



The Preserve at San Juan

AREA PLAN

(PA130026)

Prepared for:

**OC Planning
300 N. Flower Street, 1st Floor
Santa Ana, California 92702-4048
Contact: Ilene Lundfelt
(714) 667-9697**

Applicant:

**San Juan Preserve, LLP
31877 Del Obispo Street, Suite 206
San Juan Capistrano, California 92675
Phone (949) 296-3078**

Prepared by:

**Robert Mitchell & Associates
Contact: Robert Mitchell
Phone (949) 581-2112**

**RE Consulting
Contact: Renee Escario
Phone: (949) 346-4633**

Revised January 21, 2017

Table of Contents

1.0 INTRODUCTION AND PROJECT OVERVIEW

1.1 LOCATION OF THE AREA PLAN	Page 1
1.2 PROJECT SUMMARY	Page 1
1.3 GENERAL PLAN AND ZONING	Page 2
1.4 WATER DISTRICTS ANNEXATION	Page 3
1.5 AREA PLAN VISION.....	Page 3
1.6 AREA PLAN PURPOSE	Page 4
1.7 PROJECT OBJECTIVES	Page 4
1.8 PUBLIC BENEFIT	Page 5
1.9 GOVERNING DOCUMENTS	Page 6
1.10 AREA PLAN COMPONENTS	Page 6

2.0 EXISTING CONDITIONS

2.1 PROJECT SITE CONDITIONS.....	Page 7
2.2 ADJACENT LAND USE CONDITIONS.....	Page 10
2.3 TOPOGRAPHY AND GEOLOGY	Page 11
2.4 BIOLOGICAL RESOURCES.....	Page 11
2.5 CULTURAL RESOURCES	Page 14
2.6 RESOURCE CONSERVATION	Page 14

3.0 LAND USE PLAN

3.0 LAND USE PLAN.....	Page 18
------------------------	---------

4.0 INFRASTRUCTURE AND UTILITIES

4.1 CIRCULATION.....	Page 19
4.2 WATER SERVICES.....	Page 24
4.3 WATER INFRASTRUCTURE	Page 24
4.4 WASTEWATER INFRASTRUCTURE	Page 27
4.5 DRAINAGE AND WATER QUALITY	Page 27

5.0 AREA PLAN DESIGN GUIDELINES

5.1 PROJECT DESIGN FEATURES	Page 31
5.2 SITE DEVELOPMENT GENERAL GUIDELINES	Page 34
5.3 HARDSCAPE DESIGN ELEMENTS.....	Page 35
5.4 LIGHTING.....	Page 35

6.0 LANDSCAPE ELEMENTS AND FUEL MODIFICATION PLAN

6.1 WATER QUALITY SWALES.....	Page 40
6.2 AREAPLAN SITE ENTRIES	Page 40
6.3 RESIDENTIAL LOTS	Page 47
6.4 FUEL MODIFICATION REQUIREMENTS.....	Page 47
6.5 FUEL MODIFICATION SITE PLANNING	Page 47
6.6 FUEL MODIFICATION ZONES	Page 50

7.0 GENERAL PLAN CONSISTENCY

7.0 GENERAL PLAN CONSISTENCY..... Page 62

8.0 IMPLEMENTATION AND ADMINISTRATION

8.1 INTERPRETATION..... Page 73
8.2 SEVERABILITY Page 73
8.3 APPLICABILITY Page 73
8.4 SUBDIVISION MAPS..... Page 73
8.5 ENVIRONMENTAL IMPACT REPORT..... Page 73
8.6 COMPLIANCE WITH PROJECT DESCRIPTION FEATURES AND MITIGATION MEASURES Page 74
8.7 HOMEOWNERS ASSOCIATION..... Page 74
8.8 AREA PLAN AMENDMENTS Page 74

List of Tables

<u>No.</u>	<u>Name</u>	<u>Page</u>
1	AREA PLAN SUMMARY	Page 1
2	AREA PLAN SITE DEVELOPMENT SUMMARY	Page 18
3	PROJECT DESIGN FRATURES	Page 31
4	GENERAL PLAN CONSISTENCY	Page 62

List of Exhibits

<u>No.</u>	<u>Name</u>	<u>Page No.</u>
1	Regional Location Map.....	8
2	Vicinity Map.....	9
3	Wildlife Movement.....	12
4	Jurisdictional Delineation Plan.....	13
5	Constraints Map Overall Plan.....	15
6	Constraints Map – Phase 1.....	16
7	Constraints Map – Phase 2.....	17
8	Area Plan Site Map.....	20
9	Mass Grading Plan.....	21
10	Areas of Disturbance.....	22
11	Circulation Plan.....	23
12	Water Service Annexation Areas.....	25
13	Water Distribution System Plan.....	26
14	Residential Onsite Wastewater Treatment Plan.....	28
15	Drainage Plan.....	30
16	Fence and Wall Plan – Phase 1.....	36
17	Fence and Wall Plan – Phase 2.....	37
18	Wall Details.....	38
19	Fence Details.....	39
20	Conceptual Landscape Plan – Phase 1.....	41
21	Conceptual Landscape Plan – Phase 2.....	42
22	Conceptual Landscape Legend.....	43
23	Conceptual Planting Legend.....	44
24	Conceptual Entry Planting Plan – Phase 1.....	45
25	Conceptual Entry Planting Plan – Phase 2.....	46
26	Conceptual Fuel Modification – Phase 1.....	47
27	Conceptual Fuel Modification – Phase 1.....	49
28	Water Reuse Plan – Phase 1.....	52
29	Water Reuse Plan – Phase 2.....	53
30	Water Reuse Plan - Typical Dispersal Fields.....	54
31	Water Reuse Plan – Typical Fuel Mod. Irrigation.....	55
32	Water Reuse Plan – Typical Fuel Mod. Planting.....	56
33	Conceptual Vineyard Planting Plan.....	58
34	Conceptual Lot & Mfr. Slopes Planting Plan.....	60

1.0 Introduction and Project Overview

The Preserve at San Juan Area Plan (Area Plan) is a plan for development of a residential neighborhood within a 584.1-acre project site that is located within the southeastern portion of unincorporated Orange County. This Area Plan is a guide for the development of a cohesive and uniformly designed residential neighborhood and for the preservation of significant open space within the project site. The land within this Area Plan is referred to within this document as the “project site”.

1.1 Location of the Area Plan

This proposed Area Plan includes two non-contiguous parcels of land that are located in the southeastern portion of unincorporated Orange County, approximately six miles southwest of the City of Lake Elsinore in Riverside County and approximately 6.25 miles east of the City of Rancho Santa Margarita in Orange County. Specifically, the project site is located to the west of Ortega Highway and is accessed from Long Canyon Road, which intersects Ortega Highway approximately 1,500 feet west of El Cariso Village, a small rural residential area. The Phase 1 and 2 parcels are located to the west of Ortega Highway and separated by Long Canyon Road (see Exhibit 1, Regional Location Map and Exhibit 2, Vicinity Map).

1.2 Project Summary

This Area Plan provides design and development criteria to guide development of the project site in two phases; one phase per parcel. Overall, up to 72 single-family detached residential dwellings are proposed on approximately 169.5 development acres (29 percent) of the project site. Approximately 414.6 acres (71 percent) of the project site is planned for permanent open space. The Preserve at San Juan land use plan is detailed in **Table 1**.

Table 1 Area Plan Summary

Land Use	Gross Acres	Single-Family Units
Developed Areas		
Phase 1 (south parcel)		
Residential Building Pads	42.7	43
Roadways	7.6	
Landscape, Fuel Modification, Vineyards	58.3	
Total Developed Phase 1 (south parcel)	108.6	
Phase 2 (north parcel)		
Residential Building Pads	32.0	29
Roadways	8.2	
Landscape, Fuel Modification, Vineyards	20.7	
Total Developed Phase 2 (north parcel)	60.9	
Open Space		
Phase 1 (south parcel)	281.0	
Phase 2 (north parcel)	133.6	
Total Open Space	414.6	
Total Project Acreage	584.1	72

Residential Land Use: Based on the developed acreage (not including open space areas), the single-family residential development is proposed at a gross density of 0.43 dwelling units per acre (72 units within the 169.5-acre development area). The development areas are close to Long Canyon Road, and clustered in areas where the existing topography is suitable. The development is proposed to occur within two phases, and each phase would develop a separate parcel. As shown on Table 1, the developed portion of Phase 1 (south parcel) comprises 108.6 acres within which 43 single-family residential units, streets, landscaping, fuel modification, and vineyards are planned; and the developed portion of Phase 2 (north parcel) comprises 60.9 acres within which 29 single-family residential dwellings units, and the associated streets, landscaping, fuel modification, and vineyards are planned. Residential lots within Phase 1 (south parcel) would average 23,997 square feet, and lots within Phase 2 (north parcel) would average 23,667 square feet.

Open Space Land Use: Vineyards, landscaping, and fuel modification would be used to provide a vegetative buffer between the development and open space areas, and would be comprised of non-invasive species, many of which would be native. This would include up to 34.5 acres of vineyards spread throughout both phases of the project (included as part of the fuel modification acreage). The vineyards would contribute to open space and the aesthetic quality and character of the area, while providing fuel modification and open space buffer areas. The vineyards would not include wine making facilities. The grapes would be harvested by the Home Owners Association (HOA) that would be established by the project.

Large portions of the project site would remain as undeveloped open space. As shown on Table 1, Phase 1 (south parcel) includes 281 acres of open space and Phase 2 (north parcel) includes 133.6 acres of open space. Overall, this Area Plan includes 414.6 acres (which is 71 percent of the project site) of open space, which contains large areas of chaparral, over 30 acres of coast live oak woodland, and two major drainage features.

Access and Circulation: Access to both phases of the project would be provided from Long Canyon Road via Ortega Highway, which are both public roadways. Development of the Area Plan includes off-site improvements to Ortega Highway at the Long Canyon Road intersection. These improvements would occur within existing paved area and right-of-way, and would provide an enhanced roadway to safely serve build out of the Area Plan. The improvements include: increasing the number of lanes, installation of turn lanes, and installation of an acceleration lane (see Exhibit 14).

The project would develop roadways that would circle through the proposed residential development areas and provide secondary access between the residential areas and Long Canyon Road, as further detailed in Section 4.1.

1.3 General Plan and Zoning

The existing Orange County General Plan designation for the project area is Open Space (5), which allows for limited land uses that do not require a commitment of significant urban infrastructure. The existing zoning designation is General Agricultural (A1), which allows residential development at a maximum density of 0.25 dwelling unit per acre (or four acres per dwelling unit), and other low intensity uses that have a primarily open space character.

The project proposes to change the General Plan Land Use of designation of the project area to Rural Residential (1A), which allows a minimum density of 0.025 to 0.5 dwelling units per acre, (or two to forty acres per unit). The project also proposes to change the zoning designation to Residential Agricultural (AR). The AR zone provides for single-family residential neighborhoods in conjunction with agricultural and outdoor recreational uses and requires a minimum residential lot size of 7,200 square feet.

Following County approval of the zone change, residential development will be subject to all AR development regulations pursuant to Section 7-9-59.8 (AR District) of the County of Orange County Zoning Code.

1.4 Water Districts Annexations

Water service for potable use, irrigation, and fire flow to the project area would be supplied by the Elsinore Valley Municipal Water District (EVMWD). Approximately 133.4 acres of the project site (portions of the site needing domestic water service) would be annexed into the EVMWD service area. Areas of the project site that would remain in natural open space, or fuel modification areas that do not require irrigation, would not be annexed into the water service area.

EVMWD is wholly within the boundaries of Western Municipal Water District (Western), which is wholly within the boundaries of Metropolitan Water District (MWD) which provides water supplies. Because of this arrangement, the area to be included in the EVMWD Sphere of Influence and service area would also be included in the Sphere of Influence and annexed into the boundaries of Western and MWD. These service area boundary changes require approval by Riverside County Local Agency Formation Commission (Riverside LAFCO).

1.5 Area Plan Vision

The vision for the Preserve at San Juan is to provide a residential community in conjunction with limited agricultural uses, while preserving large areas of open space. This vision is guided by the following planning principles.

Community that Blends with the Natural Environment: The Preserve at San Juan land use plan responds to the physical and natural characteristics found within and around the project site, which include steep topography, streams, and oak woodlands. This Area Plan provides for the preservation of approximately 414.6 acres of the project site as open space to ensure the continued environmental stewardship of this valuable resource.

Approximately 169.5 acres of the project site is planned for development, which would occur within two non-contiguous phases. This Area Plan has designed the residential areas to complement and blend with the character of existing natural open space areas within the project area. Single-family residences would be clustered in the developed portions of the project site, while leaving large areas in natural open space. In addition, landscaping, vineyards, and fuel modification would be used to provide vegetative natural buffers between the single-family residential parcels and the onsite open space areas.

Well Designed Community: This Area Plan is designed within an open space setting and provides for the development of single-family residences with multiple bedrooms and bathrooms, and areas for entertaining on large lots with views of open space. Residential

development within the two phases would contain up to 72 single-family residential units on lots that average 23,832 square feet.

The design of the Preserve at San Juan community would utilize slumpblock masonry with either a mortarwash finish or left unfinished in an adobe color on structures. Fencing would consist of two-rail fencing with low mortar-washed slumpblock pilasters or high tubular steel fencing. The two-rail fencing and low pilasters would be used at the project entries, areas adjoining open space, vineyards, or fuel modification. The colors of the residences, fences, and other structures would be natural in tone to blend into the surrounding open space area. In addition, internal roadways would be designed to incorporate rural street standards that promote the rural character of the existing area, such as rolled curbs and no sidewalks.

