which now carry the largest share of commodities. Some of the factors involved in this shift include the deregulation of both the rail and shipping industries, the completion of major highway networks, and the flexibility and speed of truck operations.

The City of Oxnard has designated specific roadways as truck routes. These routes, which were selected to minimize the noise and vibration impacts, are generally arterial streets with few or no adjacent residential properties. The key components of the truck route system are the two routes serving the Port of Hueneme. This includes Hueneme Road and Arnold Road, and Edison Drive within the Study Area. The City of Port Hueneme has also designated Hueneme Road as a truck route.

3.10.1.3 Passenger Rail

Passenger rail services in Oxnard are provided by Metrolink and Amtrak rail services. The inter-city and regional rail passenger services are provided both between Oxnard and many of the cities in Ventura County and areas outside Ventura County.

3.10.1.3.1 Amtrak

There are two Amtrak services for the City of Oxnard. The Coast Starlight provides a daily long-distance train from San Diego to Seattle with northbound and southbound stops at Simi Valley and Oxnard, in Ventura County. The Pacific Surfliner Route connects Ventura County to San Diego, Los Angeles, Santa Barbara, and San Luis Obispo. The Amtrak trains stop at Simi Valley, Moorpark, Camarillo, Oxnard, and Ventura. The Pacific Surfliner operates eight trains, seven days per week, with three of the round trips currently traveling as far north as San Luis Obispo.

Amtrak shares the rail stations in Ventura County with Metrolink commuter train service weekdays. In places where a gap in train service exists, or on trips where Amtrak doesn't have enough ridership to operate a train, Amtrak operates a bus service that provides connections for rail service.

3.10.1.3.2 Metrolink

The counties of Ventura, Los Angeles, Orange, Riverside, and San Bernardino joined to create the Southern California Regional Rail Authority (SCRRA) or Metrolink commuter rail system. Metrolink currently operates service from the Oxnard Transportation Center (OTC) east to Los Angeles. Oxnard is served by three eastbound trains in the morning and three westbound trains in the early evening. Metrolink schedules are geared to commuters, but the

service is available for other intercity travelers. There is interest in extending commuter service to Santa Barbara.

3.10.1.4 Transit Services

Public transit provides transportation for local shopping, work, school and recreational activities. Public transit is provided by fixed route buses or general public Dial-a-Ride (DAR) services.

3.10.1.4.1 South Coast Area Transit (SCAT)

The cities of Ojai, Oxnard, Port Hueneme, Santa Paula and San Buenaventura, along with Ventura County, formed SCAT to provide bus service within and between their communities. SCAT serves each of those cities, as well as the unincorporated areas around them. SCAT buses connect with VISTA, Metrolink, Amtrak, Greyhound, and the Oxnard Harbor and Beaches DAR and the OTC. SCAT does not currently provide services to the Study Area, although its Route 7 runs along Pleasant Valley Road, just north of the Study Area.

3.10.1.4.2 Oxnard Harbors and Beaches Dial-a-Ride (DAR)

The City of Oxnard, the City of Port Hueneme, and Ventura County jointly operate the Oxnard Harbors and Beaches DAR serving the Channel Islands Harbor area, portions of Port Hueneme, unincorporated beach communities near Oxnard, the Oxnard Airport, C Street Transfer Center, and the Oxnard Transportation Center. The Oxnard Harbors and Beaches DAR provides circulation within the beach communities and serves as a feeder service to SCAT and Amtrak. It does not currently provide direct service to the Study Area.

3.10.1.4.3 Ventura Intercity Service Transit Authority (VISTA)

VISTA connects all municipal transit operators in Ventura County and makes it possible for people to travel by bus throughout Ventura County. VISTA service primarily operates on the freeway corridors; semi-colored stops are limited to transit stations, transfer points, colleges, and major employment centers. VISTA operates six days a week on the VISTA US-101 route between Ventura, Oxnard, Camarillo, and Thousand Oaks. This includes a route connecting Oxnard with California State University Channel Islands, which runs along Hueneme Road five days a week, but does not stop within the Study Area.

3.10.1.4.4 Paratransit Services

Paratransit service provides local curb-to-curb or door-to-door service for people who are unable to use fixed route bus service. Paratransit is an important link to mobility within the

county and is required to parallel all fixed route local transit services. Paratransit service is not usually considered a congestion management tool.

3.10.1.4.5 ACCESS

SCAT ACCESS provides curb-to-curb service to Americans with Disabilities Act (ADA) certified riders and seniors throughout all of the SCAT service area. SCAT ACCESS operates 20 vehicles, seven days a week, and connects with Camarillo and Santa Paula DAR as well as Thousand Oaks Transit DAR services. In 2004, ACCESS' annual ridership was 110,000, according to the Ventura County Congestion Management Plan.

3.10.1.5 Non-motorized Transportation (Bike and Pedestrian)

In September 2002, the City of Oxnard adopted its Bicycle and Pedestrian Facilities Master Plan. The plan defines the City's approach to the development of a safe, convenient and effective transportation system that facilitates bicycling and walking as a viable transportation option connecting work, shopping, residential, and recreational uses.

3.10.1.5.1 Bicycling

The following excerpts from the City's Bicycle and Pedestrian Facilities Master Plan describe three classes of bicycle facilities.

- **Class I Facilities –** Commonly referred to as a "bike path" or "multi-use trail," this type of facility provides for bicycle and pedestrian travel on a paved right-of-way, completely separate from any street or highway. Motorized vehicles of all kinds are typically prohibited from using a Class I facility, unless the facility is wide enough to separate bicycles and pedestrians from motorized vehicles, such as go-peds and powered scooters. A Class I facility can also be located alongside the outside edge of a roadway, with a parkway or raised barrier (curb, median, etc.) as separation. For the purposes of this Master Plan, typical sidewalks are not considered to be Class I facilities but are included in some of the text descriptions of recommended new facilities and in some Class I tables.
- **Class II Facilities –** Referred to as a "bike lane," this type of facility provides a striped lane for one-way bicycle travel on a roadway adjacent to the curb. A minimum of five feet of roadway width must be dedicated for this lane to make it a "true" Class II bike lane under Caltrans design standards. There are some striped bicycle facilities within the roadways in Oxnard that are less than 5 feet in width, such as the lanes on Camino Del Sol between Rice Avenue and Del Norte Boulevard. These were likely put in place to provide for a bicycle facility without reconstructing the roadway to accommodate 5 feet of pavement.

- **Class III Facilities –** This type of facility is typically referred to as a "bike route" that is indicated by signage only. Class III facilities provide for shared use of a roadway with motor vehicle traffic, and is signed to help bicycle riders reach a location where another Class I or Class II facility is usually located. Portions of Harbor Boulevard provide bike route signs. It should be noted that bicycles are allowed by law on any roadway, regardless of the existence of any bike route signage.

Oxnard is served by approximately 15 miles of designated bike paths, lanes, and routes. The City's Bicycle and Pedestrian Master Plan shows only one route providing access to the Study Area, the Pacific Coast Bikeway, which runs along Hueneme Road.

3.10.1.5.2 Pedestrian Routes

The City's Bicycle and Pedestrian Master Plan identifies existing and proposed pedestrian routes throughout the city. The only such facility that adjoins the Study Area is Pleasant Valley Road, which is shown as a recommended Class I multi-use facility.

3.10.2 Regulatory Framework

This subsection describes the federal and state authorities and regulatory requirements, as well as the agencies responsible for administration.

3.10.2.1 Federal Authorities and Administering Agencies

Table 3.10-8 cites the federal authorities that influence roadways and transportation, as well as the agencies responsible for administration of those responsibilities.

TABLE 3.10-8
FEDERAL AUTHORITIES AND ADMINISTERING AGENCIES

Name of Requirement	Requirement Description	Administering Agency
Title 49, Code of Federal Regulations, Section 171-177	Governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles	California Highway Patrol (CHP)
Title 14, Code of Federal Regulations, Section 77.13(2)(i)	Requires an Applicant to notify the FAA of construction of structures with a height greater than 200 feet from grade or greater than an imaginary surface extending outward and upward at a slope of 10 to 1 from the nearest point of the nearest runway of an airport with at least one runway more than 3,200 feet in length	Federal Aviation Administration (FAA)

Source: California Highway Patrol (CHP) Federal Regulations
Source: Federal Aviation Administration (FAA) Federal Regulations

3.10.2.2 State Authorities and Administering Agencies

Table 3.10-9 cites the State of California authorities with influence over roadways and transportation along with the agencies responsible for administering those responsibilities.

TABLE 3.10-9
STATE AUTHORITIES AND ADMINISTERING AGENCIES

Name of Requirement	Requirement Description	Administering Agency
California Vehicle Code, Section 353	Defines hazardous materials as any substance, material, or device posing an unreasonable risk to health, safety, or property during transportation, as defined by regulations adopted pursuant to Section 2402.7.	CHP
California Vehicle Code, Section 2500-2505	Authorizes the Commissioner of Highway Patrol to issue licenses for the transportation of hazardous materials including explosives.	CHP
California Vehicle Code, Section 13369, 15275, 15278	Addresses the licensing of drivers and the classification of license required for the operation of particular types of vehicles. Requires a commercial driver's license to operate commercial vehicles. Requires an endorsement issued by the DMV to drive any commercial vehicle identified in Section 15278.	Department of Motor Vehicles (DMV)
California Vehicle Code, Section 31303-31309	Requires that the transportation of hazardous materials be on the state or interstate highway that offers the shortest overall transit time possible.	CHP
California Vehicle Code, Section 31600-31620	Regulates the transportation of explosive materials.	CHP
California Vehicle Code, Section 32000-32053	Authorizes the CHP to inspect and license motor carriers transporting hazardous materials.	CHP
California Vehicle Code, Section 32100-32109	Requires that shippers of inhalation hazard or explosive materials must contact the CHP and apply for a Hazardous Material Transportation License.	CHP
California Vehicle Code, Section 34000-34100	Establishes special requirements for vehicles having a cargo tank and to hazardous waste transport vehicles and containers, as defined in Section 25167.4 of the Health and Safety Code. The commissioner shall provide for the establishment, operation, and enforcement of random on- and off-highway inspections of cargo tanks and hazardous waste transport vehicles and containers and ensure that they are designed, constructed, and maintained in accordance with the regulations adopted by the commissioner pursuant to this code and Chapter 6.5 (commencing with Section 25100) of Division 20 of the Health and Safety Code.	CHP
California Vehicle Code, Section 3500	Regulates the safe operation of vehicles, including those vehicles that are used for the transportation of hazardous materials.	CHP
California Vehicle Code,	Imposes weight guidelines and restrictions upon vehicles traveling	State of

TABLE 3.10-9 (CONTINUED)
STATE AUTHORITIES AND ADMINISTERING AGENCIES

Name of Requirement	Requirement Description	Administering Agency
Section 35550	upon freeways and highways. The section holds that "a single axle load shall not exceed 20,000 pounds. The load on any one wheel or wheels supporting one end of an axle is limited to 10,500 pounds. The front steering axle load is limited to 12,500 pounds." Furthermore, the CVC 35551 defines the maximum overall gross weight as 80,000 pounds and adds that "the gross weight of each set of tandem axles shall not exceed 34,000 pounds."	California Department of Transportation (Caltrans)
California Vehicle Code, Section 35780	Requires a Single-Trip Transportation Permit to transport oversized or excessive loads over state highways. The permit can be acquired through the Caltrans.	Caltrans
California Streets and Highways Code, Section 117	Unless otherwise specifically provided in the instrument conveying title, the acquisition by the department of any ROW over any real property for state highway purposes includes the right of the department to issue, under Chapter 3 (commencing with Section 660), permits for the location in the ROW of any structures or fixtures necessary to telegraph, telephone, or electric power lines or of any ditches, pipes, drains, sewers, or underground structures.	Caltrans
The California Streets and Highways Code, Sections 660, 670, 672, 1450,1460,1470, 1480 et seq.	Defines highways and encroachment, requires encroachment permits for projects involving excavation in State Highways, County/City streets. This law is generally enforced at the local level. The Applicant would apply for encroachment permits for any excavation in State and County roadways prior to construction.	Caltrans and Ventura County
California Health and Safety Code, Section 25160 et seq.	Addresses the safe transport of materials, requires a manifest of hazardous cargo, requires a person who transports hazardous waste in a vehicle shall have a valid registration issued by the department in his or her possession while transporting the hazardous waste.	CHP
California Department of Transportation Traffic Manual, Section 5-1.1	Requires a temporary traffic control plan be provided for "continuity of function (movement of traffic, pedestrians, bicyclists, transit operations), and access to property/utilities" during any time the normal function of a roadway is suspended. The Applicant would file a Traffic Control Plan prior to the start of construction.	Caltrans and Ventura County

Source: California Highway Patrol (CHP) Federal Regulations
Source: California Department of Motor Vehicles (DMV) State Regulations
Source: County of Ventura State Regulations

3.10.2.3 City of Oxnard

The City of Oxnard Public Works Department administers a Traffic Impact Fee Program that provides for the assessment of fees on new development based on the contribution of that development to increases in traffic. The current fee, which was set by the City Council in 1993, equates to $173.90 per trip. The City has converted this trip-based fee into unit-based fees for use in calculating impact fees for development. The funds derived from the fee are placed into an account earmarked for improvements to the arterial roadway system. They are allocated to specific projects based on the City's Capital Improvement Program. When developers of new subdivisions or other developments are conditioned by the City to construct or improve primary arterials, the City will reimburse the costs of such improvements.

3.10.2.4 Ventura County

Ventura County Ordinance 4246 established the Traffic Impact Mitigation Fee to fund roadway and highway improvements required as a result of new development. The ordinance became effective January 8, 2002. The fee provides a method of assessing on a project-by-project basis, a "fair share" portion of the cost of the projected road improvements in the County unincorporated area. Without the Traffic Impact Mitigation Fee, a project proponent might be expected to pay a disproportionate amount, be delayed indefinitely, or alternatively, there would be no funding for such projected road improvements.

The ordinance affects all development projects in the unincorporated area that increase traffic. The County has been divided into fourteen districts. The fees vary amongst these districts depending on the number of projects to be funded. If the project is in the Area of Interest of a city, an additional fee to compensate for impact on city streets may be required. Projects located in cities, where there is a reciprocal traffic impact mitigation agreement in effect, may be required to pay a county fee. Reciprocal agreements are currently in effect with the cities of Oxnard, Camarillo, and Agoura Hills.

For purposes of the County's Traffic Impact Mitigation Fee Program, Oxnard falls within District 8. As of January 2007, the fees for this district $608 per single-family dwelling unit and $430 for other types of dwelling unit. For commercial uses, the fee is $810 per thousand square feet of building area.

3.10.3 Project Impacts and Mitigation

3.10.3.1 Thresholds of Significance

3.10.3.1.1 Traffic

To determine whether the addition of project-generated trips at a study intersection results in a significant impact, the City of Oxnard has established the following thresholds of significance:

- A significant impact occurs at a study intersection when the addition of project-generated trips causes the peak-hour level of service of the study intersection to change from acceptable operation (LOS A through C) to deficient operation (LOS D through F).
- A significant impact occurs at a study intersection when the addition of project-generated traffic increases the V/C ratio by two percent or more ($\geq$ 0.020) at an intersection that was already rated LOS C through F.

The baseline against which these impacts will be compared is the forecast 2020 traffic LOS without the proposed project (Table 3.10-6).

Because the transport of soil to the Northern Subarea will affect unincorporated Ventura County during an approximately 12-week period, the analysis of that operation utilizes the following thresholds of significance based on County of Ventura Initial Study Assessment Guidelines as directed by County of Ventura staff:

- A significant impact occurs at a study intersection when the addition of project-generated trips causes the peak-hour level of service of the study intersection to change from acceptable operation (LOS A, B, C, or D) to deficient operation (LOS E or F).
- A significant impact occurs at a study intersection when the addition of project-generated traffic increases the volume to capacity ratio at a study intersection operating at LOS A by 0.20, LOS B by 0.15, or LOS C by 0.10 and when project-generated traffic adds 10 peak-hour trips to a critical movement of an intersection operating at LOS D, 5 peak-hour trips to a critical movement of an intersection operating at LOS E, or 1 peak-hour trip to a critical movement of an intersection operating at LOS F.

3.10.3.1.2 Other Transportation Systems

The impacts of development on other transportation systems are considered significant if the existing or future function of those systems is compromised or not accommodated by the development.

3.10.3.2 Project Characteristics

3.10.3.2.1 Roadway Improvements

For the Northern Subarea, the five key project study intersections are assumed to consist of the following geometry (as depicted in Figure 3.10-8):

- Edison Drive/Hueneme Road**.** The northbound Edison Drive approach will consist of two left-turn lanes and one shared through/right-turn lane. The southbound Edison Drive approach will consist of one left-turn lane, two through lanes, and one right-turn lane. The eastbound Hueneme Road approach will consist of one left-turn lane, one through lane, and one shared through/right-turn lane. The westbound Hueneme Road approach will consist of one left-turn lane, one through lane, and one shared through/right-turn lane.
- Arnold Road/Hueneme Road**.** The northbound Arnold Road approach will consist of one shared left-turn/through/right-turn lane. The southbound Arnold Road approach will consist of one left-turn lane and one shared through/right-turn lane. The eastbound Hueneme Road approach will consist of one left-turn lane, two through lanes, and one right-turn lane. The westbound Hueneme Road approach will consist of one left-turn lane, two through lanes, and one right-turn lane.

- SouthShore Drive/Hueneme Road**.** The southbound SouthShore Drive approach will consist of one left-turn lane and two right-turn lanes. The eastbound Hueneme Road approach will consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. The westbound Hueneme Road approach will consist of two left-turn lanes, two through lanes, and one right-turn lane.
- Olds Road/Hueneme Road**.** The eastbound Hueneme Road approach will consist of one left-turn lane and two through lanes. The westbound Hueneme Road approach will consist of two through lanes and one right-turn lane.

- Rose Avenue/SouthShore Drive – A Street**.** The Rose Avenue/SouthShore Drive – A Street intersection is planned to consist of a roundabout with two inside lanes. The southbound Rose Avenue approach will consist of two lanes, the eastbound SouthShore Drive approach will consist of two lanes, and the westbound A Street approach will consist of one lane.

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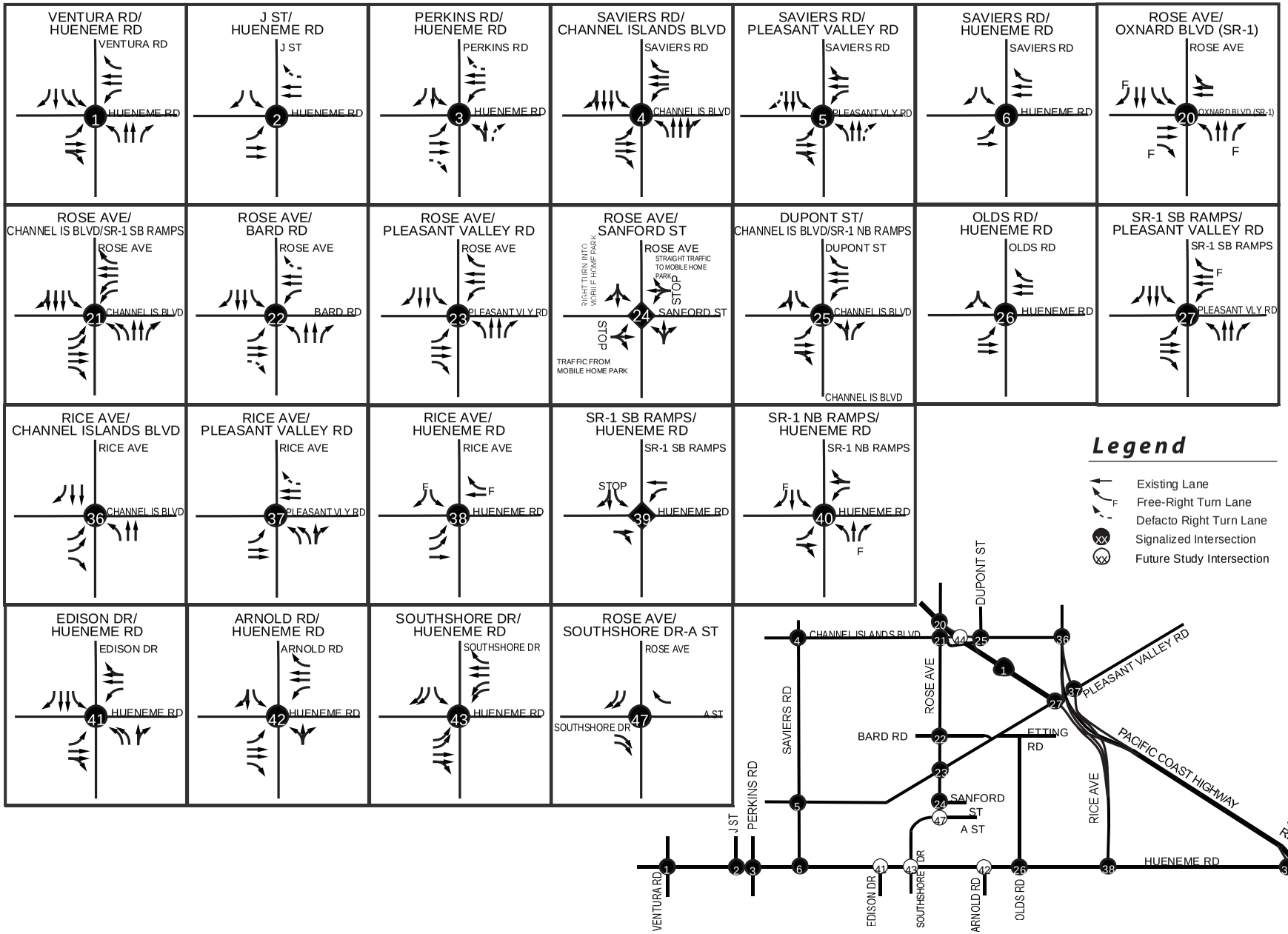

Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-8. **NORTHERN SUBAREA INTERSECTION GEOMETRY**	Nov. 2009

For the Southern Subarea, the following geometry is assumed in addition to the geometry assumed for the Northern Subarea (see Figure 3.10-9):

- SouthShore Drive/Hueneme Road**.** A northbound SouthShore Drive approach will be added, consisting of two left-turn lanes, one through lane, and one shared through/right-turn lane. The southbound SouthShore Drive approach will be re-striped to consist of one left-turn lane, one through lane, and one right-turn lane.

The assumed combined Northern and Southern subarea geometry is shown in Figures 3.10-10 and 3.10-11.

3.10.3.2.2 Traffic-calming

The Northern Subarea roadway system will integrate a variety of traffic-calming improvements. This includes pronounced entry features and enhanced intersection details; "chokers" at intersection corners; street closures and discontinuity; a neighborhood traffic circle at the intersection where Rose Avenue becomes SouthShore Drive; and enhanced paving at the intersections of A Street and 1st, 2nd, and 3rd avenues. The combination of these features will inhibit excessive travel speeds and neighborhood cut-through traffic.

3.10.3.2.3 Multi-use Trails and Pedestrian Walkways

The specific plans for both Northern and Southern subareas provide for multi-use trails and pedestrian walkways linking homes, parks, schools, commercial areas, and employment areas within the Study Area. They also call for establishing connections between the Study Area and adjacent neighborhoods and open space areas. These trails and pathways will be developed along the Study Area roadways and in conjunction with open space features.

3.10.3.2.4 Bikeways

The specific plans for the Study Area call for a system of Class I (off-street) multi-use trails and Class II (on-street) bikeways that facilitate the use of bicycles as an alternate mode of transportation for residents and visitors to the community. These bikeways will be designed to comply with the City of Oxnard's Bicycle and Pedestrian Facilities Master Plan including the "Recommended (2020) Bicycle and Pedestrian Facilities Map." Bicycle connectivity to adjacent and areas will be provided by offsite linkages via Rose Avenue, Hueneme Road, SouthShore Drive, Edison Drive, and Arnold Road. This includes integration with the Pacific Coast Bicycle and Hiking Trail along Hueneme Road.

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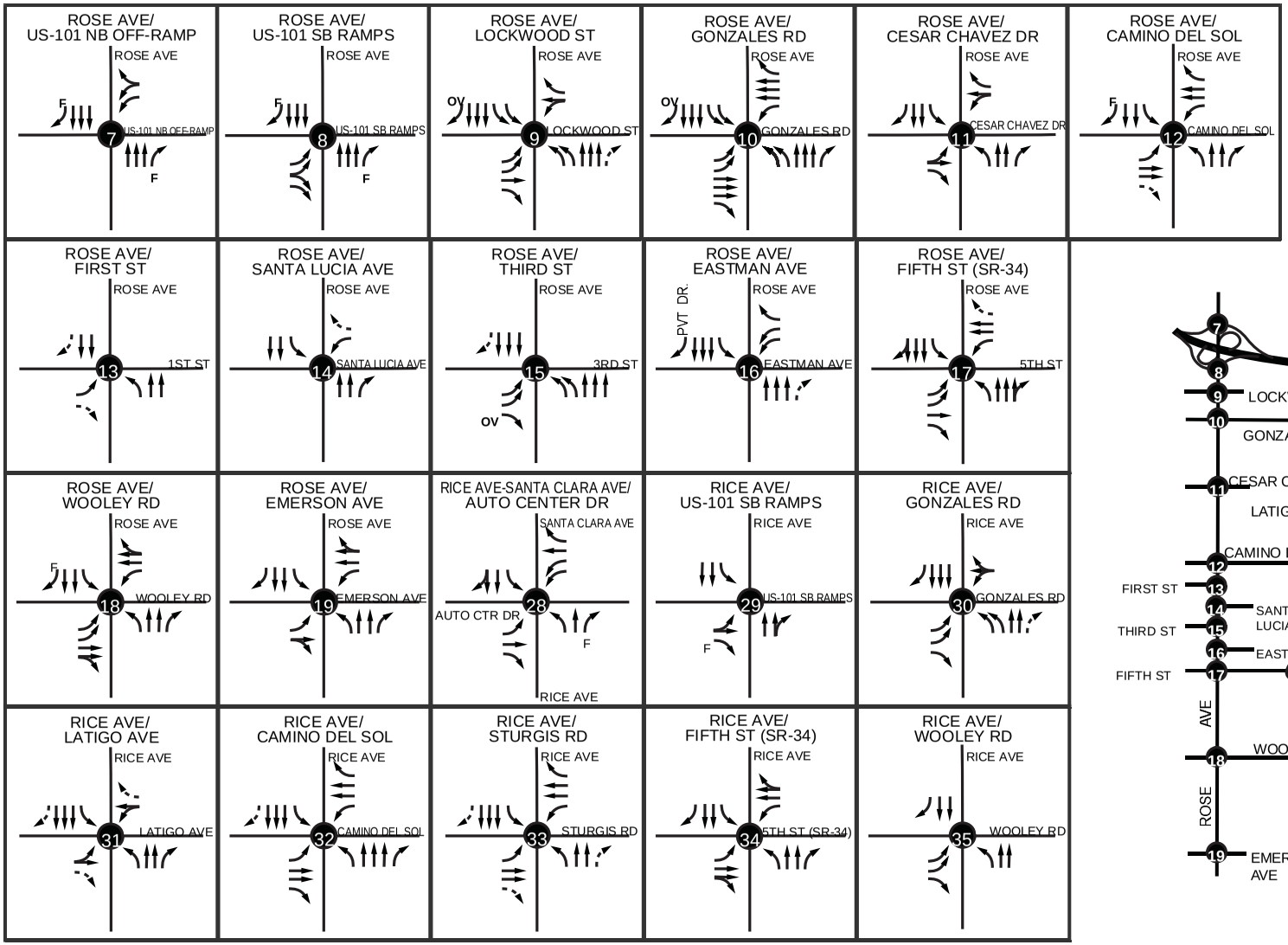

Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-9. **SOUTHERN SUBAREA INTERSECTION GEOMETRY**	Nov. 2009

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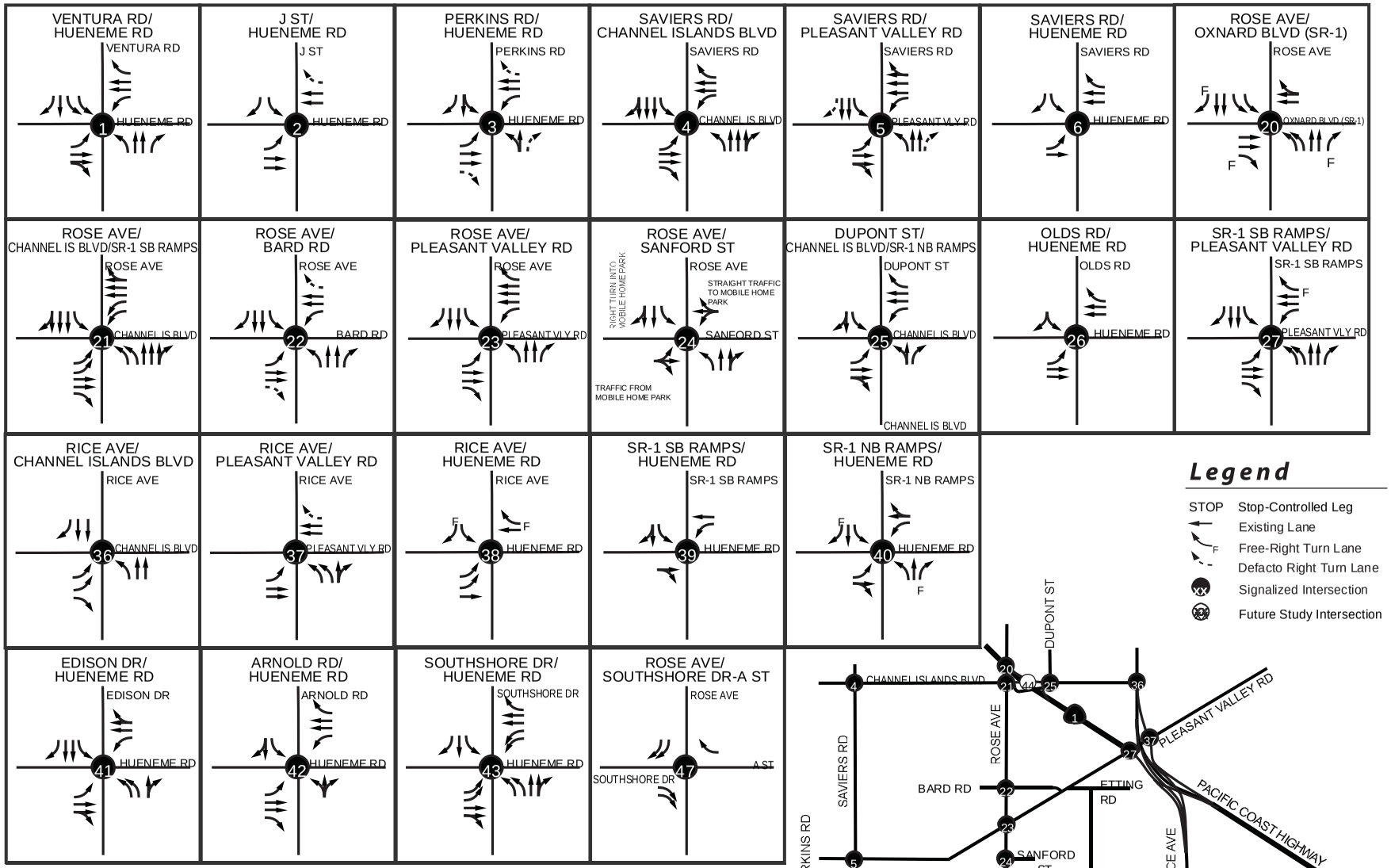

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Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-10. **NORTHERN AND SOUTHERN COMBINED PROJECT INTERSECTION GEOMETRY**	Nov. 2009

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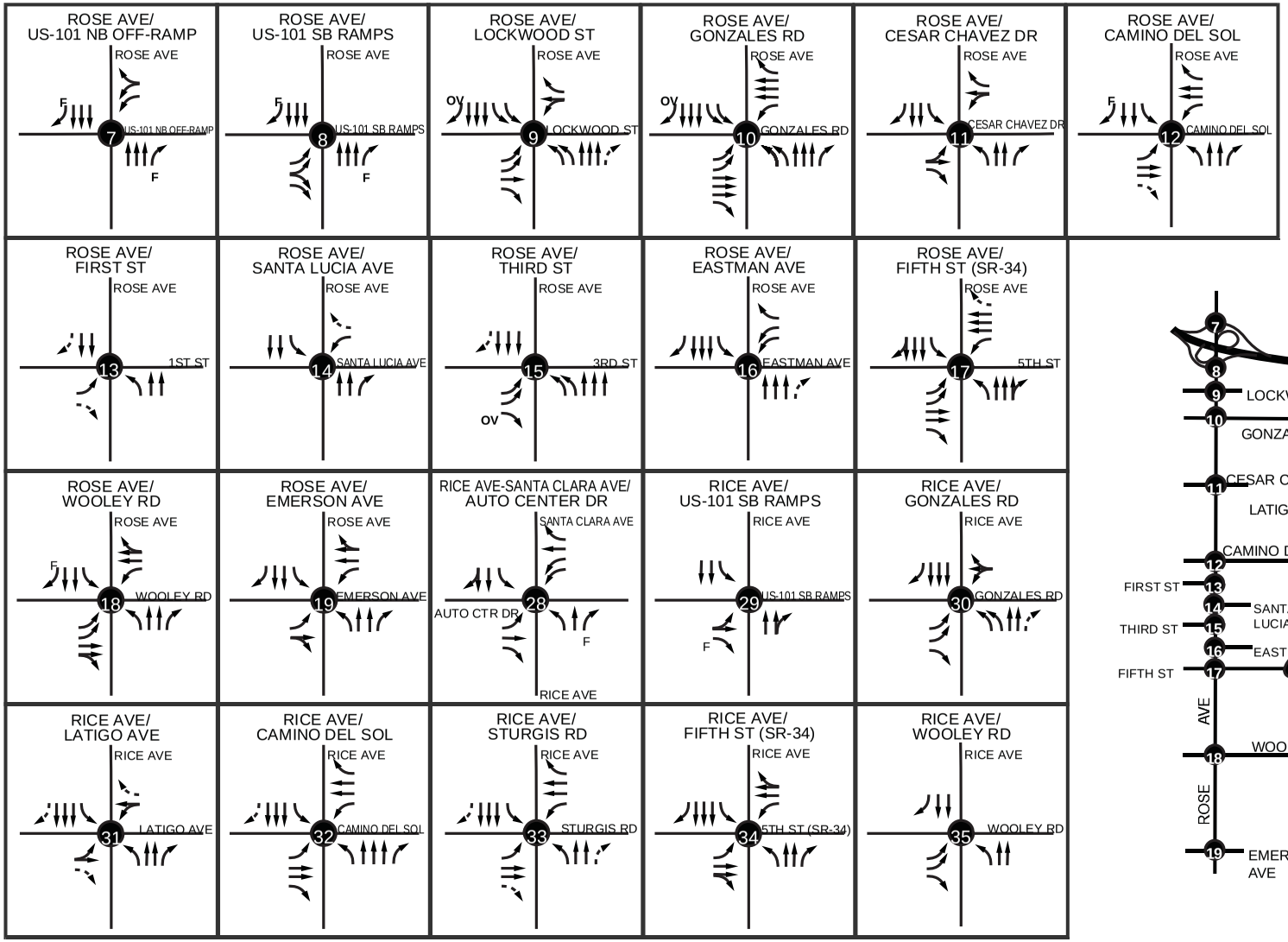
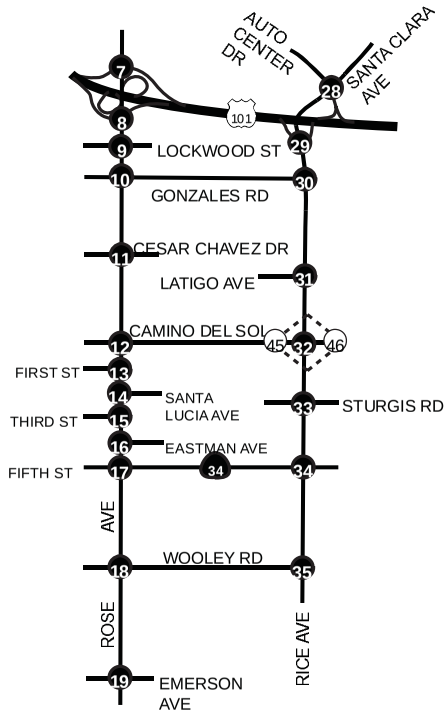


Legend

- Existing Lane
- F — Free-Right Turn Lane
- Defacto Right Turn Lane
- OV — Overlap Right Turn Lane
- XX — Signalized Intersection
- (XX) — Future Study Intersection



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Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-11. **NORTHERN AND SOUTHERN COMBINED PROJECT INTERSECTION GEOMETRY**	Nov. 2009

3.10.3.3 Project Impacts, Mitigation Measures, and Residual Impacts

This section differs slightly from other sections in this chapter in that the discussion of project impacts is followed directly by the mitigation measures associated with those impacts and then by a discussion of residual impacts. This presentation is consistent with the methodology used for the Ormond Beach Traffic Impact Study (Appendix B). Note that the mitigation measures cited herein address the deficiencies in the local transportation network resulting from the development of the proposed specific plans. They are correlated with the thresholds cited below and the travel demand model employed for this EIR. To the extent practical, these mitigation measures have been coordinated with the City's capital improvement program as of the time this analysis was completed. In some cases, specific mitigation measures and the responsibility for implementing them will be reevaluated as part of the City's normal discretionary permitting process.

To calculate trips forecast to be generated by the projects, the Oxnard Traffic Model (OTM) trip generation rates were utilized. Table 3.10-10 summarizes the OTM trip generation rates used to calculate the number of trips forecast to be generated.

TABLE 3.10-10
OXNARD TRAFFIC MODEL (OTM) TRIP RATES

Land Use	OTM Code	Units	AM Peak-hour			PM Peak-hour			Daily Trip Rate
			In	Out	Total	In	Out	Total	
Single Family Residential	1	DU	*0.19*	*0.53*	*0.72*	*0.63*	*0.34*	*0.97*	9.55
Multi Family Residential	2	DU	*0.19*	*0.44*	*0.63*	*0.50*	*0.31*	*0.81*	8.01
Apartment	3	DU	*0.18*	*0.35*	*0.53*	*0.38*	*0.28*	*0.66*	6.47
Neighborhood Commercial	7	KSF	*0.26*	*0.12*	*0.38*	*2.94*	*3.06*	*6.00*	81.16
General Commercial	10	KSF	*0.13*	*0.05*	*0.18*	*1.47*	*1.53*	*3.00*	40.00
Fast Food Restaurant	12	KSF	*19.33*	*17.25*	*36.58*	*25.73*	*23.75*	*49.48*	693.76
Business Park/R & D Center	22	KSF	*0.58*	*0.21*	*0.79*	*0.22*	*0.54*	*0.76*	10.65
Light/General Industrial	23	KSF	*0.36*	*0.05*	*0.41*	*0.16*	*0.52*	*0.68*	6.97
Self Storage	25	KSF	*0.12*	*0.14*	*0.26*	*0.15*	*0.13*	*0.28*	2.61
Elementary/Middle School	26	Students	*0.17*	*0.11*	*0.28*	*0.01*	*0.01*	*0.02*	1.09
High School	27	Students	*0.22*	*0.08*	*0.30*	*0.03*	*0.05*	*0.08*	1.38
Park	33	Acre	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	2.23

Source: City of Oxnard Traffic Model (OTM)
Source: RBF Consulting, Ormond Beach Traffic Impact Study, 2006.

Impact Trans-1: Peak-hour Traffic Conditions – Northern Subarea. Table 3.10-11 shows the difference between trips forecast to be generated by buildout of the Northern Subarea according to the City's General Plan compared with development under the proposed specific plan.

TABLE 3.10-11
FORECAST YEAR 2020 NORTHERN SUBAREA NET TRIP GENERATION PER GENERAL PLAN VS. PROPOSED PROJECT

	AM Peak-hour Trips			*PM Peak-hour Trips*			
Land Use	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*Daily Trips*
Northern Subarea per General Plan	*737*	*1,241*	*1,978*	*1,627*	*1,093*	*2,720*	*31,585*
Northern Subarea per Proposed Project	*1,062*	1,041	2,103	1,081	846	1,927	***22,245***
Net Trip Generation Total	*325*	*-200*	*125*	*-546*	*-247*	*-793*	*-9,340*

As shown in Table 3.10-11, when compared to buildout of the under the City's General Plan, the proposed specific plan for the Northern Subarea is forecast to generate approximately 9,340 fewer daily trips, which includes approximately 125 more AM peak-hour trips and approximately 793 fewer PM peak-hour trips.

It should be noted some forecast year 2020 movements are lower with development of the Northern Subarea specific plan than without because fewer trips are generated under specific plan development than under the City's General Plan. This phenomenon is also related to the OTM's redistribution of traffic based on the assumed termination of Rose Avenue at SouthShore Drive and A Street under the General Plan.

Forecast traffic conditions for the Northern Subarea are shown in Table 3.10-12 and depicted in Figures 3.10-12 and 3.10-13. The table shows those intersections exceeding the City's LOS standard and those intersections for which project-generated traffic exceeds the City's impact thresholds in bold type.