1.6 Area Plan Purpose

The purpose of the Preserve at San Juan Area Plan is to:

- Establish design criteria as described in Section 5, Area Plan Design Guidelines, for new residential land use proposed for development within the project site and to provide a sufficient level of detail to guide the County review and approval of subsequent development applications including landscape plans, grading plans, and building plans.
- Provide a plan responsive to the physical constraints found within and around the project site and to blend with the character of existing open space and surrounding adjacent residential neighborhoods.
- Provide a mechanism to implement Project Design Features, which are listed in Section 5, Area Plan Design Guidelines.
- Provide a mechanism as described in Section 8, Implementation and Administration, to implement the proposed Area Plan and amend it as necessary.
- Provide for design and project objectives to ensure that the Preserve at San Juan is developed as a cohesive and uniform planned residential neighborhood.
- Provide a plan for new infrastructure, grading, and preservation of open space; in addition to, procedures to ensure that development of the Preserve at San Juan is implemented in a uniform and cohesive manner.
- Through coordination with Orange County Fire Authority, provide for a Fire Protection Plan and fuel management zones for the project.

1.7 Project Objectives

The following project objectives guided preparation of this Preserve at San Juan Area Plan:

- To provide a residential community that is compatible with the surrounding residential and natural areas.
- To mitigate the impact that the proposed development has upon the existing blue-line streams and the native California Coastal Live Oaks.
- To ensure that current infrastructure and public services would not be lessened or burdened by Area Plan implementation but would be improved. This includes water capacity, fire safety, and storm-water runoff quality and road safety.

- To ensure that lot coverage and density do not have impacts upon the Area Plan project site which cannot be mitigated in accordance with the County of Orange land use policies and development standards.
- To provide mitigation to the satisfaction of the County of Orange, California State Fish and Game and U.S. Fish and Wildlife agencies for any development impacts to existing habitat or the blue-line streams.
- To provide a residential community that incorporates a wildland fire-safe design that protects the proposed homes from potential wildland fires in accordance with the standards set forth by the Orange County Fire Authority.
- To build a residential community that is uniquely different by integrating with and being sensitive to the environmental constraints of the existing terrain, geology, blue line streams and the California Live Oak trees and that offers a large lot and remote lifestyle in a natural setting that is not commonly found within Orange County.

1.8 Public Benefits

The Preserve at San Juan Area Plan includes the permanent preservation of approximately 414.6 acres (or approximately 71 percent of the project site) of open space, which contains biological resources that include chaparral habitat, oak woodland habitat, streams, and sensitive wildlife species. In addition to preservation of this area, the Area Plan would implement an Oak tree mitigation program in the developed portions of the project, which is focused on preservation, restoration, and enhancement of the oak trees through sustainable tree plantings (as well as native tree planting). The public would benefit by the preservation of this large area of regional open space and the various environmental resources that it contains. In addition to preservation of biological resources, the 414.6 acres of open space would be offered for dedication to the U.S. Forest Service. With the dedication of this currently private land, U.S. forestland in the project area would be expanded, which is a long-term public benefit of the proposed project.

The project would also provide improved water infrastructure for existing nearby residences in El Cariso Village by replacing and upgrading the existing water pipelines and pump stations that convey water through El Cariso Village to the Area Plan project area. Additionally, roadway improvements to Ortega Highway at the Long Canyon Road interchange would provide safety features, such as turn lanes and acceleration lanes that would benefit the public traveling these roadways. In addition, the project would provide fuel modification improvements throughout the developed portions of both Phase 1 and 2, which would reduce the potential of wildland fires.

Overall, the Preserve at San Juan Area Plan would benefit the public by preservation of open space and natural habitat, dedication of new U.S. forestland, and provision of improved water storage and roadway infrastructure.

1.9 Governing Documents

Implementation of the Preserve at San Juan Area Plan would be governed by the following:

- The Orange County General Plan.
- The Preserve at San Juan Area Plan, which includes a land use plan, infrastructure

plan, design guidelines, a fuel modification program, and implementation procedures.

- The Final EIR Mitigation Monitoring and Reporting Program (MMRP) for the San Juan Area Plan project.
- The County of Orange Zoning Code establishing the regulations governing development of residential uses within the proposed AR zoning designation.
- The Orange County Subdivision Code regulating the subdivision of land within the Preserve at San Juan Area Plan.
- Covenants, Conditions, and Restrictions (CC&Rs) established by the developer of the Preserve at San Juan Area Plan and implemented by the project's Homeowners Association (HOA) as a means of ensuring and enforcing quality design during development and the continued maintenance of common areas, such as the vineyards and fuel modification zones.

1.10 Area Plan Components

This Area Plan is organized into the following sections in addition to this Section 1, Introduction and Overview.

Section 2 Existing Conditions: The physical setting for the Preserve at San Juan is described in this section outlining the existing physical conditions found within and surrounding the project site.

Section 3 Land Use Plan: The Land Use Section describes each phase of development and the open space preservation area planned for the Preserve at San Juan.

Section 4 Infrastructure and Utilities: This section describes circulation improvements, water, wastewater, and storm drain and water quality systems that would serve the project.

Section 5 Area Plan Design Guidelines: This section provides Project Design Features, site development guidelines, hardscape design elements, and lighting standards to ensure that the Preserve at San Juan is developed with a quality design quality and character.

Section 6 Landscape Elements and Fuel Modification Plan: This section provides guidelines for implementation and maintenance of the various landscape elements and fuel modification zones within the Preserve at San Juan Area Plan.

Section 7 General Plan Consistency: This section provides a description of the Area Plan's Consistency with the relevant policies of the Orange County General Plan.

Section 8 Implementation and Administration: This section provides the requirements and procedures for implementation and administration of this Area Plan. In addition, project maintenance responsibilities are described in this section.

2.0 Existing Conditions

2.1 Project Site Conditions

The Area Plan project site is located within an undeveloped and densely vegetated part of the Santa Ana Mountains within the unincorporated southeastern portion of Orange County (See **Exhibit 1, Regional Location Map**). The natural topography of the project area is diverse and consists of steep terrain, ridgelines, and areas of level ground. For example, the northern portion of the project site has a steep ridgeline and the southernmost area has a deep canyon, and elevations range from approximately 3,300 feet above mean sea level (amsl) in the northeast portion of the project site to approximately 2,025 amsl in the southern portion in the canyon. Most of the area proposed for development is between 2,400 and 2,900 feet amsl.

The Area Plan project site is made up of two non-contiguous parcels of land that are separated by a parcel of land that is part of the Cleveland National Forest and Long Canyon Road (See **Exhibit 2, Vicinity Map**).

Phase 1 (south parcel): is approximately 389.6 acres and is located between 2,300 feet and 2,970 feet west of Ortega Highway, and consists of gently sloping terrain in the southern portion of the parcel and steep, rugged terrain in the northern portion of the parcel. The majority of Phase 1 (south parcel) is undisturbed and supports dense chaparral, densely vegetated hills, and scattered patches of oak woodland. In addition, Long Canyon Creek crosses the southwest corner of the parcel. Disturbance is limited to a network of dirt roads, trails, one abandoned residence with a shed containing a water well and cistern.

Phase 2 (north parcel): is 194.5 acres and is located approximately 122 feet north of Phase 1 (south parcel), and is between 2,240 and 2,670 feet west of Ortega Highway, and consists of gently sloping terrain in the northeast portion of the parcel and steep, rugged terrain throughout the remainder of the parcel. The majority of the parcel is undisturbed and supports dense chaparral with large rock outcroppings and areas of oak woodland. Long Canyon Creek crosses the northeast corner of the Phase 2 (north parcel) and an unnamed stream bisects the center of the parcel from north to south.

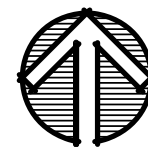
Existing disturbance areas on Phase 2 (north parcel) include a network of dirt roads and trails throughout the parcel; various cleared, graded areas where structures had previously been built; and an occupied residence in the southwest corner of the parcel that would be vacated prior to the start of construction. This portion of the parcel is also connected to the electricity grid and contains two active water wells and several water storage tanks (one of them 8,000 gallons).

The southwestern portion of the Phase 2 (north parcel) also contains the previously used McConville Airstrip (FAA Identifier CA42) that has a gravel surface, is approximately 1,000 feet long, and lies in a northeast to southwest direction on a slope. A hangar/maintenance structure, bunker, and a shed that contains tools, equipment, and oils and lubricants is located adjacent to the airstrip. In addition, several areas within Phase 2 (north parcel) are being used to store numerous dilapidated vehicles and debris piles. The parcel also contains two trash pits were used up until the 1950s or 1960s, and are currently covered by soil and vegetation.

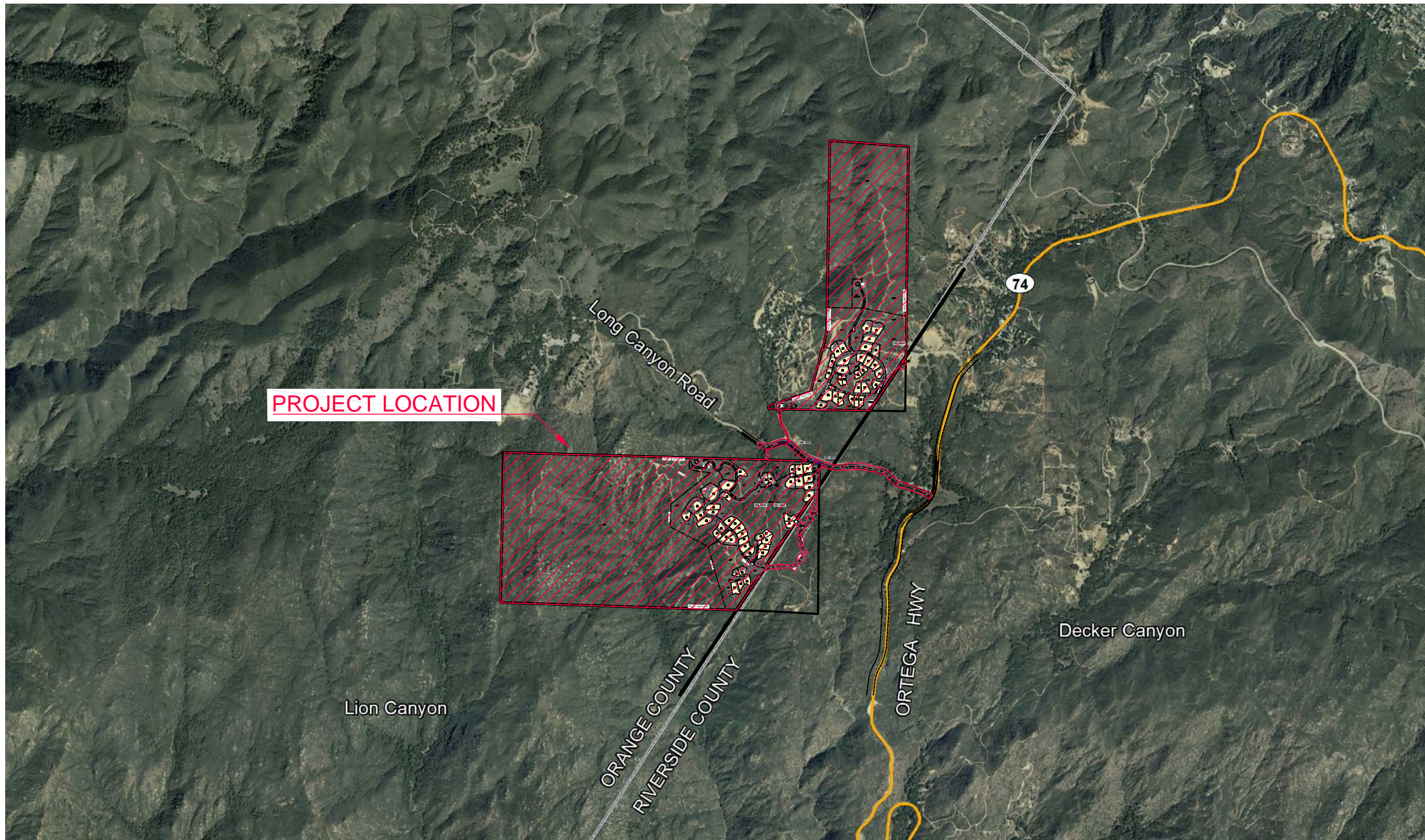


PROJECT LOCATION

REGIONAL MAP
EXHIBIT 1



THE PRESERVE
ORANGE COUNTY, CALIFORNIA



PROJECT LOCATION

Long Canyon Road

74

Lion Canyon

ORANGE COUNTY
RIVERSIDE COUNTY

ORTEGA HWY

Decker Canyon

VICINITY MAP
EXHIBIT 2



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

2.2 Adjacent Land Use Conditions

Land uses adjacent to the Area Plan project site are described below:

- **In Between Phase 1 and Phase 2:** An undeveloped parcel that is part of the Cleveland National Forest separates the two Area Plan phases, and consists of gently sloping terrain in the northern portion of the parcel; and steep, rocky, rugged terrain in the southern portion. The parcel supports dense chaparral, as well as scattered patches of oak woodland. In addition, Long Canyon Road separates the two parcels.
- **North:** Undeveloped, densely-vegetated Cleveland National Forest lands are located to the north of both Phase 1 (south parcel) and Phase 2 (north parcel).
 - The nearest structures to the north of Phase 1 (south parcel) include a residence near Long Canyon Road that is 1,340 feet from the project site, the U.S. Forest Service El Cariso Hotshot Camp (forest service fire-fighting complex) that is approximately 1,400 feet from the site; the Cleveland National Forest Blue Jay Campground (with 50 campsites), which is farther than 1,500 feet from the site; and the Los Pinos Conservation Camp (1,500 feet northwest of the site), which is a residential education center that is owned by the Cleveland National Forest and operated by the California Conservation Corps (CCC).
 - No structures are located to the north of Phase 2 (north parcel). Further to the east of these facilities are single-family rural residences. There are no structures north of Phase 2 (north parcel).
- **East:** Undeveloped, densely-vegetated Cleveland National Forest lands are located to the east of both phases.
 - There are no structures in proximity to the east of the Phase 1 (south parcel). The closest structure to the east of Phase 1 (south parcel) is Ortega Highway, which is located between 2,300 feet and 2,970 feet to the east.
 - The nearest structures to the east of the Phase 2 (north parcel) are rural residential structures that exist on the perimeter of the small rural community of El Cariso Village that is located approximately 1,500 feet east of Phase 2 (north parcel), in Riverside County.
- **South:** Undeveloped densely vegetated Cleveland National Forest lands are located to the south of Phase 1 (south parcel). There are no structures in proximity to the south of the of Phase 1 (south parcel). An area containing Long Canyon Road and an undeveloped parcel that is part of the Cleveland National Forest is located to the south of the Phase 2 (north parcel), which is in between the two project phases. In addition, a residence is located approximately 160 feet from the southeastern boundary of the Phase 2 (north parcel).
- **West:** Undeveloped densely vegetated Cleveland National Forest lands are located to the west of Phase 1 (south parcel). There are no structures in proximity to the west of Phase 1 (south parcel). The Mystic Oaks Retreat that includes various cabins for visitors is located to the west of the Phase 2 (north parcel).

2.3 Topography and Geology

As described above, the topography of the project site includes areas of steep sloping hillsides vegetated by scrub and chaparral. Geotechnical assessments of the project area have been completed, which includes: a geotechnical subsurface investigation that included air track drilling, excavation, logging, and sampling of backhoe trenches and conducting seismic refraction surveys; and a subsurface investigation for determining the percolation characteristics of onsite soils.

The potential for adverse effects related to soils and geology would be limited through incorporation of Project Design Features (listed in Section 5), California Building Code requirements, and implementation of the recommendations in the Final Geotechnical Assessment (as required per mitigation in the EIR) prior to County issuance of a building and grading permit.

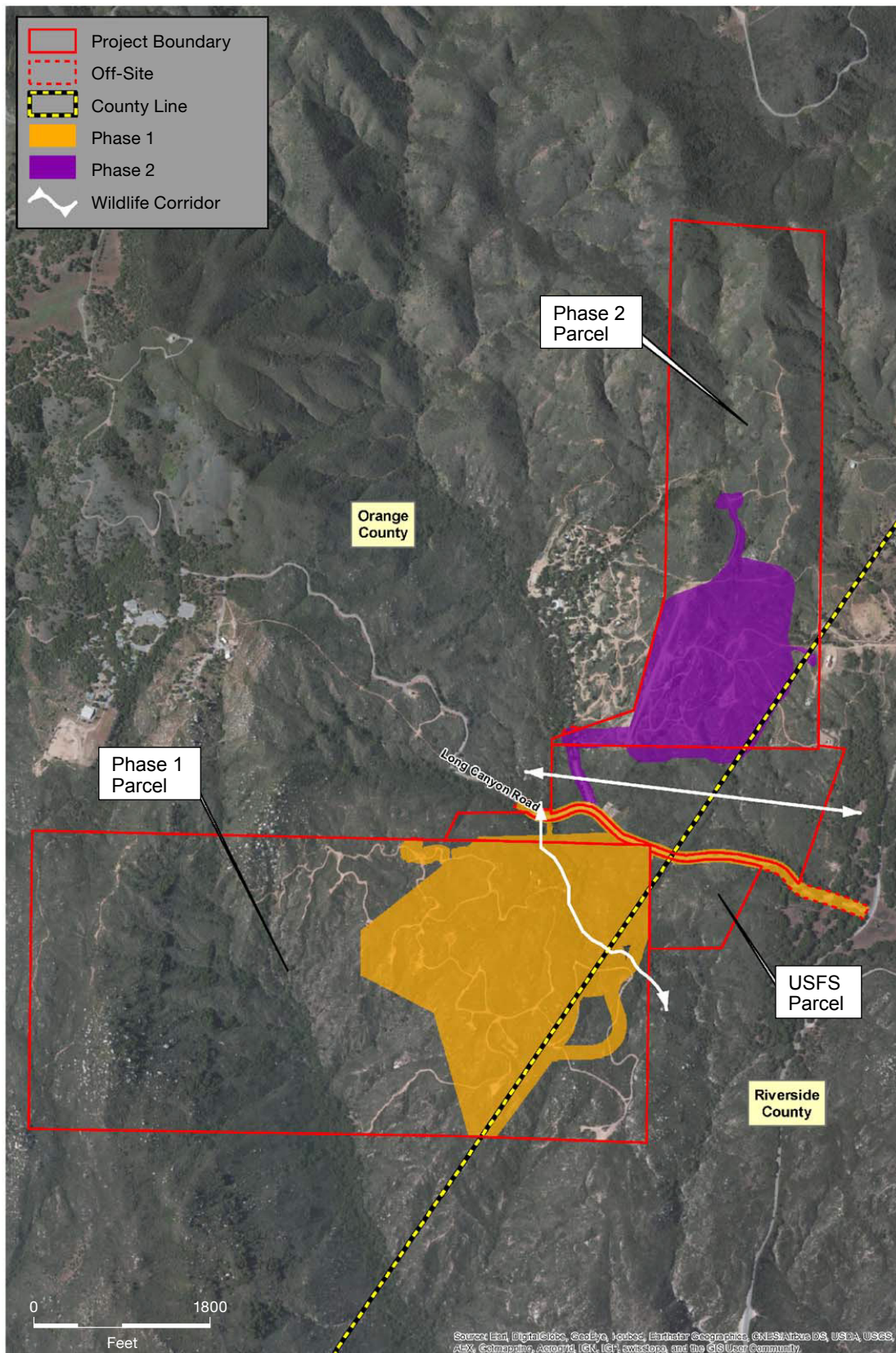
2.4 Biological Resources

A biological resources assessment was prepared for The Preserve Area Plan project site to identify onsite biological resources (e.g., plant communities, wildlife movement, jurisdictional waters, regulated trees, special status species), including an assessment of the regional and/or local importance of those resources. The Project EIR prepared for the Preserve at San Juan identifies appropriate measures, in addition to the Project Design Features (listed in Section 5), that would avoid, mitigate, and monitor any potential impacts to biological resources as part of the project. In addition, the 414.6 acres of open space that would be preserved by the project supports sensitive habitats and biological resources, which include:

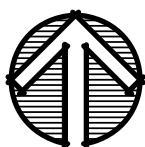
- Dense chaparral habitat,
- Oak woodland habitat,
- Two United States Geological Survey (USGS) blue line streams, and
- Sensitive wildlife species, including coast range newt, coast horned lizard, coastal rosy boa, northern red-diamond rattlesnake, white-tailed kite, and northern harrier

Wildlife Movement: A wildlife corridor is habitat connecting two or more habitat areas that would otherwise be fragmented or isolated from one another by development. No wildlife corridors currently exist within or adjacent to the Area Plan project site, because the site consists of large open spaces and minimal development, wildlife moves freely through the Area Plan project site and adjacent areas via the drainages, blue line streams, ridgelines, and dirt roads. (See **Exhibit 3, Wildlife Movement**).

Jurisdictional Streams: The Area Plan project site contains two blue line streams as indicated on the USGS topographic map (Alberhill, California). One of the blue-line streams is Long Canyon, while the other is a tributary to Long Canyon. Both of the streams converge with San Juan Creek off-site, and ultimately discharge into the Pacific Ocean. A Jurisdictional Delineation Report was prepared for the Preserve at San Juan project and identifies the jurisdictional conditions within the project site (See **Exhibit 4, Jurisdictional Delineation Plan**).

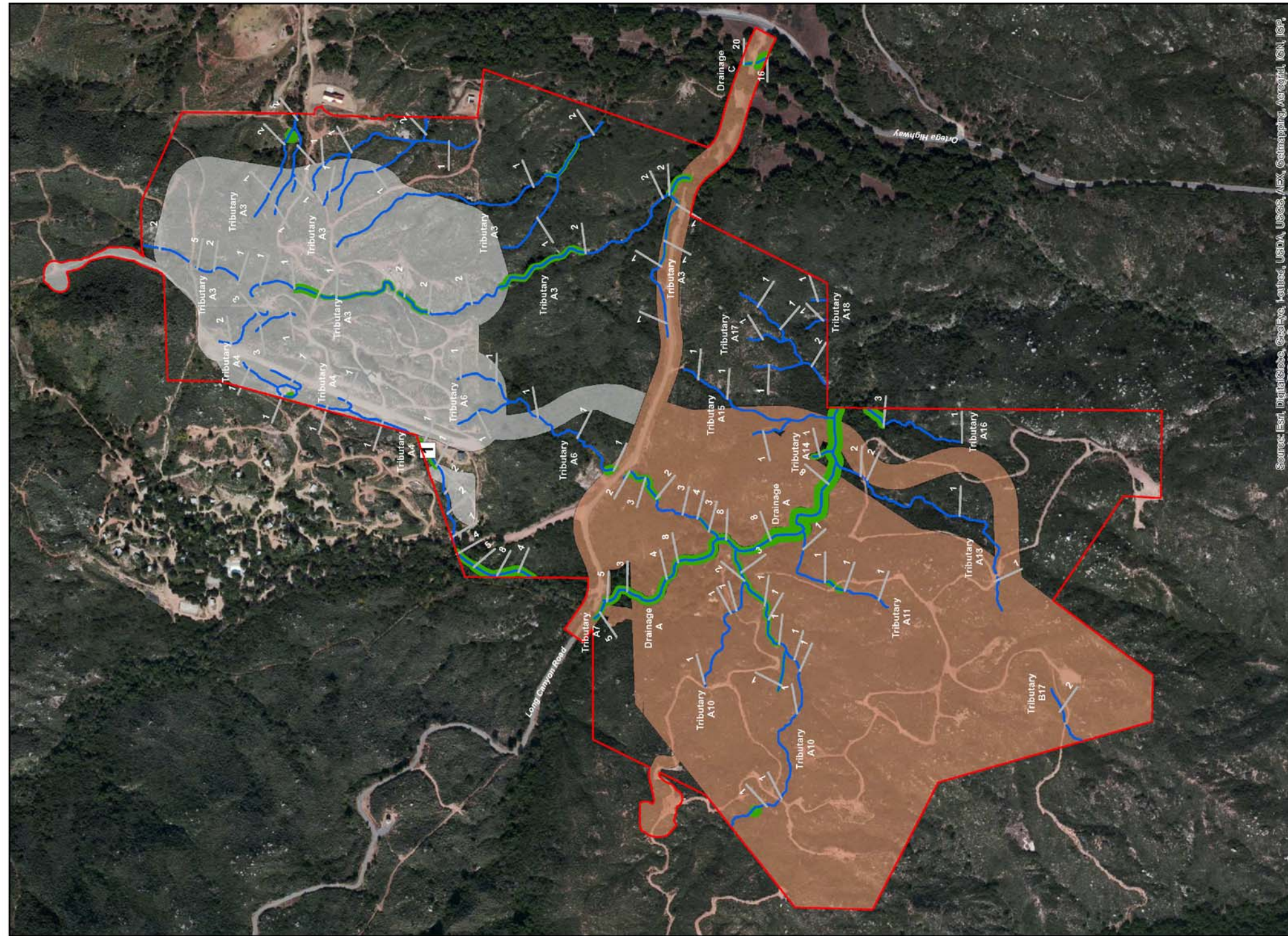


**WILDLIFE MOVEMENT
EXHIBIT 3**



THE PRESERVE

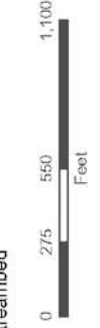
ORANGE COUNTY, CALIFORNIA



Source: Esri, DigitalGlobe, GeoEye, Earthstar, USDA, USGS, AeroGRID, IGN, IGP, and the GIS User Community

Legend

- The Preserve Study Area Boundary
- Phase 1 Development
- Phase 2 Development
- Corps/RWQCB Non-Wetland Waters/CDFW Unvegetated Streambed
- CDFW Riparian
- OHWM Width in Feet
- Soil Data Pit



THE PRESERVE AT SAN JUAN
Jurisdictional Delineation/Development Map

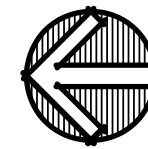
GLENN LUKOS ASSOCIATES



X:\0363-THE REST\1093-01\PRES\1093-1\GIS\Delineation\GIS\1093-1 Delineation\Layout11x17.mxd

**JURISDICTIONAL DELINEATION PLAN
EXHIBIT 4**

Source: Glenn Lukos Assoc.



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

ROBERT MITCHELL & ASSOCIATES
LAND SOLUTIONS
22983 BI YCHO ROAD LAKE POESBY, CA 92640
(949) 581-2112 FAX (949) 581-3809 www.robertmitchell.com (rmitc.com)

PLANNING
DESIGN
LANDSCAPE
ARCHITECTURE

2.5 Cultural Resources

As part of the Project EIR, a cultural and paleontological resources records search was performed for the project site. No resources meeting CEQA's definition of for a historical resource, unique archaeological or paleontological resource has been identified within the project site. However, the area has been identified as highly sensitive for cultural resources.