As shown in Table 3.10-12, 19 study intersections are forecast to operate at a deficient LOS (LOS D or worse) according to City of Oxnard performance criteria for forecast 2020 conditions with the development of the Northern Subarea under the proposed specific plan:

- Ventura Road/Hueneme Road (PM peak-hour only)
- Saviers Road/Channel Islands Boulevard (both AM and PM peak-hour)
- Saviers Road/Pleasant Valley Road (both AM and PM peak-hour)
- Rose Avenue/Lockwood Street (both AM and PM peak-hour) Rose Avenue/Gonzales Road (PM peak-hour only)
- Rose Avenue/Cesar Chavez Drive (PM peak-hour only)

TABLE 3.10-12
FORECAST YEAR 2020 TRAFFIC CONDITIONS
NORTHERN SUBAREA SPECIFIC PLAN VERSUS GENERAL PLAN

		Forecast 2020 Conditions under General Plan		*Forecast 2020 Conditions under Northern Subarea Project-specific Plan*		
Int #	*Study Intersection*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*Significant Impact?*
1	Ventura Rd/Hueneme Rd	*0.608 – N/A – A*	***0.848 – N/A – D***	*0.601* – N/A – A*	***0.870 – N/A – D***	***Yes***
2	J St/Hueneme Rd	*0.269 – N/A – A*	*0.353 – N/A – A*	*0.275 – N/A – A*	*0.344* – N/A – A*	*No*
3	Perkins Rd/Hueneme Rd	*0.428 – N/A – A*	*0.563 – N/A – A*	*0.438 – N/A – A*	*0.547* – N/A – A*	*No*
4	Saviers Rd/Channel Islands Blvd	***0.831 – N/A – D***	***0.901 – N/A – E***	***0.823* – N/A – D***	***0.933 – N/A – E***	***Yes***
5	Saviers Rd/Pleasant Valley Rd	***0.894 – N/A – D***	***0.890 – N/A – D***	***0.900 – N/A – D***	***0.854* – N/A – D***	*No*
6	Saviers Rd/Hueneme Rd	*0.534 – N/A – A*	*0.738 – N/A – C*	*0.522* – N/A – A*	*0.750 – N/A – C*	*No*
7	Rose Ave/US-101 NB Off-Ramp	*0.648 – N/A – B*	*0.494 – N/A – A*	*0.663 – N/A – B*	*0.499 – N/A – A*	*No*
8	Rose Ave/US-101 SB Ramps	*0.642 – N/A – B*	*0.523 – N/A – A*	*0.640* – N/A – B*	*0.522* – N/A – A*	*No*
9	Rose Ave/Lockwood St	***0.814 – N/A – D***	***1.163 – N/A – F***	***0.811* – N/A – D***	***1.156* – N/A – F***	*No*
10	Rose Ave/Gonzales Rd	*0.798 – N/A – C*	***1.152 – N/A – F***	*0.798 – N/A – C*	***1.151* – N/A – F***	*No*
11	Rose Ave/Cesar Chavez Dr	*0.762 – N/A – C*	***0.858 – N/A – D***	*0.760* – N/A – C*	***0.854* – N/A – D***	*No*
12	Rose Ave/Camino Del Sol	***0.852 – N/A – D***	***0.997 – N/A – E***	***0.815* – N/A – D***	***1.004 – N/A – F***	*No*
13	Rose Ave/First St	*0.592 – N/A – A*	***0.931 – N/A – E***	*0.588* – N/A – A*	***0.925* – N/A – E***	*No*
14	Rose Ave/Santa Lucia Ave	*0.581 – N/A – A*	***0.838 – N/A – D***	*0.563* – N/A – A*	***0.833* – N/A – D***	*No*
15	Rose Ave/Third St	*0.617 – N/A – B*	***0.873 – N/A – D***	*0.615* – N/A – B*	***0.858* – N/A – D***	*No*
16	Rose Ave/Eastman Ave	*0.646 – N/A – B*	***0.915 – N/A – E***	*0.627* – N/A – B*	***0.910* – N/A – E***	*No*
17	Rose Ave/Fifth St (SR-34)	*0.785 – N/A – C*	***1.040 – N/A – F***	*0.754* – N/A – C*	***1.017* – N/A – F***	*No*
18	Rose Ave/Wooley Rd	*0.644 – N/A – B*	*0.800 – N/A – C*	*0.644 – N/A – B*	*0.779* – N/A – C*	*No*
19	Rose Ave/Emerson Ave	*0.471 – N/A – A*	*0.577 – N/A – A*	*0.452* – N/A – A*	*0.566* – N/A – A*	*No*
20	Rose Ave/Oxnard Blvd	*0.500 – N/A – A*	***0.918 – N/A – E***	*0.479* – N/A – A*	***0.847* – N/A – D***	*No*
21	Rose /Channel Is Bl/Highway 1 SB Ramps	*0.718 – N/A – C*	***0.939 – N/A – E***	*0.679* – N/A – B*	***0.887* – N/A – D***	*No*
22	Rose Ave/Bard Rd	*0.667 – N/A – B*	*0.602 – N/A – A*	*0.619* – N/A – B*	*0.508* – N/A – A*	*No*
23	Rose Ave/Pleasant Valley Rd	***1.016 – N/A – F***	***1.096 – N/A – F***	***0.985* – N/A – E***	***1.065* – N/A – F***	*No*

TABLE 3.10-12 (CONTINUED)
FORECAST YEAR 2020 TRAFFIC CONDITIONS
NORTHERN SUBAREA SPECIFIC PLAN VERSUS GENERAL PLAN

		Forecast 2020 Conditions under General Plan		*Forecast 2020 Conditions under Northern Subarea Project-specific Plan*		
Int #	*Study Intersection*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*Significant Impact?*
24	Rose Ave/Sanford St	***N/A – 205.9 – F***	***N/A – OVRFL – F***	***N/A – 148.3* – F***	***N/A – 223.4* – F***	*No*
25	Dupont St/Channel Is/Highway 1 NB Ramps	*0.425 – N/A – A*	*0.688 – N/A – B*	*0.431 – N/A – A*	*0.684* – N/A – B*	*No*
26	Olds Rd/Hueneme Rd	*0.278 – N/A – A*	*0.409 – N/A – A*	*0.309 – N/A – A*	*0.428 – N/A – A*	*No*
27	Highway 1 SB Ramps/Pleasant Valley Rd	*0.750 – N/A – C*	***0.834 – N/A – D***	*0.725* – N/A – C*	*0.778* – N/A – C*	*No*
28	Santa Clara Ave/Auto Center Dr	*0.575 – N/A – A*	*0.791 – N/A – C*	*0.568* – N/A – A*	*0.785* – N/A – C*	*No*
29	Rice Ave (Highway 1)/US-101 SB Ramps	*0.363 – N/A – A*	*0.540 – N/A – A*	*0.359* – N/A – A*	*0.536* – N/A – A*	*No*
30	Rice Ave (Highway 1)/Gonzales Rd	***1.242 – N/A – F***	***1.158 – N/A – F***	***1.198* – N/A – F***	***1.156* – N/A – F***	*No*
35	Rice Ave (Highway 1)/Wooley Rd	*0.367 – N/A – A*	*0.526 – N/A – A*	*0.372 – N/A – A*	*0.528 – N/A – A*	*No*
36	Rice Ave (Highway 1)/Channel Is Blvd	*0.350 – N/A – A*	***0.819 – N/A – D***	*0.352 – N/A – A*	***0.819 – N/A – D***	*No*
37	Rice Ave (Highway 1)/Pleasant Valley Rd	*0.722 – N/A – C*	***0.800 – N/A – D***	*0.716* – N/A – C*	*0.788* – N/A – C*	*No*
38	Rice Ave/Hueneme Rd	*0.259 – N/A – A*	*0.388 – N/A – A*	*0.259 – N/A – A*	*0.372* – N/A – A*	*No*
39	Highway 1 SB Ramps/Hueneme Rd	***N/A – 706.5– F***	***N/A – 415.3 – F***	***N/A – 669.1* – F***	***N/A – 392.0* – F***	*No*
40	Highway 1 NB Ramps/Hueneme Rd	*0.626 – N/A – A*	*0.770 – N/A – C*	*0.614* – N/A – B*	*0.745* – N/A – C*	*No*
41	Edison Dr/Hueneme Rd	*0.462 – N/A – A*	*0.578 – N/A – A*	*0.416* – N/A – A*	*0.509* – N/A – A*	*No*
42	Arnold Rd/Hueneme Rd	*0.493 – N/A – A*	*0.450 – N/A – A*	*0.493 – N/A – A*	*0.435* – N/A – A*	*No*
43	SouthShore Dr/Hueneme Rd	*0.325 – N/A – A*	*0.647 – N/A – B*	*0.356 – N/A – A*	*0.434* – N/A – A*	*No*
44	Oxnard Blvd/Channel Islands Blvd	*0.363 – N/A – A*	*0.612 – N/A – B*	*0.353* – N/A – A*	*0.616 – N/A – B*	*No*
45	Rice (Highway 1) SB Rmps/Camino Del Sol	*0.450 – N/A – A*	*0.500 – N/A – A*	*0.456 – N/A – A*	*0.510 – N/A – A*	*No*
46	Rice (Highway 1) NB Rmps/Camino Del Sol	*0.225 – N/A – A*	*0.140 – N/A – A*	*0.225 – N/A – A*	*0.142 – N/A – A*	*No*
47	Rose Ave/SouthShore Dr-A St	*N/A – N/A – N/A*	*N/A – N/A – N/A*	*0.690 – N/A – B*	*0.537 – N/A – A*	*No*

Source: City of Oxnard Traffic Model (OTM)
Source: RBF Consulting, Ormond Beach Traffic Impact Study, 2006.
*Improved V/C ratio with combined subarea project scenario is due to OTM redistribution of traffic.

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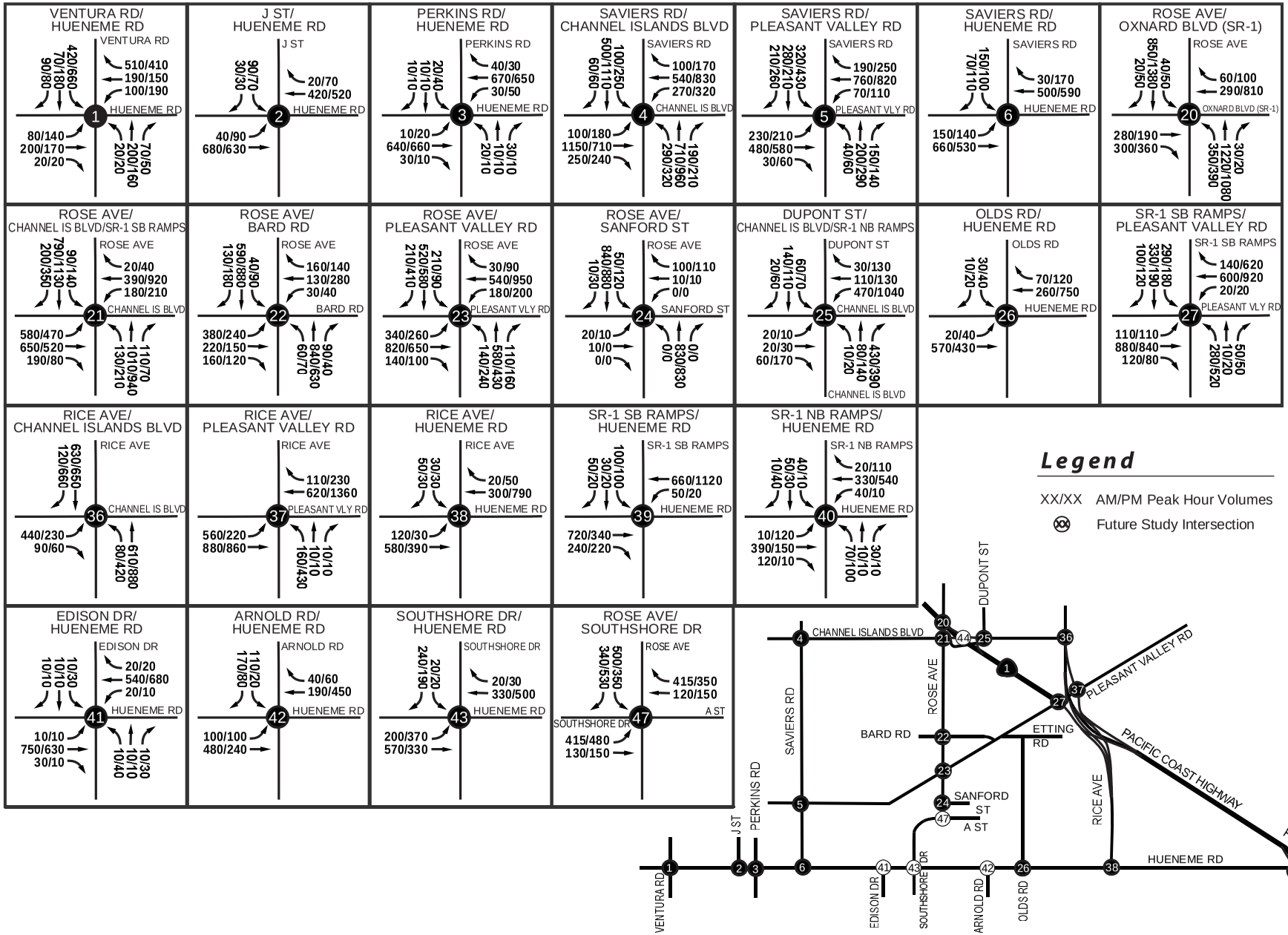
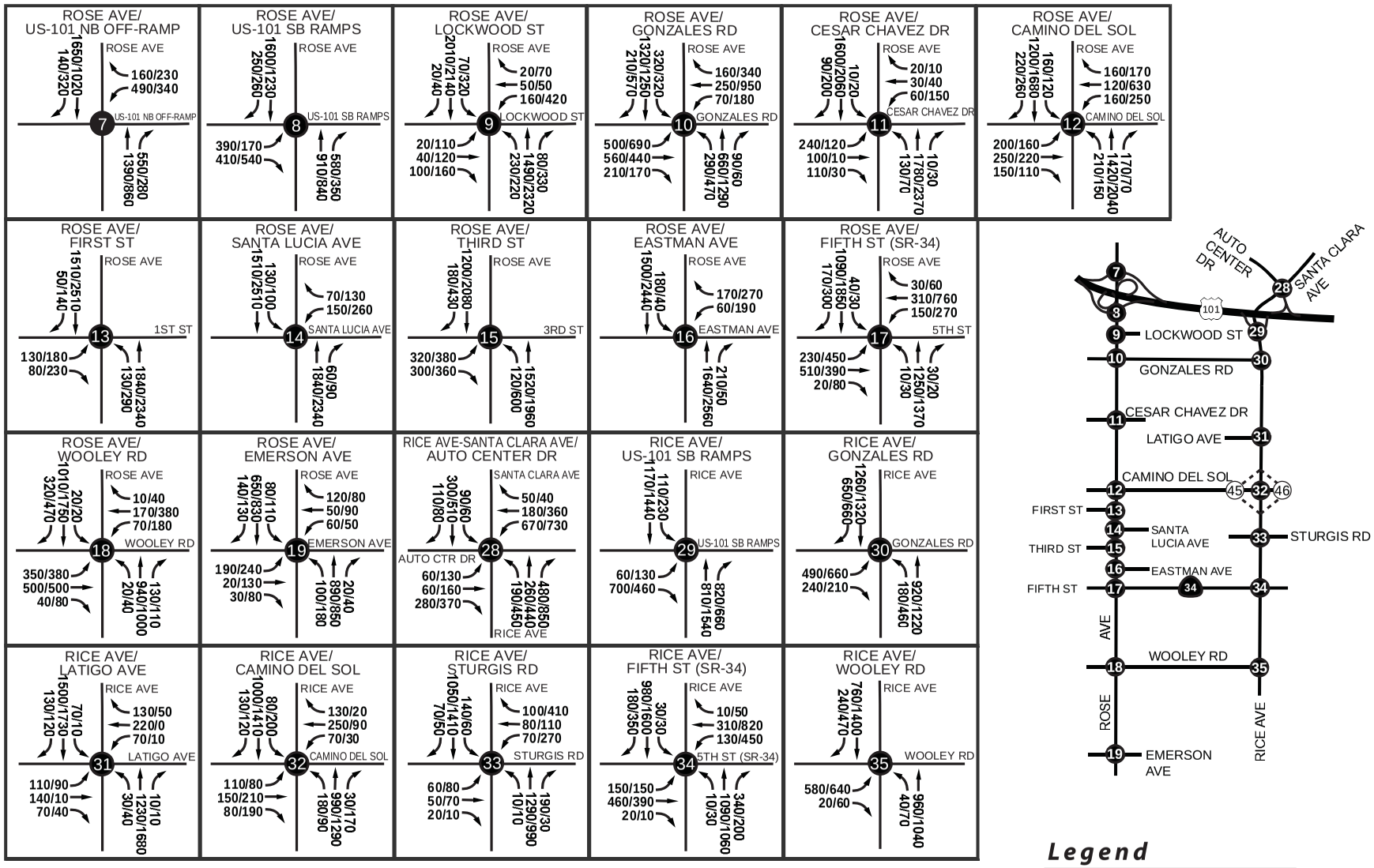


Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-12. **NORTHERN SUBAREA AM/PM PEAK HOUR INTERSECTION VOLUMES**	Nov. 2009



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Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-13. **NORTHERN SUBAREA AM/PM PEAK HOUR INTERSECTION VOLUMES**	Nov. 2009

- Rose Avenue/Camino Del Sol (both AM and PM peak-hour)
- Rose Avenue/First Street (PM peak-hour only)
- Rose Avenue/Santa Lucia Avenue (PM peak-hour only)
- Rose Avenue/Third Street (PM peak-hour only)
- Rose Avenue/Eastman Avenue (PM peak-hour only)
- Rose Avenue/Fifth Street (SR-34) (PM peak-hour only)
- Rose Avenue/Oxnard Boulevard (PM peak-hour only)
- Rose Avenue/Channel Islands Boulevard/Highway 1 Southbound Ramps (PM peak only)
- Rose Avenue/Pleasant Valley Road (both AM and PM peak-hour)
- Rose Avenue/Sanford Street (both AM and PM peak-hour)
- Rice Avenue (Highway 1)/Gonzales Road (both AM and PM peak-hour)
- Rice Avenue (Highway 1)/Channel Islands Boulevard (PM peak-hour only)
- Highway 1 Southbound Ramps/Hueneme Road (both AM and PM peak-hour)

As also shown in Table 3.10-12, based on City of Oxnard established thresholds of significance, the addition of trips generated by development in the Northern Subarea is forecast to result in a *significant but feasibly mitigated (Class II)* impact at only two study intersections: Ventura Road/Hueneme Road and Saviers Road/Channel Islands Boulevard.

Mitigation Measure Trans-1: Northern Subarea Traffic. To eliminate the significant impacts associated with development of the Northern Subarea (Impact Trans-1), the following measures, designed in accordance with City standards, are recommended (also depicted in Figures 3.10-14 and 15):

- **Ventura Road/Hueneme Road** – Modify the Ventura Road/Hueneme Road intersection traffic signal to include a westbound right-turn overlap, which will preclude u-turn movement from southbound to northbound Ventura Road.
- **Saviers Road/Channel Islands Boulevard** – Widen the northbound Saviers Road approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one shared through/right-turn lane.

Table 3.10-13 summarizes forecast year 2020 with Phase 1 project conditions AM and PM peak-hour LOS for the affected intersections assuming implementation of mitigation measure Trans-1. As shown in Table 3.10-13, assuming implementation of the mitigation measures Trans 1, no significant residual impacts are forecast to occur for forecast year 2020 with development of the Northern Subarea.

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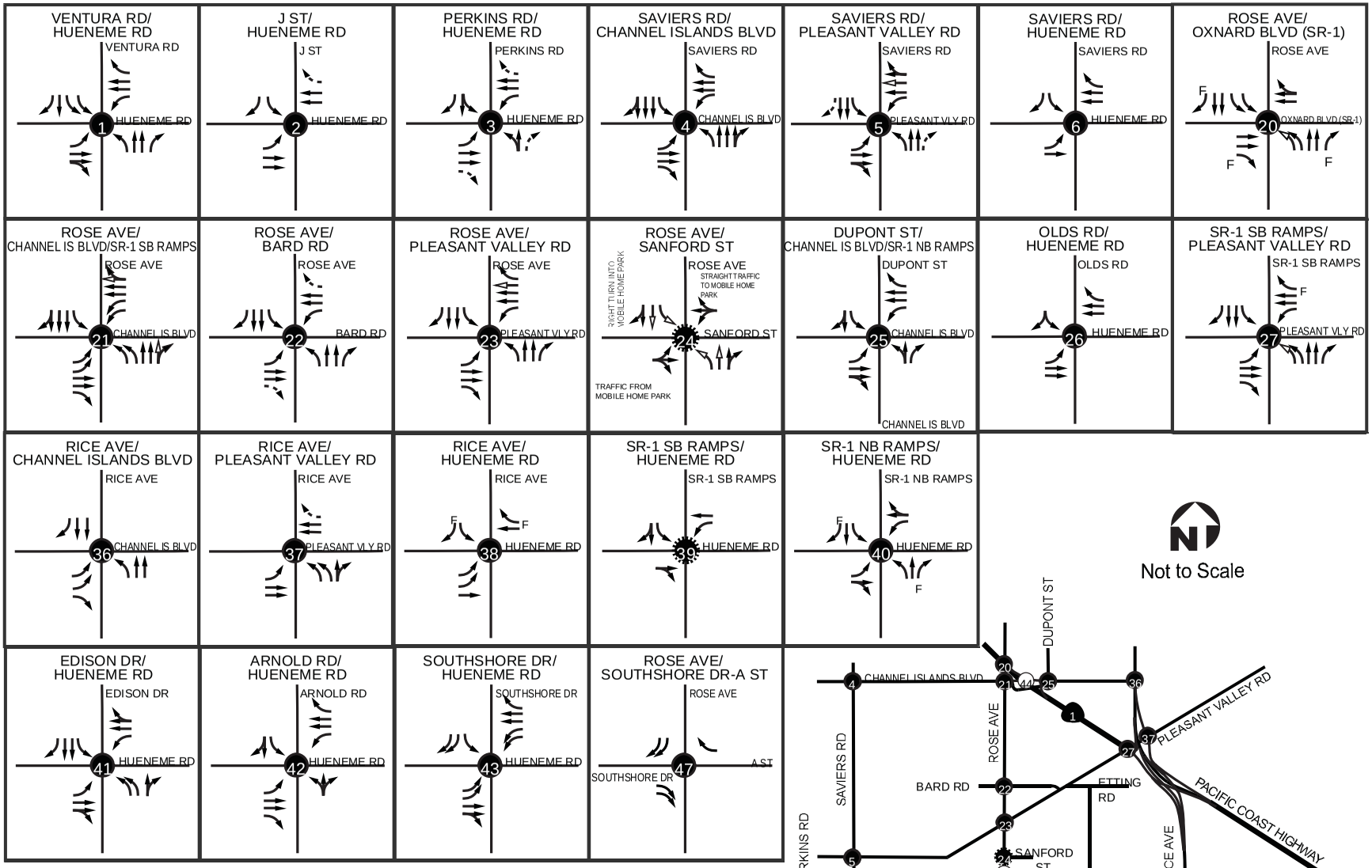
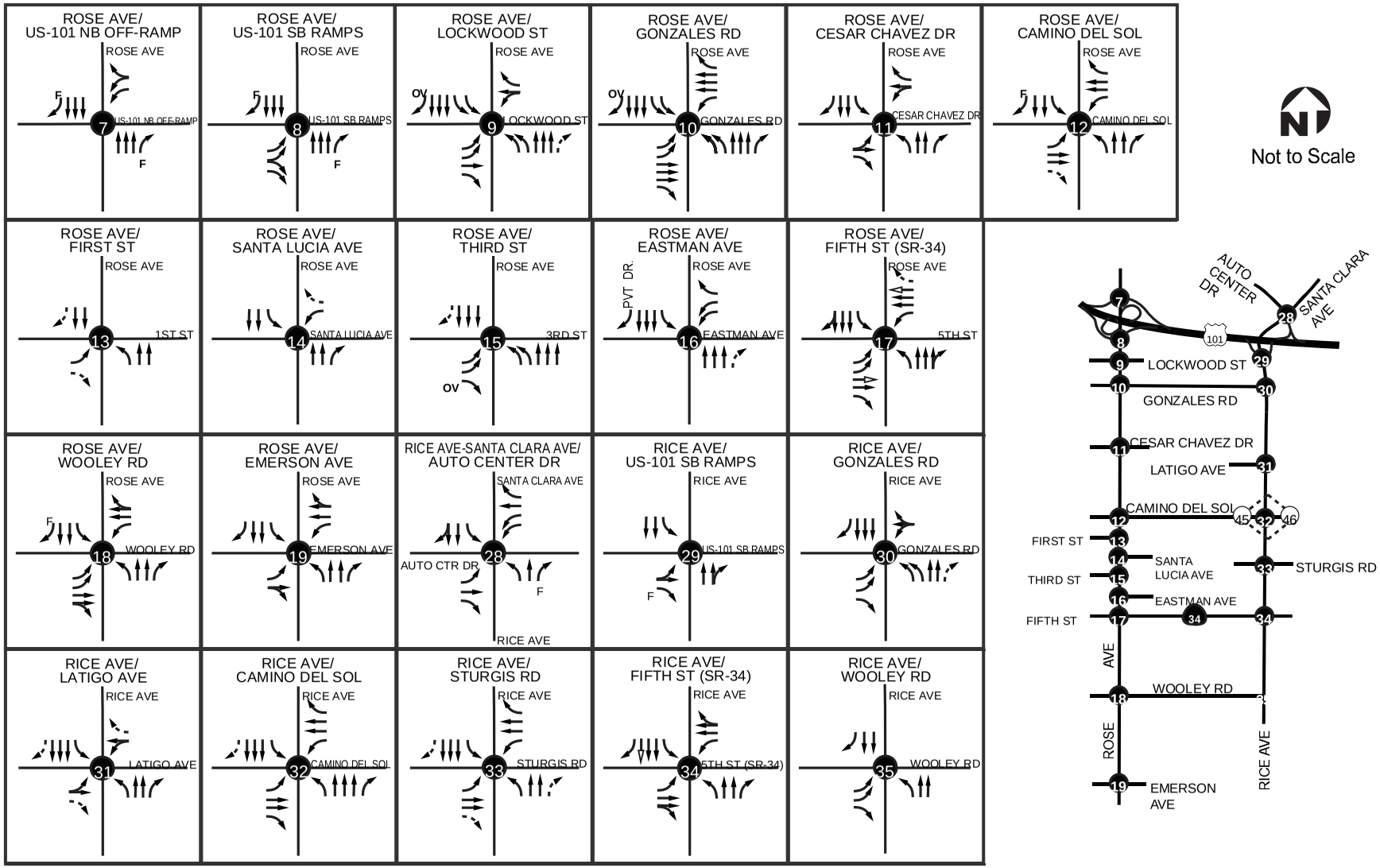


Legend

- Existing Lane
- F Free-Right Turn Lane
- Defacto Right Turn Lane
- Modified Lane
- XX Signalized Intersection
- XX Future Study Intersection
- XX Mitigated Signalized Intersection

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-14. **NORTHERN SUBAREA MITIGATED PROJECT INTERSECTION GEOMETRY**	Nov. 2009



Legend

- Existing Lane
- F — Free-Right Turn Lane
- Defacto Right Turn Lane
- OV — Overlap Right Turn Lane
- Modified Lane
- XX — Signalized Intersection
- XXX — Future Study Intersection

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-15. **NORTHERN SUBAREA MITIGATED PROJECT INTERSECTION GEOMETRY**	Nov. 2009

TABLE 3.10-13
MITIGATED YEAR 2020 TRAFFIC CONDITIONS
NORTHERN SUBAREA SPECIFIC PLAN

	Forecast Year 2020 Without Project Conditions		*Forecast Year 2020 With Phase 1 Project Mitigated Conditions*		
	AM Peak-hour	*PM Peak-hour*	*AM Peak-hour*	*PM Peak-hour*	*Significant*
Study Intersection	*V/C – Delay – LOS*	*V/C – Delay – LOS*	*V/C – Delay – LOS*	*V/C – Delay – LOS*	*Impact?*
Ventura Rd/Hueneme Rd	*0.608 – N/A – A*	***0.848 – N/A – D***	*0.454 – N/A – A*	*0.654 – N/A – B*	*No*
Saviers Rd/Channel Islands Blvd	***0.831 – N/A – D***	***0.901 – N/A – E***	*0.796 – N/A – C*	***0.871 – N/A – D***	*No*

Note: N/A = Not Applicable; Deficient intersection operation shown in **bold.**

Impact Trans-2: Peak-hour Traffic Conditions – Combined Subareas. Table 3.10-14 compares forecast year 2020 traffic conditions for the combined development of the Northern and Southern subareas with 2020 forecasts with development of the Northern Subarea only. These conditions are also depicted in Figures 3.10-16 and 3.10-17. Table 3.10-14 shows those intersections exceeding the City's LOS standard and those intersections for which project-generated traffic exceeds the City's impact thresholds in bold type.

As shown in Table 3.10-14, 19 study intersections are forecast to operate at a deficient LOS (LOS D or worse) according to City of Oxnard performance criteria for forecast 2020 conditions with development of the combined Northern and Southern subareas:

- Saviers Road/Channel Islands Boulevard (PM peak-hour only);
- Saviers Road/Pleasant Valley Road (both AM and PM peak-hour);
- Saviers Road/Hueneme Road (PM peak-hour only);
- Rose Avenue/Lockwood Street (both AM and PM peak-hour);
- Rose Avenue/Gonzales Road (both AM and PM peak-hour);
- Rose Avenue/Cesar Chavez Drive (PM peak-hour only);
- Rose Avenue/Camino Del Sol (both AM and PM peak-hour);
- Rose Avenue/First Street (PM peak-hour only);
- Rose Avenue/Santa Lucia Avenue (PM peak-hour only);
- Rose Avenue/Third Street (PM peak-hour only)
- Rose Avenue/Eastman Avenue (PM peak-hour only)
- Rose Avenue/Fifth Street (SR-34) (PM peak-hour only)
- Rose Avenue/Oxnard Boulevard (PM peak-hour only)
- Rose Avenue/Channel Islands Boulevard/Highway 1 Southbound Ramps (PM peak-hour only)
- Rose Avenue/Pleasant Valley Road (both AM and PM peak-hour)
- Rose Avenue/Sanford Street (both AM and PM peak-hour)
- Rice Avenue (Highway 1)/Gonzales Road (both AM and PM peak-hour)
- Rice Avenue (Highway 1)/Channel Islands Boulevard (PM peak-hour only)
- Highway 1 Southbound Ramps/Hueneme Road (both AM and PM peak-hour)

TABLE 3.10-14
FORECASTED 2020 TRAFFIC CONDITIONS
COMBINED NORTHERN AND SOUTHERN SUBAREAS VERSUS NORTHERN SUBAREA ONLY

		Forecast 2020 Mitigated Conditions with Northern Subarea Development		*Forecast 2020 Conditions with Combined Subarea Development*		
Int #	*Study Intersection*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*Significant Impact?*
1	Ventura Rd/Hueneme Rd	*0.454 – N/A – A*	*0.654 – N/A – B*	*0.376 – N/A – A*	*0.760 – N/A – C*	*Yes*
2	J St/Hueneme Rd	*0.275 – N/A – A*	*0.344 – N/A – A*	*0.338 – N/A – A*	*0.397 – N/A – A*	*No*
3	Perkins Rd/Hueneme Rd	*0.438 – N/A – A*	*0.547 – N/A – A*	*0.506 – N/A – A*	*0.544* – N/A – A*	*No*
4	Saviers Rd/Channel Islands Blvd	*0.796 – N/A – C*	***0.871 – N/A – D***	*0.785* – N/A – C*	***0.893 – N/A – E***	*Yes*
5	Saviers Rd/Pleasant Valley Rd	***0.900 – N/A – D***	***0.854 – N/A – D***	***0.885* – N/A – D***	***0.915 – N/A – E***	*Yes*
6	Saviers Rd/Hueneme Rd	*0.522 – N/A – A*	*0.750 – N/A – C*	*0.616 – N/A – B*	***0.944 – N/A – E***	*Yes*
7	Rose Ave/US-101 NB Off-Ramp	*0.663 – N/A – B*	*0.499 – N/A – A*	*0.668 – N/A – B*	*0.522 – N/A – A*	*No*
8	Rose Ave/US-101 SB Ramps	*0.640 – N/A – B*	*0.522 – N/A – A*	*0.652 – N/A – B*	*0.533 – N/A – A*	*No*
9	Rose Ave/Lockwood St	***0.811 – N/A – D***	***1.156 – N/A – F***	***0.824 – N/A – D***	***1.173 – N/A – F***	*No*
10	Rose Ave/Gonzales Rd	*0.798 – N/A – C*	***1.151 – N/A – F***	***0.808 – N/A – D***	***1.167 – N/A – F***	*Yes*
11	Rose Ave/Cesar Chavez Dr	*0.760 – N/A – C*	***0.854 – N/A – D***	*0.775 – N/A – C*	***0.877 – N/A – D***	*Yes*
12	Rose Ave/Camino Del Sol	***0.815 – N/A – D***	***1.004 – N/A – F***	***0.850 – N/A – D***	***0.997* – N/A – E***	*Yes*
13	Rose Ave/First St	*0.588 – N/A – A*	***0.925 – N/A – E***	*0.610 – N/A – B*	***0.927 – N/A – E***	*No*
14	Rose Ave/Santa Lucia Ave	*0.563 – N/A – A*	***0.833 – N/A – D***	*0.556* – N/A – A*	***0.867 – N/A – D***	*Yes*
15	Rose Ave/Third St	*0.615 – N/A – B*	***0.858 – N/A – D***	*0.644 – N/A – B*	***0.851* – N/A – D***	*No*
16	Rose Ave/Eastman Ave	*0.627 – N/A – B*	***0.910 – N/A – E***	*0.619* – N/A – B*	***0.942 – N/A – E***	*Yes*
17	Rose Ave/Fifth St (SR-34)	*0.754 – N/A – C*	***1.017 – N/A – F***	*0.738* – N/A – C*	***0.998* – N/A – E***	*No*
18	Rose Ave/Wooley Rd	*0.644 – N/A – B*	*0.779 – N/A – C*	*0.671 – N/A – B*	*0.776* – N/A – C*	*No*
19	Rose Ave/Emerson Ave	*0.452 – N/A – A*	*0.566 – N/A – A*	*0.435* – N/A – A*	*0.549* – N/A – A*	*No*
20	Rose Ave/Oxnard Blvd	*0.479 – N/A – A*	***0.847 – N/A – D***	*0.445* – N/A – A*	***0.907 – N/A – E***	*Yes*
21	Rose/Channel Is Bl/Hwy 1 SB Ramps	*0.679 – N/A – B*	***0.887 – N/A – D***	*0.661* – N/A – B*	***0.930 – N/A – E***	*Yes*
22	Rose Ave/Bard Rd	*0.619 – N/A – B*	*0.508 – N/A – A*	*0.583* – N/A – A*	*0.583 – N/A – A*	*No*
23	Rose Ave/Pleasant Valley Rd	***0.985 – N/A – E***	***1.065 – N/A – F***	***1.013 – N/A – F***	***1.071 – N/A – F***	*Yes*
24	Rose Ave/Sanford St	***N/A – 148.3 – F***	***N/A – 223.4 – F***	***N/A – 333.4 – F***	***N/A – 587.3 – F***	*Yes*

TABLE 3.10-14 (CONTINUED)
FORECASTED 2020 TRAFFIC CONDITIONS
COMBINED NORTHERN AND SOUTHERN SUBAREAS VERSUS NORTHERN SUBAREA ONLY

		Forecast 2020 Mitigated Conditions with Northern Subarea Development		*Forecast 2020 Conditions with Combined Subarea Development*		
Int #	*Study Intersection*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*Significant Impact?*
25	Dupont St/Channel Is/Hwy 1 NB Ramps	*0.431 – N/A – A*	*0.684 – N/A – B*	*0.444 – N/A – A*	*0.684 – N/A – B*	*No*
26	Olds Rd/Hueneme Rd	*0.309 – N/A – A*	*0.428 – N/A – A*	*0.353 – N/A – A*	*0.381* – N/A – A*	*No*
27	Hwy 1 SB Ramps/Pleasant Valley Rd	*0.725 – N/A – C*	*0.778 – N/A – C*	*0.713* – N/A – C*	*0.756* – N/A – C*	*No*
28	Santa Clara Ave/Auto Center Dr	*0.568 – N/A – A*	*0.785 – N/A – C*	*0.586 – N/A – A*	*0.761* – N/A – C*	*No*
29	Rice Ave (Hwy 1)/US-101 SB Ramps	*0.359 – N/A – A*	*0.536 – N/A – A*	*0.353* – N/A – A*	*0.542 – N/A – A*	*No*
30	Rice Ave (Hwy 1)/Gonzales Rd	***1.198 – N/A – F***	***1.156 – N/A – F***	***1.188* – N/A – F***	***1.140* – N/A – F***	*No*
35	Rice Ave (Hwy 1)/Wooley Rd	*0.372 – N/A – A*	*0.528 – N/A – A*	*0.381 – N/A – A*	*0.510* – N/A – A*	*No*
36	Rice Ave (Hwy 1)/Channel Islands Blvd	*0.352 – N/A – A*	***0.819 – N/A – D***	*0.386 – N/A – A*	***0.819 – N/A – D***	*No*
37	Rice Ave (Hwy 1)/Pleasant Valley Rd	*0.716 – N/A – C*	*0.788 – N/A – C*	*0.769 – N/A – C*	*0.756* – N/A – C*	*Yes*
38	Rice Ave/Hueneme Rd	*0.259 – N/A – A*	*0.372 – N/A – A*	*0.278 – N/A – A*	*0.375 – N/A – A*	*No*
39	Hwy 1 SB Ramps/Hueneme Rd	***N/A – 669.1 – F***	***N/A – 392.0 – F***	***N/A – 901.8 – F***	***N/A – 450.0 – F***	*Yes*
40	Hwy 1 NB Ramps/Hueneme Rd	*0.614 – N/A – B*	*0.745 – N/A – C*	*0.583* – N/A – A*	*0.695* – N/A – B*	*No*
41	Edison Dr/Hueneme Rd	*0.416 – N/A – A*	*0.509 – N/A – A*	*0.525 – N/A – A*	*0.631 – N/A – B*	*No*
42	Arnold Rd/Hueneme Rd	*0.493 – N/A – A*	*0.435 – N/A – A*	*0.606 – N/A – B*	*0.541 – N/A – A*	*No*
43	SouthShore Dr/Hueneme Rd	*0.356 – N/A – A*	*0.434 – N/A – A*	*0.559 – N/A – A*	*0.494 – N/A – A*	*No*
44	Oxnard Blvd/Channel Islands Blvd	*0.353 – N/A – A*	*0.616 – N/A – B*	*0.359 – N/A – A*	*0.622 – N/A – B*	*No*
45	Rice (Hwy 1) SB Rmps/Camino Del Sol	*0.456 – N/A – A*	*0.510 – N/A – A*	*0.456 – N/A – A*	*0.479* – N/A – A*	*No*
46	Rice (Hwy 1) NB Rmps/Camino Del Sol	*0.225 – N/A – A*	*0.142 – N/A – A*	*0.219* – N/A – A*	*0.140* – N/A – A*	*No*
47	Rose Ave/SouthShore Dr-A St	*0.690 – N/A – B*	*0.537 – N/A – A*	*0.511* – N/A – A*	*0.660 – N/A – A*	*No*

Note: N/A = Not Applicable. Deficient intersection operation shown in **bold.**
* Improved V/C ratio with combined subarea project scenario is due to OTM redistribution of traffic.

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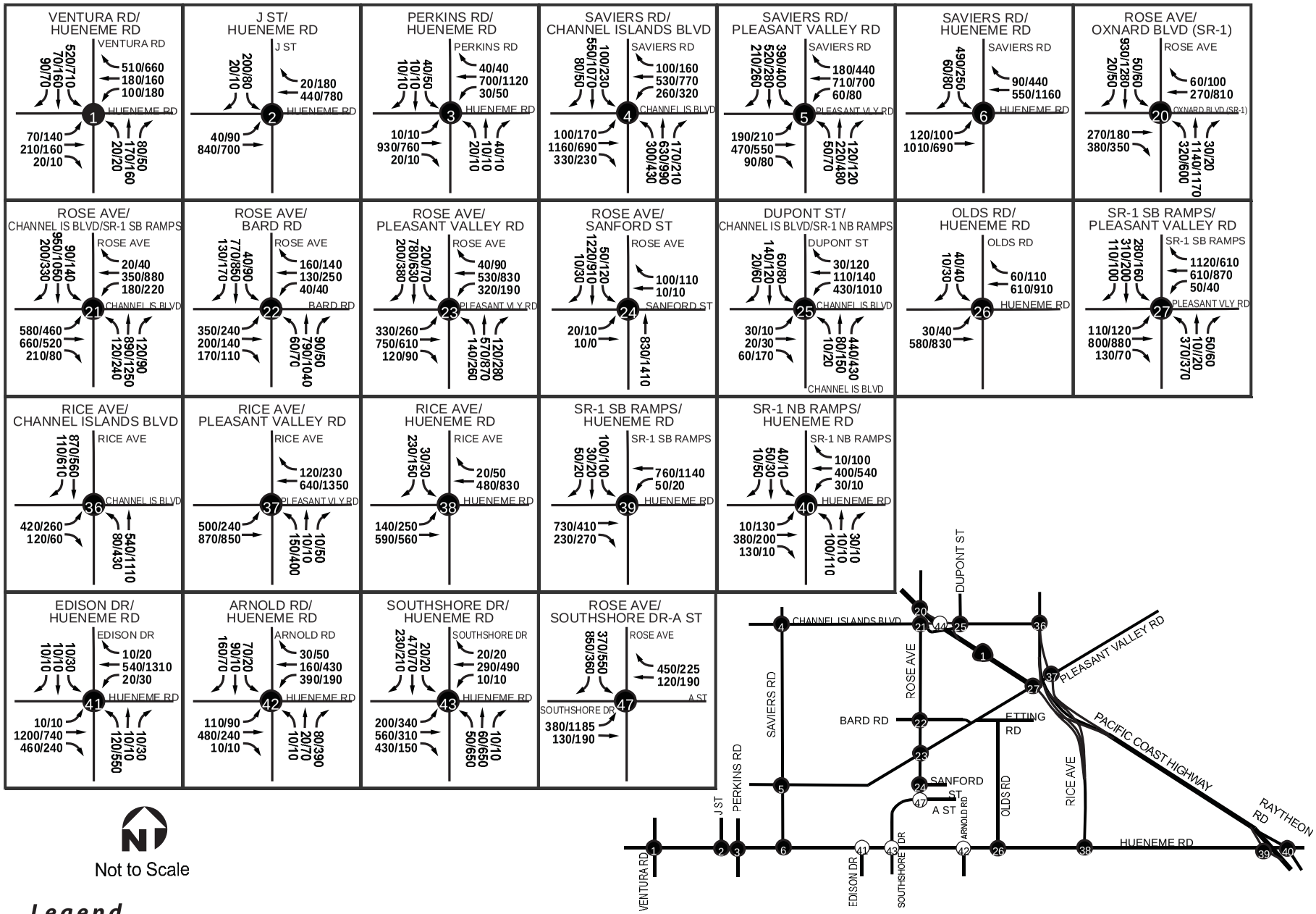


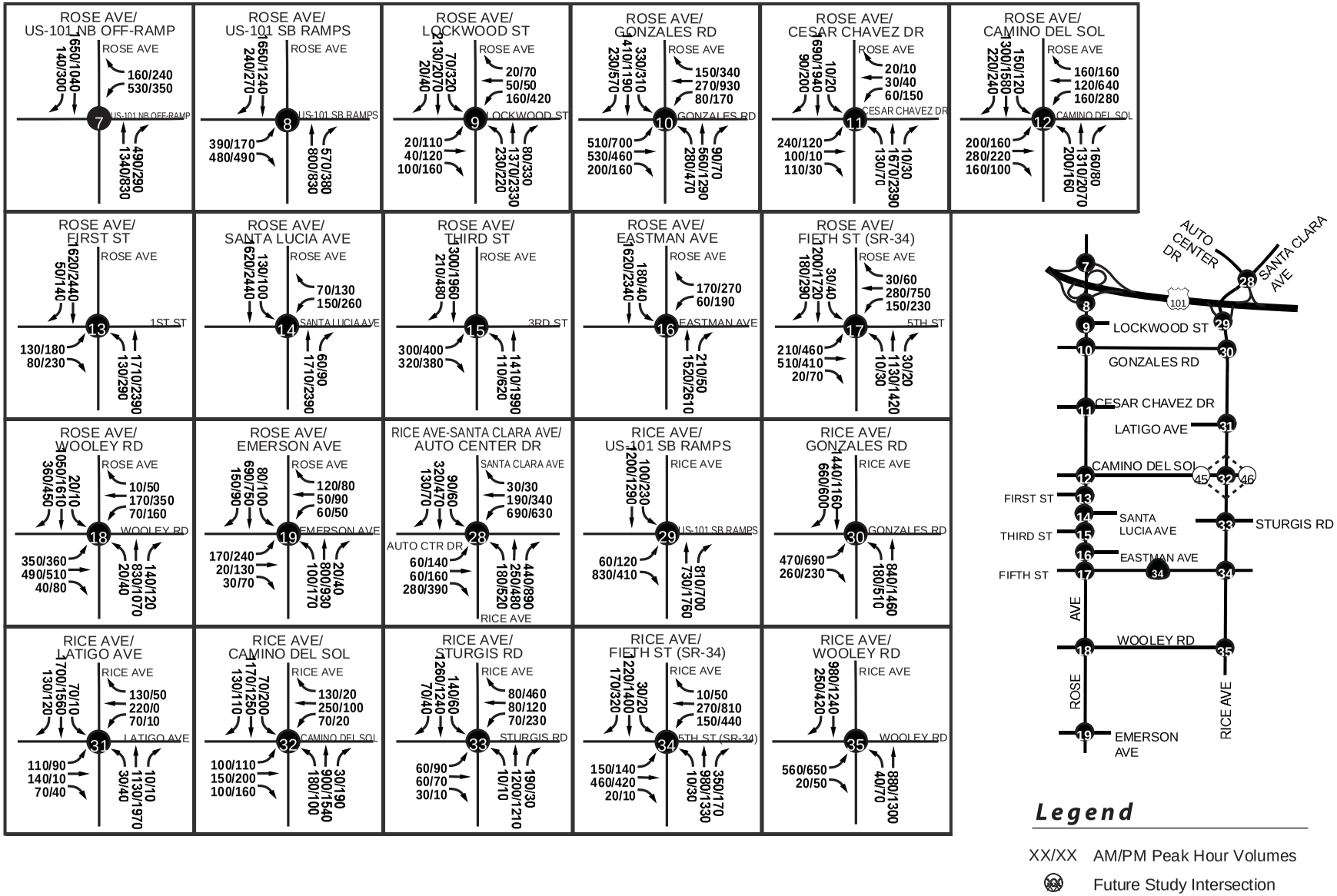
Not to Scale

Legend

XX/XX AM/PM Peak Hour Volumes

Future Study Intersection

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-16. **COMBINED NORTHERN AND SOUTHERN SUBAREA FORECAST 2020 PROJECT VOLUMES**	Nov. 2009



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Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-17. **COMBINED NORTHERN AND SOUTHERN SUBAREA FORECAST 2020 PROJECT VOLUMES**	Nov. 2009

As also shown in Table 3.10-14, based on City of Oxnard established thresholds of significance, the addition of the Southern Subarea project-generated trips is forecast to result in *significant but feasibly mitigated (Class II)* impacts at the following 15 study intersections:

- Ventura Road/Hueneme Road
- Saviers Road/Channel Islands Boulevard
- Saviers Road/Pleasant Valley Road
- Saviers Road/Hueneme Road
- Rose Avenue/Gonzales Road
- Rose Avenue/Cesar Chavez Drive
- Rose Avenue/Camino Del Sol
- Rose Avenue/Santa Lucia Avenue
- Rose Avenue/Eastman Avenue
- Rose Avenue/Oxnard Boulevard
- Rose Avenue/Channel Islands Boulevard/Highway 1 Southbound Ramps
- Rose Avenue/Pleasant Valley Road
- Rose Avenue/Sanford Street
- Rice Avenue (Highway 1)/Pleasant Valley Road
- Highway 1 Southbound Ramps/Hueneme Road

Mitigation Measure Trans-2: Combined Subarea Traffic. To eliminate the significant impacts associated with development of the combined subareas (Impact Trans-2), the following measures, designed in accordance with City standards, are recommended (also depicted in Figures 3.10-18 and 19):

- **Ventura Road/Hueneme Road –** Widen the westbound Hueneme Road approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, two through lanes, and two right-turn lanes.