Therefore, Project Design Features would be implemented and mitigation measures have been included in the EIR to mitigate any potential impacts to cultural and paleontological resources during development of the project. These measures include monitoring of project construction activities, and in the event cultural or paleontological resources are discovered, reasonable and proper steps to preserve such resources would be implemented.

2.6 Resource Conservation










This Area Plan responds to natural and man-made features found within and around the project site. **Exhibits 5 through 7, Constraints Maps**, identifies environmental factors such as streams and Oak trees and the planned buffer areas around the proposed development. The identification of the resources within the Area Plan project site and the careful consideration of the environment has led to the following Area Plan design components:

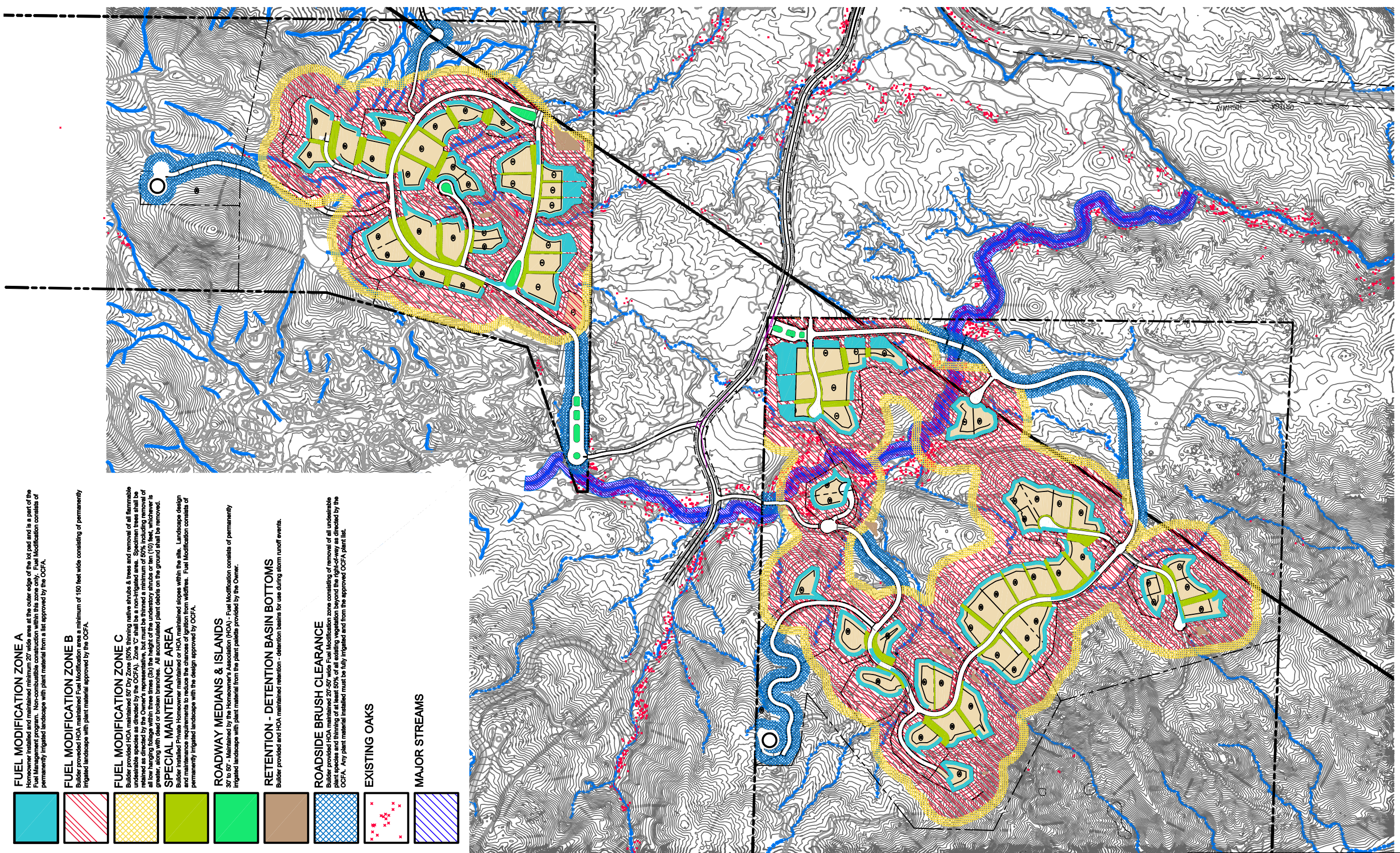
- Ecosystem planning, which preserves a large block of open space that is contiguous to other large blocks of open space, thereby providing connectivity and linkages to foster wildlife movement;
- Oak tree mitigation which relies on preservation/restoration/enhancement of on-site oak trees through sustainable tree plantings (as well as native tree planting);
- Wildland planning that utilizes sophisticated fire behavior modeling to provide a fire safe design to protect residents and structures, by including fuel modification zones and defensible spaces around residences; and
- Water quality and hydromodification features that efficiently utilize the project's infiltration capacity along with low impact development techniques and preservation of natural processes within drainages for water treatment.

As part of development of this Area Plan, all of the Coast Live Oak and California Sycamore trees that exist within or near the development areas were mapped and tagged. The land use plan was then modified to avoid development in areas where existing Coast Live Oak and California Sycamores exist. As a result, only 6.3 percent of the existing trees could be removed or pruned as part of implementing the proposed Area Plan. In addition, oak tree mitigation is included in this Area Plan, which would replace the oak trees that would be removed as part of the development process.

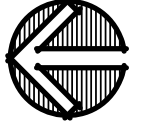
To avoid and minimize potential effects to streams, the design of this Area Plan avoids placement of development, through or adjacent to existing streams to the extent feasible. However, one stream would need to be crossed by a roadway, which would be done through installation of a half-arch metal culvert, which would completely across the stream and water area, thereby minimizing interface with the stream and potential impacts.

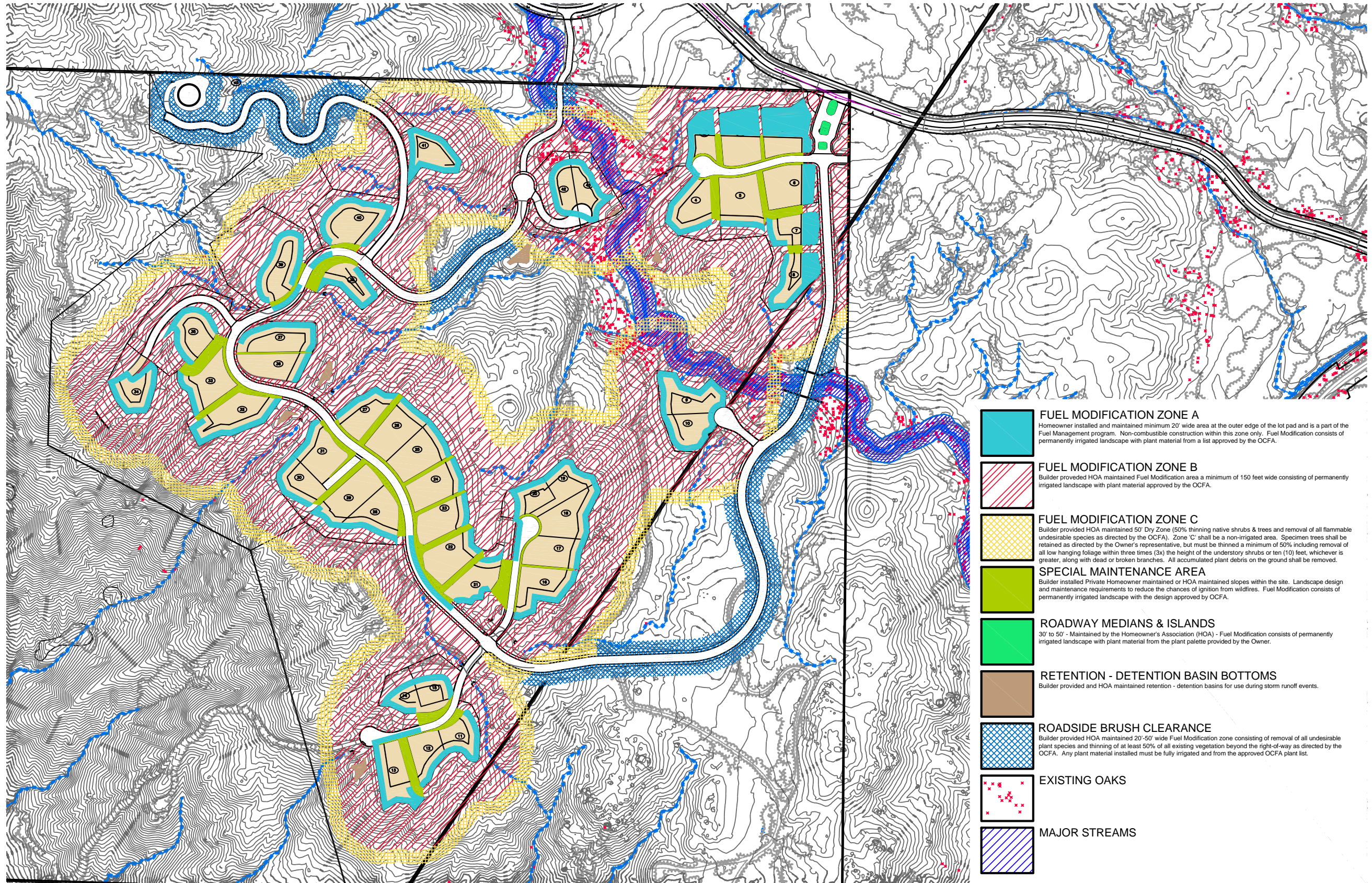
This Area Plan would develop 72 single-family residential units, which reduces the number of residential units that were originally proposed for the project site (which was 213 single-family residential units in 2006 and reduced to 169 single-family residential units in 2008). The


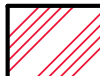






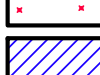
-  **FUEL MODIFICATION ZONE A**
Homeowner installed and maintained minimum 20' wide zone at the outer edge of the lot road and is a part of the Fuel Management program. Non-combatible construction within this zone only. Fuel Modification consists of permanently irrigated landscape with plant material from a list approved by the OCCFA.
-  **FUEL MODIFICATION ZONE B**
Builder provided HOA maintained Fuel Modification area a minimum of 150 feet wide consisting of permanently irrigated landscape with plant material approved by the OCCFA.
-  **FUEL MODIFICATION ZONE C**
Builder provided HOA maintained 50' Dry Zone (50% thinning native shrubs & trees and removal of all flammable undesirable species as directed by the OCCFA). Zone 'C' shall be a non-irrigated area. Specimen trees shall be retained as directed by the Owner's representative, but must be thinned a minimum of 50% including removal of all low hanging foliage within three times (3x) the height of the understory shrubs or ten (10) feet, whichever is greater, along with dead or broken branches. All accumulated plant debris on the ground shall be removed.
-  **SPECIAL MAINTENANCE AREA**
Builder installed Private Homeowner maintained or HOA maintained slopes within the site. Landscape design and maintenance requirements to reduce the chances of ignition from wildfires. Fuel Modification consists of permanently irrigated landscape with the design approved by OCCFA.
-  **ROADWAY MEDIANS & ISLANDS**
30' to 50' - Maintained by the Homeowner's Association (HOA) - Fuel Modification consists of permanently irrigated landscape with plant material from the plant palette provided by the Owner.
-  **RETENTION - DETENTION BASIN BOTTOMS**
Builder provided and HOA maintained retention - detention basins for use during storm runoff events.
-  **ROADSIDE BRUSH CLEARANCE**
Builder provided HOA maintained 20'-50' wide Fuel Modification zone consisting of removal of all undesirable plant species and thinning of at least 50% of all existing vegetation beyond the right-of-way as directed by the OCCFA. Any plant material installed must be fully irrigated and from the approved OCCFA plant list.
-  **EXISTING OAKS**
-  **MAJOR STREAMS**