- **Saviers Road/Channel Islands Boulevard** – Widen the southbound Saviers Road approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one shared through/right-turn lane.

- **Saviers Road/Pleasant Valley Road** – Widen the southbound Saviers Road approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one shared through/right-turn lane.

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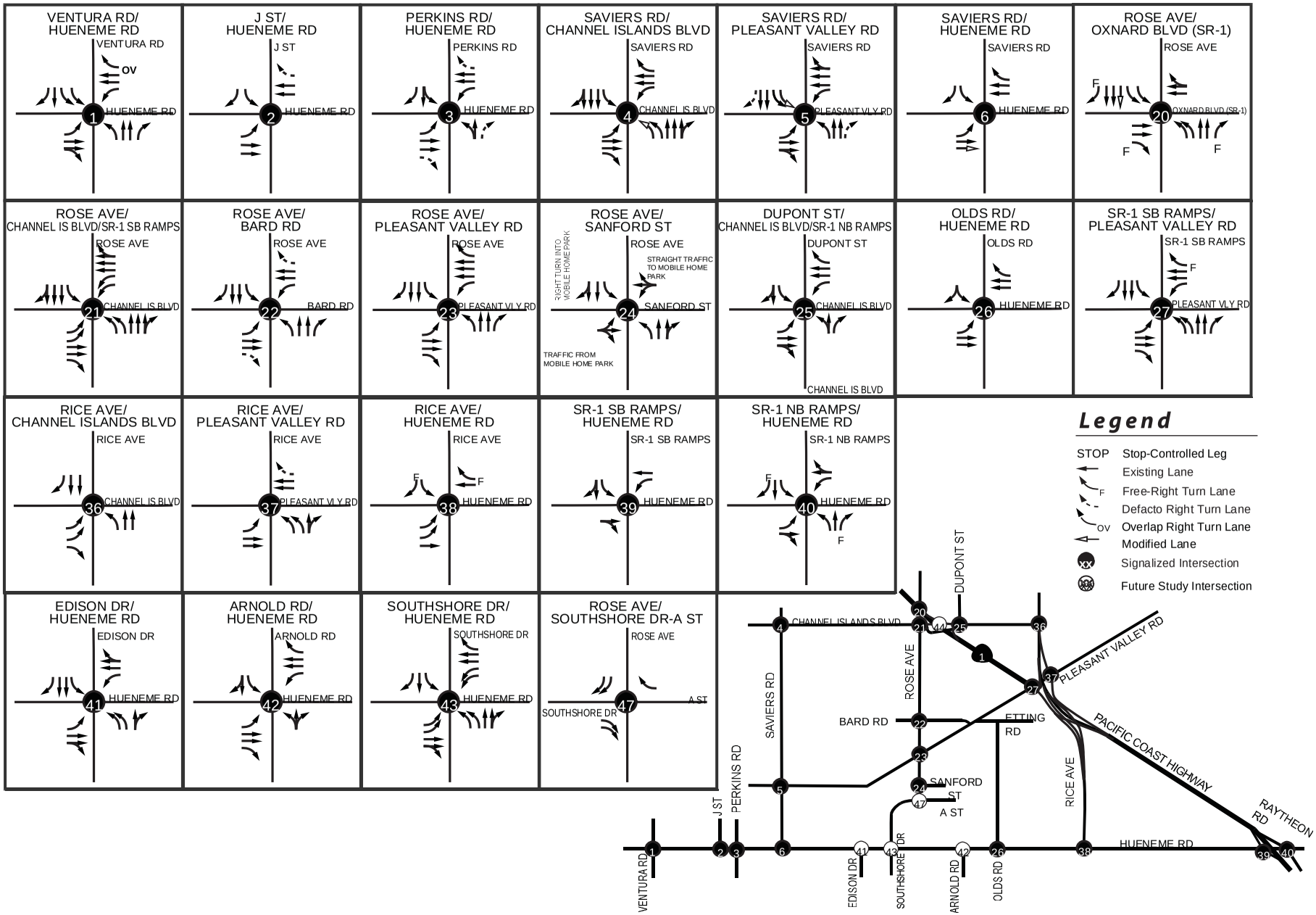

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Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-18. **NORTHERN AND SOUTHERN SUBAREA COMBINED MITIGATED PROJECT INTERSECTION GEOMETRY**	Nov. 2009

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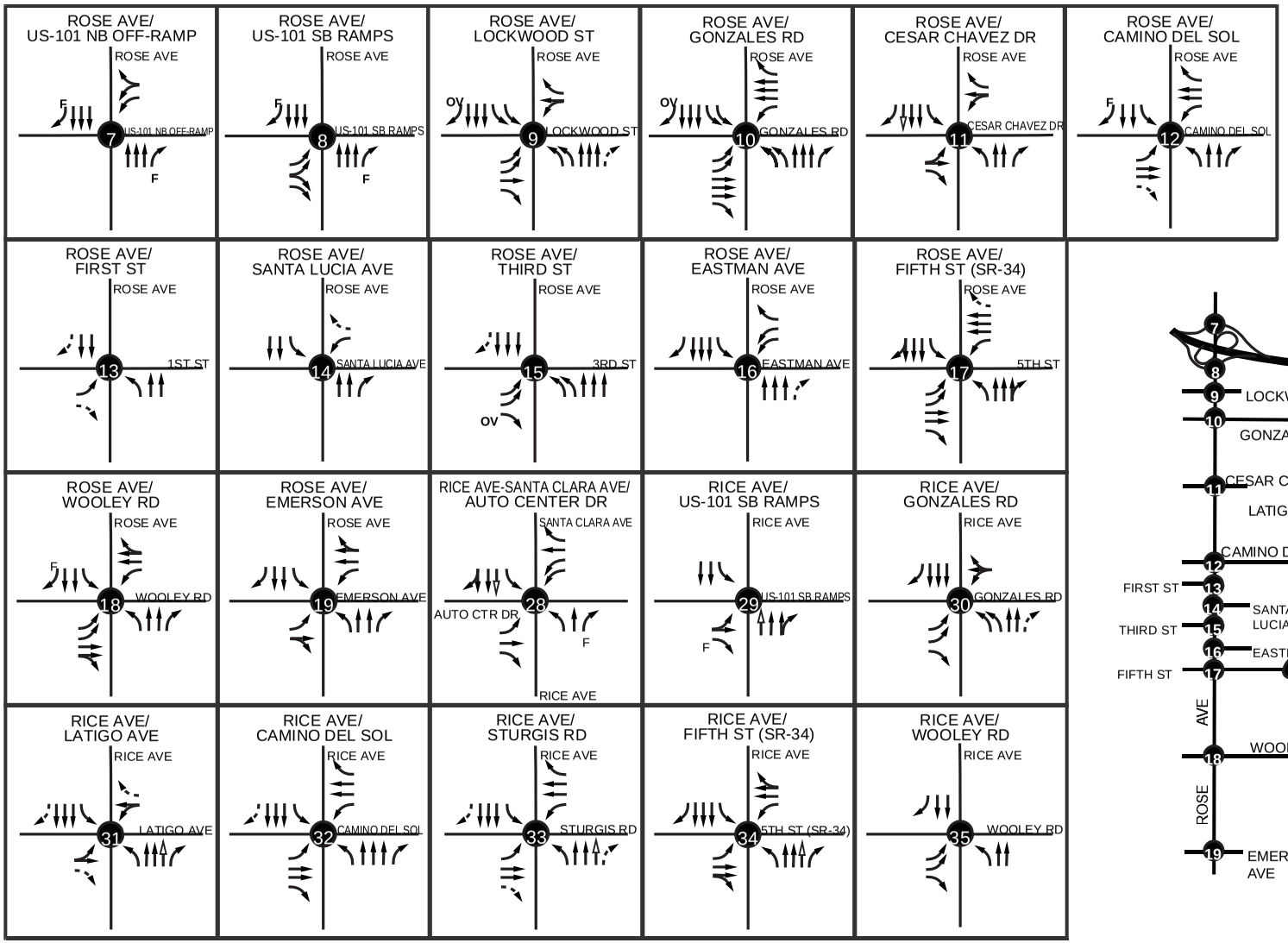


Not to Scale

Ormond Beach Specific Plan EIR URS Corporation	**Source:** *RBF Consulting* *Dated April 2006*	Figure 3.10-19. **NORTHERN AND SOUTHERN SUBAREA COMBINED MITIGATED PROJECT INTERSECTION GEOMETRY**	Nov. 2009

- **Saviers Road/Hueneme Road** – Widen the southbound Saviers Road approach from one left-turn lane and one right-turn lane to consist of one left-turn lane and two right-turn lanes. Modify the Saviers Road/Hueneme Road intersection traffic signal to include a westbound right-turn overlap, which will preclude u-turn movement from southbound to northbound Saviers Road.
- **Rose Avenue/Gonzales Road** – Modify the Rose Avenue/Gonzales Road intersection traffic signal to include a westbound right-turn overlap, which will preclude u-turn movement from southbound to northbound Rose Avenue.
- **Rose Avenue/Cesar Chavez Drive** – Widen the eastbound Cesar Chavez Drive approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and one right-turn lane. Modify the Rose Avenue/Cesar Chavez Drive intersection traffic signal to include split phasing for the eastbound and westbound Cesar Chavez approaches.
- **Rose Avenue/Camino Del Sol** – Re-stripe the eastbound Camino Del Sol approach from one left-turn lane, two through lanes, and one de-facto right-turn lane to consist of one left-turn lane, two through lanes, and one dedicated right-turn lane. Modify the Rose Avenue/Camino Del Sol intersection traffic signal to include an eastbound right-turn overlap, which will preclude u-turn movement from northbound to southbound Rose Avenue. Modify the Rose Avenue/Camino Del Sol intersection traffic signal to include a westbound right-turn overlap, which will preclude u-turn movement from southbound to northbound Rose Avenue.
- **Rose Avenue/Santa Lucia Avenue** – Re-stripe the westbound Santa Lucia Avenue approach from one left-turn lane and one de-facto right-turn lane to consist of one left-turn lane and one shared left-turn/right-turn lane.
- **Rose Avenue/Eastman Avenue** – Re-stripe the westbound Eastman Avenue approach from two left-turn lanes and one right-turn lane to consist of one left-turn lane, one shared left-turn/right-turn lane, and one right-turn lane.
- **Rose Avenue/Oxnard Boulevard** – Widen the northbound Rose Avenue approach from one left-turn lane, three through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.
- **Rose Avenue/Channel Islands Boulevard/Highway 1 Southbound Ramps** – Re-stripe the westbound Channel Islands Boulevard approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one shared through/right-turn lane.

- **Rose Avenue/Pleasant Valley Road** – Widen the eastbound Pleasant Valley Road approach from one left-turn lane, three through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.
- **Rose Avenue/Sanford Street** – Signalize intersection. Re-stripe the northbound Rose Avenue approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Re-stripe the southbound Rose Avenue approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.
- **Rice Avenue (Highway 1)/Pleasant Valley Road** – Widen the eastbound Pleasant Valley Road approach from one left-turn lane and two through lanes to consist of two left-turn lanes and two through lanes.
- **Highway 1 Southbound Ramps/Hueneme Road** – Signalize intersection.

Table 3.10-15 summarizes forecast year 2020 conditions AM and PM peak-hour LOS for affected intersections assuming implementation of mitigation measure Trans-2. As shown in Table 3.10-15, assuming implementation of the mitigation measure Trans-2, no significant residual impacts are forecast to occur for forecast year 2020 with development of both the Northern and Southern subareas.

***Impact Trans-3: Northern Subarea Soil Import Traffic*.** Soil import access to the Northern Subarea is planned to last 11 weeks at a temporary soil import driveway on Hueneme Road west of Olds Road. The source of the import soil is the Calleguas Creek dredging project planned and operated by Ventura County Watershed Protection District. The soil will be trucked from a County of Ventura borrow site near the intersection of Laguna and Hueneme roads, just over five miles from the Northern Subarea. The operations are proposed to occur between 7:00 a.m. and 3:30 p.m. on weekdays.

Table 3.10-16 summarizes the temporary soil import truck trips forecast to be generated during the 11-week soil import, as well as the passenger car equivalent- (PCE) adjusted trips, assuming the PCE factor of 3.0 provided by County of Ventura staff (conservatively assuming all soil import trucks are 5-axle trucks).

TABLE 3.10-15
MITIGATED YEAR 2020 TRAFFIC CONDITIONS
NORTHERN SUBAREA SPECIFIC PLAN

	Forecast Year 2020 with Northern Subarea Project Mitigated Conditions		*Forecast Year 2020 with Combined Northern and Southern Subarea Mitigated Conditions*		
Study Intersection	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*AM Peak-hour V/C – Delay – LOS*	*PM Peak-hour V/C – Delay – LOS*	*Significant Impact?*
Ventura Rd/Hueneme Rd	*0.454 – N/A – A*	*0.654 – N/A – B*	*0.351 – N/A – A*	*0.558 – N/A – A*	*No*
Saviers Rd/Channel Islands Blvd	*0.796 – N/A – C*	***0.871 – N/A – D***	*0.760 – N/A – C*	***0.829 – N/A – D***	*No*
Saviers Rd/Pleasant Valley Rd	***0.900 – N/A – D***	***0.854 – N/A – D***	*0.760 – N/A – C*	*0.777 – N/A – C*	*No*
Saviers Rd/Hueneme Rd	*0.522 – N/A – A*	*0.750 – N/A – C*	*0.616 – N/A – B*	*0.750 – N/A – C*	*No*
Rose Ave/Gonzales Rd	*0.798 – N/A – C*	***1.151 – N/A – F***	*0.765 – N/A – C*	***1.167 – N/A – F***	*No*
Rose Ave/Cesar Chavez Dr	*0.760 – N/A – C*	***0.854 – N/A – D***	*0.689 – N/A – B*	***0.846 – N/A – D***	*No*
Rose Ave/Camino Del Sol	***0.815 – N/A – D***	***1.004 – N/A – F***	*0.783 – N/A – C*	***0.997 – N/A – E***	*No*
Rose Ave/Santa Lucia Ave	*0.563 – N/A – A*	***0.833 – N/A – D***	*0.531 – N/A – A*	***0.826 – N/A – D***	*No*
Rose Ave/Eastman Ave	*0.627 – N/A – B*	***0.910 – N/A – D***	*0.563 – N/A – A*	***0.854 – N/A – D***	*No*
Rose Ave/Oxnard Blvd	*0.479 – N/A – A*	***0.847 – N/A – D***	*0.466 – N/A – A*	*0.751 – N/A – C*	*No*
Rose Ave/Channel Is Bl/Highway 1 SB Ramps	*0.679 – N/A – B*	***0.887 – N/A – D***	*0.646 – N/A – B*	***0.819 – N/A – D***	*No*
Rose Ave/Pleasant Valley Rd	***0.985 – N/A – E***	***1.065 – N/A – F***	***0.833 – N/A – D***	***0.915 – N/A – E***	*No*
Rose Ave/Sanford St	***N/A – 148.3 – F***	***N/A – 223.4 – F***	*0.522 – N/A – A*	*0.650 – N/A – B*	*No*
Rice Ave (Highway 1)/Pleasant Valley Rd	*0.716 – N/A – C*	*0.788 – N/A – C*	*0.584 – N/A – A*	*0.706 – N/A – C*	*No*
Highway 1 SB Ramps/Hueneme Rd	***N/A – 669.1 – F***	***N/A – 392.0 – F***	*0.781 – N/A – C*	***0.813 – N/A – D***	*No*

Note: N/A = Not Applicable; Deficient intersection operation shown in **bold**. Delay is shown in seconds.

TABLE 3.10-16
FORECAST SOIL IMPORT TRIP GENERATION

Trip Generation	AM Peak-hour Trips			Daily Trips
	In	Out	Total	
Truck Trips	80	80	160	1,280
PCE-adjusted Trips	240	240	480	3,840

As shown in Table 3.10-16, the temporary soil import is forecast to generate 3,840 PCE-adjusted daily vehicle trips, which includes approximately 480 PCE-adjusted AM peak-hour vehicle trips during the 11-week soil import. Based on these trip generation assumptions, Table 3.10-17 summarizes forecast temporary soil import AM peak-hour LOS of the study intersections during the 11-week soil import.

TABLE 3.10-17
FORECAST SOIL IMPORT
AM PEAK-HOUR INTERSECTION LOS

Study Intersection	Existing Conditions			Forecast Temporary Soil Import Conditions			Temporary Significant Impact?
	V/C	Delay	LOS	V/C	Delay	LOS	
Olds Rd/Hueneme Rd	0.488	N/A	A	0.638	N/A	B	No
Rice Ave/Hueneme Rd	0.463	N/A	A	0.612	N/A	B	No
Highway 1 SB Ramps/Hueneme Rd	N/A	22.7	C	N/A	66.6	**F**	Yes**
Highway 1 NB Ramps-Raytheon Rd/Hueneme Rd	0.324	N/A	A	0.474	N/A	A	No
Wood Rd/Hueneme Rd	N/A	15.7	C	N/A	66	**F**	Yes**
Las Posas Rd/Hueneme Rd	0.25	N/A	A	0.325	N/A	A	No
Laguna Rd/Hueneme Rd	16.3	N/A	C	34.6	N/A	D	No
Soil Import Drwy/Hueneme Rd	N/A	N/A	N/A	N/A	279.1*	**F**	No

Note: Delay is shown in seconds; Deficient intersection operation shown in **bold**.
* Delay value represents delay experienced by soil import trucks exiting the project site only.
** Temporary significant impact for 11-week duration only.

As shown in Table 3.10-17, the following study intersections are forecast to operate at a deficient LOS (E or worse) during the 11-week temporary soil import operations in the AM peak-hour:

- Highway 1 Southbound Ramps/Hueneme Road
- Wood Road/Hueneme Road
- Soil Import Driveway/Hueneme Road

As also shown in Table 3.10-17, the addition of temporary soil import-related trips is forecast to result in a *significant but feasibly mitigated impact (Class II)* only at the first two of these intersections because the third will affect only soil import trucks exiting the project site.

Mitigation Measure Trans-3: Northern Subarea Soil Import Traffic. To eliminate the identified temporary significant impacts forecast to occur during the 11-week soil import, the following measures are offered for consideration:

- Highway 1 Southbound Ramps/Hueneme Road – The project applicant shall make a fair share contribution to install a temporary traffic signal during the 11-week soil import. It should be noted signalization of the Highway 1 Southbound Ramps/Hueneme Road intersection is planned by County of Ventura and Caltrans staff but has been delayed due to funding deficiencies.
- Wood Road/Hueneme Road – The project applicant shall make a fair share contribution to install a temporary traffic signal during the 11-week soil import.
- Hueneme Road from City Limits to Laguna Road – The project applicant shall make a pro-rata contribution to the cost of repaving or rehabilitating Hueneme Road to account for damage cause by hauling of soil.

Assuming implementation of Mitigation Measure Trans-3, Table 3.10-18 summarizes forecast temporary soil import AM peak-hour LOS for the two study intersections identified as experiencing significant impacts. As the table shows, in both cases, the proposed mitigation measures reduce the impact to a *less-than-significant (Class III)* level.

TABLE 3.10-18
FORECAST TEMPORARY SOIL IMPORT MITIGATED AM PEAK-HOUR INTERSECTION LOS

Study Intersection	Existing Conditions			Forecast Temporary Soil Import Conditions			Temporary Significant Impact?
	V/C	Delay	LOS	V/C	Delay	LOS	
Highway 1 SB Ramps/Hueneme Rd	N/A	22.7	C	0.566	N/A	A	No
Wood Rd/Hueneme Rd	N/A	15.7	C	0.538	N/A	A	No

Note: Delay is shown in seconds; Deficient intersection operation shown in bold.

Impact Trans-4: Freight Movement. As described in the existing setting description, the Study Area, because of its proximity to the Port of Hueneme, plays a significant role in the transport of freight and goods. As a result, both freight rail and trucking are key features of the overall transportation system. While there is no existing or planned rail access to the Study Area, the City of Oxnard has designated Hueneme and Arnold roads and Edison Drive

as truck routes. Each of these roadways is expected to continue to serve freight movement needs, as well as accommodating new traffic associated with residential and commercial development in the Northern Subarea and light industrial and business park uses in the Southern Subarea. As discussed under Impacts Trans-1 and Trans-2 and their associated mitigation measures, the specific plans for these areas have identified roadway improvements that will accommodate all traffic associated with development in the area, including truck-based freight movement. The impacts of the proposed specific plans on freight movement are thus considered *less than significant (Class III)*.

Impact Trans-5: Transit Services. Future development in both the Northern and Southern subareas will generate increased demand for transit services. In recognition of this fact, the specific plans for each subarea include commitments to accommodation of public transit. This includes: designing connections to primary arterials which are likely to serve as future transit routes (e.g., Rose Avenue, SouthShore Drive, and Hueneme Road); roadway layouts that maximize opportunities for designated public transportation stops; pedestrian-oriented neighborhoods that encourage pedestrian and bicycle connections with transit stops; transit-supportive land uses to enhance the viability of transit; and commitment to quality design for public transportation stops, including benches and graphics that address all transit system standards. The project developers will work with public transportation providers throughout the engineering and buildout of the specific plans. The specific design of the public transportation system will be determined based on the service providers' routes and technical requirements. With such coordination, the impacts of development under the specific plans will result in a *less-than-significant (Class III)* impact on transit services in the Study Area.

Impact Trans-6: Non-motorized Transportation (Bike and Pedestrian). With development under the specific plans for the Northern and Southern subareas, there will be increased demand for non-motorized transportation facilities to connect work, shopping, residential, and recreational uses. Both specific plans include a variety of on- and off-street bike and pedestrian facilities to ensure that non-motorized transportation needs are accommodated. This includes accommodation of the Pacific Coast Bike Route in the design of Hueneme Road. As a result, the impacts of development in the Study Area on non-motorized transportation are considered *less than significant (Class III)*.

3.11 NOISE

3.11.1 Existing Conditions

3.11.1.1 Background Information

Noise is often described as unwanted sound, and thus is a subjective reaction to the physical phenomenon of sound. Sound is variations in air pressure that the ear can detect.

The ear responds to pressure changes over a range of 10^{14} to 1. This is roughly equivalent to the range of 1 second as compared to 3.2 million years, or 1 square yard compared to the entire surface area of the earth. To deal with the extreme range of pressures which the ear can detect, researchers express the amount of acoustical energy of a sound by comparing the measured sound pressure to a reference pressure, then taking the logarithm (base 10) of the square of that number. This original unit of sound measurement, named the bel after Alexander Graham Bell, corresponded well to human hearing characteristics if it was divided by a factor of 10. The resulting unit, one tenth of a bel, is called the decibel, and is abbreviated as dB.

The threshold of hearing is considered to be zero (0) dB, and the range of sounds in normal human experience is 0 to 140 dB.

Because sound pressure levels are defined as logarithmic numbers, the values cannot be directly added or subtracted. For example, two sound sources, each producing 50 dB, will produce 53 dB when combined, not 100 dB. This is because two sources have two times the energy of one source, and 10 times the logarithm of 2 equals 3. Similarly, ten sources produce a 10 dB higher sound pressure level than one source, as ten times the logarithm of 10 equals 10.

The ear responds to pressure variations in the air from about 20 times per second to about 20,000 times per second. The frequency of the variations is described in terms of hertz (Hz), formerly called cycles per second. The ear does not respond equally to all frequencies. For example, we do not hear very low frequency sounds as well as we hear higher frequency sounds, nor do we hear very high frequency sounds very well. This difference in perceived loudness varies with the sound pressure level of the sound. In general, the maximum sensitivity of the ear occurs at frequencies between about 500 and 8,000 Hz.

To compensate for the fact that the ear is not as sensitive at some frequencies and sound pressure levels as at others, a number of frequency weighting scales have been developed. The “A” weighting scale is most commonly used for environmental noise assessment, as sound pressure levels measured using an A-weighting filter correlate well with community response to noise sources such as aircraft and traffic.

When an A-weighting filter is used to measure sound pressure levels, the results may be expressed as *sound levels*, in decibels (dB). It is sufficient to use the abbreviation "dB" if these terms are well defined, but many people prefer to use the expressions dBA or dB(A) for clarity. For convenience, many people use the term "noise level" interchangeably with "sound level." Table 3.11-1 shows typical sound levels and relative loudness for various types of noise environments.

TABLE 3.11-1
EXAMPLES OF A-WEIGHTED SOUND LEVELS AND RELATIVE LOUDNESS

Sound	Sound Level (dBA)	Relative Loudness (approximate)	Relative Sound Energy
Jet aircraft, 100 feet	130	128	10,000,000
Rock music with amplifier	120	64	1,000,000
Thunder, snowmobile (operator)	110	32	100,000
Boiler shop, power mower	100	16	10,000
Orchestral crescendo at 25 feet, noisy kitchen	90	8	1,000
Busy street	80	4	100
Interior of department store	70	2	10
Ordinary conversation, 3 feet away	60	1	1
Quiet automobile at low speed	50	½	.1
Average office	40	1/4	.01
City residence	30	1/8	.001
Quiet country residence	20	1/16	.0001
Rustle of leaves	10	1/32	.00001
Threshold of hearing	0	1/64	.000001

U.S. Department of Housing and Urban Development, "Aircraft Noise Impact -- Planning Guidelines for Local Agencies," 1972.

The ambient noise level is defined as the noise from all sources near and far. A similar term is background noise level. This term usually refers the ambient noise level that is present before a noise source being studied is introduced. A synonymous term is pre-project noise level.

Noise exposure contours or noise contours are lines drawn about a noise source representing constant levels of noise exposure. Community Noise Equivalent Level (CNEL) or L_{dn} (DNL) contours are frequently utilized to graphically portray community noise exposure. The terms CNEL and L_{dn} (DNL) are defined in the following section.

Most environmental noise sources produce varying amounts of noise over time, so the measured sound levels also vary. For example, noise produced during a train passage will

vary from relatively quiet background levels before the event to a maximum value when the train passes by, then returning down to background levels as the train leaves the observer's vicinity. Similarly, noise from traffic varies with the number and types of vehicles, speed and proximity to the observer.

Variations in sound levels may be addressed by statistical methods. The simplest of these are the maximum (L_{max}) and minimum (L_{min}) noise levels, which are the highest and lowest levels observed. To describe less extreme variations in sound levels, other statistical descriptors may be used, such as the $L_{10,}$ $L_{50,}$ and L_{90}. The L_{10} is the A-weighted sound level equaled or exceeded during 10 percent of a time period. Similarly, the L_{50} and L_{90} are the sound levels equaled or exceeded during 50 and 90 percent of a time period. The most common time period used with these statistical descriptors is 1 hour, although any time period could be used so long as it is stated.

Because statistical descriptors such as L_{10}, L_{50}, etc. are sometimes cumbersome to calculate, the equivalent sound level (L_{eq}) or energy average sound level is often used to describe the "average" sound level during stated time period, usually 1 hour.

CNEL is calculated from hourly L_{eq} values, after adding a "penalty" to the noise levels measured during the evening (7 p.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) periods. The penalty for evening hours is a factor of 3, which is equivalent to 4.77 dB. The penalty for nighttime hours is a factor of 10, which is equivalent to 10 dB. To calculate L_{dn} (also called DNL), the evening penalty is omitted.

3.11.1.2 Existing Noise Environment

The Ormond Beach Specific Plan Study Area is currently occupied by a variety of agricultural and light industrial uses. Agricultural uses including strawberry fields and sod farms take in the majority of the land use area, and as such, the noise environment in the Study Area is that of a quiet rural area.

The land uses surrounding the Study Area include a power generating facility (Reliant Energy Ormond Beach Generating Station), the Southern California Gas Company pump facility, the Pacific Vehicle Preparation facility, single-family residential uses, Naval Base Ventura County (NBVC) Point Mugu, and additional agricultural area. Additionally, there is a Union Pacific Railroad track that runs diagonally in a southwest to northeast direction at the Study Area's northwest corner with a grade crossing at Pleasant Valley Road. The Reliant Ormond Beach Generating Station and SoCal Gas (The Gas Company) Reliant pump facility are located at the Study Area's southwest border. The Pacific Vehicle Preparation facility and additional light industrial business are along the western border. The northern border adjoins existing single-family land uses, and the eastern border adjoins a large

agricultural land use. At the Study Area's southeastern border is NBVC Point Mugu. Noise from these existing sources is a potentially significant impact on the Study Area.

Ambient noise measurements were performed on the project site on April 6-7, 2006. The measurement sites are shown in Figure 3.11-1. The site in the southwest corner of the Study Area was located about 60 feet from some SoCal Gas pumps, and about 1,350 feet from the Reliant Ormond Beach Generating Station. Noise from the pumps contributed to the background noise levels; noise from the power generating plant was difficult to hear in daytime hours. The site in the northern portion of the project site was distant from any major noise sources.

The continuous noise measurements were conducted to describe the day/night distribution of ambient noise levels, and to calculate hourly noise levels and Day/Night Levels. Figures 3.11-2 and 3.11-3 present the hourly noise measurement data in graphic format.

The sound measurement equipment used consisted of a Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter equipped with a B&K Type 4176 ½" microphone. This measurement equipment was calibrated immediately before and after measurements using a B&K Type 4230 calibrator, and meets the specifications of the American National Standards Institute (ANSI) for Type 1 sound measurement systems.

Noise measurements were conducted in terms of the L_{eq} and other statistical descriptors. The noise level measurements were used to determine statistical trends in ambient noise levels throughout the day and nighttime periods. Table 3.11-2 summarizes the measured 24-hour noise levels.

The existing ambient noise environment in the areas proposed for residential development may be considered very quiet, and is dominated by birds and wildlife. During the April 2006 ambient noise measurement period, some local and distant traffic noise was audible, but was not dominant.

3.11.1.3 Traffic Noise

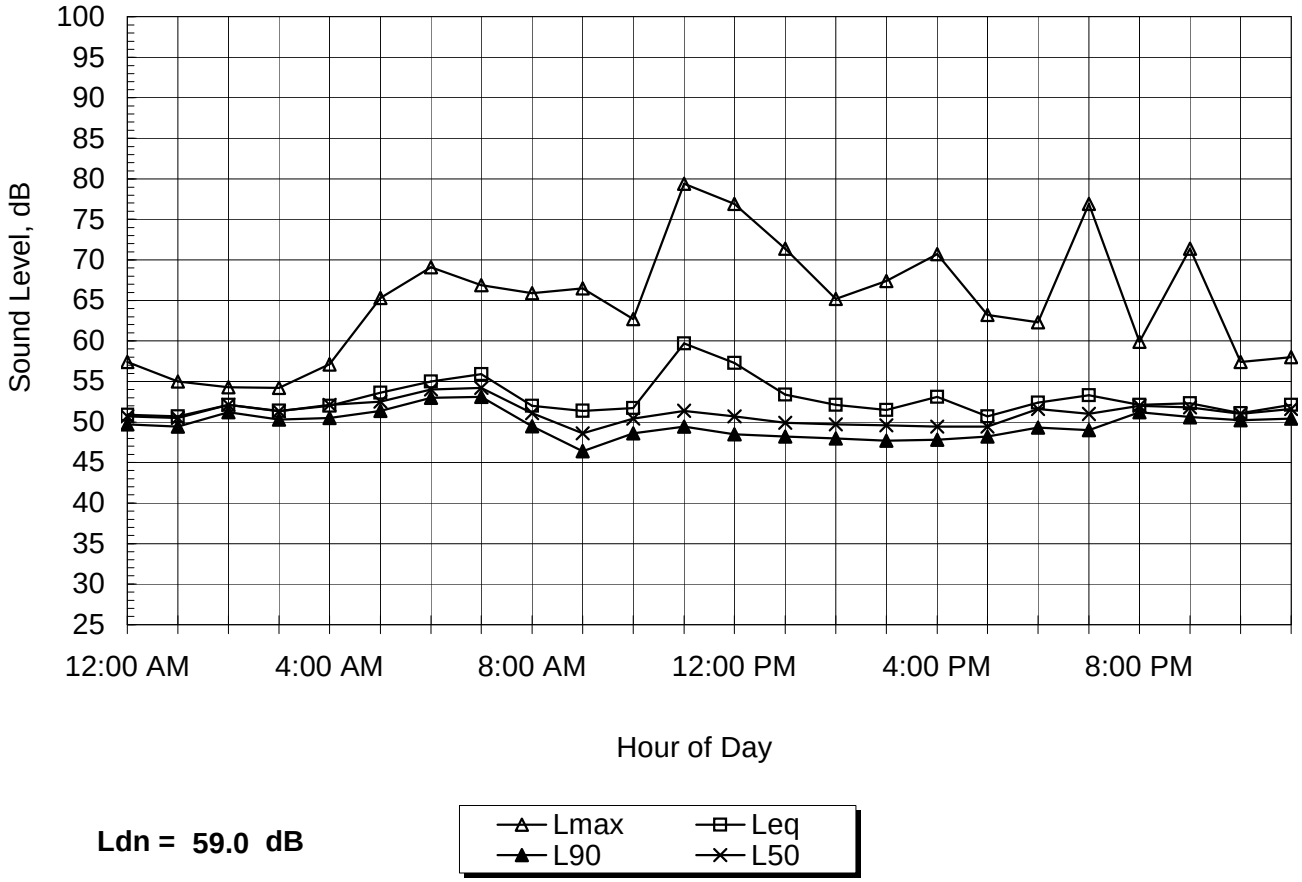
Brown-Buntin Associates, Inc., (BBA) conducted onsite traffic noise measurements on April 6, 2006. The purpose of the noise measurements was to evaluate the accuracy of the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-

Legend

- Continuous Ambient Noise Measurement Sites
- Traffic Noise Measurement Sites

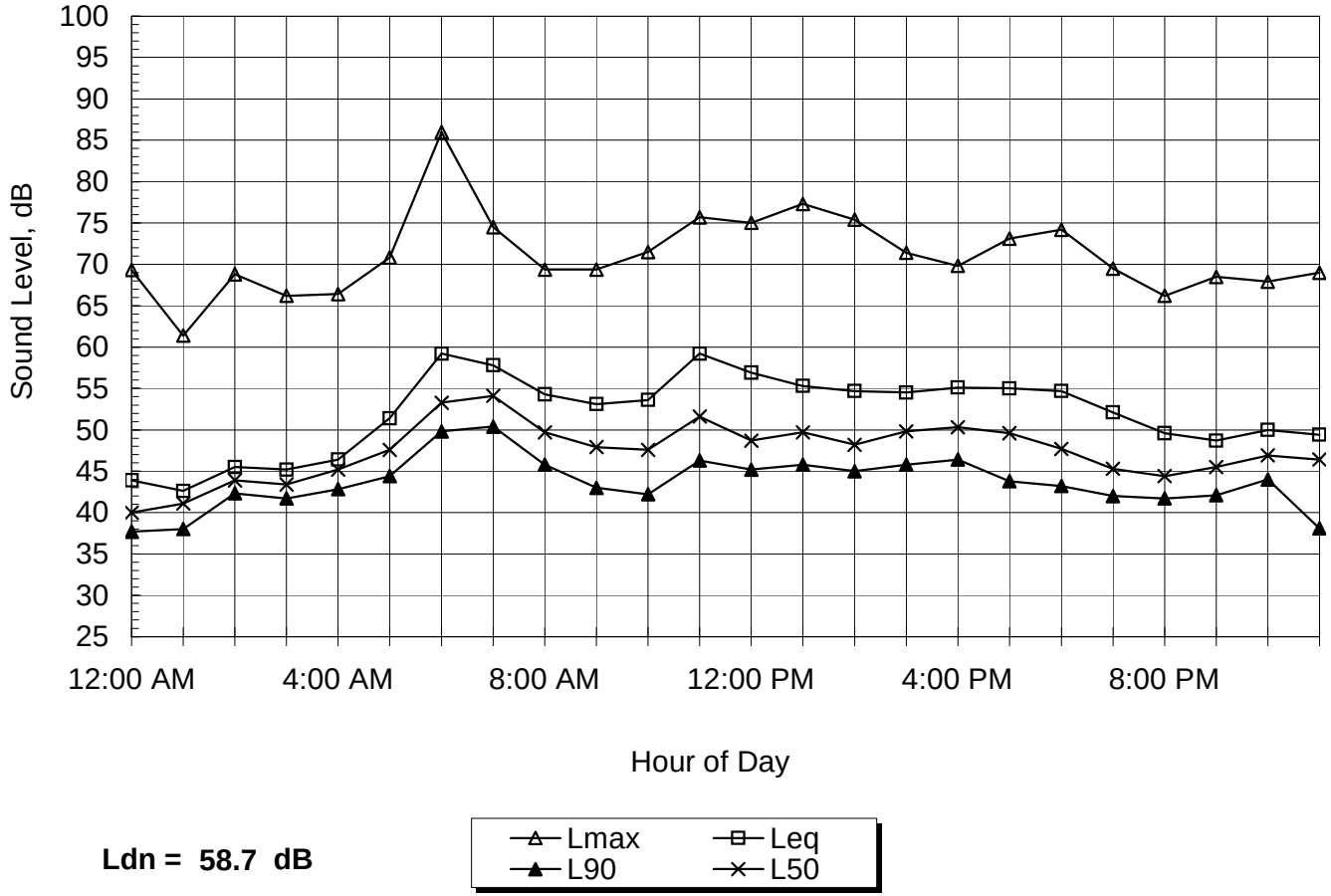
Ormond Beach Specific Plan EIR URS Corporation	Figure 3.11-1. **NOISE MEASUREMENT SITES**	Nov. 2009

FIGURE 3.11-2
MEASURED HOURLY NOISE LEVELS
RELIANT ENERGY ORMOND BEACH GENERATING STATION
APRIL 6-7, 2006



Ldn = 59.0 dB

FIGURE 3.11-3
MEASURED HOURLY NOISE LEVELS RELIANT ENERGY
OLDS ROAD AND SANFORD APRIL 6-7, 2006



Ldn = 58.7 dB

TABLE 3.11-2
MEASURED 24-HOUR NOISE LEVELS

Continuous Noise Measurement Site	Date	Ldn, dB	Hourly Leq, dBA		
			Highest Hour	Daytime Average	Nighttime Average
Near Ormond Beach Generating Station	April 6-7, 2006	59.0	59.7	54.1	52.3
Olds Road and Sanford Street	April 6-7, 2006	58.7	59.2	55.1	51.6

Brown-Buntin Associates, Inc. 2006.

108) in describing existing traffic noise levels under local conditions. The FHWA model is based upon the CALVENO noise emission factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to receiver, and the acoustical characteristics of the site.

Table 3.11-3 shows the measured noise levels compared with the noise levels predicted using the FHWA model.