CONSTRAINTS MAP - OVERALL
EXHIBIT 5














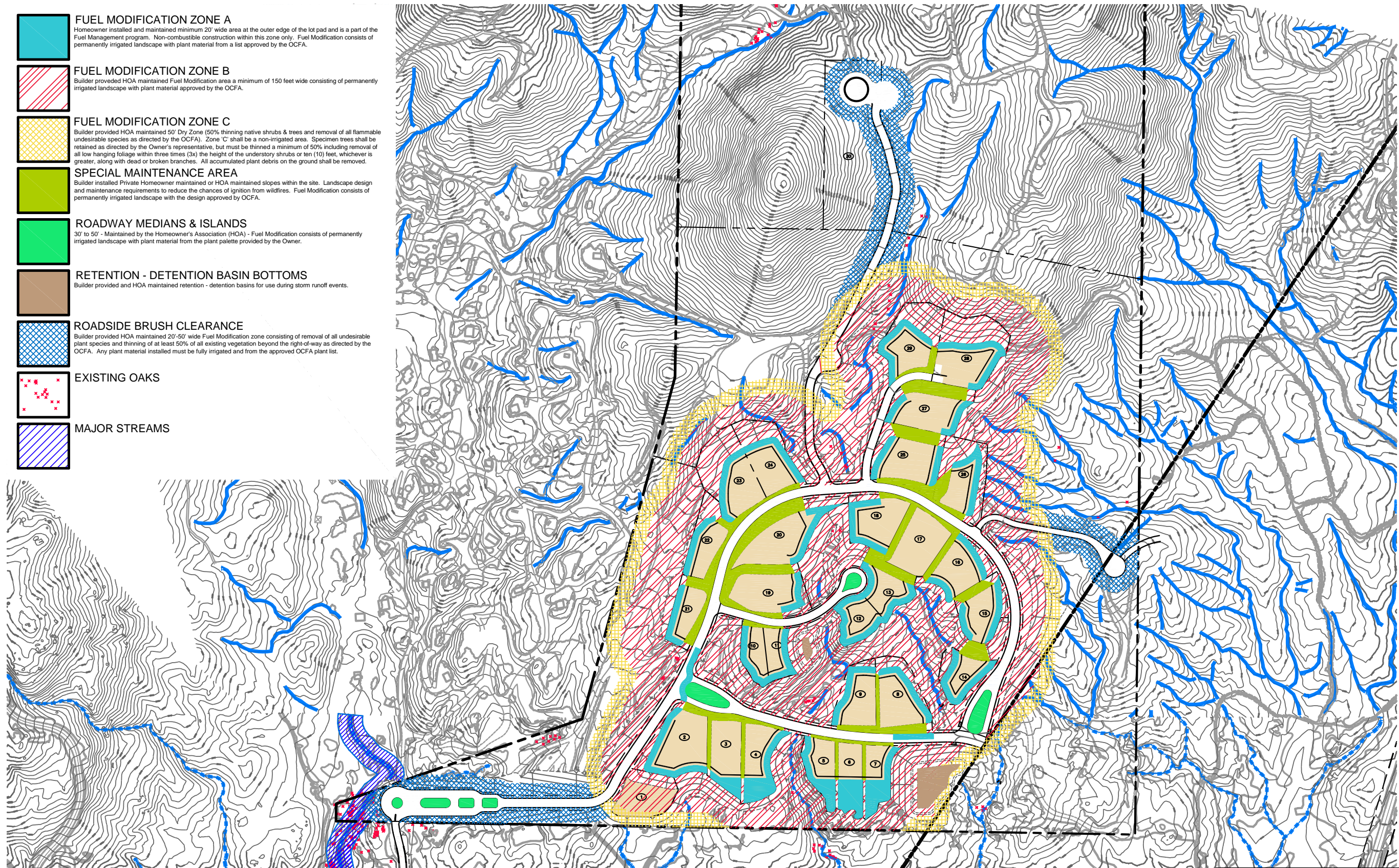
- 
FUEL MODIFICATION ZONE A
 Homeowner installed and maintained minimum 20' wide area at the outer edge of the lot pad and is a part of the Fuel Management program. Non-combustible construction within this zone only. Fuel Modification consists of permanently irrigated landscape with plant material from a list approved by the OCFA.
- 
FUEL MODIFICATION ZONE B
 Builder provided HOA maintained Fuel Modification area a minimum of 150 feet wide consisting of permanently irrigated landscape with plant material approved by the OCFA.
- 
FUEL MODIFICATION ZONE C
 Builder provided HOA maintained 50' Dry Zone (50% thinning native shrubs & trees and removal of all flammable undesirable species as directed by the OCFA). Zone 'C' shall be a non-irrigated area. Specimen trees shall be retained as directed by the Owner's representative, but must be thinned a minimum of 50% including removal of all low hanging foliage within three times (3x) the height of the understory shrubs or ten (10) feet, whichever is greater, along with dead or broken branches. All accumulated plant debris on the ground shall be removed.
- 
SPECIAL MAINTENANCE AREA
 Builder installed Private Homeowner maintained or HOA maintained slopes within the site. Landscape design and maintenance requirements to reduce the chances of ignition from wildfires. Fuel Modification consists of permanently irrigated landscape with the design approved by OCFA.
- 
ROADWAY MEDIANS & ISLANDS
 30' to 50' - Maintained by the Homeowner's Association (HOA) - Fuel Modification consists of permanently irrigated landscape with plant material from the plant palette provided by the Owner.
- 
RETENTION - DETENTION BASIN BOTTOMS
 Builder provided and HOA maintained retention - detention basins for use during storm runoff events.
- 
ROADSIDE BRUSH CLEARANCE
 Builder provided HOA maintained 20'-50' wide Fuel Modification zone consisting of removal of all undesirable plant species and thinning of at least 50% of all existing vegetation beyond the right-of-way as directed by the OCFA. Any plant material installed must be fully irrigated and from the approved OCFA plant list.
- 
EXISTING OAKS
- 
MAJOR STREAMS

**CONSTRAINTS MAP - PHASE 1
EXHIBIT 6**



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

-  **FUEL MODIFICATION ZONE A**
Homeowner installed and maintained minimum 20' wide area at the outer edge of the lot pad and is a part of the Fuel Management program. Non-combustible construction within this zone only. Fuel Modification consists of permanently irrigated landscape with plant material from a list approved by the OCFA.
-  **FUEL MODIFICATION ZONE B**
Builder provided HOA maintained Fuel Modification area a minimum of 150 feet wide consisting of permanently irrigated landscape with plant material approved by the OCFA.
-  **FUEL MODIFICATION ZONE C**
Builder provided HOA maintained 50' Dry Zone (50% thinning native shrubs & trees and removal of all flammable undesirable species as directed by the OCFA). Zone 'C' shall be a non-irrigated area. Specimen trees shall be retained as directed by the Owner's representative, but must be thinned a minimum of 50% including removal of all low hanging foliage within three times (3x) the height of the understory shrubs or ten (10) feet, whichever is greater, along with dead or broken branches. All accumulated plant debris on the ground shall be removed.
-  **SPECIAL MAINTENANCE AREA**
Builder installed Private Homeowner maintained or HOA maintained slopes within the site. Landscape design and maintenance requirements to reduce the chances of ignition from wildfires. Fuel Modification consists of permanently irrigated landscape with the design approved by OCFA.
-  **ROADWAY MEDIANS & ISLANDS**
30' to 50' - Maintained by the Homeowner's Association (HOA) - Fuel Modification consists of permanently irrigated landscape with plant material from the plant palette provided by the Owner.
-  **RETENTION - DETENTION BASIN BOTTOMS**
Builder provided and HOA maintained retention - detention basins for use during storm runoff events.
-  **ROADSIDE BRUSH CLEARANCE**
Builder provided HOA maintained 20'-50' wide Fuel Modification zone consisting of removal of all undesirable plant species and thinning of at least 50% of all existing vegetation beyond the right-of-way as directed by the OCFA. Any plant material installed must be fully irrigated and from the approved OCFA plant list.
-  **EXISTING OAKS**
-  **MAJOR STREAMS**



**CONSTRAINTS MAP - PHASE 2
EXHIBIT 7**



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

reduction in the number of residential units that would be developed within this Area Plan would reduce the overall effects on environmental resources from development and operation of the project.

In addition, this Area Plan clusters the residential lots in groups, leaving large open space areas that allow the natural vegetation and terrain to remain, jurisdictional waters to be avoided, and a large portion of the onsite trees to be untouched. This Area Plan has been designed to also allow for the natural ebb and flow of wildlife onto, through and out of the project site, and to create a balance between the natural and developed portions of the Area Plan project site.

3.0 Land Use Plan

The land use plan for the Preserve at San Juan is to create a residential community within an open space setting that has been designed to emphasize its compatibility with the natural environment. The residential community would include a total of 72 single-family residential units that would have an average lot size of approximately 23,832 square feet and would be developed in two phases, on two non-contiguous parcels.

As shown in **Table 2**, Phase 1 (south parcel) would develop 43 single-family residences, streets, landscaping, fuel modification, and vineyards on approximately 108.6 acres or 27.9 percent of the 389.6-acre Phase 1 (south parcel). Phase 2 (north parcel) would develop 29 single-family residences on approximately 60.9 acres or 31.3 percent of the 194.5-acre Phase 2 (north parcel) area.

Table 2 - Area Plan Site Development Summary	
Phase 1	
Phase 1 - Developed Area for 43 Lots (includes: building pads, streets, slopes, utilities, fuel modification and vineyards)	108.6 Acres
Phase 1 - Undisturbed Area	281.0 Acres
Phase 1 - Total Area	389.6 Acres
Phase 1 - Percent Undisturbed	72.1%
Phase 1 - Percent Developed	27.8%
Phase 2	
Phase 2 - Developed Area for 29 Lots (includes: building pads, streets, slopes, utilities, fuel modification and vineyards)	60.9 Acres
Phase 2 - Undisturbed Area	133.6 Acres
Phase 2 - Total Area	194.5 Acres
Phase 2 - Percent Undisturbed	68.7%
Phase 2 - Percent Developed	31.3%

The total Area Plan project site (both Phases 1 and 2) includes 584.1 acres, and implementation of this Area Plan would provide improvements on 169.5 of those acres. The remaining 414.6 acres (71 percent of the Area Plan project site) would remain undeveloped open space. This would consist of 281 acres in Phase 1 (72.1 percent of Phase 1) and 133.6 acres in Phase 2 (68.7 percent of Phase 2). **(See Exhibit 8, Site Map)**

The residential sites in both phases have been clustered in areas where the existing topography is suitable for development and that limited grading would be required. The grading plan provides for soils to balance on-site, such that no import or export of soil would be required for construction of the proposed project. Phase 1 (south parcel) would require 313,800 cubic yards of cut and fill and Phase 2 (north parcel) would require 221,700 cubic yards of cut and fill. Total excavation over both phases is estimated at 535,500 cubic yards, with 10,000 cubic yards to be excavated on a maximum day **(See Exhibit 9, Mass Grading Plan)**.

Landscaped entries, vineyards, and fuel modification areas would be used to provide vegetative natural buffers and unifying design elements for the Preserve at San Juan. The overall development plan for the Preserve at San Juan is shown in Exhibit 8, Site Map.

All areas that would be disturbed by development, including the vineyards, landscaping, and fuel modification zones, are considered developed lands. Undisturbed areas are those that would remain untouched by implementation of this Area Plan. The areas of disturbance are shown in **Exhibit 10, Areas of Disturbance Plan**.

As noted in Table 2 and described in Section 6.6, the project site includes three fuel modification zones. Each zone is designed specifically to help suppress a fire in different ways. Detailed information on the fire protection plan is provided in Section 6, Landscape Elements and Fuel Modification Plan.

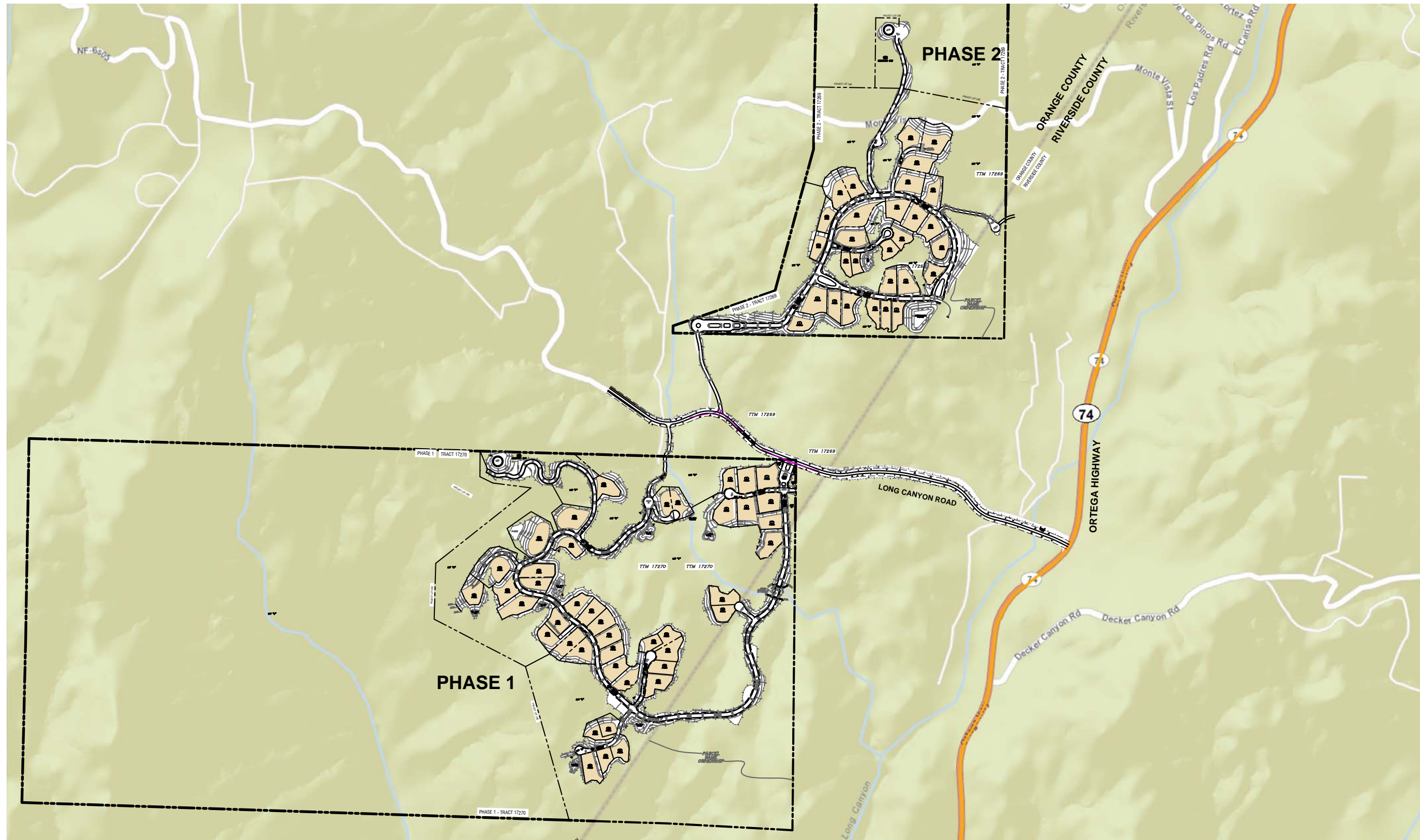
Development within the Area Plan project site would be consistent with the proposed “Rural Residential” (1A) General Plan Land Use designation and proposed Agricultural Residential” (AR) zoning regulations. All related County of Orange Zoning Code sections would be adhered to for development of the Area Plan project site.