TABLE 3.11-3
MEASURED AND PREDICTED TRAFFIC NOISE LEVELS
ORMOND BEACH, CALIFORNIA

Roadway	Vehicle Count During Measurement (15 mins)			Posted Speed, mph	Distance, ft	Measured L_{eq}, dB	Predicted* L_{eq}, dB	Difference dB
	Autos	Med. Trk.	Hvy. Trk.					
East Hueneme	121	10	16	50	50	72.8	69.8	+3.0
Pleasant Valley	224	7	2	45	80	66.6	64.1	+2.5

* A soft site was assumed.

Table 3.11-3 shows that the FHWA model under-predicted the traffic noise levels for East Hueneme and Pleasant Valley roads by 3 dB and 2.5 dB respectively. The under-prediction was due to observed vehicle speeds being higher than the posted speed limit. When the project is built out, it is likely that the higher traffic volumes will reduce the typical vehicle speeds, and the model will more accurately predict the traffic noise levels. Therefore, no offset was applied to predict future traffic noise levels.

The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions, and is considered to be accurate within 1.5 dB. To predict L_{dn} values, it is necessary to determine the day/night distribution of traffic and to adjust traffic volume input data to yield an equivalent hourly traffic volume.

To predict existing traffic noise levels in terms of the L_{dn} descriptor, the FHWA model was employed. Inputs to the FHWA model include the Average Daily Traffic volume (ADT), daytime/nighttime traffic distribution, medium and heavy truck percentages, and vehicle speed. The existing daily traffic volumes were based upon data supplied by the project traffic consultant. The day/night traffic distribution was based upon file data for suburban environments. An acoustically soft site was assumed.

Table 3.11-4 shows the predicted worst-case traffic noise levels for existing traffic volumes at a reference distance of 50 feet from roadway centerline. This distance represents a typical front building facade along a 4-lane roadway, and may be used to approximate the noise exposure for typical noise-sensitive uses. Based upon field experience, traffic noise levels at upper story building facades are expected to be about 3 dB higher than the noise levels reported below.

The City of Oxnard General Plan Noise Element Implementation Measures adopt the State of California noise compatible land use criteria, and its policies enforce the State Noise Insulation Standards. In accordance with the compatible land use criteria, proposed residential land uses within the 60 dB to 70 dB L_{dn} traffic noise contours would be "Conditionally Acceptable," and would require an acoustical analysis for residential development. The objectives of the analysis would be to ensure that the project design would achieve "Acceptable" exterior noise levels at outdoor activity areas, and that interior noise levels would be in compliance with the State Noise Insulation Standard of 45 dB L_{dn}. New residential developments within the 60 dB contour distances of the roadway segments listed in Table 3.11-4 would be subject to these requirements.

3.11.2 Regulatory Framework

3.11.2.1 City of Oxnard

The following paragraphs present the policy language from the City's Noise Element (City of Oxnard General Plan Section X. Noise Element (adopted October 7, 1990, as amended through November, 2004).

Development Policies

Noise problems in the Oxnard community can be mitigated through this 2020 General Plan and particularly this Noise Element. Mutually compatible goals and objectives provide a general framework for future efforts to achieve a quiet environment.

TABLE 3.11-4
FHWA NOISE MODELING INPUTS AND RESULTS FOR EXISTING TRAFFIC AT 50 FEET

Roadway	Segment	ADT	% Med. Trucks	% Heavy Trucks	Speed, mph	L_{dn}, dB at 50 feet	Distance from Centerline to 60 dB Ldn, feet
Rose Avenue	Between Oxnard and Channel Island	29,300	2.5	1.5	40	67.4	156
Rose Avenue	Between Channel Island and Bard	21,300	2.5	1.5	40	66.0	126
Rose Avenue	Between Bard and Pleasant Valley	12,600	2.5	1.5	40	63.7	89
Rose Avenue	Between Pleasant Valley and Sanford	5.900	2.5	1.5	40	60.4	54
Olds Road	North of Hueneme	1,700	2.5	1.5	25	50.8	12
Pleasant Valley	West of Saviers	18,500	2.5	1.5	35	64.1	94
Pleasant Valley	Between Saviers and Rose	25,400	2.5	1.5	45	68.0	170
Pleasant Valley	Between Rose and Oxnard	21,800	2.5	1.5	45	67.3	153
Pleasant Valley	East of Rice	24,600	2.5	1.5	45	67.8	166
Hueneme	West of Ventura	5,600	5	10	45	64.8	104
Hueneme	Between Ventura and J Street	13,400	5	10	45	68.6	186
Hueneme	Between J Street and Perkins	12,900	5	10	45	68.4	181
Hueneme	Between Perkins and Saviers	12,900	5	10	45	68.4	181
Hueneme	East of Saviers	11,500	5	10	45	67.9	168
Hueneme	West of Olds Road	14,300	5	10	45	68.8	194
Hueneme	Between Olds Road and Rice	14,500	5	10	45	68.9	196
Hueneme	Between Rice and SR1 SB Ramps	15,900	5	10	45	69.3	208
Hueneme	Between SR1 SB Ramps and NB Ramps	10,000	5	10	45	67.3	153
Hueneme	East of SR1 NB Ramps	8,200	5	10	45	66.4	134

1. GOALS

A quiet environment for the residents of Oxnard.

2. OBJECTIVES

1. *Provide acceptable noise levels for residential and other noise-sensitive land uses consistent with State guidelines.*
2. *Protect noise sensitive uses from areas with high ambient levels.*
3. *Integrate noise considerations into the community planning process to prevent noise/land use conflicts.*

3. POLICIES

1. *The City should encourage land uses that are not noise sensitive in areas that are permanently committed to noise producing land uses, such as transportation corridors.*
2. *The City should promote maximum efficiency in noise abatement efforts through intergovernmental coordination and public information programs.*
3. *Educational institutions should be located in areas where students and teachers can perform without distraction from noise.*
4. *The City shall promote, where feasible, alternative sound attenuation measures other than the traditional wall barrier. These may include, berms, a combination of berms and landscaping, or locating buildings away from the roadway or other noise source.*
5. *Municipal policies shall be consistent with the Ventura County Airport Land Use Commission's adopted land use plan.*
6. *Proposed development projects shall not generate more noise than that classified as "satisfactory," as determined by the noise compatibility standards, on nearby property. Project applicants shall reduce or buffer the noise generated by their projects.*
7. *The City shall prohibit the development of noise-sensitive land uses within the Oxnard Airport 65 dB(A) CNEL contour.*
8. *The City shall continue to enforce State Noise Insulation Standards for proposed projects in suspected high noise environments. The Planning Division shall notify prospective developers that, as a condition of permit issuance, the must comply with noise mitigation measures, which are designed*

by an acoustical engineer. No building permits will be issued without City staff approval of the acoustical report/design.

9. *The City shall establish noise referral zones along existing or proposed major transportation routes. Proposed development within these zones should be evaluated for noise impacts.*
10. *Preparation of the Ormond Beach Specific Plan shall include acoustical analysis to determine potential impacts from Point Mugu NAS and Air National Guard facility.*
11. *Noise contour maps and tables shall be utilized as a guide to future land use decisions.*

4. *IMPLEMENTATION MEASURES*

1. *Adopt State of California noise-compatible land use criteria. (See Figure 3.11.4).*
2. *Develop and adopt a noise ordinance.*
3. *Enforce State Noise Insulation Standards.*
4. *Update noise standards and criteria at least every five years to reflect new developments in the area of noise control.*
5. *Rezone property within the Oxnard Airport area to nonresidential and non-sensitive land uses that are consistent with the "Airport Compatible" designation of the Land Use Element.*
6. *Establish noise referral zones along existing or proposed major transportation routes.*
7. *Work with the California Department of Transportation to develop a highway noise mitigation program for the Route 101 corridor (Ventura Freeway).*

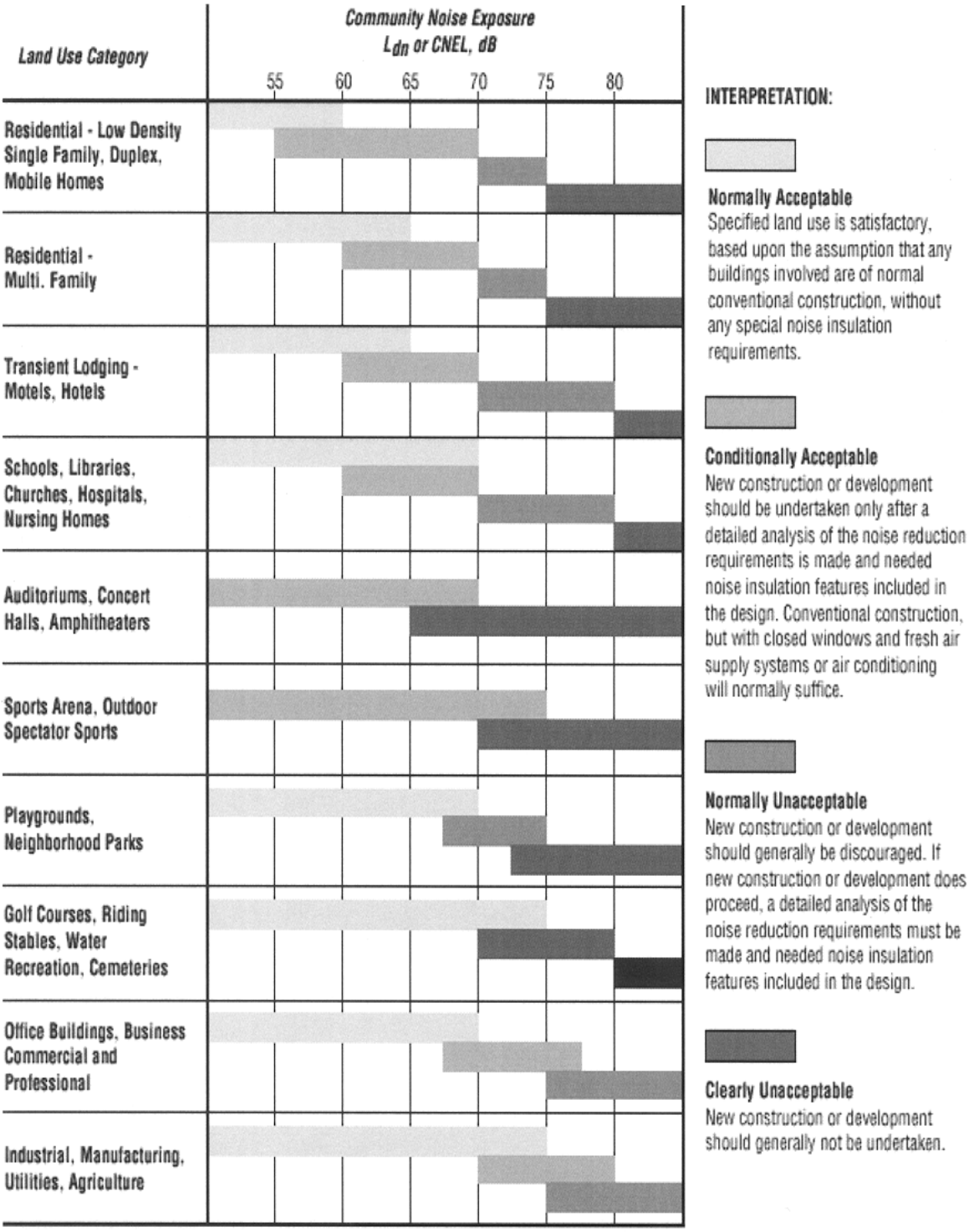
3.11.3 Project Impacts and Mitigation

3.11.3.1 Thresholds of Significance

The California Environmental Quality Act (CEQA) requires that significant environmental impacts be identified, and that such impacts be eliminated or mitigated to the extent feasible. A significant effect from noise may exist if a project would result in:

- Exposure of persons to, or generation of, noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies

FIGURE 3.11-4
CALIFORNIA STATE NOISE COMPATIBILITY LAND USE CRITERIA



- Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise level
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

The City of Oxnard also has adopted a Noise Ordinance (Article IX Section 7-180 of the Municipal Code) that incorporated the standards shown in Table 3.11-5.

TABLE 3.11-5
EXTERIOR NOISE LEVEL STANDARDS

Sound Zone	Type of Land Use	Allowable Exterior Sound Level	
		7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
I	Residential	55 dBA	50 dBA
II	Commercial	65 dBA	60 dBA
III	Industrial	70 dBA	70 dBA
IV	As identified in Figure IX-2 of the 2020 General Plan		

The noise levels specified above for the identified uses are not to be exceeded by more than 30 minutes in an hour. The Ordinance includes various adjustments, both up and down, for these limits based on duration and quality of the noise.

For transportation noise sources, noise impacts are commonly described in terms of the potential for annoyance. The potential significance of changes in cumulative noise exposure for such sources is frequently evaluated based upon data reviewed by the Federal Interagency Committee on Noise (FICON). Table 3.11-6 summarizes the FICON recommendations.

TABLE 3.11-6
SIGNIFICANCE OF INCREASES IN CUMULATIVE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES

Ambient Noise Level Without Project (L_{dn} or CNEL)	Significant Impact
<60 dB	5.0 dB or more
60-65 dB	3.0 dB or more
>65 dB	1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON), as applied by Brown-Buntin Associates, Inc.

Noise due to construction activities may be considered to be less than significant in terms of CEQA compliance if:

- The construction activity is temporary
- Use of heavy equipment and noisy activities is limited to daytime hours
- No pile driving or blasting is planned
- All industry-standard noise abatement measures are implemented for noise-producing equipment

3.11.3.2 Project Impacts

Traffic noise would change as a function of changes in traffic volumes and vehicle type mix. Table 3.11-7 shows the traffic volumes assumed to predict existing and future traffic noise levels for each roadway with development of the Northern Subarea and the Northern and Southern subareas combined.

Table 3.11-8 shows the predicted existing and future traffic noise levels on Study Area roadways, at the reference distance of 50 feet from the roadway centerline, as well as the relevant standard. The shaded cells indicate segments that exceed the standard. In areas where different uses adjoin the same roadway, the more rigorous standard is cited.

Table 3.11-9 shows the predicted changes in traffic noise levels due to the project. The shaded cells indicate which segments exceed the Federal Interagency Committee on Noise (FICON) threshold recommendations summarized in Table 3.11-6.

3.11.3.2.1 Applicable to Northern Subarea

Impact Noise-1: Traffic Noise with Northern Subarea Development. Compared with existing conditions, the changes in traffic associated with future development of the Northern Subarea would result in significant increases in traffic noise levels at noise-sensitive receivers located along the following roadway segments, according to either the exceedance standard (Table 3.11-8) or the change standard (Table 3.11-9) or both:

- Rose Avenue between Oxnard and Channel Island (Both)
- Rose Avenue between Channel Island and Bard (Both)
- Rose Avenue between Bard and Pleasant Valley (Both)
- Rose Avenue between Pleasant Valley and Sanford (Both)
- Rose-SouthShore Drive between Sanford and Hueneme (Exceedance)
- Pleasant Valley west of Saviers (Both)
- Pleasant Valley between Saviers and Rose (Both)

- Pleasant Valley between Rose and Oxnard (Both)
- Pleasant Valley east of Rice (Both)
- Hueneme west of Ventura (Both)
- Hueneme between Ventura and J Street (Both)
- Hueneme between J Street and Perkins (Both)
- Hueneme between Perkins and Saviers (Both)
- Hueneme between Saviers and Edison (Exceedance)
- Hueneme between Edison and Rose-SouthShore Drive (Exceedance)
- Hueneme between Rose-SouthShore and Arnold (Exceedance)
- Hueneme between Arnold and Olds Road (Exceedance)
- Hueneme between Olds Road and Rice (Change)
- Hueneme east of SR1 NB Ramps (Change)

The noise impact along all of these roadway segments except Pleasant Valley Road is considered *significant but feasibly mitigated (Class II).* Along Pleasant Valley Road, existing residential development would be exposed to exceedances of the City's Noise Ordinance standards and the opportunities for mitigation are limited. The impact on these residential areas is thus considered *significant and unavoidable (Class I).*

TABLE 3.11-7
ASSUMED TRAFFIC VOLUMES FOR PROJECT NOISE MODELING

Roadway	Segment	Existing	Northern Subarea	Combined Northern and Southern Subareas
Rose Avenue	Between Oxnard and Channel Island	29,300	36,000	32,800
Rose Avenue	Between Channel Island and Bard	21,300	17,400	36,850
Rose Avenue	Between Bard and Pleasant Valley	12,600	26,000	28,400
Rose Avenue	Between Pleasant Valley and Sanford	5,900	21,800	23,900
Rose-SouthShore Drive	Between Sanford and Hueneme	N/A	15,600	27,200
Rose-SouthShore Drive	South of Hueneme	N/A	7,600	11,100
Edison Drive	South of Hueneme	N/A	8,000	13,300
Arnold Road	South of Hueneme	N/A	5,200	6,800
Olds Road	North of Hueneme	1,700	2,100	2,000
Pleasant Valley	West of Saviers	18,500	27,500	27,600
Pleasant Valley	Between Saviers and Rose	25,400	36,300	30,300
Pleasant Valley	Between Rose and Oxnard	21,800	32,000	30,000
Pleasant Valley	East of Rice	24,600	33,300	33,500
Hueneme	West of Ventura	5,600	11,500	11,600
Hueneme	Between Ventura and J Street	13,400	17,600	22,200
Hueneme	Between J Street and Perkins	12,900	18,900	19,200
Hueneme	Between Perkins and Saviers	12,900	21,700	24,300
Hueneme	East of Saviers	11,500	N/A	N/A
Hueneme	West of Olds Road	14,300	N/A	N/A
Hueneme	Between Saviers and Edison	N/A	21,600	27,100
Hueneme	Between Edison and Rose-SouthShore Drive	N/A	15,200	15,200
Hueneme	Between Rose-SouthShore and Arnold	N/A	7,600	7,700
Hueneme	Between Arnold and Olds Road	N/A	14,800	11,600
Hueneme	Between Olds Road and Rice	14,500	18,200	18,900
Hueneme	Between Rice and SR1 SB Ramps	15,900	16,600	14,900
Hueneme	Between SR1 SB Ramps and NB Ramps	10,000	11,800	16,600
Hueneme	East of SR1 NB Ramps	8,200	10,300	10,000

Note: At some locations, assumed traffic volumes are lower under the combined subareas than they are under the Northern Subarea alone. This is due to the Oxnard Traffic Model's redistribution of traffic based on the forecasted interaction between the two subareas.

TABLE 3.11-8
PREDICTED PROJECT NOISE LEVELS AT THE REFERENCE DISTANCE

		Predicted L_{dn}, dB, at 50 feet			
Roadway	Segment	Standard	Existing	Northern Subarea	Northern and Southern Subareas
Rose Avenue	Between Oxnard and Channel Island	65.0	67.4	69.4	69.0
Rose Avenue	Between Channel Island and Bard	55.0	66.0	66.3	69.5
Rose Avenue	Between Bard and Pleasant Valley	55.0	63.7	68.0	68.4
Rose Avenue	Between Pleasant Valley and Sanford	55.0	60.4	67.3	67.7
Rose-SouthShore Drive	Between Sanford and Hueneme	55.0	N/A	65.8	68.2
Rose-SouthShore Drive	South of Hueneme	70.0	N/A	62.7	64.3
Edison Drive	South of Hueneme	70.0	N/A	58.7	60.9
Arnold Road	South of Hueneme	70.0	N/A	56.8	58.0
Olds Road	North of Hueneme	55.0	50.8	52.9	52.7
Pleasant Valley	West of Saviers	65.0	64.1	69.4	69.5
Pleasant Valley	Between Saviers and Rose	55.0	68.0	70.6	69.9
Pleasant Valley	Between Rose and Oxnard	55.0	67.3	70.1	69.8
Pleasant Valley	East of Rice	N/A	67.8	70.3	70.3
Hueneme	West of Ventura	55.0	64.8	68.5	68.5
Hueneme	Between Ventura and J Street	55.0	68.6	70.3	71.3
Hueneme	Between J Street and Perkins	70.0	68.4	70.7	70.7
Hueneme	Between Perkins and Saviers	65.0	68.4	71.3	71.7
Hueneme	Between Saviers and Edison	55.0	N/A	71.2	72.2
Hueneme	Between Edison and Rose-Southshore Drive	55.0	N/A	69.7	69.7
Hueneme	Between Rose-SouthShore and Arnold	55.0	N/A	66.7	66.8
Hueneme	Between Arnold and Olds Road	55.0	N/A	69.6	68.5
Hueneme	Between Olds Road and Rice	N/A	68.9	70.5	70.7
Hueneme	Between Rice and SR1 SB Ramps	N/A	69.3	70.1	69.6
Hueneme	Between SR1 SB Ramps and NB Ramps	N/A	67.3	68.6	70.1
Hueneme	East of SR1 NB Ramps	N/A	66.4	68.0	67.9

TABLE 3.11-9
PREDICTED CHANGES IN TRAFFIC NOISE LEVELS

Roadway	Segment	Northern Subarea	Combined Northern and Southern Subareas
Rose Avenue	Between Oxnard and Channel Island	+2.0	-0.8
Rose Avenue	Between Channel Island and Bard	+3.0	0.1
Rose Avenue	Between Bard and Pleasant Valley	+4.3	-0.2
Rose Avenue	Between Pleasant Valley and Sanford	+6.9	-0.8
Rose-SouthShore Drive	Between Sanford and Hueneme	N/A	1.5
Rose-SouthShore Drive	South of Hueneme	N/A	1.6
Edison Drive	South of Hueneme	N/A	4.8
Arnold Road	South of Hueneme	N/A	2.6
Olds Road	North of Hueneme	+2.1	0.2
Pleasant Valley	West of Saviers	+5.3	2.9
Pleasant Valley	Between Saviers and Rose	+2.6	-0.9
Pleasant Valley	Between Rose and Oxnard	+2.8	3.1
Pleasant Valley	East of Rice	+2.5	4.4
Hueneme	West of Ventura	+3.7	0.0
Hueneme	Between Ventura and J Street	+1.7	1.0
Hueneme	Between J Street and Perkins	+2.3	0.0
Hueneme	Between Perkins and Saviers	+2.9	0.4
Hueneme	Between Saviers and Edison	N/A	0.6
Hueneme	Between Edison and Rose-Southshore Drive	N/A	0.3
Hueneme	Between Rose-SouthShore and Arnold	N/A	-1.1
Hueneme	Between Arnold and Olds Road	N/A	-1.0
Hueneme	Between Olds Road and Rice	+1.6	0.3
Hueneme	Between Rice and SR1SB Ramps	+0.8	-0.6
Hueneme	Between SR1 SB Ramps and NB Ramps	+1.3	1.3
Hueneme	East of SR1 NB Ramps	+1.6	-0.3

Note: Shaded cells indicate a potentially significant increase in traffic noise levels.

Impact Noise-2: NBVC Point Mugu Noise. NBVC Point Mugu is located adjacent to the southeast Ormond Beach project border. The September 1992 NAWS Point Mugu Air Installation Compatible Use Zone (AICUZ) Study identifies the noise contours associated with the aircraft operations at the installation. The AICUZ also addresses land use compatibility in the AICUZ and surrounding area. Although the 65 CNEL noise contour for the installation is outside the Ormond Beach project border, the southeast part of the project is subject to aircraft overflights operating to and from the facility, with temporary high peak

noise levels. While the installation's operations do not constitute a significant impact on the project site, any potential noise-sensitive land uses located in the Northern Subarea should be informed that the area is subject to military aircraft overflights. Figure 3.11-5 shows the 65-75 CNEL Contour for the NAWS Point Mugu AICUZ and its relationship to the Study Area. The planned land uses for the Northern Subarea include residential uses. The impact of noise originating from Point Mugu NAS to the Northern Subarea is considered *significant but feasibly mitigated (Class II).*

Impact Noise-3: UPRR Railroad Noise. The UPRR railroad runs diagonally adjacent to the northwest corner of the project boundary. The planned project land use along the section of railroad tracks is light industrial. Since no noise sensitive land uses are planned near this noise source, the noise source is *less than significant (Class III)*.

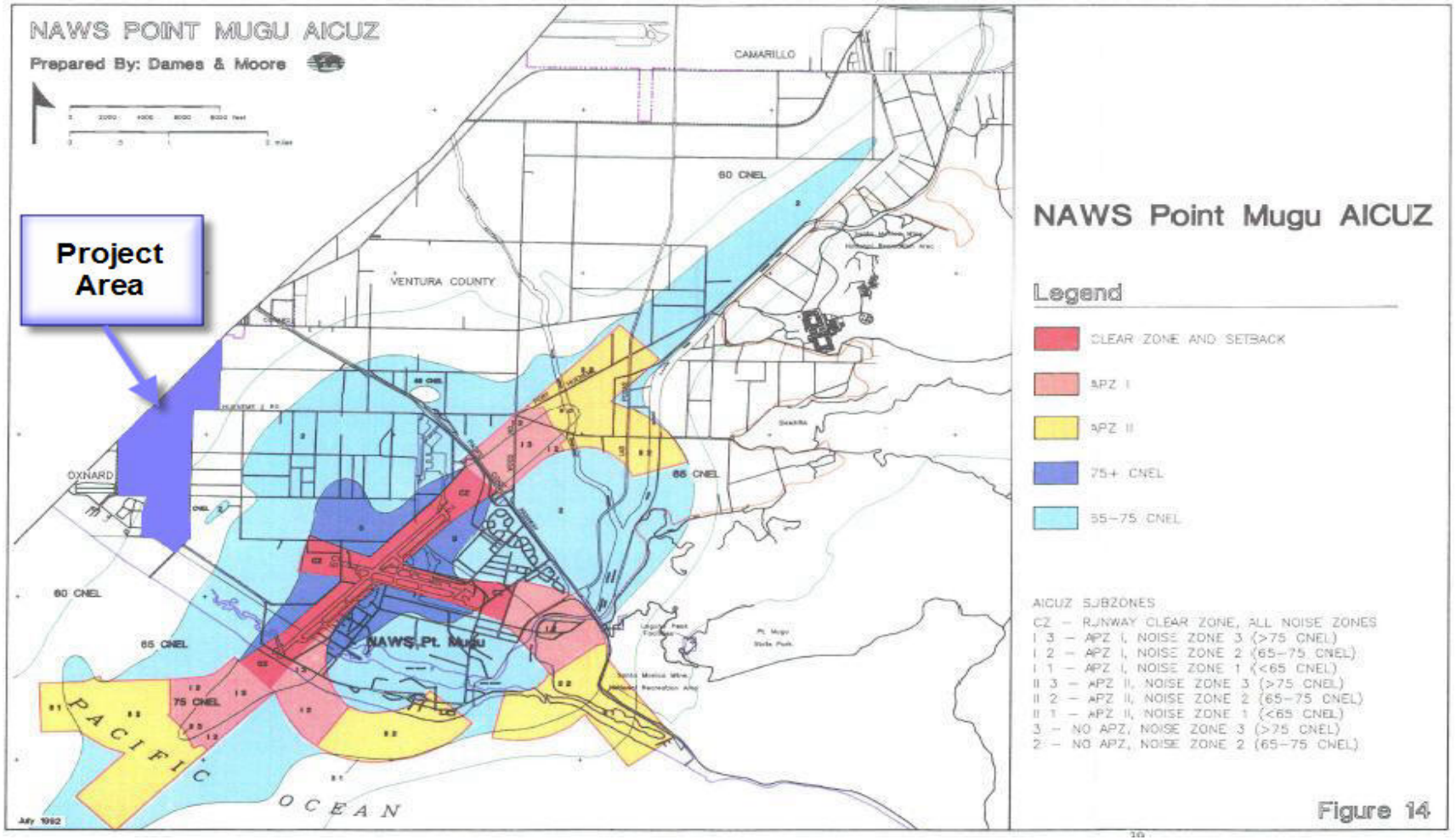
3.11.3.2.2 Applicable to Southern Subarea

Impact Noise-4: NBVC Point Mugu Noise. NBVC Point Mugu is located adjacent to the southeast Ormond Beach project border. The September 1992 NAWS Point Mugu Air Installation Compatible Use Zone (AICUZ) Study identifies the noise contours associated with the aircraft operations at the installation. The AICUZ also addresses land use compatibility in the AICUZ and surrounding area. Although the 65 CNEL noise contour for the installation is outside the Ormond Beach project border, the southeast part of the project is subject to aircraft overflights operating to and from the facility. While the installation's operations do not constitute a significant impact on the project site, any potential noise-sensitive land uses located in the Southern Subarea should be informed that the area is subject to military aircraft overflights. Figure 3.11-5 shows the 65-75 CNEL Contour for the NAWS Point Mugu AICUZ and its relationship to the Study Area. The planned land uses for the Southern Subarea are open space and light industrial. Since no noise-sensitive land uses are planned near this noise source, the impacts of noise originating from Point Mugu NAS is considered *less than significant (Class III)*.

Impact Noise-5: Ormond Beach Generating Station Noise. Noise from the power generating station was generally inaudible at the project site. This potential impact from noise associated with the generating is, thus, *less than significant (Class III)*.

Impact Noise-6: SoCal Gas Company Pumping Station. The noise levels measured in the vicinity of the gas pumping station were in the range of 45 to 55 dB at the project site. Since no noise sensitive land uses are planned near this noise source, this impacts associated with noise from the SoCal Gas Company Pumping Station is considered *less than significant (Class III)*.

FIGURE 3.11-5
NAWS POINT MUGU AICUZ



3.11.3.2.3 Applicable to Both Northern and Southern Subareas

Impact Noise-7: Traffic Noise with Combined Subarea Development. Compared with existing conditions, the changes in traffic associated with future development of both the Northern and Southern subareas would result in significant increases in traffic noise levels at noise sensitive receivers located along the following roadway segments, according to either the exceedance standard (Table 3.11-8) or the change standard (Table 3.11-9) or both:

- Rose Avenue between Oxnard and Channel Island (Both)
- Rose Avenue between Channel Island and Bard (Both)
- Rose Avenue between Bard and Pleasant Valley (Both)
- Rose Avenue between Pleasant Valley and Sanford (Both)
- Rose-SouthShore Drive between Sanford and Hueneme (Both)
- Pleasant Valley west of Saviers (Both)
- Pleasant Valley between Saviers and Rose (Exceedance)
- Pleasant Valley between Rose and Oxnard (Exceedance)
- Hueneme west of Ventura (Exceedance)
- Hueneme between Ventura and J St (Both)
- Hueneme between J Street and Perkins (Both)
- Hueneme between Perkins and Saviers (Both)
- Hueneme between Saviers and Edison (Exceedance)
- Hueneme between Edison and Rose-SouthShore Drive (Exceedance)
- Hueneme between Rose-SouthShore and Arnold (Exceedance)
- Hueneme between Arnold and Olds Road (Exceedance)
- Hueneme between Olds Road and Rice (Change)

The noise impact along all of these roadway segments except Pleasant Valley Road is considered *significant but feasibly mitigated (Class II).* The potential exposure along Pleasant Valley Road is addressed under Impact Noise-1: Traffic Noise with Northern Subarea Development.

Impact Noise-8: Pacific Vehicle Preparation Facility Noise. Noise from truck loading operations at the Pacific Vehicle Preparation Facility would have potential to be a significant noise impact, as the facility operates 24-hours per day. Vehicles are driven from the Port of Hueneme to the facility, and then are sent out via trucks and trains. The planned adjacent land use near the facility is light industrial. Since no noise sensitive land uses are planned near the facility, the impacts of noise originating from Pacific Vehicle Preparation operations is considered *less than significant (Class III).*

3.11.3.3 Mitigation Measures

Prior to City approval of a Tentative Tract Map or final development plan for any new development within the Study Area that is within 200 feet of an arterial street or major road, or within a 60 dBA Ldn contour as shown in the Noise Element of the General Plan, an acoustical analysis shall be provided to and approved by the Director of Development Services. The acoustical analysis shall demonstrate that residential uses will be located in areas outside of the 65 dBA Ldn contour or be provided with appropriate mitigation measures to ensure outdoor living areas with an Ldn of no more than 65 dBA and interior living spaces meeting the City standard of no more than 45 dBA. The measures to provide appropriate noise reduction may include a combination of building setbacks, use of berms, buildings, or other barriers to block noise, and structural measures to provide acceptable interior noise levels. The following list reviews the approaches to noise mitigation and provides additional guidance for the development of noise mitigation measures.

Mitigation Measure Noise-1: Rose-SouthShore Drive Exterior Noise. The required setbacks to ensure compliance of new residential areas with the City of Oxnard exterior noise standard of 60 dB L_{dn} would be in the range of 140 feet from the centerline of Rose-SouthShore Drive. With the proposed cross-section, the distance from the centerline to the edge of the right-of-way would be 55 feet. The applicants have also proposed 34-foot landscape buffer along SouthShore Drive. Thus, the proposed total distance from the centerline to the edge of the attached residential parcels along SouthShore Drive would be 89 feet. The site layout and structural design of the attached residential areas along SouthShore Drive would, thus, need to incorporate features to mitigate exterior noise levels to City standards.

Mitigation Measure Noise-2: Outdoor Activity Areas. The project should be designed to ensure that outdoor activity areas are shielded from direct view of major roadways. Shielding could be achieved by building orientation (so that the back yards are shielded by the homes), or by the use of noise barriers. The proposed layout of the Northern Subarea calls for outdoor activity areas to be separated from SouthShore Drive by attached residential buildings. The project should also be designed to ensure satisfaction of the exterior noise standards for traffic generated by traffic on internal roads. The specific design of noise barriers, berms or combinations thereof will depend upon the final roadway and lot designs, and upon the grading plans. To achieve a meaningful amount of noise reduction using barriers or berms, these should be designed to break line of sight between the source and receiver. Generally, a barrier 6 feet high located on level ground will provide about 5 dB noise level reduction for traffic noise. An improvement of about 1 dB would be expected for each 1-foot increase in barrier height beyond breaking line of sight.

Mitigation Measure Noise-3: Interior Noise Exposure. The methods required to mitigate interior noise exposures would depend on the locations of the residences relative to the roadways. In general, if the exterior traffic noise exposure is 65 dB L_{dn} or less, no exceptional construction techniques would be required. Where the exterior traffic noise level is between 65 dB and 75 dB L_{dn}, it is usually feasible to achieve the interior noise standard of 45 dB L_{dn} by installing acoustically-rated glazing, using stucco or brick siding, and by minimizing the surface area of glazing that faces the roadways. Where the exterior traffic noise exposure exceeds 75 dB L_{dn}, it is usually more difficult to achieve the interior noise standard in residences.

Mitigation Measure Noise-4: Post-Design Acoustical Analysis. To ensure satisfaction of the exterior and interior traffic noise standards for the noise sensitive land uses within the Study Area, an acoustical analysis should be prepared after the roadway and lot designs and grading plans have been finalized. The recommendations prepared as a result of that analysis should be implemented so that the noise standards are achieved.

Mitigation Measure Noise-5: NBVC Point Mugu Noise. The project shall incorporate noise attenuation measures (e.g., double-paned window or higher grade windows, HVAC) and shall disclose to purchasers the potential for peak noise levels that exceed standards.

3.11.3.4 Residual Impacts

With implementation of the mitigation measures cited, all noise impacts will be mitigated to a less than significant level, except for traffic noise impacts on existing development along Pleasant Valley Road, which cannot be feasibly mitigated and will remain *significant and unavoidable (Class I)*.

3.12 CULTURAL RESOURCES

This section addresses known cultural resources (archaeological sites and historic resources) in the Study Area. This section describes known cultural resources (including their potential significance), assesses potential impacts of the proposed uses, and recommends mitigation measures to reduce the significance of potential project impacts. Additionally, this section discusses regulatory policies relative to archaeological and historic resources.

The information contained in this section is based primarily on records search results, with augmentation from research journals and reports for this region of the Central Coast.

3.12.1 Existing Conditions

3.12.1.1 Overview

The Study Area has experienced long and significant periods of human occupation, dating to at least 8,000 years before present (BP). The archaeological remains of these periods of occupation are known to be present in the general project region.

3.12.1.1.1 Prehistoric Overview

The creeks, river valleys, and floodplains in the region, along with the fringing coastline, have supported a continuous cultural occupation for at least the last 8,000 years. An early Holocene occupation has been identified in the archaeological record that reflects the early emergence of non-agricultural village-based groups in the region. Current archaeological evidence suggests that a relatively small population existed in region, but by 2,000 years BP, populations appear to have expanded considerably into resource-rich coastal and near-shore estuarine environments (Dillon, 1990:6). Accounts by Juan Rodríguez Cabrillo (Wagner, 1929:79-93) and Sebastian Vizcaino (Bolton, 1930:52-103) indicate that by the time of European contact with this area of the California coast, some of the large coastal villages had hundreds of occupants and were engaged in both terrestrial and maritime long-distance trade.

The Study Area falls within the traditional lands of the Chumash Native American tribal groups. Sites associated with the Chumash cultural complex are found throughout San Luis Obispo (the Obispeño Chumash), Ventura (the Ventureño Chumash) and Santa Barbara counties (the Barbareño, the Purisimeño, the Ynezeño, the Cuyama, the Emigdiano, and the Castaic Chumash), including the Channel Islands. These sites exhibit a diverse spectrum of cultural manifestations. Site types range from small shrine or petroglyph locations and temporary campsites to large, permanently occupied villages and rancherias that may include extensive shell midden deposits and dense artifact remains.

Paleoindian Period. The San Dieguito Complex (Warren, 1967; Wallace, 1978: 27) is found throughout Southern California (including Santa Barbara County) and includes non-fluted

points such as leaf-shaped projectile points and various leaf-shaped bifacial tools. Unfortunately, there are few reliable published radiometric dates from this period, with most of the artifacts identified as isolated find locations. During this time, human subsistence relied heavily upon the hunting of Pleistocene-epoch mega fauna species, including mammoth, giant bison, and possibly camel, with supplemental plants and smaller animals. As the availability of the mega fauna declined due to changing environmental conditions near the end of the Pleistocene (9,000 to 8,000 BP) subsistence strategies changed to a heavier reliance on seeds, nuts, and smaller mammals, such as deer and bear.

One fluted-point fragment is known from the Santa Barbara area. The artifact, consisting of a basal fragment from a fluted point, was found at CA-SBA-1951 on the coastal plain to the west of Santa Barbara (Erlandson *et al*., 1987; Erlandson, 1994: 44).

In the northern Channel Islands, two sites have produced fairly reliable late-Pleistocene dates. Radiometric dates have been obtained from shells at Daisy Cave, on San Miguel Island (Erlandson *et al*., 1996; Rick *et al.*, 2001), and human remains were found in a secure early-Holocene context on Santa Rosa Island at Arlington Springs (the so-called Arlington Woman). Neither locus has extensive archaeological remains, but nevertheless, these dates put humans on the Channel Islands as early as 13,000 BP (Johnson *et al*., 2002).

The Millingstone Period. The Millingstone Period extends to at least 6,000 BP and probably as far back to 8,500 + BP (Warren, 1968; Wallace, 1955). Recent work by Jones *et al*. (2002) may push this date back as early as almost 10,000 BP. Hard seed processing became one of the major components of subsistence during this period. Overall, the economy was based on plant collecting, but was supplemented by fishing and hunting, and general exploitation of marine and estuarine resources (Wallace, 1955). Large, heavy ground stone milling tools such as deep basin metates and wedge-shaped manos, and large core/cobble choppers and scrapers typify the Millingstone Period.

Millingstone sites in the region are common on terraces and knolls, typically setback from the current coastline (Glassow *et al.*, 1988: 68; Erlandson, 1994: 46). The larger sites usually contain extensive midden deposits, possible subterranean house pits, and cemeteries. Most of these sites probably reflect intermittent use over many years of local cultural habitation and resource exploitation. Erlandson has noted that the typical Millingstone manos/metates are not common on contemporaneous Channel Island sites, possibly reflecting an alternate insular resource exploitation (Erlandson, 1994: 47).

The “Little Sycamore site” (CA-VEN-1), located along the coast between Topanga Canyon and Santa Barbara provides strong evidence for the transition between the Millingstone and Late Prehistoric periods within the region. Two distinct strata were identified through excavations conducted by W. J. Wallace of the University of Southern California in 1953

(Moratto, 1984:129). It is thought that the earlier component (consisting of millingstones, manos and hammers) of this site can be dated to circa 5,000 - 3,000 BP.

The Intermediate Period. The Intermediate period has also been called the "Hunting Period" or "Middle Horizon." About 5,000 years BP, the Millingstone traditions, with their heavy reliance on vegetal food sources, began to gravitate more toward animal proteins and marine resources. Procurement of plants for caloric intake was not necessarily replaced in kind by game hunting, but rather the local Millingstone dietary regimen began to transition toward other/alternate resources. Mortars and pestles predominate the tool kit, rather than manos and metates. Glassow has hypothesized that, in the Santa Barbara geographic setting, this could reflect greater use of acorns (Glassow *et al*., 1988).

The reliance on shellfish probably declined during the Intermediate Period, as the maritime and coastal marine exploitations expanded into the aforementioned terrestrial resources (Erlandson, 1988). Some argue that the development of the plank canoe (*tomol*), approximately 1,000 years ago, made fishing and trade with the Santa Barbara Channel Islands safer and more efficient (Arnold, 1987). Material remains from sites dating to this period demonstrate an increase in marine-related artifacts, including marine shell deposits and fish remains.

The Late Prehistoric Period. The Late Prehistoric Period probably began sometime around the B.C./A.D. transition, but expanded culturally around A.D. 500 with the introduction of bow and arrow technology (Meighan, 1954). The end of the period is recognized as the end of the 18th Century, when full implementation of the Spanish mission system took effect on the native populations.

The Santa Barbara coastal areas, along with the western areas of Ventura County and the Los Angeles Basin, were occupied during the Late Prehistoric Period by the so-called "Canaliño" culture (Rogers, 1929). During this period, the coastal populations expanded greatly and probably took advantage of a wide variety of ecological niches, especially marine resources. Small projectile points, frequently side-notched, are typical in the bow and arrow-based toolkit. Specialty items such as basketry, ollas or large water vessels, shell and stone beads, and shell and bone fishhooks appear, as does elaborate rock painting (Grant, 1965). Anthropologists believe that the Chumash are directly descended from the Canaliño culture of the archaeological record.

During the Late Prehistoric Period, a highly advanced fishing and hunting strategy developed that included the exploitation of a wider variety of fish and shellfish. These new subsistence strategies, coupled with the appearance of the bow and arrow, enabled a substantial increase in local populations, the development of permanent settlements, and a "money" economy based on the shell trade.

The Late Prehistoric Period Chumash, with a Hokan linguistic stock, lived in large villages along the coastal byte and the wide valleys leading into the California interior. This was an ethnohistoric boundary group situated between the Chumash to the northwest and the Gabrieliño to the south and east. In the archaeological record, the Gabrieliño material culture (Johnston, 1962; Blackburn, 1963; Bean and Smith, 1978) is often (but not always) indistinguishable from the Chumash (Landberg, 1965; Grant, 1965, 1978a, b).

The Chumash were highly sea oriented. Given the presence of earlier sites on the offshore islands, this evidence suggests that there was a maritime tradition at least partially carried over from the Millingstone and Intermediate Period cultures (Harrington, 1978). By at least 1,000 BP, the Chumash were relying on blue-water vessels in an exploitation strategy partially based on deep-sea fishing and marine mammal hunting.

3.12.1.1.2 Chumash Ethnography

The following summary discussion has been synthesized primarily from Dillon (1990), Bean and Smith (1978), Moratto (1984), and Grant (1978a, b). Specific citations are indicated, where appropriate.

Europeans first encountered the Chumash in 1542, when Cabrillo landed on the shores of Ventura. The Spanish later contacted the Chumash in 1602, when Vizcaíno entered the Santa Barbara Channel (Grant, 1978a: 505). The pre-European-contact Chumash probably numbered between 10,000 and 15,000 individuals. Anthropologists and linguists note that the Hokan language stock of the Chumash appears to be one of the oldest language groups in California, suggesting that Chumash ancestors must have been present in the area for at least several thousand years prior to European contact.

At the time of contact, the Chumash ranged from San Luis Obispo to Malibu Canyon along the coast, inland as far as the southwestern margin of the southern San Joaquin Valley, and out to the Channel Islands. There were at least six Chumash languages. The project area is located within the ethnographic boundaries of the coastal Ventureño Chumash. The Chumash were incorporated rather quickly into the Spanish mission system. This precipitated the rapid demise of their native culture and language, enough so that by the time anthropologists were interviewing Chumash individuals, most of their culture had long since disappeared. By the early 1800s, nearly the entire Chumash population, except for individuals who had escaped to the interior, was incorporated into the mission system (Grant, 1978a: 505).

The early Spanish travelers provided valuable details concerning Chumash dwellings. The huts were described as hemispherical in shape, with many containing internal subdivisions, possibly for privacy. Some of the larger dwelling structures could house up to 70 people, and the Spanish noted that many villages also contained sweathouses.

The Chumash were composed of patrilineal descent groups, with most villages having one "chief" and three or four "captains" (Grant, 1978b: 510). Most Chumash marriages were monogamous, except for village chiefs. Puberty rites are not well known. Girls entering puberty were not allowed to eat meat and could not look into a burning fire. Boys were taken out at night and given a psychotropic concoction made from Datura root to induce visions (Harrington, 1942: 36-37 in Grant, 1978b: 511).

The Chumash had a high level of material culture and craftsmanship, including intricate basketry, woodcarving, fine stone objects, well-developed rock art, and excellent ocean-going plank canoes (*tomol*) that highly impressed Spanish explorers. The Coastal Chumash had an extensive trading network that reached well beyond the Santa Barbara Channel region. Most Chumash lived in permanent villages, composed of large round houses up to 50 feet in diameter, which might be home to as many as 10 families. The dietary staple for all Chumash groups was the acorn, though the addition of pine nuts, soap root, berries, mushrooms, seeds, mollusks, fish, and game varied the diet.

Coastal Chumash village sites were often located at the mouths of creeks and rivers, usually on higher ground just above the shoreline (Grant, 1978b: 510). Smaller hunting camps and resource exploitation sites were located in smaller perennial creek areas, in the upper elevations, and in the immediate interior (Landberg, 1965: 89).

In 1775, Spaniard Pedro Fages commented that the Chumash were very inclined to trade, barter, and general commerce (Erlandson, 1994: 48-49). Johnson also notes that the Spanish observed persistent Chumash intervillage warfare (McLendon and Johnson, 1999: 29-39), possibly due to raids of neighboring groups' stored resources (Landberg, 1965: 89).

3.12.1.1.3 Historic Background

The first known European entry into the area was the expedition of Juan Cabrillo who sailed north up the California coast from Mexico in 1542. His two ships reached the Santa Barbara Channel in October 1542 and, after several tries, were able to round Point Conception and sail as far north as San Francisco Bay (Chesnut, 1993).

A second Spanish expedition consisting of two ships under the command of Sebastian Vizcaíno arrived in the area in 1602. His aim was to follow Cabrillo's route and reassert Spanish claims to the area. Naming local landmarks after the saint's day on which they were discovered, he named the harbor of Santa Barbara on St. Barbara's feast day (December 4) and Point Conception on the Feast of the Immaculate Conception (December 8). Vizcaíno sailed as far north as Monterey Bay, eventually returning to Acapulco.

In the 1760s, the Spanish government decided to establish a series of presidios (military establishments) and missions along the California coast between the two great natural

harbors of San Diego and San Francisco (Weber, 1982, 1992). These establishments countered against feared occupation of the coast by Russian or English forces.

As a function of this effort by the Spanish government to establish military presence on the West Coast, an expedition left the colony at San Diego in the summer of 1769 under the command of Don Gaspar de Portola, the governor of Baja California. The objective was to locate an overland route to Monterey Bay and prospect for presidio locations along the route. Portola's expedition passed through the Oxnard area on its return to San Diego (Chesnut, 1993).

Following Portola's expedition, Spanish visits and activity increased. An expedition led by Juan Bautista de Anza passed through the area in spring of 1776. A presidio was established at Santa Barbara in 1782 to fill the gap between the previously established presidios in Monterey and San Diego. This established a permanent European presence in the area, and was followed shortly by the establishment of the Mission San Buenaventura in Ventura by Father Junipero Serra that same year.

Personally dedicated by Father Serra, this Mission San Buenaventura had a strong effect on the region. The neighboring Chumash area began to adopt many phases of mission life (Schaefer, 2004). The economy of this mission was similar to others: the Chumash practicing agriculture (corn, wheat, and vineyards) as well as raising cattle and sheep. A seven-mile-long aqueduct was constructed to provide the mission with water from the local mountains. The mission soon was renowned for its crops, ranging from exotic fruits to figs and coconuts.

Over time, the introduction of the Spanish in the area proved to be dangerous to the health of the Chumash populations, as they were exposed to European diseases to which they had no immunity. Chumash populations went into a steep decline.

When Mexico gained its independence from Spain in 1821, Alta California became part of the new country. Approaches to church control changed as government control devolved to Mexico City and to the Mexican territorial and state governors.

It had never been the intention of the Spanish and the successor Mexican government that the missions would remain as permanent entities controlling the economy of the frontier areas (Weber, 1982). With independence, the Mexican government began a process of secularization of mission properties that concluded in 1833. Missions were turned into parish churches and regional commissions were established to dispose of the properties and resettle the Indians affiliated with the missions. Mexican government policy was to give mission properties and other unclaimed land to prominent citizens who would be required to build homes and facilities and develop the properties. The period of California history known as the Rancho Period began as a class of wealthy landowners known as "rancheros" controlled the state. They built large ranches based on cattle hide and tallow production.

The United States and Mexico went to war in 1846 over the annexation of Texas. With the end of the war in 1848, the Treaty of Guadalupe-Hidalgo ceded California to the United States (Weber, 1982). The annexation of California dislocated the dominant Hispanic culture due to the change in government control and the influx of large numbers of Anglo-Americans. Land titles were a major source of conflict between the two cultures. In 1851, a land act was passed that required the Mexican and American courts to confirm Spanish land grants. Many of the ranchos were broken up, as owners were unable to produce sufficient documentation to satisfy the courts.

3.12.1.2 Previously Recorded Cultural Resources

A file and records search for the Study Area was conducted at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System at California State University, Fullerton (CSUF) on October 28, 2004. This search revealed that there are no previously recorded cultural resources in the Study Area, although two prehistoric and nine historic cultural resources have been identified within a ½-mile radius of the Study Area. The two prehistoric cultural resources are not listed and do not appear to have been evaluated for the National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR). The nine historic cultural resources have been evaluated by their recorders and do not appear to be eligible for either the NRHP or the CRHR under any of the criteria.

Seventeen cultural resource surveys have been conducted within the Study Area and its ½-mile search radius, though only six fall within the Study Area itself. Portions of the Study Area south of Hueneme Road were covered by surveys conducted in 1991 and 2001. The project area north of Hueneme Road was surveyed in 1991. Information on the 17 cultural resources is summarized in Table 3.12-1.

Information on the 11 previously recorded cultural resources within ½-mile of the Study Area is provided below and briefly summarized in Table 3.12-2. This information has been provided by the SCCIC from site forms and referenced reports.

TABLE 3.12-1
PREVIOUSLY CONDUCTED CULTURAL RESOURCE SURVEYS
Within ½-mile Radius of the Study Area

Survey Number	Survey Title	Reference/Author	Date
VN127	An Archaeological and Historical Assessment of Areas Within the Takelines of the Proposed Features of the Ventura County Water Management Project	Clewlow, C. William Jr.	1978
VN236	Final Report Onshore Cultural Resources Assessment Union Federal Leases OCS P-0202 and P-0216, Offshore, Southern California	Horne, Stephen	1980
VN380*	Archaeological Survey Report on the Proposed Oxnard Wastewater Reclamation Facilities and Pipeline Routes Locates in the Oxnard Area of Ventura County	Whitney-Desautels, Nancy A.	1978
VN506	Cultural Resources Investigation: Oxnard/Ventura Solids Processing and Compost Facility	Toren, A. George	1986
VN572	Phase I Cultural Resources Survey, Fiber Optic Cable Project, Burbank to Santa Barbara, California for US Sprint Communications Company	Dames and Moore	1988
VN716*	Cultural Resources Survey and Impact Assessment for the Proposed Ablab Facility near Arnold Beach, Hueneme, Ventura County, CA	Singer, Clay A. and John E. Atwood	1989
VN900	Updated Site Record for Site VEN-555 Located Just Outside the Naval Air Station, Point Mugu	Shwartz, Steven J.	1990
VN1040	For Improvement of the Operational Characteristics of Route 101, the Ventura Freeway in Los Angeles and Ventura Counties, Between Route 405 in Los Angeles, and the Santa Clara River in Oxnard	Steele, Kenneth and Albert Gallardo	1982
VN1081*	Phase I Archaeological Survey and Cultural Resources; Assessment for the Ormond Beach Specific Plan, City of Oxnard, Ventura County, CA	Whitley, David and Joseph Simon	1991
VN1153	Class III Cultural Resource Assessment of the Proposed Carpinteria and Southern Reroutes, Santa Barbara, Ventura, and Los Angeles Counties, CA	Peak & Associates, Inc.	1991
VN1265	Consolidated Report: Cultural Resources Studies for the Proposed Pacific Project	Peak & Associates, Inc.	1992
VN1604*/ VN3905*	Cultural Resource Survey and Clearance Report for the Proposed Oxnard Terminal to Triunfo Pass Earth Station Fiber Optic Communication Route, Ventura and Los Angeles Counties, CA	Peak & Associates, Inc.	1989
VN1883	Installation Restoration Program Remedial Investigation/Feasibility Study, Naval Air Weapons Station, Point Mugu	Schwartz, Steven	1992
VN1884	Inventory and Evaluation of National Register Eligibility Buildings 5, 17, 50, 65, 311, 385, 553 and 3012, Naval Air Weapons Station, Point Mugu	Mikesell, Stephen	1998
VN1961*	Phase I Archaeological Survey of Approximately 18 Linear Miles for CMWD Regional Salinity Management Program, Ventura County, CA	Maki, Mary	2001
VN2241	Native American Graves Protection and Repatriation Act Report for Naval Air Station, Whidbey Island, Washington, and Naval Air Weapons Station, Point Mugu, CA	Halpin, Teresa and M. Militello	1999

* Survey falls within the Study Area

TABLE 3.12-2
PREVIOUSLY RECORDED CULTURAL RESOURCES
Within ½-Mile Radius of the Study Area

Site	Type	Size	Depth	Time Period	NRHP/CRHP Eligible
CA-VEN-555A	Shell midden	225 m^2	Unknown	Prehistoric	Not Evaluated
CA-VEN-555B	Shell midden	225 m^2	Unknown	Prehistoric	Not Evaluated
P-56-150013	Cemetery	13,814 ft^2	Not Applicable	Historic	Not Eligible
P-56-150014	Cemetery	3.94 acres	Not Applicable	Historic	Not Eligible
P-56-150022	Hut/Orange grove	1.97 acres	Not Applicable	Historic	Not Eligible
P-56-150023	Windrow	1,300 feet	Not Applicable	Historic	Not Eligible
P-56-150024	Farm structures	4.66 acres	Not Applicable	Historic	Not Eligible
P-56-150027	Ocean View School	Not Available	Not Applicable	Historic	Not Eligible
P-56-150028	Cottage	Not Available	Not Applicable	Historic	Not Eligible
P-56-150029	House	Not Available	Not Applicable	Historic	Not Eligible
P-56-152784	Warehouse	Not Available	Not Applicable	Historic	Not Eligible

P-56-150014: The Hueneme Masonic Cemetery was incorporated/constructed in 1898 and is located on approximately 4 acres. According to the site record forms, the cemetery design follows the original tract map, with a large, open circular area in the center, around which the cemetery plots are centered in rows running north and south. The cemetery is poorly maintained, with many of the monuments and stones overturned and vandalized. It was recommended when re-recorded in 1996, that this resource did not appear to possess the potential for eligibility for either the NRHP or the CRHR under any criteria.

P-56-150022: This resource is described as a small Quonset hut dwelling and adjoining orange grove that occupies approximately 2 acres of land, adjacent to the Hueneme Masonic Cemetery. There is currently no information recovered as to the original occupants of this dwelling on the Naumann family property. When re-recorded in 1996, this resource did not appear to possess the potential for eligibility for either the NRHP or the CRHR under any criteria, or as a contributing part of any historic district or landscape.

P-56-150023: The Naumann Blue Gum Grove, also referred to as "Ventura County Landmark #15", consists of rows of blue gum (eucalyptus) trees running along the boundaries of the above-mentioned cemeteries. The Hueneme Masonic Cemetery Association planted the trees as windbreaks in 1900 to shelter the cemetery from the weather. The grove has been designated a landmark due to the size of the trees, with one tree recorded to a height of 147 feet. When re-recorded in 1996, the grove did not appear intact enough to

be eligible under Criterion C, nor did it appear to bear significance under any of the other criteria. It was recommended that this resource did not appear to be eligible for either the NRHP or the CRHR, neither did there appear to be the potential for a historic district or landscape, which might include this property.

P-56-150024: Referred to as the Naumann Farm, this complex on a 4.66-acre parcel consists of a farmhouse, a garage and various outbuildings. The house was constructed in 1957, while the outbuildings (a pumphouse, implement shed, barn, and small shed) date to about 1940. It was recommended that this resource did not appear to be eligible for either the NRHP or the CRHR, neither did there appear to be the potential for a historic district or landscape, which might include this property when re-recorded in 1996.

P-56-150027: The Old Ocean View School was constructed in 1910 and destroyed by fire in 1970. No original school buildings remain. The oldest building on the property dates to 1940; it is a substantially altered and deteriorated structure, previously used as a residence with an attached garage at the rear of the lot. Currently a fruit and vegetable stand with an associated pumphouse and cold storage building is located at the front of the lot. Construction activity after the fire has reduced the potential for any intact subsurface deposits. As such, when re-recorded in 1996, it was recommended that this resource did not appear to be eligible for either the NRHP or the CRHR, nor did there appear to be the potential for a historic district or landscape which might include this property.

P-56-150028: The Eastwood House is a later Victorian cottage that was constructed for Herbert H. Eastwood circa 1900. Herbert Eastwood settled in the area in 1876, and was known as a businessman, a farmer and Oxnard's mayor from 1920 to 1926. When re-recorded in 1996, it was recommended that because the house is not architecturally distinguished, the property did not appear to be eligible for either the NRHP or the CRHR under any criteria, nor did there appear to be the potential for a historic district/landscape which might include this property.

P-56-150029: Constructed in 1916, the Stanley Pidduck house is architecturally described as a Prairie Style building with California Style elements. This house was designed by Los Angeles architect Alfred F. Priest. Mr. Priest designed houses during the World War I era, though he is better known for his commercial and public buildings. The buildings on the property consist of a barn (constructed circa 1900), a garage, guesthouse and storage building (circa 1940), and a storage building (circa 1962). When re-recorded in 1996, it was recommended that the Stanley Pidduck house did not possess significant distinction to be eligible under Criterion C, nor did it appear to bear significance under any other criteria. Therefore, this resource did not appear to be eligible for either the NRHP or the CRHR, neither did there appear to be the potential for a historic district or landscape which might include this property.

P-56-152784: Referred to as the Driscoll Berry Facility, this one-story building was originally used as a commercial warehouse around 1940 to 1958. The structure has been altered from it original construction, with the replacement of one of the three garage doors. When recorded in 2003, it was recommended that because this resource does not appear to have any associations with important events or significant persons, it did not appear likely to yield information important to history or prehistory. Therefore, this resource did not appear to be eligible for either the NRHP or the CRHR, neither did there appear to be the potential for a historic district or landscape which might include this property.

A records search of the Sacred Lands File maintained by the Native American Heritage Commission (NAHC) was conducted on November 10, 2004. According to the NAHC, the search failed to indicate the presence of Native American cultural resources within the immediate Study Area. The NAHC provided a list of 16 individuals/organizations who may have knowledge of cultural resources in the area. These individuals/organizations have been contacted. None of these individuals has contacted URS with any additional knowledge on cultural resources in the area.

3.12.2 Regulatory Framework

3.12.2.1 State Regulations

3.12.2.1.1 California Environmental Quality Act

The basic goal of the California Environmental Quality Act (CEQA) is to develop and maintain a high-quality environment now and in the future. The CEQA Guidelines provide a framework for the analysis of impacts to Archaeological Resources.

In considering impact significance under CEQA, the significance of the resource itself must first be determined. At the state level, consideration of significance as an "important archaeological resource" is measured by cultural resource provisions considered under CEQA Guidelines Sections 15064.5 and 15126.4, and the draft criteria regarding resource eligibility to the CRHR.

Generally under CEQA, an historical resource (these include built-environment historic and prehistoric archaeological resources) is considered significant if it meets at least one of the criteria for listing on the CRHR. These criteria are set forth in CEQA Guidelines Section 15064.5 and defined as any resource that:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- Is associated with lives of persons important in our past

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- Has yielded, or may be likely to yield, information important in prehistory or history

Under CEQA Guidelines Section 15064.5, a project would potentially have significant impacts if it would cause substantial adverse change in the significance of one of the following:

- A historical resource (i.e., a cultural resource eligible for the CRHR)
- An archaeological resource (defined as a unique archaeological resource which does not meet CRHR criteria)
- Human remains (i.e., where the project would disturb or destroy burials)

A non-unique archaeological resource is given no further consideration other than the simple recording of its existence by the CEQA lead agency.

Potential impacts to identified cultural resources need only be considered if the resource is an "important" or "unique archaeological resource" under the provisions of CEQA Guidelines Sections 15064.5 and 15126.4 and the eligibility criteria. If a resource cannot be avoided, then the resource must be examined vis-à-vis the provisions of CEQA Guidelines Sections 15064.5 and 15126.4 and of the eligibility criteria as an "important" or "unique archaeological resource." In many cases, determination of a resource's eligibility can only be made through extensive research and archaeological testing. No mitigation measures are required unless previously undiscovered cultural resources are detected. Mitigation under CEQA must address impacts to the values for which a cultural resource is considered important. To mitigate adequately, it must therefore be determined what elements make a site eligible for the CRHR. The first line of mitigation is complete avoidance, when feasible, of all cultural resources.

Where a project may adversely affect a unique archaeological resource, CEQA (under Section 21083.2 of the Public Resources Code [PRC]) requires that the Lead Agency (i.e., City of Oxnard) treat that effect as a significant environmental impact. When an archaeological resource is listed in or eligible to be listed in the CRHR, PRC Section 21084.1 requires that any substantial adverse effect to that resource be considered a significant environmental impact.

Impacts to "unique archaeological resources" are also considered under CEQA, as described under PRC 21083.2. A unique archaeological resource implies an archaeological artifact, object, or site about which it can be clearly demonstrated that – without merely adding to the

current body of knowledge – there is a high probability that it meets one of the following criteria:

- The archaeological artifact, object, or site contains information needed to answer important scientific questions, and there is a demonstrable public interest in that information.
- The archaeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type.
- The archaeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archaeological resource indicates an archaeological artifact, object, or site that does not meet the above criteria. Impacts to non-unique archaeological resources and resources which do not qualify for listing on the CRHR receive no further consideration under CEQA.

3.12.2.1.2 California Coastal Act

The California Coastal Act (CCA) recognizes archaeological and historic resources as sensitive and requires the development of reasonable mitigation measures with the California Office of Historic Preservation. These procedures are defined in CCA Section 30244.

3.12.2.1.3 Public Resources Code

Section 15064.5 of the CEQA Guidelines also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under California PRC Section 5097.98. In short, it prohibits interference with the free expression of Native American religions by any public agency or contracted private party on public land, and by similarly prohibiting the disturbance of any Native American cemetery or sacred site by such parties on public land.

3.12.2.1.4 Tribal Consultation Guidelines Supplement to 2003 General Plan Guidelines Government Codes §65450 et seq.

In April of 2005 with the passage of SB 18, Tribal Consultation Guidelines were issued as a Supplement to the 2003 General Plan Guidelines. These new Guidelines require local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These requirements apply to adoption and amendment of both general plans and specific plans.

Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the

opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation unless a shorter timeframe has been agreed to by the tribe.

In accordance with these Guidelines, in November 2004 and May 2005, URS (on behalf of the City of Oxnard) requested and received the names or groups or individuals listed by the NAHC as contacts for Ventura County. URS then notified the appropriate individuals and groups of the project. The Tribal Elders Council of Santa Ynez Band of Chumash Indians responded that, at this time, there was no knowledge of the presence of spiritual or ceremonial sites in the Study Area. The Tribal Elders Council further indicated that cultural deposits could be intact in the Study Area. URS also requested and received a listing of sacred lands in the areas that are listed within the Sacred Lands File, and no sacred lands were identified within the Study Area or a ½ -mile radius surrounding the Study Area. The NAHC request, list of names, contact letters, and response are contained in Appendix H.

3.12.2.2 County Regulations

3.12.2.2.1 Ventura County General Plan

According to the Ventura County General Plan (GP), dated January 27, 2004, it is the County's policy that discretionary development shall be assessed for potential cultural resources impacts, except where exempt from such requirements by CEQA. Discretionary development shall be designed or redesigned to avoid potential impacts to significant cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significance level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance and mitigation shall be made by qualified archaeological and/or historical consultants (in consultation with recognized local Native American groups).

Mitigation of significant impacts on cultural resources shall follow the Guidelines of the State Historic Preservation Office (SHPO), the NAHC, and shall be performed in consultation with professionals in their respective areas of expertise. The GP also states that the locations of archaeological sites shall be kept confidential in order to preserve and protect these resources. Finally, the GP requires that during the environmental review of any discretionary development, the reviewing agency shall be responsible for identifying sites having potential archaeological, architectural or historical significance and that this information be provided to the County Cultural Heritage Board for evaluation.

Coastal Area Plan. As outlined in the Coastal Area Plan (CAP) of the Ventura County General Plan, the November 20, 2001 edition, the Ventura County's Public Works Agency

(the agency that reviews all major development applications for archaeological resources) may require additional work to be performed as a permit condition, based upon the location of the proposed project. The additional work ranges from field survey to test pit excavations based upon an area's sensitivity for cultural resources. Other requirements include a summary of the qualifications of the archaeologist who performs the applicant's study that will be presented with the rest of the required information.

The CAP also outlines policies stating that human burials should not be removed from the ground without specific authorization, and under direction of, a Native American monitor or Native American-approved archaeologist. Where significant archaeological resources have been identified on a site, a qualified archaeologist may be required to be present, at the applicant's expense, during all excavating, grading and other earthmoving activities. The location of all coastal zone archaeological sites will be kept confidential to avert disturbance or destruction.

Finally, the CAP requires that where new development would adversely impact archaeological resources, reasonable mitigation measures will be required. Such measures may involve covering the site, moving the structure(s) to another site on the parcel, or not constructing on the site, depending on the severity of the impacts and the significance of the resource. If previously unknown cultural resources are discovered after construction starts, all work shall cease and the Public Works Agency shall be notified. After review of the site by the Agency, or other qualified personnel additional reasonable mitigation measure may be required.

3.12.2.3 City Regulations

3.12.2.3.1 City of Oxnard General Plan

The City of Oxnard 2020 General Plan (as updated through November 8, 2005) requires a cultural resources study (which includes a field study component) prior to the permitting of specific development plans that may affect significant historical resources. A qualified archaeologist should inspect development locations for "surface evidence" of archaeological deposits, and archaeological monitoring during grading should be required in areas where significant cultural resources have been identified or are expected to occur.

If cultural resources are uncovered during the course of construction, all work in the area should be halted and a qualified archaeologist consulted to determine the significance of the find. In the event that proposed development threatens significant archaeological resources, alternatives should be considered, including planning construction to avoid archaeological sites, deeding archaeological sites into permanent conservation easements, and planning parks, greenspace, or other open space to incorporate archaeological sites.

3.12.3 Project Impacts and Mitigation

3.12.3.1 Thresholds of Significance

For the purposes of this EIR, cultural resource impacts are considered significant for the proposed project:

- Violates state or local agency cultural resources standards
- Causes a substantial adverse change in the significance of an archaeological resource, including destruction or alteration of the resource or its immediate surroundings
- Causes a substantial adverse change in the significance of a historical resource as defined at the state level by eligibility for listing on the CRHR
- Disturbs any human remains, including those interred outside of formal cemeteries

3.12.3.2 Project Impacts

As there are no known cultural resources that are eligible for the CRHR within the Study Area, there are no anticipated project impacts on known cultural resources. Direct impacts are typically associated with construction activity and have the potential to immediately alter, diminish, or destroy all or part of the character and quality of historic and archeological resources.

3.12.3.2.1 Northern Subarea

Construction of the proposed development site (Northern Subarea) is not expected to result in direct impacts to the known cultural resource base.

Impact Cultural-1: Construction-related Grading. Grading activities associated with site preparation at the proposed development site (including residential, mixed-use commercial, light industrial, developed open space uses) in the Study Area could impact previously undiscovered cultural resources. In the event that project-related activities impact a previously undiscovered CRHR eligible cultural resource, this would be considered to be *significant but feasibly mitigated (Class II).*

3.12.3.2.2 Southern Subarea

Construction of the proposed development site (Southern Subarea) is not expected to result in direct impacts to the known cultural resource base.

Impact Cultural-2: Construction-related Grading. Grading activities associated with site preparation at the proposed development site (including business park and light industrial uses) in the Study Area could impact previously undiscovered cultural resources. In the event

that project-related activities impact a previously undiscovered CRHR eligible cultural resource, this would be considered to be *significant but feasibly mitigated (Class II).*

3.12.3.3 Mitigation Measures

There are no expected impacts on known cultural resources by the proposed project, and therefore no site-specific mitigation measures are recommended. However, there is a low-to-moderate likelihood of buried cultural resources in the project area. A professional archaeologist should monitor any ground-disturbing activity in the Study Area.

Mitigation Measure Cultural-1: Construction Period Monitoring. An archaeologist will monitor all initial construction grading or excavation. If unanticipated resources are discovered, they will be evaluated according to the procedures set forth at CEQA Section 15064.5. If the evaluation determines that such resources are either unique or significant archaeological or historical resources and that the project would result in significant effects on those resources, then further mitigation would be required. In cases where the resources are unique, then avoidance, capping, or other measures, including data recovery, would be appropriate mitigation. If the resources are not unique, then recovery, without further mitigation, would be appropriate.

This mitigation addresses Impacts Cultural-1 and Cultural-2.

3.12.3.4 Residual Impacts

Impacts on archaeological or cultural resources would be mitigated to a less significant level with application of mitigation measure Cultural-1. No residual impacts would remain.

3.13 VISUAL/AESTHETIC RESOURCES

This section identifies and describes the visual setting of the Ormond Beach Specific Plan Area and surrounding areas under existing conditions. It then addresses potential visual impacts resulting from the development of the Ormond Beach Specific Plan in detail based on site reconnaissance and documentation of important visual features. The Ormond Beach Specific Plan Study Area consists of two Subareas, as described in Section 2.0, Project Description. The Study Area is bordered on the west by Edison Drive and on the east by Arnold and Olds roads. The Northern Subarea is bordered by Pleasant Valley Road to the north and Hueneme Road to the south. The Southern Subarea is bordered by Hueneme Road to the north and coastal wetlands to the south. For purposes of this discussion, the Northern and Southern Subareas are referred to collectively as the Study Area.

3.13.1 Existing Conditions

3.13.1.1 Visual Setting

The Ormond Beach Specific Plan Study Area is located on a flat portion of the Oxnard Plain in southeastern Oxnard. The Oxnard Plain is confined along its southern border by the Pacific Ocean and extends inland between Point Mugu and Ventura. The topography of the Oxnard Plain is characteristic of a historic watershed area, with level to gently sloping areas generally draining to the south, where the plain meets the Pacific Ocean. Prominent visual features in the area surrounding the Oxnard Plain include the local hillsides and ridgelines that form the backdrop of much of the area. The eastern edge of the Oxnard Plain is defined by the Santa Monica Mountains. To the north are the Camarillo Hills, while the coastline defines the western and southern boundaries. Inland views of the foothills and mountains associated with the distant Los Padres National Forest and the Santa Monica Mountains are prevalent throughout Oxnard.

The City of Oxnard is visually defined by natural and man-made resources, including open spaces, beaches, coastline, and agricultural operations. Coastlines along the Pacific Ocean define the western and southern edges of the city. The northern city visual boundary is defined by the Santa Clara River and agricultural operations. The eastern boundaries of the city are defined by agricultural lands within the Oxnard-Camarillo Greenbelt in unincorporated areas of Ventura County.

The Study Area represents a transition area between the urban uses to the north and west and the agricultural and open space areas to the south and east. To the north of the Study Area are the Villa Capri and Tierra Vista neighborhoods. Existing industrial areas are located west of Edison Drive and north of Hueneme Road. To the west of Edison Drive and south of Hueneme Road are industrial areas and agricultural operations. To the south of the Study Area are the

Reliant Energy Ormond Beach Generation Station, resource protection areas, and the coastline. The area east of the Study Area is currently in agricultural production.

The existing visual character of the Ormond Beach Specific Plan Study Area itself is defined by agricultural operations, including cultivated row crops and sod farming. Views from the Study Area include industrial uses to the west, residential uses to the north, agricultural uses to the east, and coastal features, including the Pacific Ocean, to the south. As a major transportation corridor connecting Oxnard with the Los Angeles metropolitan area, Highway 1 serves as a primary gateway to the City and the Ormond Beach Specific Plan Area by its connection with Hueneme Road to the east.

Prominent visual features found near the Study Area include the Santa Monica Mountains to the east, distant views of the Los Padres National Forest to the north, the Reliant Energy power plant to the south, and agricultural lands to the east. The Community Design Element of the City of Oxnard's 2020 General Plan identifies the agricultural land to the east of the Ormond Beach Specific Plan Study Area as a natural scenic resource. Most of the agricultural spaces are marked by eucalyptus and cypress windrows, which are continued within greenbelts that serve as green buffers surrounding the City's developed core. These agricultural areas and the views of the mountains and hills forming the backdrop to the Oxnard Plain are considered scenic resources that contribute to the unique character and visual image of Oxnard.

3.13.1.2 Viewsheds

Primary access to the Study Area would be provided by Hueneme Road, which runs east-west bisecting Study Area, and an extension of Rose Avenue from its current terminus at the northern edge of the Study Area. In addition, Pleasant Valley Road, Olds Road, Arnold Road, and Edison Drive, provide secondary connections to various locations within the Study Area. In order to document the existing visual conditions on the Specific Plan site and in surrounding areas, photographs were taken from these roadways.

3.13.1.2.1 Rose Avenue

As proposed, one primary access to the Study Area would be provided through an extension of Rose Avenue. Currently, Rose Avenue ends approximately one-eighth of a mile south of Pleasant Valley Road. Photo #1 (Figure 3.13-1) shows an existing view from the current terminus of Rose Avenue facing south. The foreground view from this viewpoint shows the cultivated agricultural fields and utility lines on the northern part of the Specific Plan Study Area. Midground views show the existing utility lines that parallel Hueneme Road. Background views show beach dunes and the Reliant Energy power plant, which are adjacent to the coastline. Views of the ocean to the south of the Study Area are obstructed from view by the coastal dunes.

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Photo #1. Existing view from the current terminus of Rose Avenue facing in the southerly direction.

Photo #2. Viewpoint adjacent to the intersection of Hueneme Road and Edison Drive.

Ormond Beach Specific Plan EIR URS Corporation	Figure 3.13-1. **PHOTO 1 AND PHOTO 2**	Nov. 2009

3.13.1.2.2 Hueneme Road

Hueneme Road would provide the major east-west connection between the Study Area and Highway 1 to the east and Port Hueneme and the Oxnard to the west. According to Figure VIII-9 in the Open Space/Conservation Element of the City's 2020 General Plan, Hueneme Road is identified as a scenic roadway. Photo #2 (Figure 3.13-1) depicts a viewpoint adjacent to the intersection of Hueneme Road and Edison Drive. This view presents a typical perspective from the observation point of a driver traveling eastbound on Hueneme Road. In the foreground of the photo are agricultural operations to the north and south of Hueneme Road. Midground views show agricultural buildings, windrows associated with agricultural operations, and utility lines paralleling Hueneme Road. Background views show agricultural operations continuing across the Oxnard Plain. Beyond the agricultural area to the east are the Santa Monica Mountains, which provide a visual backdrop to the area.

Photo #3 (Figure 3.13-2) presents a viewpoint at Arnold Road and Hueneme Road facing east. This perspective shows the typical viewshed that could be observed by a motorist traveling westbound on Hueneme Road. Foreground views show Hueneme Road, fencing surrounding existing agricultural operations, and utility lines. Midground views identify agricultural buildings and windrows located within the Study Area. Background views show the 220 kV transmission lines running north to south connecting to the Reliant power plant. Limited views of the residential and industrial areas at the current urban edge of Oxnard can also be seen from this vantage point.

3.13.1.2.3 Pleasant Valley Road

Pleasant Valley Road does not actually border the Study Area. At the northwest corner of the Study Area, Pleasant Valley Road turns slightly to the northeast immediately after crossing the railroad tracks. According to Figure VIII-9 in the Open Space/Conservation Element of the City's 2020 General Plan, Pleasant Valley Road is identified as a scenic highway. Photo #4 (Figure 3.13-2) presents a typical viewshed from this observation point. This viewpoint represents the viewshed that motorists would observe as they travel past this observation point in the eastbound direction. Foreground views from this location show agricultural operations within the Study Area and 220 kV transmission lines associated with the Reliant Energy power plant. Midground views show agricultural support buildings and utility lines located within the Study Area. Background views show distant views of the Santa Monica Mountains.

Photo #3. Viewpoint at Arnold Road and Hueneme Road in the easterly direction.

Photo #4. Pleasant Valley Road view-shed in the eastbound direction.

3.13.1.2.4 Olds Road

Olds Road is the eastern boundary of the Northern Subarea. Photo #5 (Figure 3.13-3) shows a vantage point adjacent to the intersection of Hueneme and Olds Roads facing north. Foreground views show current agricultural operations and fencing, while midground and background views show the residential neighborhood to the north of the Study Area, existing 220 kV transmission lines, and trees located within various areas of Oxnard to the north.

Photo #6 (Figure 3.13-3) is taken from the northeast corner of the Study Area, just south of intersection of Olds Road and Sanford Street, facing south. From this vantage point, foreground views show existing agricultural operations within the Study Area and midground views show Hueneme Road and transmission lines that bisect the Study Area. Background views show the windrows associated with historical agricultural operations in the area.

3.13.1.2.5 Arnold Road

Arnold Road currently traverses existing agricultural operations providing direct access to the Ormond Beach area to the south of the Study Area. Photo #7 (Figure 3.13-4) was taken from a vantage point just south of the intersection of Arnold Road and Hueneme Road, facing south. Foreground views show existing sod cultivation operations within the Study Area. Midground views show windrows and the southern edge of the Study Area at the sand dunes associated with the coastline. Background views are defined by the coastal sand dunes, which provide a visual barrier blocking any views of the Pacific Ocean, but which themselves are identified in the City's General Plan scenic visual resources.

Photo #8 (Figure 3.13-4), was taken from a vantage point at the terminus of Arnold Road near the southeastern point of the Study Area, facing north. Foreground views from this location show existing agricultural operations both on and adjacent to the Study Area. Midground views show the existing urban edge of the City of Oxnard to the north and northwest of the Study Area. Background views show the Camarillo Hills, hillsides behind Ventura, and distant views of the Los Padres National Forest.

3.13.1.2.6 Edison Drive

Edison Drive is the western boundary of the Specific Plan Study Area and provides access to the Reliant Energy power plant. Photo #9 (Figure 3.13-5) shows a view from the terminus of Edison Drive adjacent to the Reliant Ormond Beach Generating Station looking to the northeast. Foreground views from this location show existing agricultural operations both within and adjacent to the Study Area. Midground views show the existing urban edge of the City of Oxnard north of the Study Area. Background views show the Camarillo Hills, localized hillsides behind Ventura, and distant views of the Los Padres National Forest.

Photo #5. Viewpoint adjacent to the intersection of Hueneme Road and Olds Road facing in the northerly direction.

Photo #6. Northwest corner of Study Area adjacent to the future intersection of Olds Road and Lei Drive facing in the southerly direction.

Photo #7. Viewpoint south of the intersection of Arnold Road and Hueneme Road, facing in the southerly direction

Photo #8. Viewpoint at the terminus of Arnold Road near the southeastern point of the Specific Plan area facing in the northerly direction.

Photo #9. View from the terminus of Edison Dr. adjacent to the Reliant Energy Power Plant in the northeasterly direction.

3.13.2 Regulatory Framework

3.13.2.1 California State Authorities and Administering Agencies

California's Scenic Highway Program was created by the California Legislature to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of land adjacent to those highways. When a city or county nominates an eligible scenic highway for official designation, it must adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist. These ordinances make up the scenic corridor protection program. Scenic corridor protection programs include policies intended to preserve the scenic qualities of the highway corridor, including regulation of land use and density of development, detailed land and site planning, control of outdoor advertising (including a ban on billboards), careful attention to and control of earthmoving and landscaping, and careful attention to design and appearance of structures and equipment (California Streets and Highways Code §260 et seq.). The closest designated state scenic highway to the Study Area is Highway 1, which is located approximately two miles to the east.

3.13.2.2 Local Ordinances and Administering Agencies

The visual quality in the City of Oxnard is addressed in the City's 2020 General Plan, which contains various goals, policies, and objectives intended to preserve aesthetic and visual qualities within the city and surrounding area. Specific goals and objectives are found in the Community Design and Open Space/Conservation elements.

3.13.2.2.1 Community Design Element

The relationship between the future built environment and the natural setting require the preservation and enhancement of existing aesthetic resources. The Community Design Element of the City's 2020 General Plan defines the following goals and objectives pertaining to the City's aesthetic resources:

- Goals
  - A unified and high quality visual image for the City
  - A thoughtful and sympathetic relationship between the built environment and the natural environment
- Objectives
  - Maintain the unique coastal and agricultural character of Oxnard
  - Preserve the visual identity and character of existing neighborhoods
  - Preserve the City's unique natural features and historic structures
  - Revitalize areas of the City that are currently deteriorated or detract from the visual quality of the City

- Achieve quality architectural and landscape architectural design that recognizes its surrounding natural environment
- Upgrade major entryways to the City with landscaping and/or signage to enhance the City's image and sense of place
- Enhance the visual identity of the City's activity nodes
- Preserve important view corridors

The Community Design Element of the 2020 General Plan identifies important scenic resources within Oxnard. The City of Oxnard regards agricultural lands as a natural scenic resource. Thus, the agricultural lands located within and to the east of the Study Area are regarded as natural scenic resources. These areas provide open space buffers between the Santa Monica Mountains to the west and the urban area associated with the City of Oxnard. Agricultural lands also provide a sense of identity for the community. Eucalyptus and cypress windrows associated with the agricultural fields are also important visual features.

The Community Design Element also recognizes the beaches and coastline as Oxnard's primary natural scenic resource. This includes the Ormond Beach sand dunes and wetlands, which, despite their undeveloped status and poor access, constitute a major scenic resource. The Community Design Element also considers parks an important aesthetic resource. Since no parks are located within or adjacent to the Study Area, this is not considered a key issue with respect to the specific plans.

3.13.2.2.2 Open Space/Conservation Element

The City's Open Space/Conservation Element addresses recreational and open space issues facing the City of Oxnard. This element also addresses conservation and preservation of natural resources, with the following goals and objectives pertaining to aesthetic resources:

- Goals
  - Maintenance and enhancement of natural resources and open space
- Objectives
  - Protect unique biological habitats from development
  - Manage water resources to prevent overdraft and loss of water quality
  - Protect agricultural lands from premature and unnecessary urbanization
  - Provide for the continued timely extraction of minerals while minimizing land use conflicts
  - Provide adequate open space areas to satisfy the current and future recreation needs of the City
  - Manage urban development to protect open space areas that provide for public health and safety
  - Protect and enhance areas of cultural and historic significance
  - Preserve the coastline and beaches and minimize beach erosion

The Open Space/Conservation Element also includes a list of scenic highways that was developed in consultation with Ventura County and the City of Port Hueneme. As noted earlier in this section, both Hueneme Road and Pleasant Valley Road are identified as scenic highways based on their long-range panoramic views of the farmlands and the Santa Monica Mountains to the east. These long-range scenic views are regarded as important visual features. The Open Space/Conservation Element also describes Oxnard's primary natural scenic resources, including the coastal dunes and wetlands and views to the mountains.