4.0 Infrastructure and Utilities

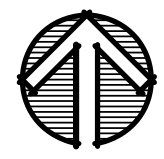
Development of the Preserve at San Juan includes construction of new internal roadways, water mains, onsite wastewater systems, and hydromodification facilities. Public services and utilities would be provided to the project by existing agencies as described in this section.

4.1 Circulation

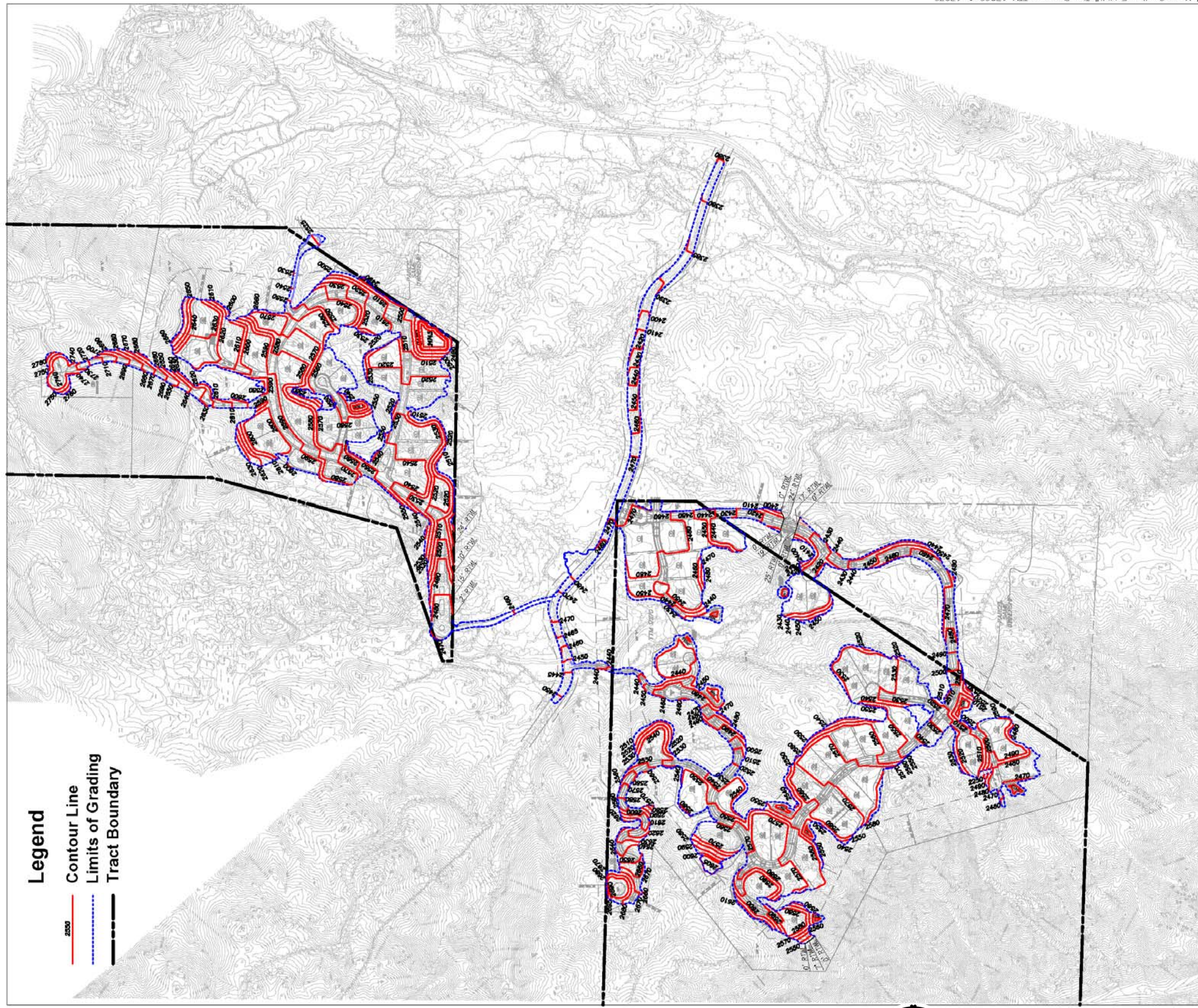
The circulation plan for the Preserve at San Juan provides safe and adequate access while protecting the rural character of the area. Onsite circulation would be provided by private streets with a rural design, that includes: rolled curbs and no sidewalks, with cul-de-sacs and landscaped planter islands; and would meet all applicable Orange County roadway design standards. **See Exhibit 11 – Circulation Plan.**



SITE MAP
EXHIBIT 8



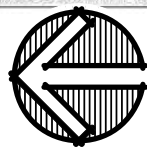
THE PRESERVE
ORANGE COUNTY, CALIFORNIA



- Legend**
- 2000 — Contour Line
 - Limits of Grading
 - Tract Boundary



**MASS GRADING PLAN
EXHIBIT 9**



Source: Hunsaker

THE PRESERVE
ORANGE COUNTY, CALIFORNIA

**Mass Grading Exhibit
The Preserve (VTTM 17269 and VTTM 17270)**

PLOTTED BY: Rose Smiljicich DATE: Jul. 13, 2014 01:58:11 PM FILE: F:\0188\Planning\0A_Project\EXH_General\EIR_Exhibits\Mass_Grading_Exhibit.dwg

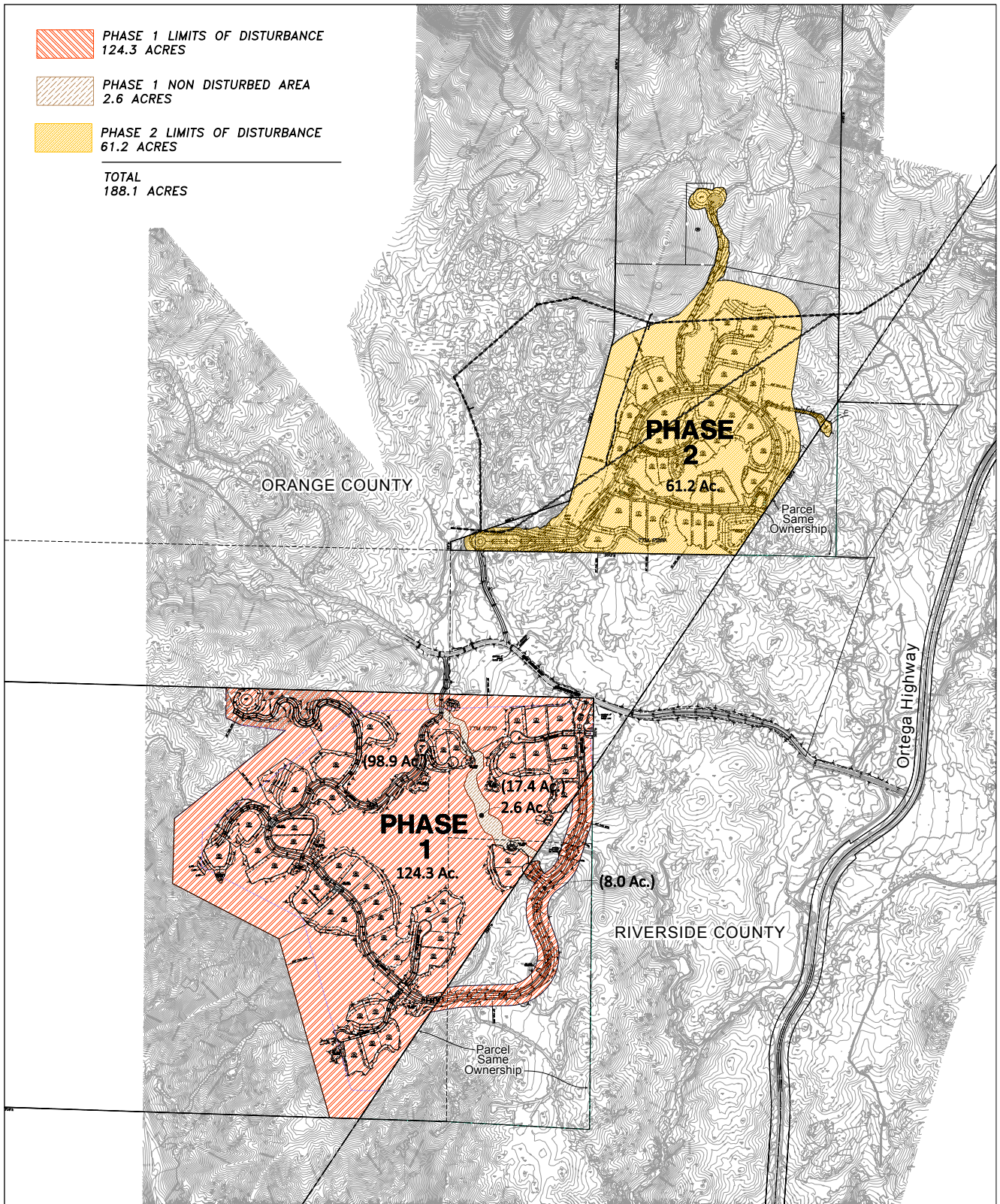
W:\0188-1 EIR Exhibit\Mass Grading Exhibit\The Preserve TTM 17269 & 17270

PHASE 1 LIMITS OF DISTURBANCE
124.3 ACRES

PHASE 1 NON DISTURBED AREA
2.6 ACRES

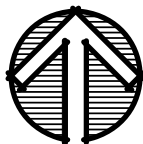
PHASE 2 LIMITS OF DISTURBANCE
61.2 ACRES

TOTAL
188.1 ACRES



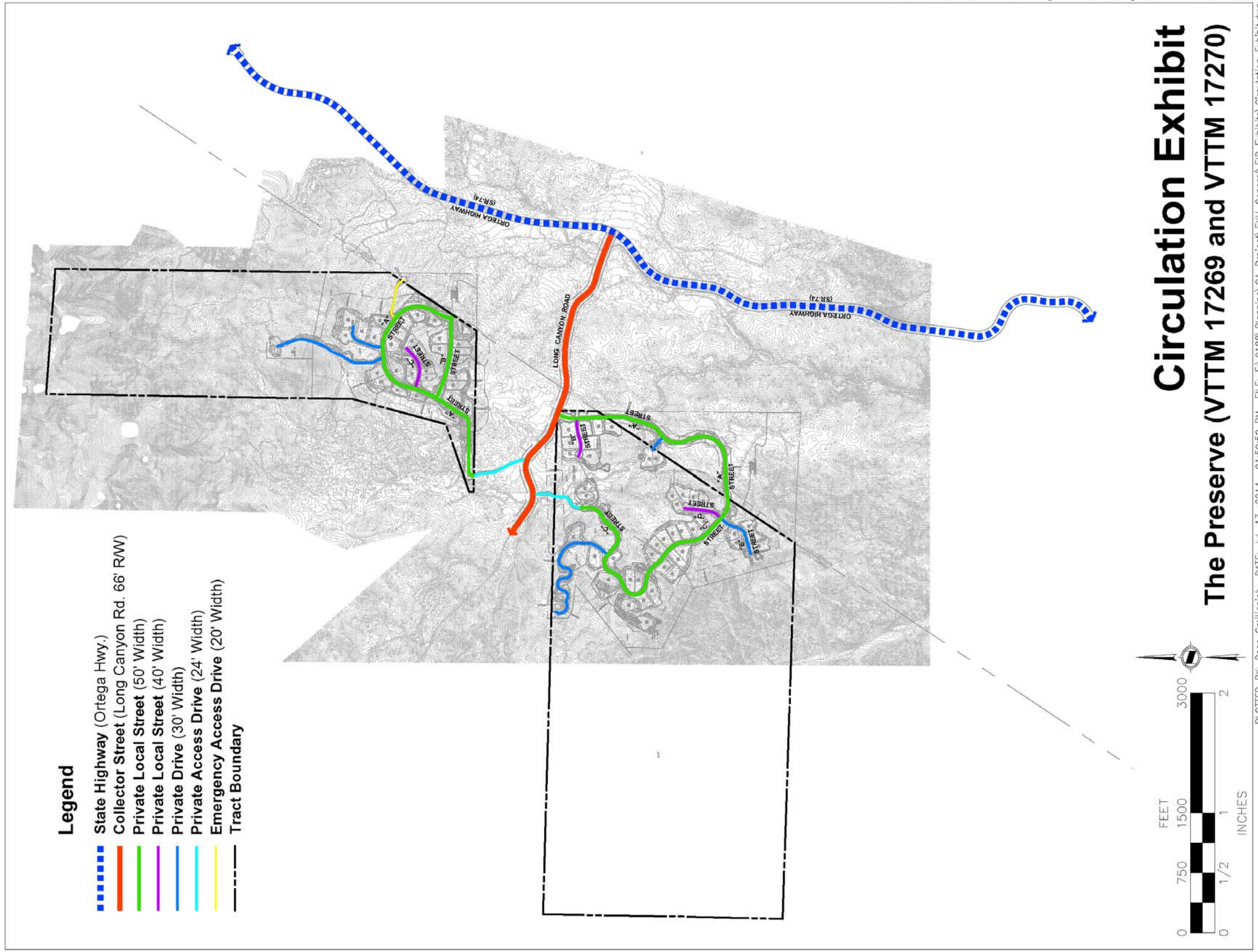
0 800
Feet

AREAS OF DISTURBANCE
EXHIBIT 10











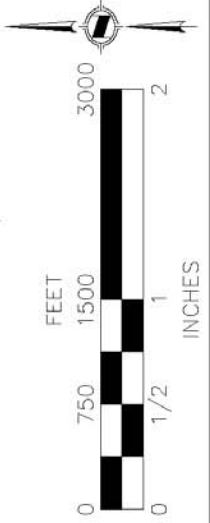
THE PRESERVE

ORANGE COUNTY, CALIFORNIA



Legend

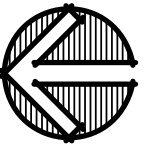
-  State Highway (Ortega Hwy.)
-  Collector Street (Long Canyon Rd. 66' RW)
-  Private Local Street (50' Width)
-  Private Local Street (40' Width)
-  Private Drive (30' Width)
-  Private Access Drive (24' Width)
-  Emergency Access Drive (20' Width)
-  Tract Boundary



**Circulation Exhibit
The Preserve (VTTM 17269 and VTTM 17270)**

**CIRCULATION PLAN
EXHIBIT 11**

Source: Hunsaker



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

Access to the project site is provided by Long Canyon Road via Ortega Highway. Long Canyon Road is a public road with a 66-foot-wide right-of-way. Long Canyon Road was improved in 2016 and currently provides a paved width of 24-feet with a curb and gutter. The Phase 1 (south parcel) would be accessed directly from Long Canyon Road via gated entries that would be setback from Long Canyon Road at a minimum of 100 feet from the curb line of Long Canyon Road, to provide adequate vehicle stacking space (per Orange County Standard Plan No. 1107). Stop signs, stop bars, and stop legends would be installed at the intersection of Long Canyon Road for vehicles exiting the site.