3.13.3 Project Impacts

3.13.3.1 Thresholds of Significance

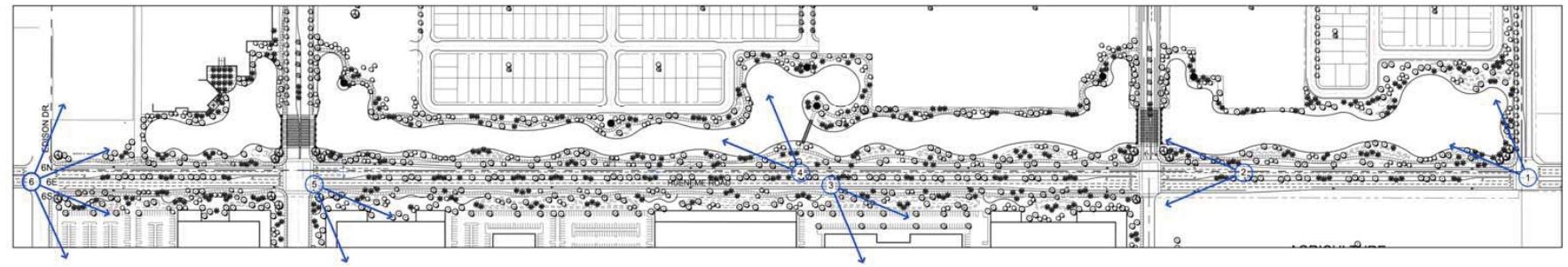
Impacts are considered potentially significant if the proposed development activity, including all proposed mitigation measures would:

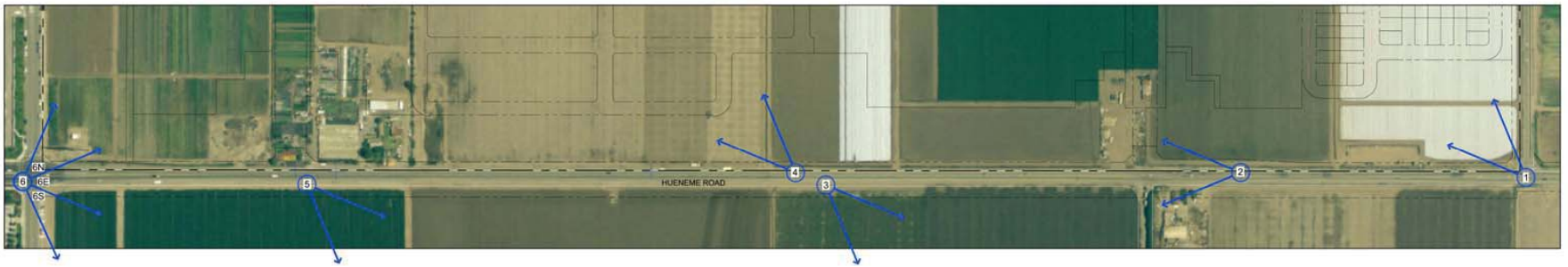
- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

3.13.3.2 Project Impacts

As noted above, the City of Oxnard's General Plan recognizes the area's beaches, coastline, agricultural areas, and distant views of foothills and mountains surrounding the Oxnard Plain as important scenic resources. In the context of the Ormond Beach Specific Plan Study Area, the development of the proposed land uses would involve the conversion of the generally rural agricultural area to an urban extension of the City of Oxnard. The potential impacts to scenic vistas in the Study Area are assessed for each subarea and the photographs presented in Figures 3.13-1 through 3.13-5.

Hueneme Road is a key focal point in the Study Area, serving as the major east-west transportation corridor and gateway into the area. It also serves as the dividing line between the Northern and Southern Subareas. The applicants for development in the two subareas have committed to seizing upon the opportunity to use Hueneme Road to unify the two areas by creating a heavily landscaped scenic corridor with common treatments on north and south sides of the road. Figures 3.13-7 through 3.13-10 depict how Hueneme Road might appear from several perspectives based on the design commitments of the specific plans (Figure 3.13-6 shows the locations of these perspectives).






LOCATION 4


LOCATION 3


LOCATION 2


LOCATION 1


LOCATION 6E


LOCATION 6N


LOCATION 6S


LOCATION 5

Ormond Beach Specific Plan EIR URS Corporation	Figure 3.13-6. **HUENEME ROAD RENDERING LOCATIONS**	Nov. 2009

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Ormond Beach Specific Plan EIR URS Corporation	Figure 3.13-7. **LOCATIONS 1 AND 2**	Nov. 2009

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Ormond Beach Specific Plan EIR URS Corporation	Figure 3.13-8. **LOCATIONS 3 AND 4**	Nov. 2009

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Ormond Beach Specific Plan EIR URS Corporation	Figure 3.13-9. **LOCATIONS 5 AND 6E**	Nov. 2009

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Ormond Beach Specific Plan EIR URS Corporation	Figure 3.13-10. **LOCATIONS 6N AND 6S**	Nov. 2009

3.13.3.2.1 Applicable to Northern Subarea

Impact AES-1: Scenic Vistas-Rose Avenue. The Northern Subarea would utilize an extension of Rose Avenue as the main north/south entrance to the Study Area. Photo #1 (Figure 3.13-1) shows the existing view from the current terminus of Rose Avenue. Following the buildout of the Northern Subarea, Rose Avenue would be extended and improved with a roundabout approximately 300 feet to the south of the northern boundary of the Study Area. From the vantage point of the entrance to the Northern Subarea, a community park, self-storage area, and the roundabout associated with Rose Avenue would be visible in the foreground. Midground views of the new detached and attached single-family residences within the Northern Subarea would obstruct views of other land uses located farther south within the Study Area. Detached housing would be limited to a maximum height of 35 feet above grade, while attached housing would be limited to a maximum height of 45 feet.

The existing terminus of Rose Avenue does not provide any direct view of the southern coastline or mountain and foothill backdrops that are considered scenic vistas according to the City's General Plan. While the area would be converted from agricultural operations to developed urban land uses, from the vantage point of Rose Avenue, the development of the Northern Subarea would not obstruct scenic vistas based on the fact that scenic vistas would not be affected. This impact is considered to be *less than significant (Class III)*.

Potential aesthetic impacts associated with the conversion of existing agricultural operations to developed urban land uses are addressed under Impact AES-9: Visual Character.

Impact AES-2: Scenic Vistas-Hueneme Road. Hueneme Road is identified as a scenic roadway in Oxnard's 2020 General Plan. Photo #2 (Figure 3.13-1) shows the existing view from a vantage point adjacent to the intersection of Hueneme Road and Edison Drive. Photo #3 (Figure 3.13-2) shows the existing viewshed on Hueneme Road looking to the east. Following the buildout of the Northern Subarea, existing agricultural operations would be converted into urban uses adjacent to Hueneme Road. Specifically, a man- made lake feature is proposed adjacent to Hueneme Road, beyond which will be single-family detached residential neighborhoods. Northeast of the intersection of Hueneme Road and Edison Drive would also be developed with commercial and mixed commercial/residential uses.

The proposed man-made lake separating the residential uses from Hueneme Road would act as a visual buffer, separating homes that could impair views of the Santa Monica Mountains to the east from the perspective of an eastbound motorist. Presently, motorists traveling in the westbound direction on Hueneme Road have views of the existing urban areas. No views of the coastline are visible from this perspective. As the man-made lake would provide a separation of the proposed residential neighborhoods from Hueneme Road, the existing views of the Santa Monica Mountains to the east from the perspective of eastbound motorists and pedestrians would be preserved. There are no scenic vistas from the perspective of a westbound motorist

traveling on Hueneme Road. Overall, the scenic vista impacts associated with the Northern Subarea along Hueneme Road are considered to be *less than significant (Class III).*

Visual impacts associated with the Southern Subarea are addressed below under Impact AES-5: Scenic Vistas-Hueneme Road (Southern Subarea).

Impact AES-3: Scenic Vistas-Pleasant Valley Road. Pleasant Valley Road is also identified as a scenic roadway in the City's General Plan. About 220 feet of Pleasant Valley Road passes along the northwestern corner of the Study Area. The area adjacent to the roadway will provide primary access to the proposed storage uses that will lie in the Southern California Edison transmission line corridor. There will be a large landscaped entry to the storage area from Pleasant Valley Road. Photo #4 (Figure 3.13-2) shows the existing viewshed adjacent to Pleasant Valley Road facing east.

The self-storage buildings and boat/RV parking areas proposed in the Specific Plan will be set back from Pleasant Valley Road to minimize their visibility from the roadway. The self storage buildings would be constructed as single-story facilities with maximum heights of 25 feet. Without measures to preserve the distant views of the Santa Monica Mountains, the impact on scenic vistas from Pleasant Valley Road could be significant. Because the eastward viewshed from Pleasant Valley Road is so limited and because the buildings within the Study Area will be set back from the road, the potential impacts of project development on scenic vistas to the Santa Monica Mountains are considered *less than significant (Class III).*

Impact AES-4: Scenic Vistas-Olds Road. Photo #5 and Photo #6 (Figure 3.13-3) show existing views on or adjacent to Olds Road facing to the north and south, respectively. According to the proposed Specific Plan, a high school will be developed adjacent to Olds Road. The landscaped buffer area/shelterbelt separating Olds Road from the high school will create a visual buffer that will prevent view obstruction of the distant mountain views to the north from the perspective of northbound motorists or pedestrians. This impact is considered to be *less than significant (Class III).*

Photo #6 (Figure 3.13-3) shows the existing view facing south adjacent to Olds Road. From this perspective, the coastline to the south is obstructed from view by sand dunes to the south. Thus, there are no important scenic vistas from the vantage point adjacent to Olds Road facing south, so the proposed development in the Northern Subarea would not impact scenic vistas. This impact is considered to be *less than significant (Class III).*

3.13.3.2.2 Applicable to Southern Subarea

Impact AES-5: Scenic Vistas-Hueneme Road. Hueneme Road to the north of the Southern Subarea is a scenic roadway according to the City of Oxnard's General Plan. Photo #2 (Figure 3.13-1) shows the existing viewshed along Hueneme Road facing east. As shown in this figure,

the Santa Monica Mountains to the east and southeast provide a prominent visual backdrop to the Oxnard Plains from the perspective of a motorist traveling eastbound. With the development of the Southern Subarea, the existing agricultural operations would be converted into urban uses, including light industrial (associated with the harbor use overlay) and business parks. Separating Hueneme Road from these light industrial and business park uses would be a 150-foot wide landscaped greenbelt paralleling Hueneme Road. Similar to the man-made lake north of Hueneme Road, the greenbelt would act as a visual buffer. By providing a separation distance between Hueneme Road and the location where new buildings would be constructed, impacts to distant views of the Santa Monica Mountains would be reduced.

Consistent with the City's Zoning Ordinance, the proposed Specific Plan limits maximum building heights to 35 feet for the business park uses and 55 feet for the light industrial uses. While the setbacks along the Hueneme Road Scenic Corridor would preserve views of the Santa Monica Mountains from the perspective of an eastbound motorist, obstructions of the distant mountains would still likely occur based on the allowable height of the future buildings constructed adjacent to Hueneme Road. The design guidelines in specific plan for the Southern Subarea includes a commitment to consideration of "views and vistas, both from within and from offsite." This provision will allow the City to ensure that development within the area maintains visual corridors. The impact is thus considered *less than significant (Class III)*.

Impact AES-6: Scenic Vistas-Arnold Road. Photo #7 and Photo #8 (Figure 3.13-4) show existing views adjacent to Arnold Road facing south and north, respectively. Business park and light industrial uses are proposed for the areas adjacent to Arnold Road in the northern part of the Southern Subarea. An agricultural buffer consisting of a 70-foot-wide bioswale and 16-foot-wide pedestrian area will separate Arnold Road from the business park and light industrial development to the west. The southern portion of the Subarea is proposed to remain in agricultural use. From the perspective of Photo #7 (Figure 3.13-4), buildings constructed within the business park and light industrial land use areas would be set back due to the location of the agricultural buffer adjacent to the roadway. Overall, view obstructions would not occur from the perspective of a southbound motorist or pedestrian on Arnold Road as the buildings would be set back from the roadway and would not impact any identified scenic resources. Photo #8 (Figure 3.13-4) shows the view facing north on Arnold Road at the southeastern corner of the Specific Plan area. Views of the distant mountains and foothills to the north would also be preserved due to the setback of development from the roadway.

Although the agricultural buffer would preserve the northerly viewshed, the allowable buildings heights could result in obstructions of the distant mountains and foothills. The design guidelines in specific plan for the Southern Subarea includes a commitment to consideration of "views and vistas, both from within and from offsite." This provision will

allow the City to ensure that development within the area maintains visual corridors. The impact is thus considered *less than significant (Class III).*

Impact AES-7: Scenic Vistas-Edison Drive. Edison Drive would provide north/south access to the Southern Subarea of the Ormond Beach Specific Plan Study Area. Photo #9 (Figure 3.13-5) shows the northerly view from the end of Edison Drive. Edison Drive would not include the same sort of buffer areas adjacent to the roadway as is proposed for the areas adjacent to Hueneme Road and Arnold Road. Development along Edison Drive would consist of harbor-related light industrial uses. Since buildings constructed within this area can be constructed to a maximum height of 55 feet, potential view obstructions of the distant mountains and ridgelines could occur. Because the specific plan for the Southern Subarea includes a commitment to consideration of views and vistas, the impact is considered *less than significant (Class III).*

3.13.3.2.2 Applicable to Both Northern and Southern Subareas.

Impact AES-8: Scenic Highways. The closest State Scenic Highway to the Study Area is Highway 1, which is located approximately two miles to the east of the Study Area. While views from Highway 1 would be slightly altered by the development of urban uses within the Study Area, the predominant visual features visible from the highway are the coastal areas to the south and agricultural lands and the Santa Monica Mountains to the east and northeast. From the perspective of a motorist on Highway 1, the area would be converted from an agricultural area to an urban extension of the City of Oxnard. Based on the distance of Highway 1 from the Specific Plan Area and the fact that no scenic vistas would be obstructed, the development of the Specific Plan area would not impact views from the perspective of a passing motorist traveling on Highway 1. This impact is considered to be *less than significant (Class III).*

The City of Oxnard's General Plan Open Space/Conservation Element identifies both Hueneme Road and Pleasant Valley Road as scenic roadways. Existing views from these roadways from the perspective of a passing motorist traveling eastbound include agricultural lands and the Santa Monica Mountains to the east and the Ormond Beach sand dunes and wetland area to the south. The potential view obstructions of both Hueneme Road and Pleasant Valley Road are assessed under Impacts AES-2, AES-3, and AES-5.

Impact AES-9: Visual Character. The Ormond Beach Specific Plan Study Area is predominantly used for agricultural operations. The approval of the two specific plans and development of all of the proposed land uses would result in the transition of the area from a rural agricultural area to an urban area. When compared to existing conditions, the transition of land use intensity to an urban area would have a substantial change in the visual character. As noted earlier, the City of Oxnard views agricultural lands as an important visual resource, which also provides a sense of identity for the community. It should be noted that the City's

2020 General Plan identifies the Ormond Beach Specific Plan Study Area as a site for future growth of urban land uses. Specifically, the General Plan and the EIR for the General Plan addressed the future development of Study Area with a wide variety of residential, commercial, industrial, and open space uses. Nevertheless, the development of the Ormond Beach Specific Plan Study Area is considered to have a substantial impact on the visual character of the site, as the development would involve converting agricultural land to urban uses. This impact is considered to be *significant and unavoidable (Class I).*

Impact AES-10: Daytime Light and Glare. Development of the two specific plans would increase the amount of glare (indirect reflected light) generated in the immediate area during the daytime. Daytime sources of glare would primarily be generated by the activities of people, and the sun reflecting off glass windows of structures, automobiles, and trucks. From observation points located on the roadways adjacent to the project area, daytime sources of glare generated by the developed lands uses would be partially screened through the use of landscaping and buildings fronting the roadways. The increased light and glare that would be generated by the development of the Specific Plan would not be out of character with urbanized land uses within the City of Oxnard to the north and northwest of the site. As a result, daytime light and glare impacts are considered to be a *less than significant impact (Class III).*

Impact AES-11: Nighttime Light and Glare. The development of the specific plans would introduce new sources of nighttime light and glare. Nighttime sources of light would include vehicle headlights and lights used within buildings located throughout the project site. As these sources of light and glare have the ability to affect adjacent land uses, potentially significant impacts could result. The specific plans include provisions to limit or avoid light spillage onto adjacent properties. The impact of nighttime light and glare generated by the development of the specific plans is, thus, considered to be *less than significant (Class III).*

3.13.3.2.4 Cumulative Impacts

Impact AES-12: Cumulative Impacts. From a visual assessment standpoint, the City of Oxnard is largely built-out based on its 2020 General Plan. The Ormond Beach Specific Plan Study Area was identified in the 2020 General Plan as an area for future growth and development. The majority of the projects that will be constructed in the future are confined by the growth restrictions for areas within the City Urban Restriction Boundary (CURB) line enacted as a result of Save Open Space and Agricultural Resources (SOAR) provisions. The CURB line matches the eastern Study Area boundaries of Olds Road and Arnold Road and will remain in its present location until the year 2020.

The Ormond Beach Specific Plan Study Area is the last undeveloped site within the CURB line in southeastern Oxnard. All other projects currently under development or developed in the future will likely be infill development projects within the City's CURB line. While the

specific plans would result in project-specific significant and unavoidable impacts as a result of the change in the visual character of the area, the CURB line paralleling the eastern Specific Plan boundary would prevent additional visual cumulative impacts in association with other development projects. Development of the specific plans, along with other foreseeable development projects consistent with the General Plan, will result in substantial change in the visual character of the area. This impact is considered to be *significant and unavoidable (Class I).*

3.13.3.3 Mitigation Measures

Mitigation measures are not included since the established standards contained in the CBC and City Grading Ordinance would be incorporated into all development associated with the proposed project. With the incorporation of these established standards, all visual impacts were found to be less than significant. The exception to this is the change in visual character associated with the development of the Study Area. Although the projects provide for landscaping and other aesthetic amenities to buffer the proposed urban development, and the proposed change in use was previously contemplated in connection with amendment of the General Plan, there are no feasible mitigation measures that would reduce or mitigate the change from open agricultural areas to urban development.

3.13.3.4 Residual Impacts

With the exception of the change in visual character associated with the development of the Study Area, all visual impacts were found to be less than significant. The conversion of the Specific Plan area from agricultural operations to an urban area was determined to be a significant and unavoidable impact of the project both locally and cumulatively.

SECTION 4
PROJECT ALTERNATIVES

SECTION 4.0 PROJECT ALTERNATIVES

4.1 INTRODUCTION

An EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment. Per the requirements of CEQA, this section of the EIR describes a range of reasonable alternatives to the proposed Project, including one that could feasibly attain most of the basic objectives of the proposed Project, and could avoid or substantially lessen one or more of the significant environmental impacts of the Project. This section evaluates the comparative merits of the selected alternatives including the "No Project" alternative and designates the environmentally superior alternative. According to CEQA, if the alternative with the least environmental impact is the "No Project" Alternative, then an environmentally superior alternative must be chosen from among the other alternatives.

An EIR need not consider every conceivable alternative to the project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. A lead agency may use various factors and other considerations to remove an alternative from detailed considerations in an EIR. Such factors include, but are not limited to failure of the alternative to meet most of the basic project objectives, inability of the alternative to avoid significant environmental impacts, and infeasibility. A discussion of the alternatives screening process and the reason for inclusion of each project Alternative is provided in Section 4.4 (Alternatives Selection Process) below.

4.2 PROJECT OBJECTIVES

The first step in the Alternatives analysis is to specify the proposed Project Objectives. This is necessary to determine whether or not the alternatives could feasibly attain most of the basic objectives of the proposed Project. The City of Oxnard objectives for Area 16 in the 2020 General Plan apply in part to the Ormond Beach Specific Plan Study Area, as well as to the larger Specific Plan Area.

The proposed Ormond Beach project consists of a Southern Subarea (the proposed South Ormond Beach Specific Plan) and a Northern Subarea (the proposed SouthShore Specific Plan). In addition to the City's 2020 General Plan objectives, the specific plans for the two subareas include objectives, which are presented in full in Section 2.0 (Project Description). Section 2.0 also includes thematic objectives that summarize the respective objectives of the 2020 General Plan and the specific plans. These thematic objectives, which are summarized in Table 4-1, are the basis for the comparative analysis of the merits of the Project Alternatives in this section.

TABLE 4-1
THEMATIC PROJECT OBJECTIVES

Thematic Objectives (City of Oxnard General Plan 2020)

- Provide comprehensively planned development including housing, employment, retail, and recreation opportunities, open space and supporting infrastructure.
- Provide a diversity of housing types including mixed-use residential/commercial areas
- Address historic functional issues and management and improve appearance of area
- Improve coastal access and recreation
- Protect coastal resources
- Protect regional resources (e.g., air and water quality) and facilities (e.g., roadway, waste treatment facilities)
- Maintain compatibility with the Southern California Edison Ormond Beach power station[1] and the Navy's Point Mugu facilities.
- Assure continued consideration of a new regional airport facility in the area (Obsolete)

Northern Subarea Objectives (SouthShore Specific Plan)

- Maintain compatibility with the agricultural areas east of Olds Road and south of Hueneme Road
- Provide a pedestrian-oriented community
- Provide both the opportunity to establish a new high school within the community, as well as an alternative to use this same land for other residential and public community facilities if the high school site is not acquired by the school district
- Plan to reduce energy and water consumption
- Provide entry landscaping and signage suitable for the gateway entry to the City and the project
- Provide a fiscally balanced community

Southern Subarea Objectives (South Ormond Beach Specific Plan)

- Allow for the California Coastal Conservancy's request to acquire 220 acres of coastal land as part of the Conservancy's Ormond Beach Wetlands Restoration Project
- Provide buffer area between the developed areas of the Southern Subarea and the potential wetland restoration area
- Plan the edges of the project to respond to adjacent uses including the Northern Subarea to the north, the agricultural uses to the east and the resource protection area to the south
- Provide a sustainable infrastructure plan that will complement the nearby wetlands areas

[1] Now called Reliant Energy Ormond Beach Generating Station

4.3 SIGNIFICANT IMPACTS OF THE PROPOSED PROJECT TO BE AVOIDED

In addition to their ability to meet most of the basic project objectives, the project alternatives must be evaluated based on their ability to avoid or substantially reduce the significant environmental impacts of the proposed Project. Section 3.0 of this EIR identifies impacts of the proposed Project by resource areas. Table 4-2 lists the impacts that were determined to be significant and unavoidable (Class I) and significant but feasibly mitigated (Class II).

4.4 ALTERNATIVES SELECTION PROCESS

In June 2004, the City of Oxnard sponsored a Community Scoping Meeting to inform interested stakeholders about the proposed Ormond Beach Specific Plan project and to solicit comments about the project. As part of this process, the City presented three preliminary land use concepts for review and comment. The first was the Land Use Map from the City's General Plan; the second was a conservation-based alternative that had been proposed by the Greater Ormond Beach Task Force; and the third was a composite land use concept that reflected the preliminary applications for the Northern and Southern subareas. The comments that the City received during and following the Scoping Meeting provided the basis for the development of project alternatives to be considered in this EIR. Through this screening process, the following reasonable range of alternatives was selected for further comparative analysis:

- Alternative 1: Proposed Project with High School located East of Olds Road, instead of within Northern Subarea
- Alternative 2: No Project/Existing City Plan (General Plan 2020)
- Alternative 3: No Project/Continuation of Existing Uses (Existing County Zoning)
- Alternative 4: Conservation

In addition to these four alternatives, a fifth alternative has been added in response to comments received on the May 2007 DEIR. This alternative reflects a lower level of development intensity in the interest of including an alternative that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects, as required by CEQA.

Offsite project alternatives were considered and screened from further analysis in this EIR as the proposed Project involves the development of General Plan 2020 Ormond Beach Specific Plan Area. Any offsite alternatives would fail to meet the basic objectives identified in the 2020 General Plan for the development of the Study Area and, therefore, further consideration is not required under CEQA. Project alternatives were also considered that provide for protection and enhancement of the sensitive environmental and agricultural resource areas within the Ormond Beach Specific Plan Area. In addition, the No Project Alternative is included as required by CEQA.

TABLE 4-2
PROJECT IMPACTS TO BE AVOIDED OR SUBSTANTIALLY REDUCED

Northern Subarea	Post-Mitigation	Southern Subarea	Post-Mitigation
GEO-1 Erosion	LTS	GEO-1 Erosion	LTS
GEO-2 Slope Stability	LTS	GEO-2 Slope Stability	LTS
GEO-3 Seismic Hazards	LTS	GEO-3 Seismic Hazards	LTS
GEO-4 Expansive Soils	LTS	GEO-4 Expansive Soils	LTS
GEO-5 Collapsible and Sensitive Soils	LTS	GEO-5 Collapsible and Sensitive Soils	LTS
WATER-1: Water Supply and Demand	LTS	WATER-1: Water Supply and Demand	LTS
WATER-4: Construction-Related Surface Water Quality	LTS	WATER-12: Construction-Related Surface Water Quality	LTS
WATER-5: Post-Construction Surface Water Quality	LTS	WATER-14: Post-Construction Surface Water Quality	LTS
WATER-7: Erosion	LTS	WATER-16: Erosion	LTS
WATER-9: Wastewater Collection and Treatment	LTS	WATER-17: Wastewater Collection and Treatment	LTS
AQ-1: Soil Import (Northern Subarea)	LTS	AQ-5: Construction Related Particulates	LTS
AQ-2: Construction Related Particulates	LTS	AQ-6: Construction Related Emissions	Significant
AQ-3: Construction Related Emissions	Significant	AQ-7: Project Related Emissions	Significant
AQ-4: Project Related Emissions	Significant	HM-7: Potentially Contaminated Soils	LTS
HM-1: Potentially Contaminated Soils	LTS	HM-8: Hazardous Materials Leaks and Spills	LTS
HM-2: Hazardous Materials Leaks and Spills	LTS	HM-9: Asbestos-Containing Materials/ Lead Based Paints	LTS
HM-3: Asbestos-Containing Materials/Lead Based Paints	LTS	BIO-16 Bird Foraging Habitat	LTS
BIO-4: Bird Foraging Habitat	LTS	BIO-18 Nesting Birds	LTS
BIO-6: Nesting Birds	LTS	BIO-19 Special-status Bird Foraging Habitat	LTS
BIO-7: Special-status Bird Foraging Habitat	LTS	BIO-20 Burrowing Owl	LTS
BIO-8: Burrowing Owl	LTS	BIO-22 Indirect (Offsite) Impacts to Sensitive Habitats	Sig/Mitigable
BIO-10: Indirect (Offsite) Impacts to Sensitive Habitats	Sig/Mitigable	BIO-26 Western Snowy Plover	Sig/Mitigable
BIO-11: Western Snowy Plover	Sig/Mitigable	BIO-27 California Least Tern	Sig/Mitigable
BIO-12: California Least Tern	Sig/Mitigable	BIO-13 Invasive Species (Southern Subarea)	LTS
AG-4: Dust Impacts to Local Crops	LTS	BIO-28: White-faced ibis (Southern Subarea)	Sig/Mitigable
AG-5: Direct Farmland Conversion	Significant	AG-4: Dust Impacts to Local Crops	LTS
TRANS-1: Peak Hour Traffic Conditions	LTS	AG-7: Direct Farmland Conversion	Significant
TRANS-3: Soil Import Traffic	LTS	TRANS-2 Peak Hour Traffic Conditions	LTS
NOISE-1: Traffic Noise	Significant	TRANS-3 Northern Subarea Soil Import Traffic	LTS
NOISE-2: Point Mugu Naval Air Station Noise	LTS	NOISE-7: Traffic Noise	LTS
CULTURAL-1 Construction-related Grading	LTS	NOISE-4: Point Mugu Naval Air Station Noise	LTS
AES-9 Visual Character	Significant	CULTURAL-1 Construction-related Grading	LTS
		AES-9 Visual Character	Significant

4.5 DESCRIPTION OF PROJECT ALTERNATIVES

Following are brief descriptions of the Project and the five alternatives considered. These descriptions are followed by a comparison of the alternatives as they relate to the impacts listed in Table 4-2 (Section 4.6, Comparison of Alternatives. Additional detail for each of the alternatives is provided in tables within the description of each alternative below.

4.5.1 Proposed Project

The proposed Project includes two Specific Plans covering approximately 917 acres (see Figures 2-2 and 2-3). The combined development would include 1,283 residential units of varying density and almost 4.6 million square feet of commercial, business, research, and industrial uses (see Table 4-3). Each specific plan would include roadways and other facilities to support the development in the subarea.

- **Northern Subarea:** The residential uses would be located in the Northern Subarea (the SouthShore Specific Plan). The Northern Subarea as proposed also includes 11.8 acres for an elementary school site and 56.3 acres for a high school. Parks and other amenities would also be provided to support the residential community in the Northern Subarea.
- **Southern Subarea:** Most (3.9 million square feet) of the industrial and business/research uses would be located in the Southern Subarea.

The proposed Project is described in more detail in Sections 2.3.3 and 2.3.4.

TABLE 4-3
PROPOSED PROJECT LAND USE AND DEVELOPMENT POTENTIAL

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**DU/SF**	**Acres**	**SF**	**Acres**	**DU/SF**
Residential-Low	56.5	289			56.5	289
Residential-Low Medium	37.3	262			37.3	262
Residential-Medium	40.9	712			40.9	712
Mixed-Use (Residential)		20				20
Mixed-Use (Commercial)	4.2	62,726			4.2	62,726
Business/Research Park			61.3	934,580	61.3	934,580
Light Industrial	37.2	568,052	217.5	3,009,996	254.7	3,578,048
School	63.5				63.5	
Park	39.6		.		39.6	
Agriculture			228.6		228.6	
Miscellaneous Open Space	25.4		51.0		76.4	
Other	17.4		36.4		53.8	
Total Acreage	**322.0**		**594.8**		**916.8**	
Residential Units		**1,283**				**1,283**
Non-Residential Square Footage		**630,778**		**3,944,576**		**4,575,354**

4.5.2 Alternative 1: Property Owners' Request with High School East of Olds Road

This alternative is nearly identical to the specific plans as proposed, except the high school site proposed in the Northern Subarea would be relocated to the east, just outside of the Study Area (see Figure 4-1 and Table 4-4). Under Alternative 1, residential uses would replace the high school.

- **Northern Subarea:** This alternative would provide an increase in the number of residential units (from 1,283 to 1,545) and other adjustments to the plan to accommodate the additional residential development. The high school would be developed outside of the Study Area to the east of the Northern Subarea.

- **Southern Subarea:** The Southern Subarea would not be affected under this alternative; it would be developed as in the proposed project.

TABLE 4-4
ALTERNATIVE 1 LAND USE AND DEVELOPMENT POTENTIAL

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**DU/SF**	**Acres**	**SF**	**Acres**	**DU/SF**
Residential-Low	72.0	370			72.0	370
Residential-Low Medium	57.4	393			57.4	393
Residential-Medium	49.2	762			49.2	762
Mixed-Use (Residential)		20			-	20
Mixed-Use (Commercial)	4.8	62,726			4.8	62,726
Business/Research Park			61.3	934,580	61.3	934,580
Light Industrial	37.2	568,052	217.5	3,009,996	254.7	3,578,048
School	11.8				11.8	
Park	41.2				41.2	
Agriculture			228.6		228.6	
Miscellaneous Open Space	32.5		51.0		83.5	
Other	15.8		36.4		52.2	
Total Acreage	**321.9**		**594.8**		**916.7**	
Residential Units		**1,545**				**1,545**
Non-Residential Square Footage		**630,778**		**3,944,576**		**4,575,354**

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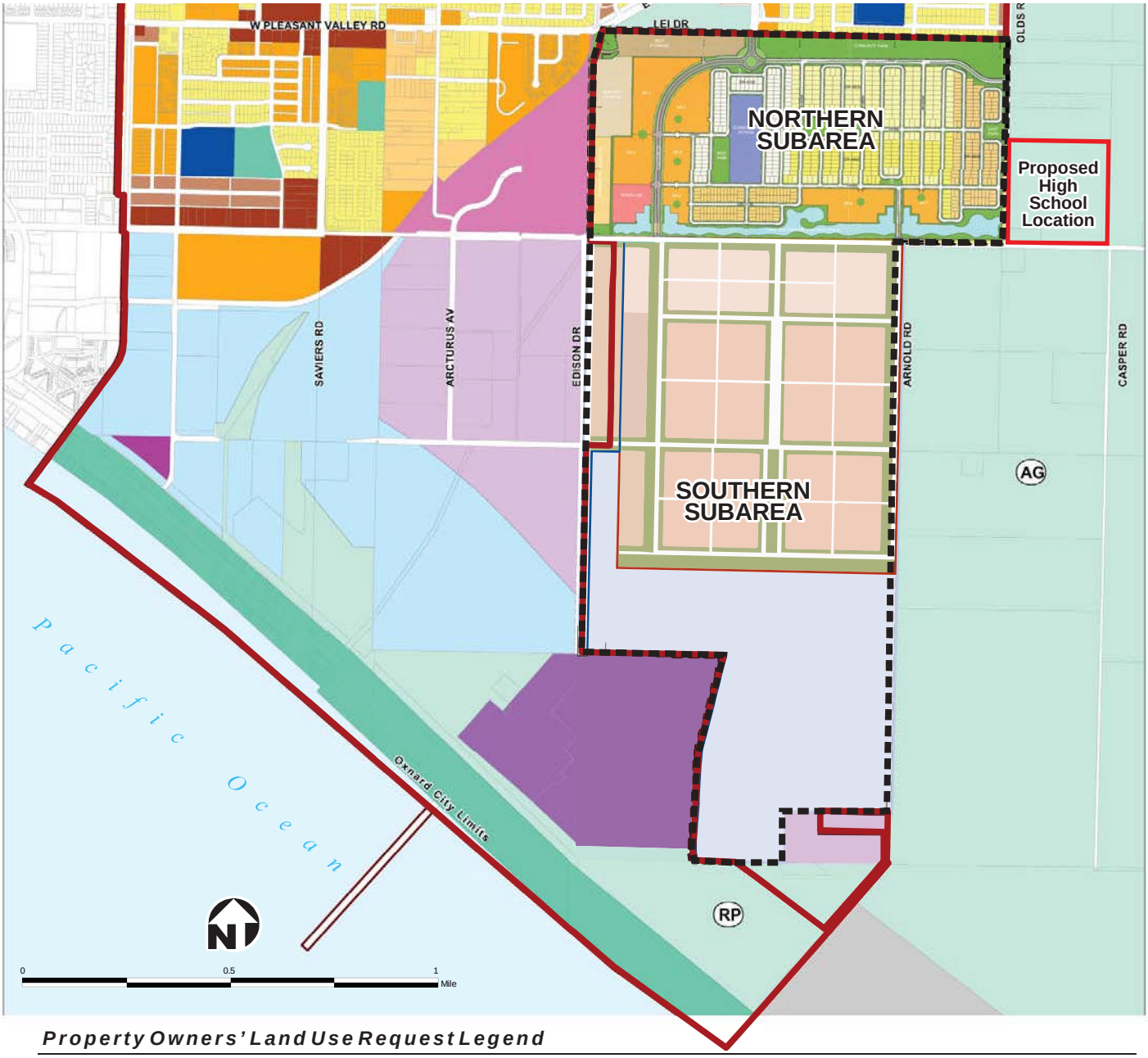

Property Owners' Land Use Request Legend

- City Limits
- Ormond Beach Specific Plan Project Area
- Naval Air Weapons Station Point Mugu

Residential
- Factory Built (1-7 DU/Acre)
- Low (3-7 DU/Acre)
- Low Medium (8-12 DU/Acre)
- Medium (13-18 DU/Acre)
- High (19-30 DU/Acre)

Commercial
- Neighborhood
- General
- Visitor Serving

Industrial
- Limited
- Light
- Coastal Dependent
- Public Utility/Energy Facility

Other
- Open Space
- Park
- School
- RP Resource Protection Open Space
- AG Agricultural Open Space

Northern Subarea Specific Plan Legend

- Specific Plan Boundary
- Product Boundary

Residential
- Single-Family Detached 5,820 S.F.
- Single-Family Detached 4,850 S.F.
- Single-Family Detached 4,100 S.F.
- Single-Family Detached 3,825 S.F.
- Single-Family Detached 3,738 S.F.
- AR Attached Residential (AR)

Non-Residential
- Public Parks & Open Space
- 1 Rose Green
- 2 Arnold Green
- 3 Enhanced Parkway Adjacent to Olds Road
- Public School
- Private Recreation Areas
- Mixed Use
- Self Storage (SCE)
- Boat/RV Storage
- Commercial Incubator (SCE)

Other
- Arterial Roadway
- Neighborhood Roadway

Southern Subarea Specific Plan Legend

- Business Research Park
- Light Industrial
- Light Industrial-Harbor Related Overlay
- Open Space/Green Belt
- Open Space/Agriculture
- Right-of-Way

Ormond Beach Specific Plan EIR **URS Corporation**	**Source:** City of Oxnard 2020 General Plan Northern Subarea Specific Plan Southern Subarea Specific Plan	Figure 4.5-1 **ALTERNATIVE 1: PROPERTY OWNERS' REQUEST WITH HIGH SCHOOL EAST OF OLDS ROAD**	Nov. 2009

4.5.3 Alternative 2: No Project/Existing Plan (City of Oxnard 2020 General Plan)

The State CEQA Guidelines Section 15126.6 (e) state that the No Project Alternative should examine 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. When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative would be the continuation of the existing plan, policy, or operation into the future. Thus, the projected impacts of the proposed plan will be compared to the impacts that would occur under the existing plan.

Under Alternative 2, the proposed specific plans would not be implemented, and in the short-term the land would remain in its existing uses (predominantly agricultural) under the County of Ventura general plan and zoning jurisdiction. A potential consequence of this No Project alternative, however, would be future annexation to the City of Oxnard and development in accordance with the existing land use designations of the Oxnard General Plan 2020 Land Use Element (see Figure 4-2 and Table 4-5).

- **Northern Subarea:** Development in accordance with the existing General Plan 2020 would result in a residential community in the Northern Subarea consisting of 1,964 homes in a uniform low-medium density. The Northern Subarea would also include just over 200,000 square feet of general commercial uses, as compared to approximately 63,000 square feet of mixed-use commercial and nearly 570,000 square feet of light industrial uses.
- **Southern Subarea:** The northern part of the Southern Subarea under this alternative would develop with approximately 2,100 medium-density residential units. The remainder of the Southern Subarea, currently designated as Public Utility/Energy Facility, would probably remain vacant for some time and would then be subject to a plan update for alternate uses. The ultimate uses might include some research and industrial uses as proposed, but that outcome is not specified in the City's General Plan.

TABLE 4-5
ALTERNATIVE 2 LAND USE AND DEVELOPMENT POTENTIAL

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**DU/SF**	**Acres**	**DU/SF**	**Acres**	**DU/SF**
Residential-Low Medium	196.4	1,964	209.5	2,095	405.9	4,059
Mixed-Use (Commercial)	15.8	206,474			15.8	206,474
Light Industrial	-		302.4		303.0	-
School	35.6				35.6	-
Park	15.3		8.3		23.6	-
Miscellaneous Open Space	54.9		54.7		109.6	-
Other	3.9		19.9		23.8	-
Total Acreage	**321.9**		**594.8**		**916.7**	
Residential Units		**1,964**		**2,095**		**4,059**
Non-Residential Square Footage		**206,474**				**206,474**

4.5.4 Alternative 3: No Project/Continuation of Existing Uses (County of Ventura General Plan/Zoning)

Under this No Project alternative, the existing agricultural uses would continue indefinitely under the existing County of Ventura General Plan (Agriculture) and zoning ordinance (Agriculture-Exclusive) (see Figure 4-3 and Table 4-6). The current agricultural uses of the area are dominated by sod farming, with some strawberries or other row crops in the northeast corner of the Study Area. It is possible that other agricultural crops may be planted consistent with the Agricultural zoning designation.

This alternative would avoid the direct physical changes caused by the proposed project or the previously described alternatives. It would also preserve the current agricultural uses, and the habitat provided by the artificial grassland of those uses, in proximity to the coastal habitat of Ormond Beach.

This No Project Alternative would also leave a large area of the City of Oxnard 2020 General Plan without implementation. The residential population and other uses proposed might be accommodated in other areas of the City of Oxnard or elsewhere. This might lead to pressure for development beyond the CURB limit of Oxnard with adverse effects in other areas similar to those under Alternatives 1 and 2.

TABLE 4-6
ALTERNATIVE 3 LAND USE AND DEVELOPMENT POTENTIAL

Land Use Designation	Northern Subarea Acres	Southern Subarea Acres	Total Acres
Agriculture	321.9	594.8	916.7
Total Acreage	**321.9**	**594.8**	**916.7**

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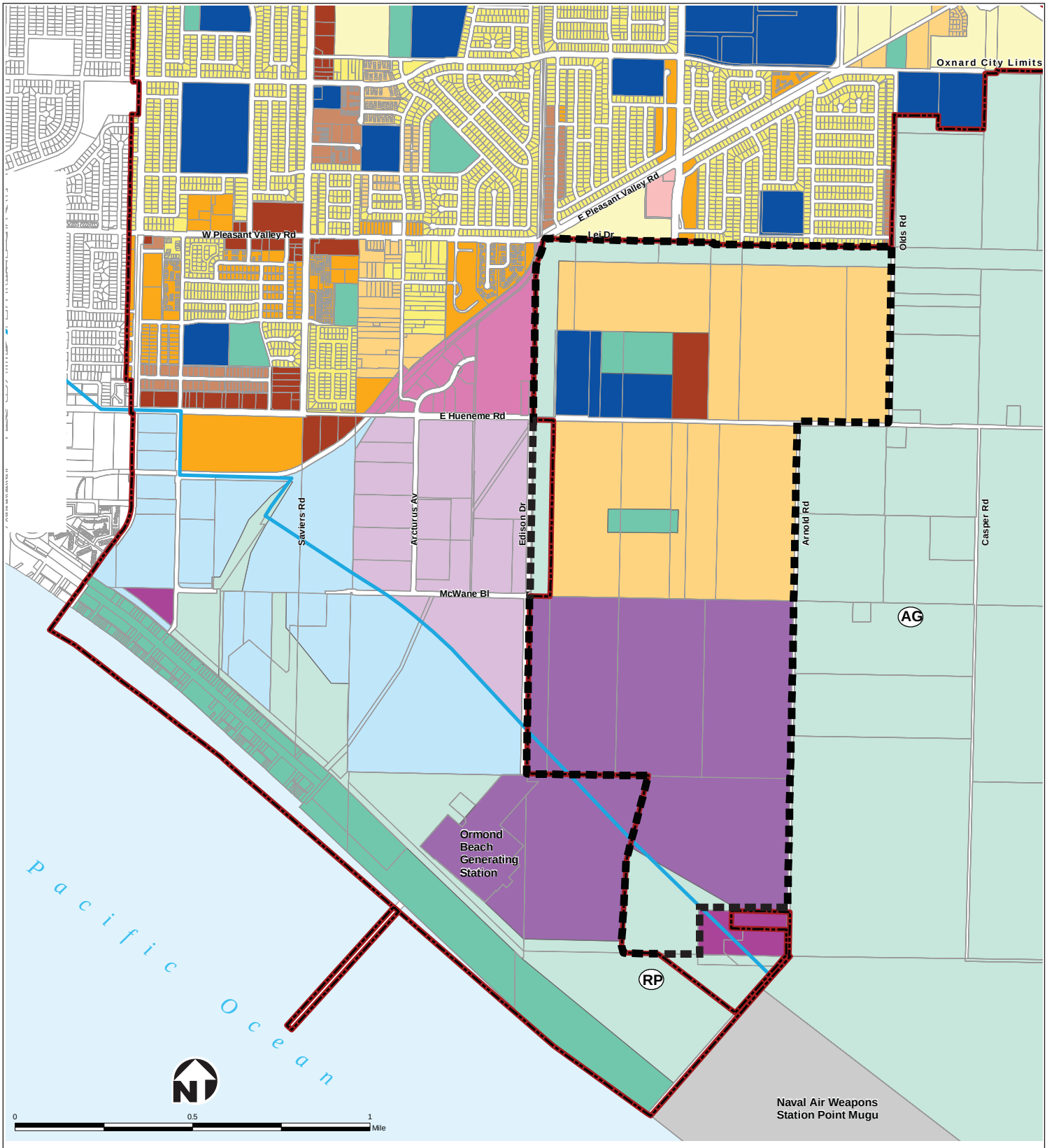

Legend

Residential
- Factory Built (1-7 DU/Acre)
- Low (3-7 DU/Acre)
- Low Medium (8-12 DU/Acre)
- Medium (13-18 DU/Acre)
- High (19-30 DU/Acre)

Commercial
- Neighborhood
- General
- Visitor Serving

Industrial
- Limited
- Light
- Coastal Dependent
- Public Utility/Energy Facility

Other
- Open Space
- Park
- School
- RP Resource Protection Open Space
- AG Agricultural Open Space

- City Limits
- Ormond Beach Specific Plan Project Area
- Naval Air Weapons Station Point Mugu
- Coastal Zone Boundary Line

Ormond Beach Specific Plan EIR URS Corporation	**Source:** City of Oxnard 2020 General Plan	Figure 4-2. **ALTERNATIVE 2: NO PROJECT/ CITY OF OXNARD GENERAL PLAN 2020**	Nov. 2009

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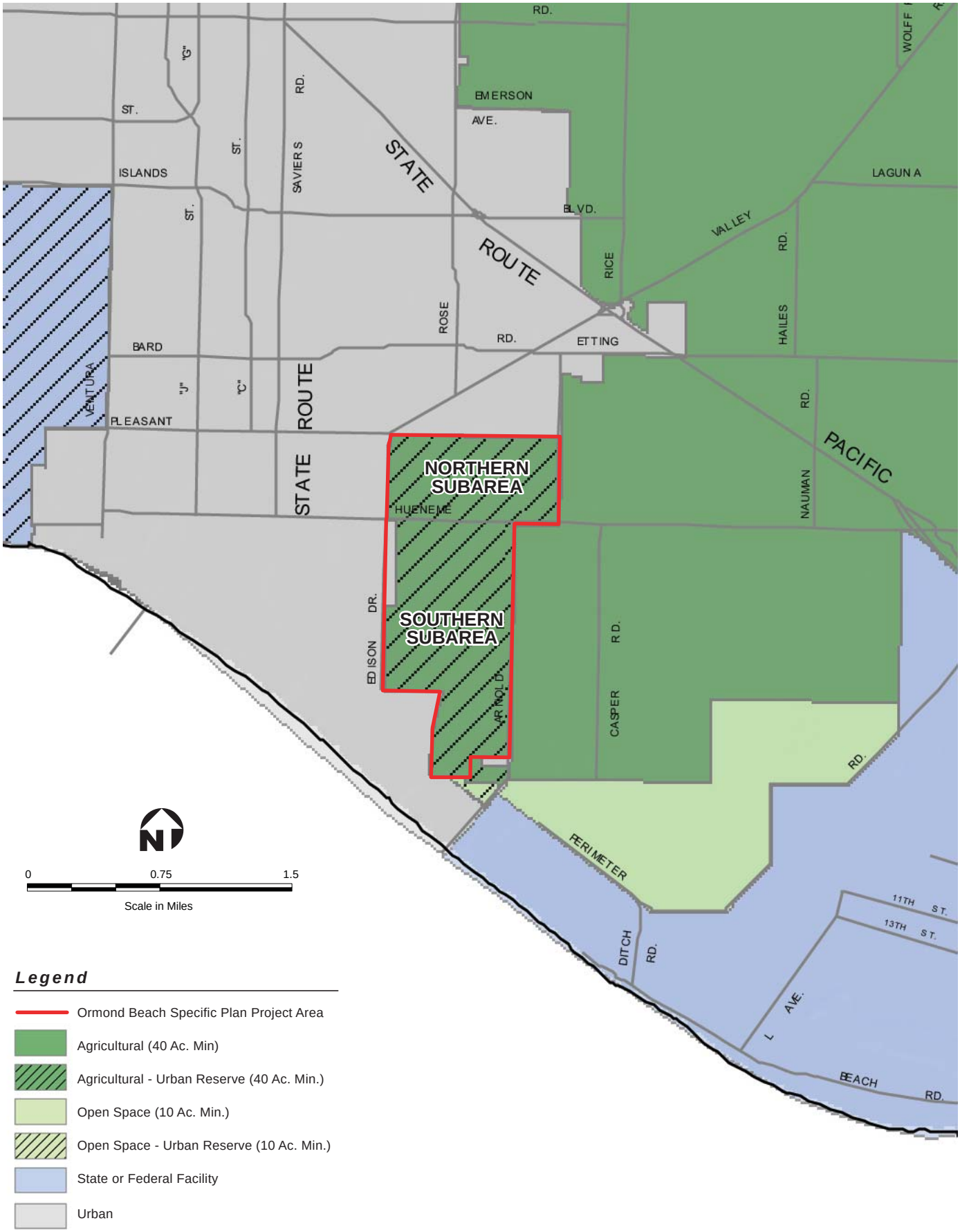

Ormond Beach Specific Plan EIR URS Corporation	**Source:** County of Ventura General Plan Dated: Nov. 2005	Figure 4-3. **ALTERNATIVE 3: NO PROJECT/ CONTINUATION OF EXISTING USES (County of Ventura General Plan)**	Nov. 2009

4.5.5 Alternative 4: Conservation Alternative

Under this alternative, all of the Study Area north of McWane Boulevard (approximately 563 acres) would remain in agricultural uses, while the area south of McWane (approximately 350 acres) would be set aside for resource protection (see Figure 4-4 and Table 4-7). The area south of McWane is, and has been, part of a larger area considered by both the Coastal Conservancy and the Nature Conservancy for acquisition for inclusion in the larger Ormond Beach park and open space complex. Both conservancies have completed acquisitions in the area and it is likely that a substantial part of the area south of McWane may be acquired for conservation purposes.

This alternative would avoid the physical changes and impacts that would attend development under the specific plans. It would also provide a much larger buffer area and conservation of agricultural uses north of the potential Ormond Beach restoration area. Indirect effects of this alternative would be similar to those described above for Alternative 3, since it may lead to proposals to accommodate population growth and provide other urban uses in lands not currently planned for that purpose.

TABLE 4-7
ALTERNATIVE 4 LAND USE AND DEVELOPMENT POTENTIAL

Land Use Designation	Northern Subarea Acres	Southern Subarea Acres	Total Acres
Agriculture	321.9	240.7	562.6
Resource Protection		354.1	354.1
Total Acreage	**321.9**	**594.8**	**916.7**

4.5.6 Alternative 5: Less Intensive Development

This alternative was added in response to comments received on the May 2007 DEIR. Those comments expressed concern that the four alternatives evaluated in that document did not include an alternative that could feasibly accomplish most of the basic objectives of the project, while avoiding or substantially lessening one or more of the significant effects, as required by CEQA. In response, the City worked with the project applicants to identify development alternatives that would satisfy those criteria. The result is Alternative 5, which is a composite of the alternatives for the Northern and Southern Subareas and reflects a lower level of intensity than the other alternatives that call for development (i.e., the Project and Alternatives 1 and 2).

- **Northern Subarea:** Under Alternative 5, the developed part of Northern Subarea would be reduced in size, the amount of residential acreage would be increased, and the density of proposed residential development would be reduced. The reduction in

size of approximately 60 acres would occur along the northern and eastern edges of the Study Area, where it is assumed that the existing agricultural uses would remain. These changes would result in the elimination of the community park and the high school proposed as part of the project. Approximately 10 acres of the site proposed for the high school under the project would be converted to residential uses. In addition, the densities in remaining residential areas would be reduced, primarily along the eastern side SouthShore Drive and the northern edge of Lake SouthShore.

- **Southern Subarea:** In the Southern Subarea, Alternative 5 would consist of designating the entire developed area as Harbor Industrial. Since the permitted floor-area ratio would be considerably lower under this alternative, there would be a substantial reduction in the total square footage of development compared with the project. In addition, the type of development would shift from employment-intensive business park and light industrial uses to the type of port-related industrial that currently occurs to the west of the Study Area. Since these uses tend to support very low employment densities, there would be a reduction in the employment capacity of the area, and thus a reduction in the severity of impacts associated with human occupation.

Figures 4-5 and 4-6 depict the land uses under Alternative 5 and Table 4-8 shows the acreage distribution of uses.

TABLE 4-8
ALTERNATIVE 5 LAND USE AND DEVELOPMENT POTENTIAL

	Northern Subarea		Southern Subarea		Total	
Land Use Designation	**Acres**	**DU/SF**	**Acres**	**SF**	**Acres**	**DU/SF**
Residential-Low	136.6	819			136.6	819
Residential-Medium	9.6	155			9.6	155
Mixed-Use (Residential)		5			-	5
Mixed-Use (Commercial)	4.8	62,726			4.8	62,726
Light Industrial	37.2	568,052			37.2	568,052
Harbor Industrial			278.8	1,943,124	278.8	1,943,124
School	9.6				11.8	
Park	14.6		51.0		92.2	
Miscellaneous Open Space	35.3		228.6		263.9	
Other	15.3		36.4		51.7	
Total Acreage	**263.0**		**594.8**		**886.6**	
Residential Units		**979**				**979**
Non-Residential Square Footage		**630,778**		**1,943,124**		**2,573,902**

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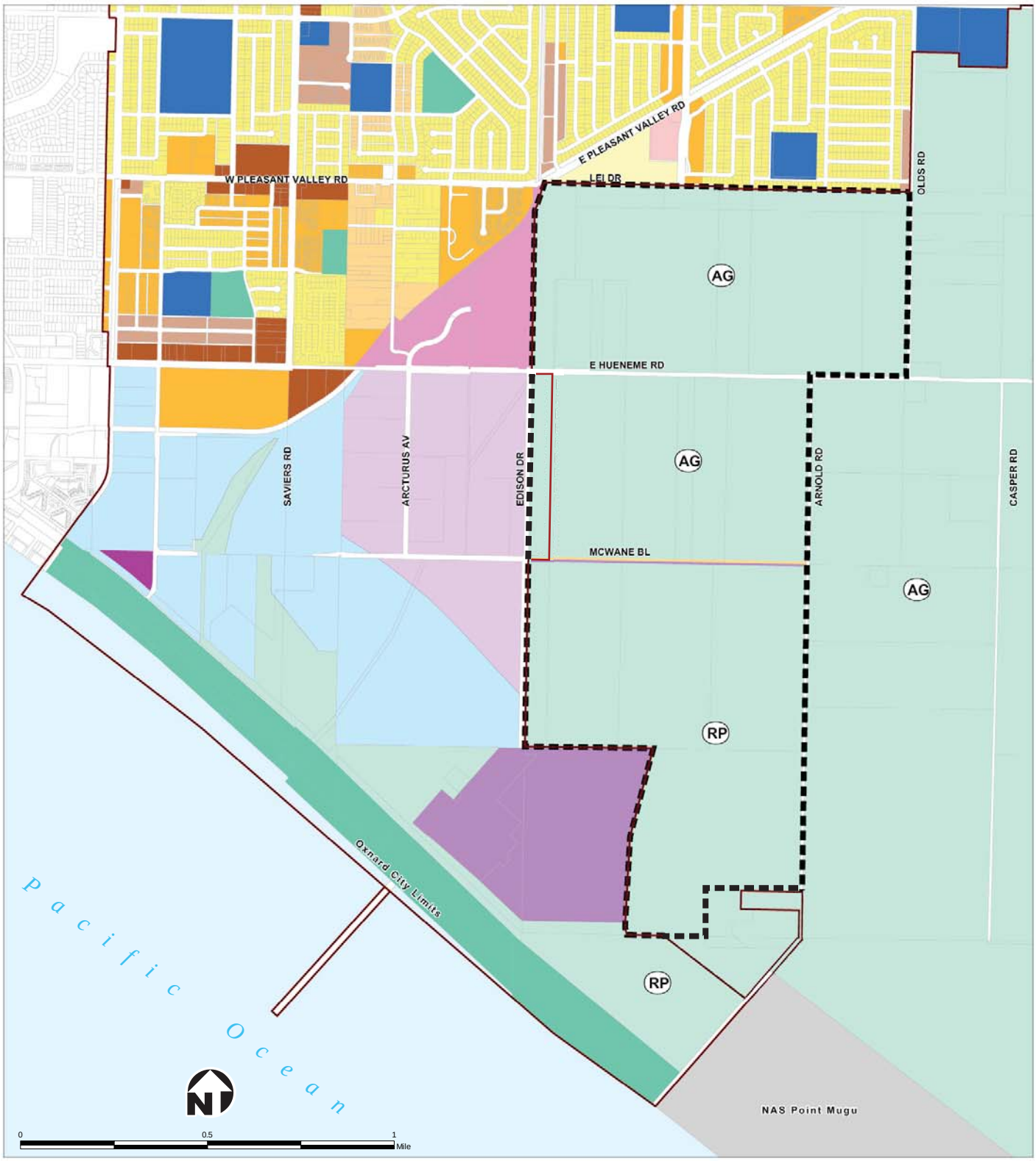

Legend

- City Limits
- Ormond Beach Specific Plan Project Area
- Naval Air Weapons Station Point Mugu

Residential
- Factory Built (1-7 DU/Acre)
- Low (3-7 DU/Acre)
- Low Medium (8-12 DU/Acre)
- Medium (13-18 DU/Acre)
- High (19-30 DU/Acre)

Commercial
- Neighborhood
- General
- Visitor Serving

Industrial
- Limited
- Light
- Coastal Dependent
- Public Utility/Energy Facility

Other
- Open Space
- Park
- School
- RP Resource Protection Open Space
- AG Agricultural Open Space

Ormond Beach Specific Plan EIR URS Corporation	**Source:** City of Oxnard 2020 General Plan	Figure 4-4. **ALTERNATIVE 4: CONSERVATION ALTERNATIVE**	Nov. 2009

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PLEASANT VALLEY RD.
VILLA CAPRI NEIGHBORHOOD
ROSE AVENUE
WEBSTER DR.
ALEXANDER DR.
TULSA DR.
SYRACUSE DR.
TIERRA VISTA ELEMENTARY SCHOOL
BEAUMONT AVE.
TIERRA VISTA NEIGHBORHOOD
SWEETLAND ST.
REEDER DR.
SANFORD ST.
SANFORD ST.
SELF STORAGE
EXISTING AGRICULTURE
A STREET
BOAT/RV STORAGE
AR-1
DR-4100-ALT (Proposed AR-2)
DR-4100
DR-5820
1ST AVENUE
2ND AVENUE
3RD AVENUE
B STREET
B STREET
B STREET
CENTRAL PARK
EAST PARK
EXISTING AGRICULTURE
PACIFIC VEHICLE PROCESSORS (PVP)
COMMERCIAL/INCUBATOR
DR-3738-ALT (Proposed AR-3)
SOUTHSHORE DRIVE
DR-3738-ALT (Proposed AR-4)
ELEMENTARY SCHOOL
WEST PARK
DR-4850
C STREET
MIXED-USE
DR-3738-ALT (Proposed AR-5)
DR-3738
DR-4850-ALT (Proposed AR-6)
DR-4850-ALT (Proposed AR-7)
LAKE SOUTHSHORE AND OPEN SPACE
AGRICULTURE
SOUTH ORMOND BEACH SPECIFIC PLAN AREA
AGRICULTURE

LEGEND

- Specific Plan Boundary
- Product Boundary

RESIDENTIAL:

- Single-Family Detached 5,820 S.F.
- Single-Family Detached 4,850 S.F.
- Single-Family Detached 4,100 S.F.
- Single-Family Detached 3,738 S.F.
- AR — Attached Residential (AR)

NON-RESIDENTIAL:

- Public Parks & Open Space
- ① Rose Green
- ② Arnold Green
- ③ Trail and Agricultural Buffer
- Public School
- Private Recreation Areas
- Mixed Use
- Self Storage (SCE)
- Boat/RV Storage (SCE)
- Commercial/Incubator (SCE)

OTHER:

- Arterial Roadway
- Neighborhood Roadway

Ormond Beach Specific Plan EIR URS Corporation	**Source:** Hearthside Homes, December 2007	Figure 4-5. **ALTERNATIVE 5 NORTHERN SUBAREA**	Nov. 2009

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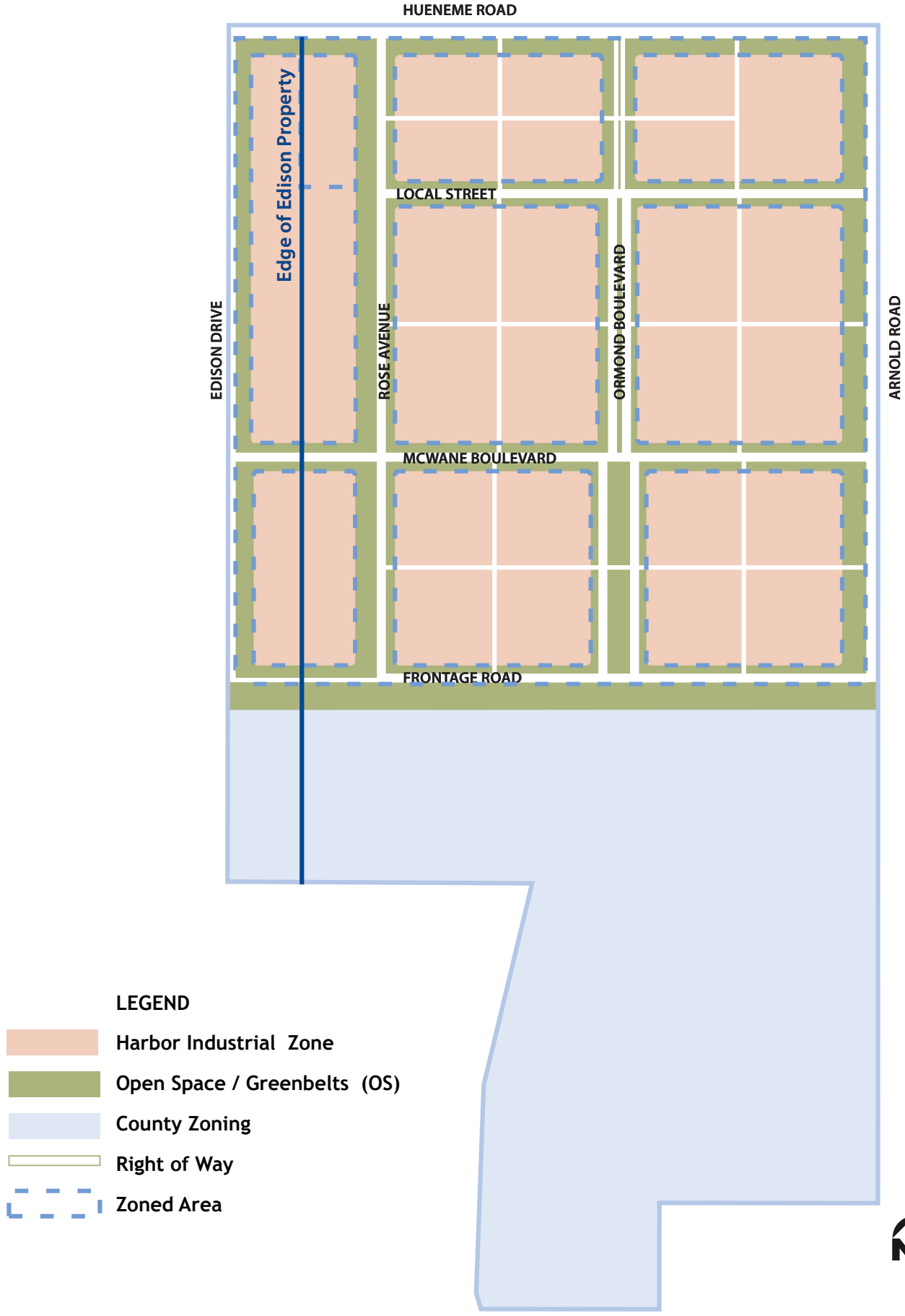

Ormond Beach Specific Plan EIR URS Corporation	**Source:** Armstrong Real Estate Advisors, December 2007	Figure 4-6. **ALTERNATIVE 5 SOUTHERN SUBAREA**	Nov. 2009

4.6 COMPARISON OF MERITS OF PROJECT ALTERNATIVES

The comparison of the merits of the project alternatives consists of 1) a summary of the alternatives' ability to meet the basic project objectives and 2) a summary comparative analysis of the ability of the alternatives to reduce or avoid the potential significant effects of the proposed project. The project objectives alternatives analysis is summarized in Table 4-9. The comparative impact analysis for the proposed Project and alternatives are summarized in Tables 4-10 and 4-11.

TABLE 4-9
ABILITY OF ALTERNATIVES TO ACHIEVE PROJECT OBJECTIVES

Alternative		City of Oxnard Objectives							Northern Subarea Owner Objectives						Southern Subarea Owner Objectives			
		Comprehensive Planning	Diversity of Housing Type	Address Functional Issues	Coastal Access and Recreation	Protect Coastal Resources	Protect Regional Resources	Compatibility with Power Plant and Air Station	Agricultural Area Compatibility	Pedestrian-Oriented Design	Site for New High School	Reduced Energy and Water Consumption	Entry Landscaping and Signage	Fiscally Balanced Development	Coastal Conservancy Acquisition Compatibility	Wetland Area Buffer	Adjacent Use Compatibility	Sustainable Infrastructure
	Proposed Project																	
	Northern Subarea	■	■	■	NA	NA	■	■	■	■	■	■	■	■	NA	NA	NA	NA
	Southern Subarea	□	□	■	■	■	■	■	NA	NA	NA	NA	NA	NA	■	■	■	■
1	**Offsite High School Alternative**																	
	Northern Subarea	■	■	■	NA	NA	□	■	□	■	■	■	■	■	NA	NA	NA	NA
	Southern Subarea	□	□	■	■	■	■	■	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	**No Project/Existing Plan (2020 General Plan)**																	
	Northern Subarea	■	■	■	NA	NA	■	■	■	■	■	■	■	■	NA	NA	NA	NA
	Southern Subarea	■	■	■	■	■	■	■	NA	NA	NA	NA	NA	NA	■	■	■	□

TABLE 4-9 (CONTINUED)
ABILITY OF ALTERNATIVES TO ACHIEVE PROJECT OBJECTIVES

Alternative		City of Oxnard Objectives							Northern Subarea Owner Objectives						Southern Subarea Owner Objectives			
		Comprehensive Planning	Diversity of Housing Type	Address Functional Issues	Coastal Access and Recreation	Protect Coastal Resources	Protect Regional Resources	Compatibility with Power Plant and Air Station	Agricultural Area Compatibility	Pedestrian-Oriented Design	Site for New High School	Reduced Energy and Water Consumption	Entry Landscaping and Signage	Fiscally Balanced Development	Coastal Conservancy Acquisition Compatibility	Wetland Area Buffer	Adjacent Use Compatibility	Sustainable Infrastructure
3	**No Project/Continuation of Existing Uses**																	
	Northern Subarea	□	□	□	NA	NA	■	■							NA	NA	NA	NA
	Southern Subarea	□	□	□	□	■	□	■	NA	NA	NA	NA	NA	NA	■	□	□	□
4	**Conservation Alternative**																	
	Northern Subarea	□	□	□	NA	NA	■	■	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Southern Subarea	□	□	□	■	■	■	■	NA	NA	NA	NA	NA	NA	■	■	■	NA
5	**Less Intensive Development Alternative**																	
	Northern Subarea	■	■	■	NA	NA	■	■	■	■	□	■	■	■	NA	NA	NA	NA
	Southern Subarea	□	□	■	■	■	■	■	NA	NA	NA	NA	NA	NA	■	■	■	■

■ = Meets Objective
□ = Does Not Meet Objective
NA = Objective Does Not Apply

TABLE 4-10
SIGNIFICANT AND POTENTIALLY SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Impact / Mitigation Measure	Proposed Project	Alternative 1: High School East of Olds Road	Alternative 2: No Project Existing City GP 2020	Alternative 3: No Project Existing County Plan	Alternative 4: Conservation	Alternative 5: Less Intensive Development
3.2 Geology and Geologic Hazards						
GEO-1 Erosion	X	X	X			X
MM GEO-1: Erosion Control Measures						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
GEO-2 Slope Stability	X	X	X			X
MM GEO-1: Erosion Control Measures						
MM GEO-2: Slope Stability						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
GEO-3 Seismic Hazards	X	X	X			X
MM GEO-3 Seismic Hazards						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
GEO-4 Expansive Soils and GEO-5 Collapsible and Sensitive Soils	X	X	X			X
MM GEO-4 Expansive and Collapsible Soils						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
3.3 Water Resources						
WATER-1 / WATER-10: Water Supply and Demand	X	X	X			X
MM WATER-1: On-Site Domestic Water System						
MM WATER-2: On-Site Recycled Water System						
MM WATER-3: Exterior Water Conservation						
MM WATER-4: Grey Water						
MM WATER-5: Drought-Tolerant Landscaping						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
WATER-4 / WATER-12: Construction-Related Surface Water Quality	X	X	X			X
MM WATER-5: Environmental Site Assessment						
MM WATER-6: De-Watering						
MM WATER-7: Stormwater Pollution Prevention Plan						
MM WATER-8: Stormwater Pollution Control Plan						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
WATER-5 / WATER-14: Post-Construction Surface Water Quality	X	X	X			X
MM WATER-9: SQUIMP Development Guidelines						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*

TABLE 4-10 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Impact / Mitigation Measure	Proposed Project	Alternative 1: High School East of Olds Road	Alternative 2: No Project Existing City GP 2020	Alternative 3: No Project Existing County Plan	Alternative 4: Conservation	Alternative 5: Less Intensive Development
WATER-7 / WATER-16: Erosion	X	X	X			X
MM WATER-11: Drainage Plan						
MM WATER-12: Stormwater Control Structures and Devices						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
WATER-9 / WATER-17: Wastewater Collection and Treatment	X	X	X			X
MM WATER-15: Downgradient Sewer Study						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
3.4 Air Quality						
AQ-1: Soil Import (Northern Subarea)	X	X	X			X
MM AQ-1: Dust Control Measures						
MM AQ-2: ROC and NOx control measures during construction						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
AQ-2 / AQ-5: Construction Related Particulates	X	X	X			X
MM AQ-1: Dust Control Measures						
MM AQ-2: ROC and NOx control measures during construction						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
AQ-3 / AQ-6: Construction Related Emissions	X	X	X			X
MM AQ-2: ROC and NOx control measures during construction						
Resulting Level of Significance	*Sig. Unav.*	*Sig. Unav.*	*Sig. Unav.*	*LTS*	*LTS*	*Sig. Unav.*
AQ-4 / AQ-7: Project Related Emissions (post-construction operations)	X	X	X			X
MM AQ-3: Operational Control Measures						
MM AQ-4: TDM Fee Program						
Resulting Level of Significance	*Sig. Unav.*	*Sig. Unav.*	*Sig. Unav.*	*LTS*	*LTS*	*Sig. Unav.*
3.5 Hazards and Hazardous Materials						
HM-1 / HM-7: Potentially Contaminated Soils	X	X	X			X
MM HM-1 Soil Sampling						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
HM-2 / HM-8: Hazardous Materials Leaks and Spills	X	X	X			X
MM HM-3 Phase II ESA						

TABLE 4-10 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Proposed Project	Alternative 1: High School East of Olds Road	Alternative 2: No Project Existing City GP 2020	Alternative 3: No Project Existing County Plan	Alternative 4: Conservation	Alternative 5: Less Intensive Development
	Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
HM-3 / HM-9: Asbestos-Containing Materials and Lead Based Paints		X	X	X			X
	MM- HM-3 Phase II ESA						
	Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
3.6 Biological Resources							
BIO-4 / BIO-16 Bird Foraging Habitat		X	X	X			X
	BIO-2 Restoration of coastal native grassland mitigation						
	Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
BIO-6 / BIO-18 Nesting Birds		X	X	X			X
	BIO-5 Pre-construction nesting survey						
	Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
BIO-7 / BIO-19 Special-status Bird Foraging Habitat		X	X	X			X
	BIO-2 Restoration of coastal native grassland mitigation						
	Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
BIO-8 / BIO-20 Burrowing Owl							
	BIO-4 Restoration of coastal native grassland mitigation	X	X	X			X
	BIO-7 Nest Identification and Avoidance						
	Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
BIO-10 / BIO-22 Indirect (Offsite) Impacts to Sensitive Habitats		X	X	X			X
	BIO-1 Invasive Plant Species						
	BIO-2 Foraging Habitat Creation / Restoration						
	BIO-5 Wetland Runoff Control						
	Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
BIO-11 / BIO-26 Western Snowy Plove		X	X	X			X
	BIO-1 Invasive Plant Species						
	BIO-5 Wetland Runoff Control						
	Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*

TABLE 4-10 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Impact / Mitigation Measure	Proposed Project	Alternative 1: High School East of Olds Road	Alternative 2: No Project Existing City GP 2020	Alternative 3: No Project Existing County Plan	Alternative 4: Conservation	Alternative 5: Less Intensive Development
BIO-12 / BIO-27 California Least Tern	X	X	X			X
BIO-1 Invasive Plant Species						
BIO-5 Wetland Runoff Control						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
BIO-13 Invasive Species (Southern Subarea)	X	X	X			X
BIO-3 Non-invasive Landscaping						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
BIO-28: White-faced ibis (Southern Subarea)	X	X	X			X
BIO-5 Wetland Runoff Control						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
3.7 Land Use and Planning						
No Significant or Potentially Significant Impacts						
3.8 Agricultural Resources						
AG-4: Dust Impacts to Local Crops)	X	X	X			X
MM AQ-1: Dust Control Measures						
MM AG-1: Buyer Notification						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
AG-5 / AG-7: Direct Farmland Conversion						
Cannot be feasibly mitigated						
Resulting Level of Significance	*Sig. Unav.*	*Sig. Unav.*	*Sig. Unav.*	*LTS*	*LTS*	*Sig. Unav.*
3.9 Public Facilities and Services						
No Significant or Potentially Significant Impacts						
3.10 Transportation and Circulation						
TRANS-1 / TRANS-2 Peak Hour Traffic Conditions	X	X	X			X
MM TRANS-1 / TRANS-2 Intersection signalization and selected road widening						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
TRANS-3 Northern Subarea Soil Import Traffic	X	X	X			X
MM TRANS-3 Contribution to installation of temporary signals						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*

TABLE 4-10 (CONTINUED)
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Impact / Mitigation Measure	Proposed Project	Alternative 1: High School East of Olds Road	Alternative 2: No Project Existing City GP 2020	Alternative 3: No Project Existing County Plan	Alternative 4: Conservation	Alternative 5: Less Intensive Development
3.11 Noise						
NOISE-1/ NOISE-7: Traffic Noise	X	X	X			X
MM NOISE-1 – Rose-SouthShore Drive Exterior Noise MM NOISE-2 –Outdoor Activity Areas MM NOISE-3 – Interior Nosie Exposure. MM NOISE-4 – Post-Design Acoustical Analysis.						
Resulting Level of Significance	*Sig. Unav. (Pleasant Valley)*	*Sig. Unav. (Pleasant Valley)*	*Sig. Unav. (Pleasant Valley)*	*LTS*	*LTS*	*Sig. Unav. (Pleasant Valley)*
NOISE -2 / NOISE -4: Point Mugu Naval Air Station Noise	X	X	X			X
MM NOISE-5: Point Mugu Naval Air Station Noise						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
3.12 Cultural Resources						
CULTURAL-1 Construction-related Grading	X	X	X			X
MM CULTURAL-1 / CULTURAL-2: Construction Period Monitoring						
Resulting Level of Significance	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*	*LTS*
3.13 Visual/Aesthetic Resources						
AES-9 Visual Character	X	X	X			X
Cannot be mitigated						
Resulting Level of Significance	*Sig. Unav.*	*Sig. Unav.*	*Sig. Unav.*	*LTS*	*LTS*	*Sig. Unav.*

X = Applicable
Blank = Not Applicable
LTS = Less than Significant
Sig. Unav. = Significant and Unavoidable Impact.

TABLE 4-11
COMPARISON OF ALTERNATIVES WITH PROPOSED PROJECT

Issue Area	Impact of Project (post mitigation)	Alt 1 – High School East of Olds Road	Alt 2 – No Project/ Existing Oxnard GP 2020	Alt 3 – No Project / County General Plan	Alt 4 – Conservation	Alt 5 – Less Intensive Development
Northern Subarea						
GEO-1: Erosion	LTS					
GEO-2: Slope Stability	LTS					
GEO-3: Seismic Hazards	LTS					
GEO-4: Expansive Soils	LTS					
GEO-5: Collapsible and Sensitive Soils	LTS					
WATER-1: Water Supply and Demand	LTS					
WATER-4: Construction-Related Surface Water Quality	LTS					
WATER-5: Post-Construction Surface Water Quality	LTS					
WATER-7: Erosion	LTS					
WATER-9: Wastewater Collection and Treatment	LTS					
AQ-1: Soil Import	LTS					
AQ-2: Construction Related Particulates	LTS					
AQ-3: Construction Related Emissions	Significant					
AQ-4: Project Related Emissions	Significant					
HM-1: Potentially Contaminated Soils	LTS					
HM-2: Hazardous Materials Leaks and Spills	LTS					
HM-3: Asbestos-Containing Materials/Lead Based Paints	LTS					
BIO-4: Bird Foraging Habitat	LTS					
BIO-6: Nesting Birds	LTS					
BIO-7: Special-status Bird Foraging Habitat	LTS					
BIO-8: Burrowing Owl	LTS					
BIO-10: Indirect (Offsite) Impacts to Sensitive Habitats	LTS					
BIO-11: Western Snowy Plover	LTS					
BIO-12: California Least Tern	LTS					
AG-4: Dust Impacts to Local Crops	LTS					
AG-5: Direct Farmland Conversion	Significant					
TRANS-1: Peak Hour Traffic Conditions	LTS					

TABLE 4-11 (CONTINUED)
COMPARISON OF ALTERNATIVES WITH PROPOSED PROJECT

Issue Area	Impact of Project (post mitigation)	Alt 1 – High School East of Olds Road	Alt 2 – No Project/ Existing Oxnard GP 2020	Alt 3 – No Project / County General Plan	Alt 4 – Conservation	Alt 5 – Less Intensive Development
TRANS-3: Soil Import Traffic	LTS					
NOISE-1: Traffic Noise	Significant					
NOISE-2: Point Mugu Naval Air Station Noise	LTS					
CULTURAL-1: Construction-related Grading	LTS					
AES-9: Visual Character	Significant					
Southern Subarea						
GEO-1: Erosion	LTS					
GEO-2: Slope Stability	LTS					
GEO-3: Seismic Hazards	LTS					
GEO-4: Expansive Soils	LTS					
GEO-5: Collapsible and Sensitive Soils	LTS					
WATER-10: Water Supply and Demand	LTS					
WATER-12: Construction-Related Surface Water Quality	LTS					
WATER-14: Post-Construction Surface Water Quality	LTS					
WATER-16: Erosion	LTS					
WATER-17: Wastewater Collection and Treatment	LTS					
AQ-5: Construction Related Particulates	LTS					
AQ-6: Construction Related Emissions	Significant					
AQ-7: Project Related Emissions	Significant					
HM-7: Potentially Contaminated Soils	LTS					
HM-8: Hazardous Materials Leaks and Spills	LTS					
HM-9: Asbestos-Containing Materials/Lead Based Paints	LTS					
BIO-16: Bird Foraging Habitat	LTS					
BIO-18 Nesting Birds	LTS					
BIO-19 Special-status Bird Foraging Habitat	LTS					
BIO-20 Burrowing Owl	LTS					

TABLE 4-11 (CONTINUED)
COMPARISON OF ALTERNATIVES WITH PROPOSED PROJECT

Issue Area	Impact of Project (post mitigation)	Alt 1 – High School East of Olds Road	Alt 2 – No Project/ Existing Oxnard GP 2020	Alt 3 – No Project / County General Plan	Alt 4 – Conservation	Alt 5 – Less Intensive Development
BIO-22 Indirect (Offsite) Impacts to Sensitive Habitats	LTS					
BIO-26 Western Snowy Plover	LTS					
BIO-27 California Least Tern	LTS					
BIO-13 Invasive Species (Southern Subarea)	LTS					
BIO-28: White-faced ibis	LTS					
AG-4: Dust Impacts to Local Crops	LTS					
AG-7: Direct Farmland Conversion	Significant					
TRANS-2 Peak Hour Traffic Conditions	LTS					
NOISE-7: Traffic Noise	LTS					
NOISE-4: Point Mugu Naval Air Station Noise	LTS					
CULTURAL-1 Construction-related Grading	LTS					
AES-9 Visual Character	Significant					

Greater Impact
Similar Impact
Less Impact

4.6.1 Alternative 1: Property Owners' Request with High School East of Olds Road

4.6.1.1 Northern Subarea

- **Ability to Meet Basic Project Objectives:** In the Northern Subarea, this alternative would meet all of the basic project objectives except one. The placement of the high school on agricultural land outside of the Study Area would negatively affect this regionally important agricultural resource.
- **Geology and Geologic Hazards (significant, mitigation possible):** Impacts related to erosion, slope stability, seismic hazards, expansive soils, and collapsible soils would be essentially the same as the Project.
- **Water Resources (significant, mitigation possible):** Construction-related and post-construction impacts and water quality impacts associated with runoff directed to sensitive estuary and marine environments would be similar to the Project. Impacts associated with wastewater collection and treatment would also be similar.
- **Air Quality (significant, mitigation possible):** Dust from soil import could be reduced to less-than-significant levels. This impact would be similar to that of the proposed Project.
- **Air Quality (significant, mitigation possible):** Particulates associated with construction activity would be similar to the proposed Project.
- **Air Quality (significant unavoidable):** While vehicular traffic and HVAC emissions would exceed standards for ROC and NO_x, as they do under the Project, there would be a slight reduction in emissions associated with vehicle traffic. This would result from the replacement of the high school with residential uses, which would result in less traffic during the peak hours, and thus reduce the associated emissions.
- **Hazards and Hazardous Materials (significant, mitigation possible):** Impacts associated with contaminated soils and potentially hazardous materials resulting from prior agricultural operations could be properly remediated to less-than-significant levels, as is the case with the proposed Project.
- **Biological Resources (significant, mitigation possible):** Direct impacts associated with bird foraging habitat, nesting birds, and special-status birds, could be mitigated to less-than-significant levels. This impact would be similar to that of the proposed Project.
- **Biological Resources (significant, mitigation possible):** Indirect impacts associated with offsite habitats and special-status bird species, could be mitigated to less-than-significant levels. The severity of the potential offsite impacts would, however, be greater with the high school situated across Olds Road.

- **Agricultural Resources (significant unavoidable):** This alternative would result in the direct conversion of approximately 322 acres of agricultural land to urban and open space uses, which is the same as the Project. The assumption that the proposed high school would move from within the Northern Subarea to east of Olds Road, adjacent to the Northern Subarea, would also result in the indirect conversion of acreage necessary to accommodate the high school and provide sufficient buffers around the school to protect agricultural uses. This impact would be greater than that of the proposed Project.
- **Transportation and Circulation (significant, mitigation possible):** The residential uses that would be substituted for the high school within the Study Area would produce fewer trips than the high school, so the direct traffic impacts associated with this alternative would be less severe.
- **Noise (significant and unavoidable):** Because peak hour traffic would be reduced slightly as a result of replacement of the high school with residential uses, associated traffic noise would be reduced. These reductions would not, however, avoid significant unavoidable impacts along Pleasant Valley Road.
- **Noise (significant, mitigation possible):** Exposure to noise originating from Pt. Mugu Naval Air Station would be similar to the proposed Project, since this alternative would result in substituting one noise-sensitive use (the high school) with another (single-family homes).
- **Cultural Resources (significant, mitigation possible):** Impacts to previously unknown significant cultural resources encountered during grading activities would be similar to that of the proposed Project.
- **Visual/Aesthetic Resources (significant and unavoidable):** Because the displacement of agricultural land would be similar to the proposed Project, the impact on the visual character of the area under Alternative 1 would be similar.

4.6.1.2 Southern Subarea

Impacts in the Southern Subarea would remain unchanged when compared to those of the proposed Project. Please refer to Table ES-1B for a summary of significant impacts for the Southern Subarea.

4.6.2 Alternative 2: No Project/Existing Plan (Oxnard General Plan 2020)

- **Ability to Meet Basic Project Objectives:** This objective would meet all of the City of Oxnard General Plan 2020 objectives. The achievement of some of the Northern Subarea objectives might, however, not be assured, such as pedestrian-oriented design, energy-efficient development, and City gateway entrance landscaping and signage.

4.6.2.1 Northern Subarea

Because the City's General Plan would result in substantially more residential development than the proposed Project and there would be no assurance that the open space benefits of the Project would be provided, Alternative 2 would worsen all of the significant impacts of the Project associated with human occupation of the area, since there would be more residents. The effect on the visual character of the area would also be worsened because of the absence of assurance of the Project's open space benefits. Construction-related impacts under Alternative 2 would, however, be similar to the Project.

4.6.2.2 Southern Subarea

The City's General Plan would result in considerably more and different development than the proposed Project. In particular, there would substantial residential development and there would be no assurance the southern part of the area would be retained in agricultural uses or converted to managed open space. This would result in greater levels of human occupation and larger areas of construction than the proposed Project, without any assurance of the open space benefits of the Project. Thus, Alternative 2 would worsen all of the significant impacts of the Project.

4.6.3 Alternative 3: No Project/Existing Development (County of Ventura General Plan)

Under this alternative the urban development anticipated by the proposed Project would not occur, because the land would not be annexed to the City of Oxnard and would remain in agricultural uses. Thus, none of the urban development impacts of the proposed Project would occur. As noted above, the residential population and other uses proposed in the Project might be accommodated in other areas of the City of Oxnard or elsewhere, and that might lead to pressure for development beyond the City's CURB limit, with adverse effects in other areas similar to those in the development Alternatives 1 and 2.

Impacts associated with continued agricultural uses would occur and may increase compared to the environmental baseline. For instance, impacts from new drainage facilities and use of fertilizers and other hazardous materials may cause environmental impacts. These types of impacts would occur in both the Northern and Southern subareas.

- **Ability to Meet Basic Project Objectives:** Most of the basic objectives of the City of Oxnard 2020 General Plan would not be met. These include provision of a comprehensively planned community, a diversity of housing type, and addressing the functional issues of the existing setting. In the Southern Subarea, coastal access and recreation would not be enhanced and important regional resources of sensitive

environmental habitats may not be protected. Potential acquisition of these sensitive areas remains viable.

- **Water Quality (agricultural operations, significant, mitigation possible):** Runoff water quality directed to sensitive estuary and marine environments could be reduced to less-than-significant levels. This impact would be greater than that of the proposed Project as potential mitigation may not be imposed.
- **Hazardous Materials (operations, significant, mitigation possible):** Hazardous materials are used during agricultural operations possibly leading to contamination of surface water, groundwater, and soils. It would, however, be possible to reduce this impact to less-than-significant levels through ongoing monitoring and site remediation (where necessary). This impact could be similar to that of the proposed Project.