Phase 2 (north parcel) would be accessed from Long Canyon Road via an existing 0.73-acre off-site roadway that is usable per an existing U.S. Forest Service road use permit that was issued in April 1997. The existing road use authorization is being altered (U.S. Forest Service approval is anticipated in the fall of 2017), to allow the existing dirt road to be paved to a 24-foot width, as part of the proposed project. Improvements would include pavement and installation of stop signs, stop bars, and stop legends at the intersection of Long Canyon Road for exiting vehicles. Gated entries would be installed at the entrance to the Phase 2 (north parcel) that would be designed in accordance with Orange County Standard Plan No. 1107.

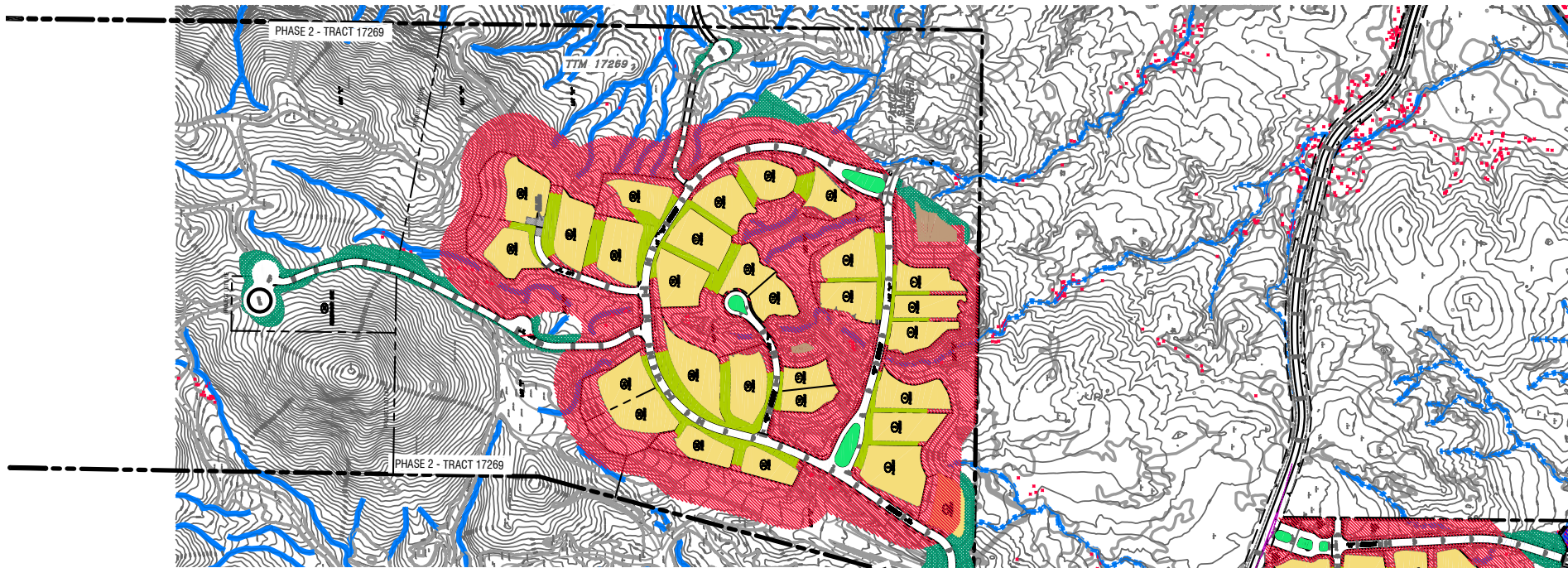
The secondary access for Phase 2 (north parcel) would connect to an existing roadway in Riverside County the connection to the existing roadway would be improved to Riverside County's required roadways standards. The secondary access would also be restricted to residents leaving the site, and for emergency access.

Any additional improvements required for the project access, will be conditioned by Orange County Fire Authority, The County of Orange and the County of Riverside.

Offsite Roadway Improvements: As described above, in Phase 1 (south parcel) off-site roadway improvements would occur to an approximately 0.5-acre roadway area to provide secondary access; and off-site roadway improvements for Phase 2 (north parcel) would occur on a 0.73-acre off-site roadway that connects to Long Canyon Road. In addition, off-site improvements to Ortega Highway at the Long Canyon Road intersection would occur as part of the Area Plan project. These improvements consist of installing a northbound 12-footwide acceleration on Ortega Highway at Long Canyon Road, installing a northbound 12-foot wide left turn lane on Ortega Highway at Long Canyon Road, and installation of a minimum 22-foot wide southbound deceleration lane on Ortega Highway from Long Canyon Road to 160 feet to the north. These improvements would all occur within the existing paved Ortega Highway right-of-way.

4.2 Water Services

Water service to the new residences would be supplied by the Elsinore Valley Municipal Water District (EVMWD). EVMWD has provided 'Will-Serve' letters stating that capacity exists to serve the proposed project, in addition to existing service demands. However, approximately 133.4 acres of the Area Plan project site, shown on **Exhibit 12, Water Service Annexation Areas**, is not within district's service boundaries and would require annexation into EVMWD. EVMWD is a sub-agency of Western Municipal Water District (Western) who is a member agency of Metropolitan Water District (MWD) of Southern California. EVMWD receives imported water from MWD through Western; and EVMWD is wholly within the boundaries of Western, which is wholly within the boundaries of MWD. Because of this boundary and water



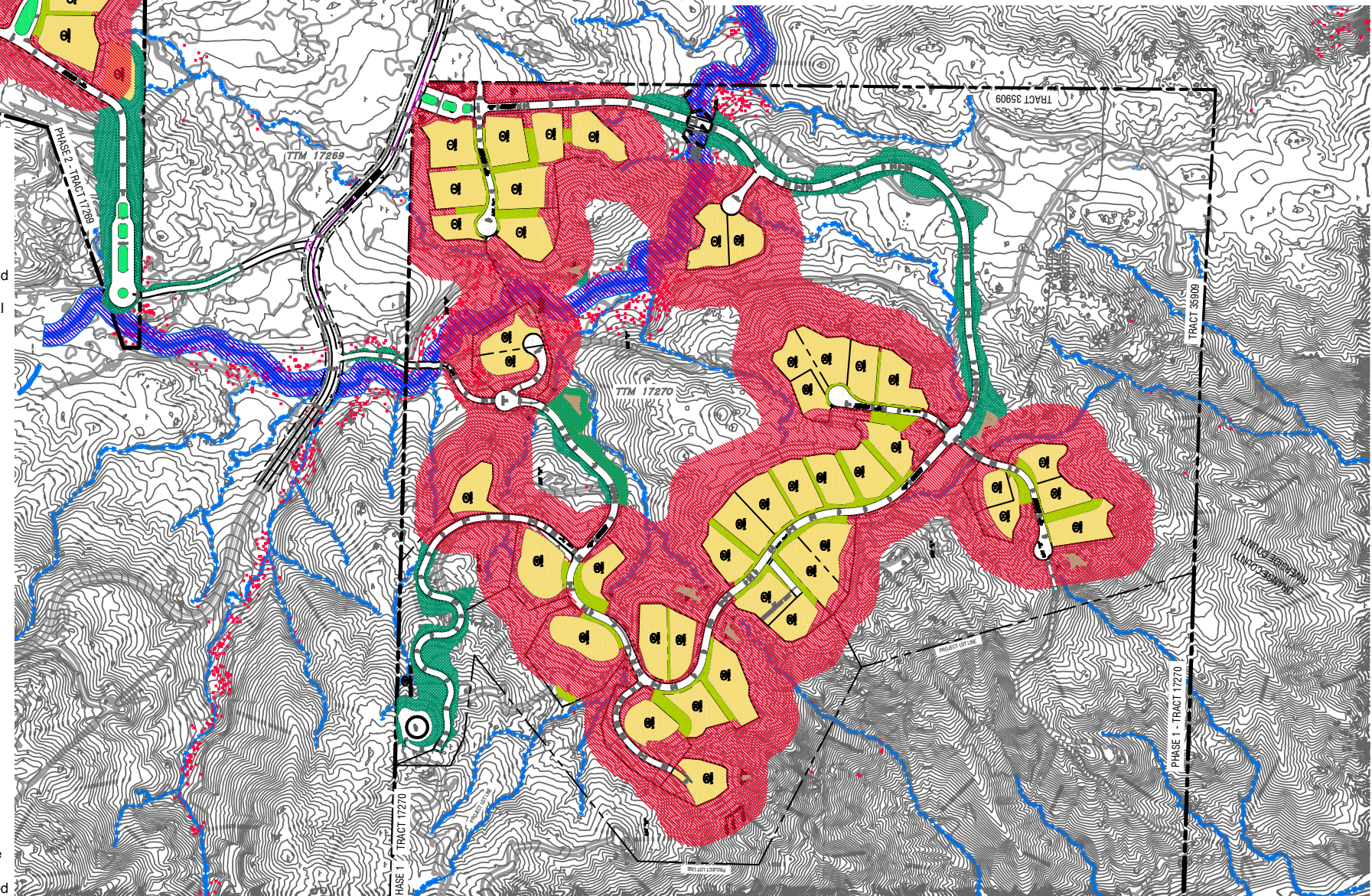
TRACT 17269 ANNEXATION AREA TABLE

LOT PAD AREA	FUEL MOD ZONE 'B'	HO MAINT. SLOPES	HOA MAINT. SLOPES	ISLANDS & MEDIANS	TOTAL SQ. FT. OF AREA	TOTAL ACRES
696,581	1,065,730	131,125	164,627	21,821	2,079,884	47.75

TRACT 17270 ANNEXATION AREA TABLE

LOT PAD AREA	FUEL MOD ZONE 'B'	HO MAINT. SLOPES	HOA MAINT. SLOPES	ISLANDS & MEDIANS	TOTAL SQ. FT. OF AREA	TOTAL ACRES
1,029,065	2,338,368	124,076	236,581	3,526	3,731,616	85.67

GRAND TOTAL	5,811,500	133.41
--------------------	------------------	---------------



ANNEXATION AREA LEGEND

- 
RESIDENTIAL LOT PAD
 Homeowner installed and maintained minimum 20' wide area at the outer edge of the lot pad and is a part of the Fuel Management program. Non-combustible construction within this zone only. Fuel Modification consists of permanently irrigated landscape with plant material from a list approved by the OCFA.
- 
FUEL MODIFICATION ZONE B
 Builder provided HOA maintained Fuel Modification area a minimum of 150 feet wide consisting of permanently irrigated landscape with plant material approved by the OCFA.
- 
SPECIAL MAINTENANCE AREA
 Builder installed Private Homeowner maintained or HOA maintained slopes within the site. Landscape design and maintenance requirements to reduce the chances of ignition from wildfires. Fuel Modification consists of permanently irrigated landscape with the design approved by OCFA.
- 
ROADWAY MEDIANS & ISLANDS
 Builder provided HOA maintained entry area with sodded fescue grass and/or container shrubs and ground covers and permanent irrigation.
- 
RETENTION / DETENTION BASIN BOTTOMS
 Builder provided retention / detention basins the bottom of which will not be planted or irrigated to facilitate removal of any silt or debris on a regular basis as a part of required maintenance.
- 
ASSOCIATION MAINTAINED SLOPE PLANTING
 Builder provided HOA maintained slope planting which meets the Fuel Modification 'B' zone requirements for choice, density and spacing of plant material with permanent irrigation. Slope areas are required to be planted and irrigated as a part of improvements to manufactured slopes for erosion control.