4.6.4 Alternative 4: Conservation

As stated above, this alternative would avoid the physical changes and impacts that would attend development under the two specific plans. It would also provide a much larger buffer area and conservation of agricultural uses adjacent to the Ormond Beach restoration areas. Indirect effects of this alternative would be similar to those described above for Alternative 3, since it may lead to proposals to accommodate population growth and provide other urban uses in lands not currently planned for that purpose.

Impacts would still be anticipated related to water quality during construction of enhancement measures. Operational water quality impacts would be much less than those of the proposed Project. Cultural Resources could be encountered during restoration activities and these impacts would be similar to the proposed Project. These impacts would be anticipated in both the Northern and Southern subareas.

- **Ability to Meet Basic Project Objectives:** Similar to Alternative 3, none of the urban development-related objectives would be met, including provision of a comprehensively planned community and provision of a diversity of housing types. Many of the important resource protection objectives of the 2020 General Plan would, however, be met with this alternative. The economic feasibility of this alternative is questionable. Implementation of this alternative would require funding from sources which have not been identified and are speculative at this time.
- **Water Quality (significant, mitigation possible):** Short-term impacts to runoff water quality directed to sensitive estuary and marine environments could be reduced to less-than-significant levels. This impact would be similar to that of the proposed Project.
- **Agricultural Resources (significant unavoidable):** This alternative would result in the direct conversion of all agricultural operations south of McWane Boulevard to open space uses. This direct loss of agricultural land would be similar to the loss associated with the Project.

4.6.5 Alternative 5: Less Intensive Development Alternative

4.6.5.1 Northern Subarea

Impacts in the Northern Subarea would be similar to those of the proposed Project and Alternative 1 (see Table 4-10). Impacts under Alternative 5 would, however, be less pronounced due to decreased intensity of development compared to the proposed Project. The reduction would be manifest principally with traffic, air quality, noise, and indirect offsite habitat and species impacts, all of which are related to human occupation. In addition, because less land would be developed, direct impacts such as agricultural land conversion and direct habitat and species disturbance would be slightly lower. Also, although they are not significant or potentially significant impacts of the project, and thus not evaluated as part of this analysis, the public facility benefits of the project (i.e., the high school and community park) would not be realized under Alternative 5.

4.6.5.2 Southern Subarea

Impacts in the Southern Subarea would also be similar, but slightly less severe, than those of the proposed Project and Alternative 1 (see Table 4-10). Because the employment intensity of the harbor-related development would be lower than under the proposed project, impacts associated with human activity would not be as great. Specifically, traffic and associated air quality and noise impacts and indirect offsite habitat and species impacts would be less severe because fewer employees would be attracted to the area. On the other hand, the less employment-intensive types of development would result in fewer and less diverse jobs in the Ormond Beach area, which is counter to the City's overall economic development and jobs-housing balance objectives.

4.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The results of the comparative analysis of the proposed project and the alternatives indicate that the Conservation Alternative is the Environmentally Superior Alternative. However, as shown in Table 4-8, this alternative does not meet most of the basic objectives of the City of Oxnard and the two subarea property owners. Where a "no development" alternative is determined to be the Environmentally Superior Alternative, CEQA requires that the EIR identify the environmentally superior development alternative. In this case, Alternative 5 would be the Environmentally Superior Build Alternative.

4.8 ALTERNATIVE SITES

The California Supreme Court, in Citizens of Goleta Valley v. Board of Supervisors (1990), determined that a discussion of alternative sites is needed if the project "may be feasibly accomplished in a successful manner considering the economic, environmental, social, and

technological factors involved" at another site. As suggested in Goleta, several criteria form the basis of whether alternative sites need to be considered in detail. These criteria take the form of the following questions:

1. Could the size and other characteristics of another site physically accommodate the project?
2. Is another site reasonably available for acquisition?
3. Is the timing of carrying out development on an alternative site reasonable for the applicant?
4. Is the project economically feasible on another site?
5. What are the land use designation(s) of alternative sites?
6. Does the lead agency have jurisdiction over alternative sites? and
7. Are there any social, technological, or other factors that may make the consideration of alternative sites infeasible?

There are no other reasonably available sites within the Oxnard that could accommodate the scale of development and mix of uses anticipated by either of the specific plans under consideration in this document. While there are other undeveloped properties within the city that could accommodate some of the development features proposed in the specific plans, all of these properties are subject to other specific plans proposed by other development interests. Thus, the Ormond Beach applicants do not have access to these sites. Furthermore, the applicants have made substantial investments in the proposed project sites. Finally, the City is constrained in its ability to make other sites available because of the restrictions on annexation and development imposed by the SOAR (Save Open Space and Agricultural Resources) Ordinance and the associated City Urban Restriction Boundary (CURB).

In light of these considerations, relocating the development proposed under the specific plans would not be feasible from either an economic or timing standpoint. Consequently, because relocation of the project to an alternative site is not feasible, discussion of the impacts of alternative sites is not warranted.

SECTION 5
OTHER CEQA CONSIDERATIONS

SECTION 5.0 OTHER CEQA CONSIDERATIONS

5.1 INTRODUCTION

Section 15126 of the CEQA Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Environmental Impact Report must also identify: 1) significant environmental effects of the proposed project; 2) significant environmental effects that cannot be avoided if the proposed project is implemented; 3) significant irreversible environmental changes that would result from implementation of the proposed project; 4) growth-inducing impacts of the proposed project; 5) mitigation measures proposed to minimize significant effects; and 6) alternatives to the proposed project.

5.2 SIGNIFICANT ENVIRONMENTAL EFFECTS

Table ES-1 (Summary of Environmental Impacts and Mitigation Measures), which is contained in the Executive Summary of this EIR, and Tables ES-1A and ES-1B of this EIR provide a comprehensive identification of the environmental effects of the proposed project, including the level of significance both before and after mitigation.

5.3 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. Implementation of the proposed project would result in the following significant and unavoidable project-related impacts:

- **Air Quality**
    - **Construction-related Emissions.** Heavy equipment used during proposed construction activities produces combustive NO_X and ROG emissions. Emissions from the construction of development projects are described in the County ozone attainment planning process.
    - **Project-related Emissions.** Operations of the project would produce significant ROC and NO_X emissions from all combined residential and non-residential project sources, including vehicular traffic, space heating, water heating, and consumer products.

- **Agriculture**

  - **Conversion of Prime Farmland or Farmland of Statewide Importance to Non-agricultural Uses.** Development of the Northern Subarea would convert approximately 322 acres of land currently used for agricultural operations to urban and open space uses. The Southern Subarea would convert 375 acres of land currently used for agriculture to non-agricultural uses.

- **Noise**

  - **Traffic Noise with Northern Subarea and Combined Subarea Development.** Compared with existing conditions, the changes in traffic associated with future development of both the Northern and Southern subareas would result in significant traffic noise levels at noise-sensitive receptors located along the several roadway segments, according to either the exceedance standard, the change standard, or both.

- **Aesthetics/Visual Resources**

  - **Visual Character.** The Specific Plan Study Area is predominantly used for agricultural operations. The approval of the two specific plans and development of all of the proposed land uses would result in the transition of the area from a rural agricultural area to an urban area. When compared to existing conditions, the transition of land use intensity to an urban area would have a substantial change in the visual character.

5.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Specifically, Section 15126.2(c) states:

"Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses
- The project would involve a large commitment of non-renewable resources
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy)

Development of the proposed Ormond Beach Specific Plan would result in the long-term commitment of most of the project site to more intensive uses, thereby precluding other uses for the lifespan of the project.

Resources that would be permanently and continually consumed by project implementation include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources.

With respect to operational activities, compliance with all applicable building codes, as well as City Policies and the Mitigation Measures identified in this EIR would ensure that all natural resources are conserved to the maximum extent possible. Overall, the consumption of natural resources would increase at a lesser rate than the projected population increase due to the variety of energy conservation measures that the City has in place and will continue to provide.

5.5 GROWTH INDUCING IMPACTS

This section analyzes potential impacts of the proposed project on population and housing. According to the CEQA thresholds of significance, a project would have significant impacts on population and housing if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

As presented earlier in this document (Refer to Section 2.0), current uses within the Study Area are agriculture and vacant. Therefore, development of the proposed project would not displace substantial numbers of existing housing or people. For this reason, this section will focus on the analysis of potential growth inducing impacts resulting from the proposed project.

5.5.1 Existing Conditions

Existing land uses within the Study Area are agriculture and vacant. The City of Oxnard 2020 General Plan establishes the future land uses that are planned for the Study Area. The Study Area is included as part of the Ormond Beach Major Study Area (identified as Area 16) in the Land Use Element of the City of Oxnard 2020 General Plan. The Ormond Beach Major Study Area consists of approximately 2,789 acres of land with about 168 acres of beach frontage. Approximately 2,300 acres are unincorporated, with about 1,560 acres located outside the City's existing Sphere of Influence. The area also includes 345 acres that are located within the Coastal Zone (City of Oxnard 2020 General Plan).

The City of Oxnard 1990 General Plan land use designations for the Ormond Beach Study Area were Open Space, Low-Medium Density Residential, and Limited, Light, and Heavy Industrial. The 2020 General Plan land uses in the Ormond Beach Study Area were revised to address the City's principal areas of concern relating to the Ormond Beach study area:

- Protection of significant wetlands and other habitat resources and enhancement of degraded resources
- Aesthetics in relation to present blighted conditions
- Beach access and recreational use opportunities consistent with Coastal Act resource protection policies
- Need for visitor serving facilities
- Desirability of providing for a variety of housing types
- Desirability of relocating certain existing land uses in the study area

The 2020 General Plan permits approximately 3,500 dwelling units at low-medium density (20 percent of which shall be low and low-moderate income dwellings), and approximately 400,000 square feet of associated commercial uses, in an area outside the Coastal Zone and generally north of an easterly extension of McWane Boulevard and east of the Edison transmission lines to the current boundary of the City's Sphere of Influence. An elementary school, high school, and neighborhood park would also be located north of Hueneme Road. The property south of this area is owned by the Edison Company and the portion that is outside the Coastal Zone is designated Public Utility/Energy Facilities. For the remaining

area outside the Coastal Zone, the land use designation is Light Industrial for the area south of McWane Boulevard and for the area south of the Ventura County Railroad line. All areas outside the 1981 Sphere of Influence boundary are designated Agriculture, and will be considered for inclusion in an extension of the Oxnard-Camarillo Greenbelt (City of Oxnard 2020 General Plan).

The 2020 General Plan land use designations for the portion of the Ormond Beach study area within the Coastal Zone are consistent with the Oxnard Coastal Land Use Plan (City of Oxnard 2020 General Plan).

Since the Study Area corresponds to a portion of the Ormond Beach Major Study Area represented in the 2020 General Plan, Table 5-1 shows the maximum development allowed by the General Plan for the proposed Project area:

TABLE 5-1
PROPOSED GROWTH ALLOWED BY THE 2020 GENERAL PLAN

	General Plan 2020		
Land Use Designation	**Acres**	**% of Total**	**Units/SF**
Residential-Low			-
Residential-Low Medium	405.8	44.3%	4,058
Residential-Medium			-
Mixed-use (Residential)			-
General Commercial	15.8	1.7%	206,474
Mixed-use (Commercial)			-
Business/Research Park			-
Light Industrial			-
School	35.6	3.9%	-
Visitor-serving	19.9	2.2%	-
Park	23.6	2.6%	-
Public Utility/Energy Facility (undeveloped buffer)	282.7	30.8%	-
Misc. Open Space (Agricultural)			
Misc. Open Space (Resource Protection)	127.6	13.9%	-
Other	5.8	0.6%	-
Total	**959.1**	**100.0%**	

5.5.2 Project Impacts and Mitigation

5.5.2.1 Thresholds of Significance

For the purposes of the draft EIR, the proposed project would be considered growth inducing if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)

5.5.2.2 Project Impacts

Impact Growth-1: Growth Inducement. The proposed Project is not expected to result in growth-inducing impacts. The City of Oxnard 2020 General Plan shows that the Study Area is designated Specific Plan, including a mix of uses such as residential, commercial, light industrial, open space, and schools. The City of Oxnard 2020 General Plan Land Use Elements includes the following Goal: "1. A balanced community meeting housing, commercial and employment needs consistent with the holding capacity of the City." The proposed Project meets this goal, since it would offer a mix of uses consistent with the holding capacity of the City as detailed in the General Plan. Therefore, the proposed Project would accommodate future growth as planned in the General Plan.

In addition, land uses under the proposed Project would be less intensive than the maximum development allowed within the Study Area by the 2020 General Plan, as shown in Table 5-2. Accordingly, infrastructure would be sized and built to support land uses as specified in this document, which would be a reduction from the infrastructure needed if the maximum development allowed by the General Plan was built.

Implementation of the proposed project would not require further extension or expansion of infrastructure or services that could induce or serve additional growth beyond the project. Future development of the proposed residential units would not result in a substantial growth or concentration of population; instead, it would accommodate the current local population growth. Although the proposed roads would provide access to the project site, the potential development of the area east of the Study Area is limited due to the City of Oxnard SOAR Ordinance and the CURB line, as detailed in Section 3.7, Land Use, and Section 3.8, Agriculture. Thus, the project is not expected to induce substantial growth in this area.

TABLE 5-2
COMPARISON BETWEEN THE PROPOSED GROWTH ALLOWED BY THE 2020 GENERAL PLAN AND PROPOSED GROWTH FOR THE PROJECT

	Project: Property Owners' Request			Alternative 2: No Project/Existing Plan (General Plan 2020)		
Land Use Designation	**Acres**	**% of Total**	**Units/SF**	**Acres**	**% of Total**	**Units/SF**
Residential-Low	56.5	6.2%	289			-
Residential-Low Medium	37.3	4.1%	262	405.8	44.3%	4,058
Residential-Medium	40.9	4.5%	712			-
Mixed-use (Residential)			20			-
General Commercial			-	15.8	1.7%	206,474
Mixed-use (Commercial)	4.2	0.5%	62,726			-
Business/Research Park	61.3	6.7%	934,580			-
Light Industrial	254.7	27.8%	3,578,048			-
School	63.5	6.9%	-	35.6	3.9%	-
Visitor-serving				19.9	2.2%	-
Park	39.6	4.3%	-	23.6	2.6%	-
Public Utility/Energy Facility (undeveloped buffer)			-	282.7	30.8%	-
Misc. Open Space (Agricultural)	228.6	24.9%	-			
Misc. Open Space (Resource Protection)	76.4	8.3%	-	127.6	13.9%	-
Other	53.8	5.9%	-	5.8	0.6%	-
Total	**916.8**	**100.0%**		**916.8**	**100.0%**	

5.5.2.3 Mitigation Measures

No growth inducing impacts are expected to result from the proposed project; therefore, no mitigation measures are recommended.

5.5.2.4 Residual Impacts

No residual impacts are expected.

5.6 ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the proposed project are presented in Section 4.0 (Alternatives) of this EIR.

SECTION 6
LIST OF PREPARERS

SECTION 6.0 LIST OF PREPARERS

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SECTION 7
REFERENCES

SECTION 7.0 REFERENCES

AMEC. 2003. Santa Clara River Enhancement and Management Plan, Public Review Draft, 2003. Prepared for Ventura County Watershed Protection District and Los Angeles County Department of Public Works.

Armbrust, Roma. Undated. Ormond Beach Observers, Ormond Beach: Past, Present, and Future.

Arnold, J. E. 1987. Craft Specialization in the Prehistoric Channel Islands, California. Berkeley: University of California Publications in Anthropology, 18.

Barbier, Edward B., Mike Acreman, and Duncan Knowler. 1997. Economic valuation of wetlands: A guide for policy makers and planners. Ramsar Convention Bureau, IUCN-The World Conservation Union. Gland, Switzerland 1997.

Bean, L. and C. Smith. 1978. "Gabrieliño". In Handbook of North American Indians, Volume 8 California. R. F. Heizer (ed.): 538-549. Washington DC: Smithsonian Institute Press.

BioResource Consultants. 2002. Sensitive Biological Resources Assessment of the Oxnard Drainage District No. 3 Canal Excavation and Restoration Project.

Blackburn, T.C. 1963. Ethnohistoric descriptions of Gabrieliño material culture. UCLA Archaeological Survey, Annual Report 5: 1-50.

Bolton, H.E. 1930. Diary of Sebastian Viscaino, 1602-1603. In Spanish Explorations in the Southwest, 1542-1706, (H.E. Bolton translation). New York: Scribner's Sons (1967 reprint, New York: Barnes and Noble).

California Air Resource Board Air Quality Data Statistics Webpage. Accessed 2007, http://www.arb.ca.gov/adam/php_files/aqdphp/sc8start.php.

California Coastal Conservancy. 1999. Southern California Wetlands Recovery Project. May 13.

California Department of Conservation. 2000-2002. California Farmland Conversion Report.

California Agricultural Evaluation and Site Assessment Model Instruction Manual. 1997.

California Department of Conservation, Division of Oil, Gas and Geothermal Resources. 2003. Well Field Maps 213 and 214. Available at http://www.consrv.ca.gov/DOG /index.htm.

1994-1998. Map W2-1.

California Department of Education. 2005-2006. CBEDS.

California Department of Health Services. 2002. Radon Database of California. Compiled by Richard Blood, Staff Env. Scientist, CDHS. October.

California Department of Motor Vehicles (DMV). (As amended). State Regulations for Transportation Projects.

California Department of Water Resources (DWR). 2003. Bulletin 188 update.

1993. Bulletin 160-98- California Water Plan Update. http://ceres.ca.gov/wetlands/geo_info/so_cal/ormond_beach.html.

1985. Floodplain Management. FEMA Map Service Center; Oxnard FIRM.

California Energy Commission (CEC). 2001. Residential Manual for Compliance with California's 2001 Energy Efficiency Standards, http://www.energy.ca.gov/title24/2001 standards/residential_manual/index.html).

2000. Technical Report to California Energy Outlook.

California Environmental Protection Agency, California Integrated Waste Management Board Website. 2006. Accessed at http://www.ciwmb.ca.gov/.

California Environmental Resources Evaluation System, California Wetlands Information System. 2000. May.

California Geological Survey (formerly California Division of Mines and Geology). 2002a. California Fault Parameters Map. A GIS Database. http://www.consrv.ca.gov/CGS/rghm/psha/fault_parameters/htm/.

2002b. Seismic Hazard Zone Report for the Oxnard 7.5 – minute Quadrangle, Ventura County, California.

1997a. Fault Rupture Hazard Zones In California. California Geological Survey Special Publication 42. 38 pp.

1997b. Guidelines for Evaluating and Mitigating Seismic Hazards in California. Special Publication, 117.

1996. Open File Report 96-08

1995a. "Geologic surface effects triggered by the Northridge Earthquake." California Geological Survey Special Publication 116. p 65-88.

1995b. Radon Map of Ventura County, California. California Geological Survey Open File Report.

1994. Fault Activity Map of California and Adjacent Areas. California Geologic Data Map Series.

California Native Plant Society (CNPS). 2005. *Inventory of Rare and Endangered Vascular Plants of California,* database was searched within USGS 7.5-minute Gaviota quadrangle. Visited January and May.

California Natural Diversity Database. 2004 and 2005. Wildlife and Habitat Data Analysis Branch. Department of Fish and Game. October 3, 2004 and May 2005.

California Regional Water Quality Control Board – Los Angeles. 1998. Pesticide Contamination in Mugu Lagoon and its Tributaries. 23 Dec 1988.

1996. Calleguas Creek Preliminary Report: Water Quality. January.

1994. Basin Plan. June 13.

California State Lands Commission (CSLC). 2006. Revised Draft Environmental Impact Report for the BHP Billiton Cabrillo Port Liquefied Natural Gas Deepwater Port. March 13.

Calleguas Metropolitan Water District (CMWD). 2005. 2005 Urban Water Management Plan. Prepared by Black & Vetch Corporation. September.

CASQA. 2003. California Stormwater Quality Association Stormwater Best Management Practice Handbook-Construction. January.

Chesnut, M. 1993. The Gaviota Land: A Glimpse into California History. Santa Barbara: Fithian Press.

Churchill, R.K. 1997. Radon Mapping Santa Barbara and Ventura Counties. California Geology. November/December. P.167-177.

CH2MHill. 2004. Groundwater Recovery Enhancement and Treatment (GREAT) Program; Final Program Environmental Impact Report (PEIR). May.

2004. Groundwater Recovery Enhancement and Treatment (GREAT) Program *Geology, Soils, and Mineral Resources Technical Report*. February.

2004. Groundwater Recovery Enhancement and Treatment (GREAT) Program, *Water Resources Technical Report,* prepared for the City of Oxnard. February.

2004. Groundwater Recovery Enhancement and Treatment (GREAT) Program *Biological Resources Technical Report*. February.

City of Oxnard Fire Department. 2006. Personal communication with Asst. Fire Chief Merricks. January 25.

City of Oxnard Planning Department. Adopted November 1990, Amended through July 2004. City of Oxnard 2020 General Plan.

1998. Save Open Space and Agricultural Resources (SOAR) Measure "K" Ordinance.

1996. City of Oxnard Water Quality Improvement Program DEIR. February.

1984. General Plan. Safety Element.

City of Oxnard Traffic Engineering Department. 2005. Oxnard Traffic Model (OTM).

2006. Roadway Segment Speed Limits.

City of Oxnard Threshold Guidelines/Initial Study Assessment. 1995. February.

Clear Creek Systems Inc. 2007. Water treatment system for development project in Oxnard Ca.; proposal outline for LGC Valley Inc. January 30.

Cowardin, L.M., Carter, V., Golet, F.C., and LaRoe, E.T. 1979. Classification of Wetlands and Deepwater Habitat of the United States. U.S. Fish and Wildlife Service, Office of Biological Services, Washington D.C. 131 pp.

CPIF (California Partners in Flight). 2000. Version 1.0. *The Draft Grassland Bird Conservation Plan: a strategy for protecting and managing grassland habitats and associated birds in California* (B. Allen, lead author). Point Reyes Bird Observatory, Stinson Beach, CA. http://www.prbo.org/CPIF/Consplan.html.

Dibblee, T. W., Jr. 1988. Geology of the Ventura Basin Area, in Ventura Basin: Geologic Introduction and Field Trip Guidebook. 36 pp.

1982. "Regional Geology of the Transverse Range Province of Southern California." Geology and Mineral Wealth of the California Transverse Ranges. South Coast Geological Society. P 7-25.

1966. Geology of the Central Santa Ynez Mountains. Santa Barbara County, California. Bulletin 166 of the California Division of Mines and Geology. pp. 99.

Dillon, B. 1990. Archaeological Record Search and Impact Evaluation for the Los Angeles Wastewater Program Management (NOS-NCOS) Project, Los Angeles, California. Prepared for Dr. Janet Fahey, James M. Montgomery, Consulting Engineers, 250 N. Madison Ave., P.O. Box 7009, Pasadena, CA 91109-7009.

Dolan, D. F. and T. K. Rockwell. 2001. Paleoseismologic Evidence for a Very Large, Post-A.D. 1660 Surface Rupture on the Eastern San Cayetano Fault. Ventura County, California. Was This the Elusive Source of the Damaging 21 December 1812 Earthquake? Bulletin of the Seismological Society of America. 91.6. pp. 1417-1432. December.

Douglas. 1997. Global Searise: A Redetermination, Survey in Geophys., v.18, p. 279-292.

Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

California Department of Fish and Game, Environmental Services Division. 1994. A Field Guide to Lake and Streambed Alteration Agreements Sections 1600-1607, California Fish and Game Code.

Erlandson, J. 1994. Early Hunter Gathers of the California Coast. New York: Plenum Press.

1988. Cultural Evolution and Paleogeography on the Santa Barbara Coast: A 9600 Year 14C record from Southern California. Radiocarbon 30: 25-39.

Erlandson, J., and D.J. Kennete, B. Jogram, D.A. Guthrie, D.P. Morris, M.A. Tveskav, G.J. West, and P.L. Walker. 1996. An Archaeological and Paleontological Chronology for Daisy Cave (CA-SMI-261) San Miguel Island, California. Radiocarbon 38: 361-373.

Erlandson, J., T. Cooley, and R. Carrico. 1987. A Fluted Projectile Point from the Southern California Coast: Chronology and Context at CA-SBA-1951. Journal of California and Great Basin Anthropology 9: 120-128.

Farmland Mapping and Monitoring Program. 2002. Important Farmland in California, 2002.

Farmland Mapping and Monitoring Program. 2005. Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Ventura County, updated December 5, 2005.

Federal Aviation Administration. (As amended). Federal Regulations for Transportation Projects.

Ferren, Wayne. 2000. Member, Science Advisory Board. Southern California Wetlands Recovery Project. Personal Communication. May 2000: Santa Barbara, CA.

2000. Letter to Dr. John Dixon of the California Coastal Commission about "wetland edges, transitions, and adjacent uplands." (October 28, 2000)

Foxall, W., A. Boissonnade, L. Hutchings, S. Savey, B. Luyendyk, R. Archuleta, C. Nicholson, M. Kamerling, E. Keller, C. Sorlien, A. Sylvester, A. Tumarkin, and G. Lindley. 1995. Technical Issues Relevant to Seismic Hazard Analysis of the Eastern Santa Barbara Channel, for Technology Assessment and Research Branch, Minerals Management Service. 67 pp.

Gay et al. 2001. Analysis of Contaminants and Potential Effects at the South Ormond Beach Wetland Restoration Site, Ventura County, California. June, 2001. Master's Thesis, Bren School, UCSB.

Glassow, M., L. Wilcoxon, and J. Erlandson. 1988. Cultural and Environmental Change During the Early Period of Santa Barbara Channel Prehistory. In: The Archaeology of Prehistoric Coastlines, G. Bailey and J. Parkington, (eds.): 64-77. Cambridge University Press.

Grant, C. 1978a. Chumash: Introduction. In Handbook of North American Indians, Volume 8 California. R. F. Heizer (ed.): 505-508. Washington DC: Smithsonian Institute Press.

1978b. Eastern Coastal Chumash. In Handbook of North American Indians, Volume 8 California. R. F. Heizer (ed.): 509-519. Washington DC: Smithsonian Institute Press.

1965. Rock Paintings of the Chumash. Berkeley: University of California Press.

Harrington, J.P. 1978. Tomol: Chumash Watercraft as Described in the Ethnographic Notes of John P. Harrington. T. Hudson, J. Timbrook, and M. Rempe (eds). Ballena Press Anthropological Papers 9.

1942. Culture Element Distributions, XIX: Central California Coast. University of California Anthropological Records 7(1): 1-46.

Hawks and Associates. 2003. City of Oxnard Master Plan of Drainage. October.

Hickman, J.C. 1993. *The Jepson Manual, Higher Plants of California*. University of California Press, Berkeley, Los Angeles, London.

Highway Capacity Manual. 2000. Unsignalized Intersection LOS and Delay Ranges.

Hoffman, David J., Barnett, A. Rattner, G. Allen Burton, Jr. and John Cairns, Jr. 1995. Handbook of Ecotoxicology. Lewis Publishers, 1995: London.

Holland, Robert F. 1986. *Preliminary Description of the Terrestrial Natural Communities of California*. Unpublished report. California Department of Fish and Game.

Impact Sciences. 2000. Wetlands Delineation for a portion of the Ormond Beach Specific Plan Area. November.

1996. Administrative Draft EIR; J Street Drain, Oxnard Industrial Drain and Hueneme Drain Improvement Project. December 25.

1996. North Ormond Beach Flood Control Management Plan, prepared for the Ventura County Flood Control District. April.

Johnson, J., T. Stafford, H. Agie and D. Morris. 2002. Arlington Springs Revisited. In Proceedings of the Fifth California Islands Symposium. D. Brown, K. Mitchell and H. Chaney eds. Santa Barbara Museum of Natural History.

Johnston, B.E. 1962. California's Gabrieliño Indians. Frederick Webb Hodge Anniversary Publication Fund, vol. VII. Los Angeles: Southwest Museum.

Jones, T. R. Fitzgerald, D. Kennett, C. Miksicek, J. Fagen, J. Sharp, and J. Erlandson. 2002. The Cross Creek Site (CA-SLO-1797) and Its Implications for New World Colonization. American Antiquity 67:213-230.

Jones and Stokes Associates, Inc. 1995. South Ormond Beach Wetland Restoration and Management Plan. May 1995: Sacramento.

1994. South Ormond Beach wetland restoration and management plan. Final draft. (JSA 94-080) Sacramento, CA. Prepared for City of Oxnard, Community Development Department, Oxnard CA. November.

Kennedy/Jenks Consultants. 2006. 2005 Wastewater Master Plan Update – Draft Report Wastewater Master Plan. Prepared for the City of Oxnard. January 26.

2006. Final Draft Urban Water Management Plan. Prepared for the City of Oxnard. January 16; Rev. March 8.

2006. Final Report Water Supply Assessment. SouthShore Report, prepared for the City of Oxnard. September 8.

2006. Draft Water Supply Assessment. South Ormond Beach Report, prepared for the City of Oxnard. September 19.

2003. Water System Master Plan. Prepared for the City of Oxnard. January.

2003. GREAT Program Advanced Planning Study. Prepared for the City of Oxnard Water Division. March 2003.

King, Dennis and Lisa Wainger. 1999. Assessing the Economic Value of Biodiversity Using Indicators of Site Conditions and Landscape Context. Draft Copy, October: Paris.

Landberg, L.C. 1965. The Chumash Indians of Southern California. Southwest Museum Papers, 19. Highland Park, California.

Lawson & Associates. 2004. Geotechnical Investigation Report for the Southshore Development, County of Ventura, California.

McClelland Engineers. 1985. Ormond Beach Wetland Restoration and Management Program. Oct.

1985. Draft Environmental Impact Report 85-1 Ormond Beach Area Plan #184, prepared for the City of Oxnard. September.

McLendon, S. and J. Johnson. 1999. The Nature of Chumash Social-Political Groups. In Cultural Affiliation and Lineal Descent of Chumash Peoples in the Channel Islands and Santa Monica Mountains, Vol.1. S. McLendon and J. Johnson, eds. Santa Barbara Natural History Museum. Pps. 29-39.

Meighan, C.W. 1954. A late complex in Southern California prehistory. Southwestern Journal of Anthropology 10(2): 215-227.

Moratto, M. 1984. California Archaeology. Florida: Academic Press.

Namson, J. and T.L. Davis. 1990. Late Cenozoic Fold and Thrust Belt of the Southern Coast Ranges and Santa Maria Basin, California. The American Association of Petroleum Geologists Bulletin, V. 74, No. 4, pp. 467-492.

1988. Structural transect of the Western Transverse Ranges, California. Implications for lithospheric kinematics and seismic risk evaluation, Geology, vol. 16, p. 675-679.

National Resources Conservation Service. 2005. Soil Data Mart – A Geographic Information System database. United States Department of Agriculture.

North Carolina State University. 2002. Watersheds. May.

Ocean View School District. 2005. School Facilities Needs Analysis. April.

2005. 2004-2005 Annual District Report Card.

2004. Commercial/Industrial Development School Fee Justification Study for Ocean View School District. February.

2004. Residential Development School Fee Justification Study for Ocean View School District. February.

Ormond Beach Generating Station Risk Management Plan (RMP). 2004. From http://www.rtknet.org/rmp/sum7/CA/fac100000095327, last accessed May 11.

Oxnard Union High School District. 2005. School Facilities Needs Analysis. April.

2006. School Impact Mitigation Payment Analysis for Oxnard Union High School District - School Year 2005-2006.

2006. Personal communication with Sherril Tucker, executive assistant to the Superintendent. January 26.

PACE. 2006. Stormwater Quality and Lake BMP Analysis prepared for Hearthside Homes Inc. December 18.

2006. Technical Memorandum: Additional Lake Construction Dewatering Information and Alternatives the SouthShore Project Pace Project 38233E. October 24.

2006. Memo: "Southshore Lake Project – reply to City of Oxnard's Response to the Southshore Development Lake Data and Description for EIR Documents." September 26.

2006. Letter: "Response to URS Comments dated 4-26-06 regarding May 2005 Lake Report and March 2006 Addendum". May 26.

2006. Technical Memorandum: Addendum to March 29, 2005 PACE Technical Memorandum regarding lake data and description for EIR document. May 15.

2005. Technical Memorandum: Lake Data and Description for EIR Document. October 24.

2005. Technical Memorandum: Lake Data and Description for EIR Document. May 5.

Page, G.W. and L.E. Stenzel, eds. 1981. The breeding status of the snowy plover in California. Western Birds 12(1):1-40

Peltier, W.R. and A.M. Tushingham. 1989. Global sea level rise and the greenhouse effect: might they be connected? SCIENCE, v. 244, no. 4906, p. 806-810.

Pereksta, D. 2005. Personal Communication. US Fish and Wildlife Service, Ventura Field Office.

Phillip Williams & Associates. Interim Field Survey Report, South Ormond Beach. 1999. Corte Madera, California. December 8.

Polakovic, Gary. 2000. Dead in the Water. Los Angeles Times. Los Angeles, CA. February 20.

Pritchett, David. 2000. Biologist, US Fish and Wildlife Service. Personal Communication. Ventura, CA. May.

RBF Consulting. 2006. 463 DEIR response memo no. 1. November 19.

2006. Ormond Beach Traffic Impact Analysis. May 19.

2006. Ormond Beach Traffic Impact Analysis. Prepared for Hearthside Homes.

2005. Phase I Environmental Site Assessment. South Ormond Beach. November 21.

2003. Phase I Environmental Site Assessment, North Ormond Beach 256-Acre Agricultural Site.

Richardson, C. J. 1994. Ecological Functions and Human Values in Wetlands: A Framework for Assessing Forestry Impacts. Wetlands, Vol. 14(1): 1-9.

Rick, T.C., J. Erlandson, and R.L. Vellanowesh. 2001. Paleocoastal Marine Fishing on the Pacific Coast of the Americas: Perspectives from Daisy Cave, California. American Antiquity 66: 595-613.

Rogers, D.B. 1929. Prehistoric Man of the Santa Barbara Coast. Santa Barbara Museum of Natural History.

Sawyer, John O., and Keeler-Wolfe, Todd, 1995. *A Manual of California Vegetation.* California Native Plant Society, Sacramento.

Schaefer, Athanasius. 2004. The San Buenaventura Site. http://www.athanasius.com/camission/ventura.htm. October 27.

Seed, H. B., Tokimatsu, K., Harder, L. F., and Chungh, R. M. 1985. "Influence of SPT Procedures in Soil Liquefaction Resistance Evaluations." Journal of Geotechnical Engineering, Vol. 111, No. December 12.

Serageldin, I. 1993. Making Development Sustainable. Finance & Development. Vol 30:(4): 6.

Shaw, J. H., and J. Suppe. 1994. Active faulting and growth folding in the eastern Santa Barbara Channel, California. Geological Society of America Bulletin, v. 106, p. 607-626.

Simons, Li and Associates, Inc. 1994. Sediment Transport Analysis Carpinteria Salt Marsh Enhancement Project. Santa Barbara County Flood Control and Water Conservation District: Santa Barbara, CA. October 7.

Smith, Clifton F. 1998. *A Flora of the Santa Barbara Region, California*. Second Edition. Santa Barbara Botanic Garden and Capra Press, Santa Barbara, CA.

Sorlien, C.C., J.P. Gratier, B. P. Luyendyk, J. S. Hornafius, and T. E. Hopps. 2000. Map restoration of folded and faulted late Cenozoic strata across the Oak Ridge fault, onshore and offshore Ventura basin, California, GSA Bulletin, v. 112, no. 7, p. 1080-1090.

Sylvester, A. 2003. Personal communication with Phil Hogan (URS Corporation).

Sylvester, A.G., and A. C. Darrow. 1979. Structure and Neotectonics of the Western Santa Ynez Fault System in Southern California, Tetonophysics, Vol. 52, p. 389-405.

Taylor, Brent D. 1981. Sediment Management for Southern California Mountains, Coastal Plains, and Shoreline. CA Institute of Technology: Pasadena, CA.

Tetra Tech EM INC. 2002. Final Integrated Natural Resource Management Plan, Naval Base Ventura County, Point Mugu, California. San Diego, CA.

Thelander, C. ed. 1994. Life on the edge: a guide to California's endangered natural resources. BioSystem Books. Santa Cruz, CA. p 180-182.

Toppozada, T. R., C. R. Real, and D. L. Parke. 1981. Preparation of isoseismal maps and summaries of reported effects for pre-1900 California earthquakes, California Division of Mines and Geology Open-File Report 81-11 SAC, 182 pp.

Transportation Research Board. 1990. Signalized Intersections LOS and V/C Ratios.

URS Corporation. 2005. Ormond Beach Specific Plan and EIR Baseline Report, Progress Review Draft.

2004. Technical work Plan: Additional Site Characterization Investigations for the Halaco Engineering Facility, Oxnard, California. April, 2004.

U.S. Department of Agriculture (USDA). 1970. Natural Resources Conservation Service (NRCS). April 1970. Soil Survey of Ventura Area, California.

U.S. Department of the Navy. 2002. Final Integrated Natural Resource Management Program.

U.S. EPA. 2007 Results of the National Fish Tissue Study. http://epa.gov/waterscience/fishstudy/results.htm.

1999, Sediment Quality Guidelines; Sediment Quality Guidelines Developed for the National Status and Trends Program. http://www.epa.gov/waterscience/cs/guidelines.htm#epa.

2007a. Overview of Halaco Superfund Site, Retrieved from www.epa.gov/region09/Halaco on December 19, 2007.

2007b. Integrated Assessment Halaco Engineering Company, Oxnard, California. January 10, 2007

2007c. Phone conversation with José García, USEPA Community Involvement Coordinator, on December 19, 2007.

2008. Site Profile, Halaco Engineering. Retrieved from http://www.epaosc.net/site_profile.asp?site_id=2258%20 on April 18, 2008.

U.S. Geological Survey. 2004. Comments on Potential Geologic and Seismic Hazards Affecting Coastal Ventura County, California. Open File Report 2004-1286. 20 pp.

2003. Simulation of Ground-Water/Surface-Water Flow in the Santa Clara-Calleguas Ground-Water Basin, Ventura County, California. United States Geological Survey Water Resources Investigations Report 02-4136. 157 pp.

2001. Earthquake Ground Motion Amplification in Southern California. Open File Report 01-164.

1962. Geology of Southeastern Ventura Basin, Los Angeles County, California. Geological Survey Professional Paper 334-H. 366 pp.

1904 thru 1967. Oxnard Quadrangle Maps.

U.S. Fish and Wildlife Service. 2005. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover; Final Rule.

2001. Western Snowy Plover (*Charadrius alexandrinus nivosus*) Pacific Coast Population Draft Recovery Plan. Portland, Oregon. xix + 630 pp.

1985. Recovery Plan for the California Least Tern (*Sterna antillarum browni*.) U.S. Fish and Wildlife Service, Portland, Oregon. 112 pp.

United States National Oceanic and Atmospheric Administration, National Ocean Service. 1990. Estuaries of the United States: Vital Statistics of a Natural Resources Base. October.

Urban Land Institute. 1999. Advisory Services Panel Report, Ormond Beach, Oxnard, California. Washington, D.C.

UWCD and CLWA (United Water Conservation District and Castaic Lake Water Agency). 1996. Water Resources Report. April.

Ventura County Agricultural Commissioner. 2006. APAC Buffer Policy. Revised July 19.

2005. Ventura County 2005 Crop Report.

2004. Ventura County Pesticide Use Data.

Ventura County Air Pollution Control District. 2007. Draft Ventura County Air Quality Management Plan Revision.

2004. Ventura County Air Quality Management Plan Revision (Proposed).

2003. Ventura County Air Quality Assessment Guidelines. October.

1997. Ventura County 1997 Update to the 1995 Air Quality Management Plan Revision. October.

1995. Ventura County 1995 Air Quality Management Plan Revision. December.

1994. Ventura County 1994 Air Quality Management Plan. November.

Ventura County Environmental Health Division. 2004. Certified Unified Program Agency Report: Hazardous Materials Business Plan and Chemical Materials Information Compliance.

Ventura County Resource Management Agency Planning Division. 2006. Planning Division. Personal consultation with Julie Bulla, Land Use Planner. October 5.

2005. Ventura County Non-Coastal Zoning Ordinance. Legally effective February 29, 2004. Updated December 6.

2005. Coastal Zoning Ordinance. In effect June 3, 2003. Updated December 6, 2005.

2005. Ventura County General Plan, Land Use appendix, Figure 3.3-18. November 15.

2004. Ventura County General Plan, Goals, Policies, and Programs. January 27 (last amended).

2004. Hazards Appendix, County of Ventura General Plan.

1998. Save Open Space and Agricultural Resources (SOAR) Ordinance (Measure B).

1996. Guidelines for Orderly Development. Last amended December 6, 2005. Ventura County Coastal Zoning Ordinance.

Ventura County Solid Waste Management Department. 1998. California Integrated Waste Management Board Database. Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts.

Ventura County Water & Environmental Resources Division. 2006. Personal consultation with David Panaro, P.G., Groundwater Manager. October 5.

Ventura County Watershed Protection District. 2007, 2006, 2005. Rainfall and Other Hydrology Data (http://publicworks.countyofventura.org/fc/hydrology/index.htm).

2005. Integrated Watershed Protection Plan, Fiscal Year 2005, Zone 2. May 16.

Ventura LAFCO Commissioner's Handbook. 2002. The Policies and Procedures of the Ventura LAFCO. January 1.

Wagner, H.R. 1929. Spanish Voyages to the Northwest Coast of America in the Sixteenth Century. California Historical Society Special Publications – 4. San Francisco: California Historical Society.

Wallace, W.J. 1978. Post-Pleistocene Archaeology, 9,000 to 2,000 B.C. In Handbook of North American Indians, Volume 8 California. R. F. Heizer (ed.): 25-36. Washington DC: Smithsonian Institute Press.

Wallace, W.R. 1955. A suggested chronology for Southern California coastal archaeology. Southwestern Journal of Anthropology 11 (3): 214-230.

Warren, C.N. 1968. Cultural tradition and ecological adaptation the southern California coast. In (C. Irwin-Williams, ed.) Archaic prehistory in the western United States. Portales: Eastern New Mexico University Contributions in Anthropology 1(3): 1-14.

1967. The San Dieguito Complex: A review and hypothesis. American Antiquity 32(2): 168–185.

Weber, David J. 1992. The Spanish Frontier in North America. New Haven: Yale University Press.

1982. The Mexican Frontier 1821-1846. Albuquerque: University of New Mexico Press.

Weber Jr., F. Harold and Kiessling, E.W. 1978. "Historical Earthquakes: Effects in Ventura County." California Geology. Volume 31. Number 5.

Wells, D. L., and K. J. Coppersmith. 1994. New empirical relationships among magnitude, rupture length, rupture width, rupture area, and surface displacement. Bulletin Seismological Society of America, Vol. 84, p. 974-1002.

WRA Environmental Consultants. 2005. Ormond Beach Biological Resources – Presentation to the Ormond Beach Task Force. Unpublished report. California Coastal Conservancy, Oakland.

Yolo-Solano Air Quality Management District. 2002. *Software User's Guide: URBEMIS2002 for Windows with Enhanced Construction Module*. November.