WATER SERVICE ANNEXATION AREAS EXHIBIT 12



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

supply service arrangement, the project area would also need to be annexed into Western and MWD. Areas of the project site that would remain in natural open space would not be annexed into the water service area. These service area boundary changes are included in this Area Plan and require approval by the Riverside County Local Agency Formation Commission (Riverside LAFCO).

4.3 Water Infrastructure

Water supply for potable use, irrigation and fire flow would be provided by an existing 6-inch water transmission main that runs from the Tomlin No.1 Booster Station and travels southwest to provide potable water to upgradient communities along Ortega Highway, including El Cariso Village. The transmission main runs adjacent to the northern portion of the Area Plan project site along Ortega Highway and along Long Canyon Road to its terminus at the Los Pinos No. 2 Reservoir, which is west of the project site and at an elevation of approximately 3500 ft.

The proposed project includes both on-site and off-site improvements to the existing water system. The off-site water improvements would extend the distribution of water supplies from the existing six-inch main to both Phase 1 and Phase 2 development areas by installation of 12-inch water mains that would be located within the existing EVMWD right-of-way as shown on **Exhibit 13, Water Distribution System Plan**.

The new on-site water distribution facilities would include a 12-inch distribution line that would be constructed throughout the developed portions of the Area Plan project site during each construction phase. In addition, the existing six-inch main would provide water supplies to two new water storage reservoirs, one within each phase. The reservoir site on the Phase 1 (south parcel) would be 615,000 gallons and would be located in the northwestern-most portion of the Phase 1 (south parcel) development area. The reservoir in the Phase 2 (north parcel) would be 525,000 gallons and would be located at the far northern end of the Phase 2 (north parcel).

Both reservoirs are planned at elevations to utilize gravity flow to convey water to the development areas, which would minimize the use of booster stations. The proposed 12-inch water mains have been sized based on EVMWD's standards for service provision and fire flow

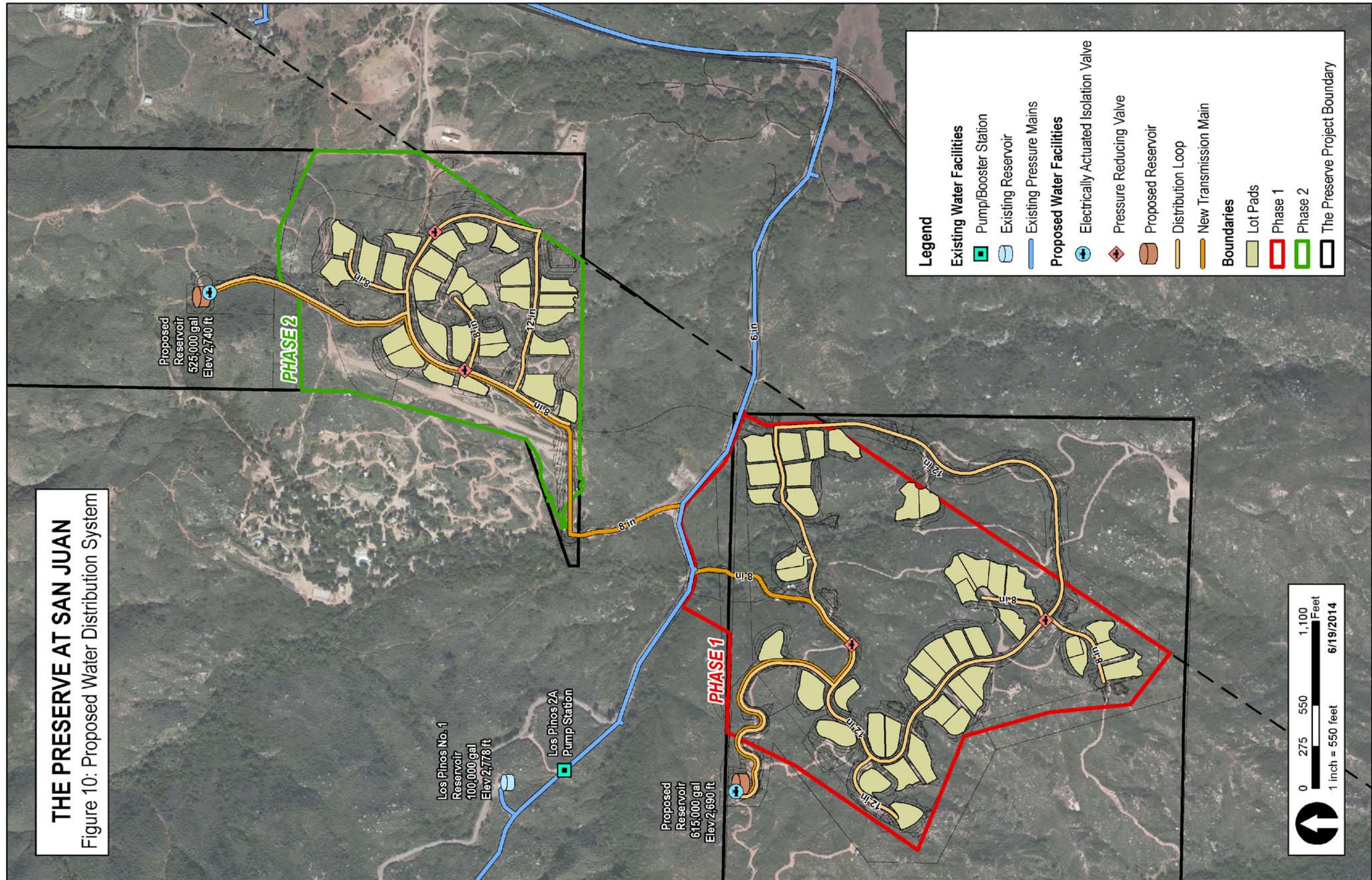
4.4 Wastewater Infrastructure

Wastewater generated from each residential unit be treated using On-site Wastewater Treatment Systems (OWTS) that would be located on both individual residential lots and lettered HOA maintained slope areas. The OWTS would be designed according to Tier 2 (secondary treatment) waste discharge standards and would consist of (1) a 1,500-gallon septic tank; (2) three modular peat fiber biofilters; and (3) a 300-gallon water reuse pump station on each residential lot. The septic tank provides primary treatment through biological anaerobic treatment of the wastewater and to settle out the solids. The peat filtration system provides secondary treatment through aerobic attached growth, and the pump station provides discharge of the treated wastewater to be used for irrigation of the fuel modification areas. Soil percolation tests have been completed to ensure that the local soil conditions will support the proposed development.

The OWTS facilities would be designed and installed pursuant to the Orange County On-site Sewage Absorption System Guidelines, the Regional Water Quality Control Board requirements, the State Water Resources Control Board, and the California Plumbing Code for

THE PRESERVE AT SAN JUAN

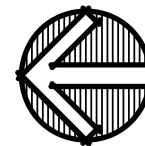
Figure 10: Proposed Water Distribution System



PROPOSED WATER DISTRIBUTION SYSTEM

EXHIBIT 13

Source: Pace



THE PRESERVE

ORANGE COUNTY, CALIFORNIA

Gray Water Reuse, which requires that all irrigation fields maintain at least a 100-foot distance from stream channels. This would ensure that the facilities function correctly and that wastewater would be disposed of appropriately in accordance with state and local regulatory requirements (See **Exhibit 14, Residential Onsite Wastewater Treatment System**). Homeowners would be responsible for maintenance and appropriate operation of all improvements found within the private residential lots, including the OWTS. The HOA would be responsible for maintenance of all greywater irrigation areas and the associated infrastructure that would be located on land maintained and managed by the HOA.

4.5 Drainage and Water Quality

The Preserve at San Juan Area Plan was designed to maintain existing natural drainage patterns to the extent feasible, and that downstream flows would remain as close as possible to conditions that exist prior to implementation of the Area Plan.

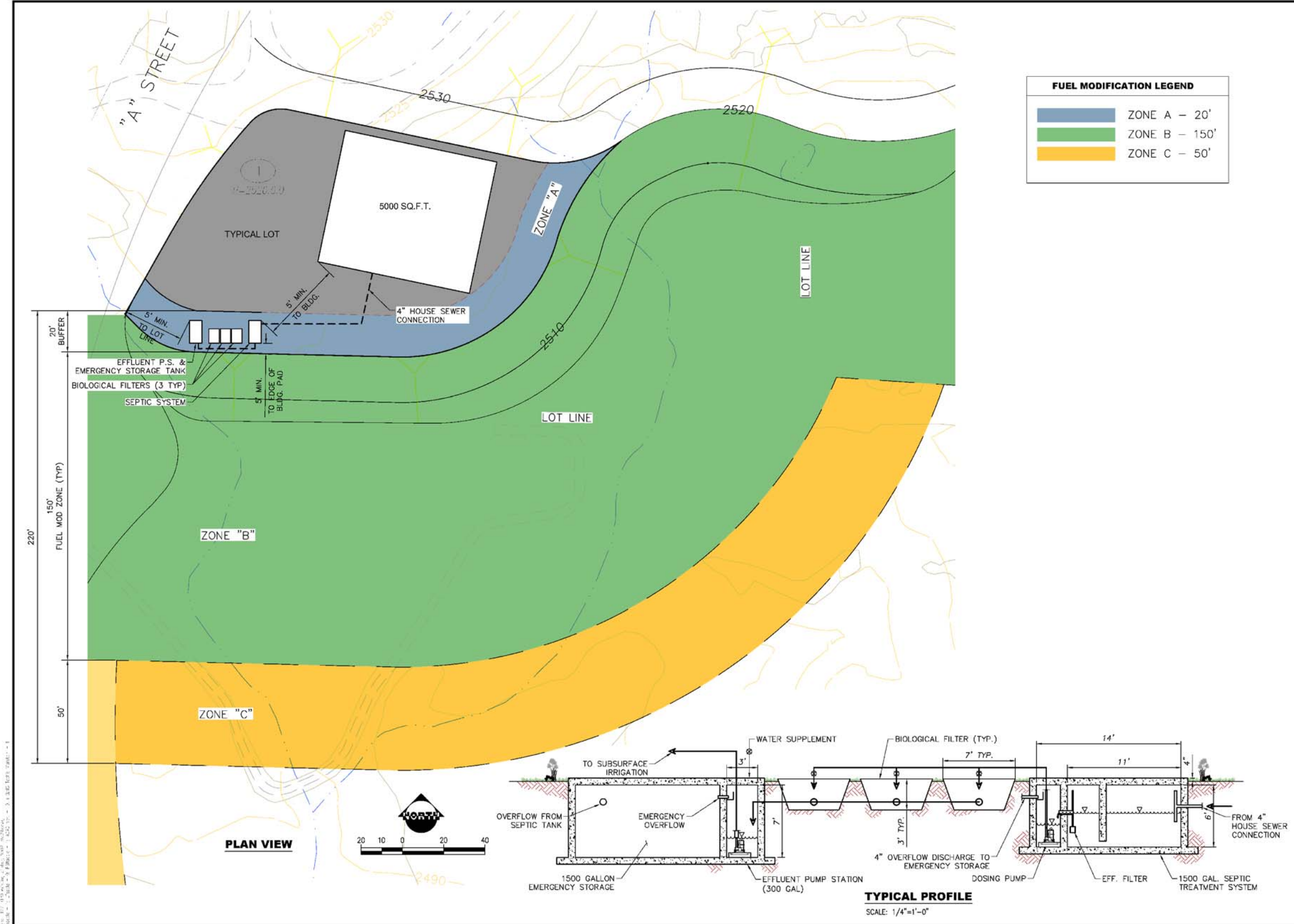
The project site is generally in a natural condition that consists of steep, hillside terrain that slopes to the southeast and has almost entirely vegetation cover. In addition, Long Canyon Creek flows through the southwest corner of Phase 2 (north parcel) and through the northeast corner of Phase 1 (south parcel), eventually joining with the southwest-flowing San Juan Creek a mile downstream of the Phase 1 (south parcel) southern boundary.

Runoff from the western portion of the Phase 1 (south parcel) drains to the south via un-named tributary to San Juan Creek. Runoff from the eastern portion of the Phase 1 (south parcel) drains to the southeast to Long Canyon Creek. Phase 2 (north parcel) drains generally to the southeast, mostly discharging at several points to the south and east into Long Canyon Creek. All flows from the project area eventually drain to San Juan Creek located downstream and off-site.

Based on the information provided in the South Orange County Hydromodification Management Plan (HMP), implementation of this Area Plan has the potential to result in Hydrologic Conditions of Concern (HCOC), as development within the area could increase runoff (volume and flow) from the developed areas that may result in erosion impacts to natural drainages downstream.

To avoid HCOC this Area Plan has been designed pursuant to the County of Orange requirements for Priority Development Area Plan Sites (PDP's). Runoff from the developed portions of Phases 1 and Phase 2 would be conveyed via vegetated swales and vegetated culverts or gutter flow to infiltration basins, catch basins, or detention/drywell systems. The vegetated swales would provide storm water treatment and conveyance to infiltration basins, which would also retain, and filter runoff (See **Exhibit 15, Drainage**).

The drainage facilities have been designed to capture the difference in runoff flow rates (and volume) between the Area Plan project site's natural and proposed conditions. Any volume in excess of infiltration basin capacity would be directed into a spillway for discharge off-site. The spillway would prevent sediment-laden water from discharging off-site by allowing the sediment to settle out, either in the vegetated swales or infiltration basins. Additionally, rip rap splash pads would be provided as an energy dissipater for the vegetated culverts to prevent erosion of the culvert slopes. These design measures would control the flow of runoff and



FUEL MODIFICATION LEGEND

	ZONE A - 20'
	ZONE B - 150'
	ZONE C - 50'

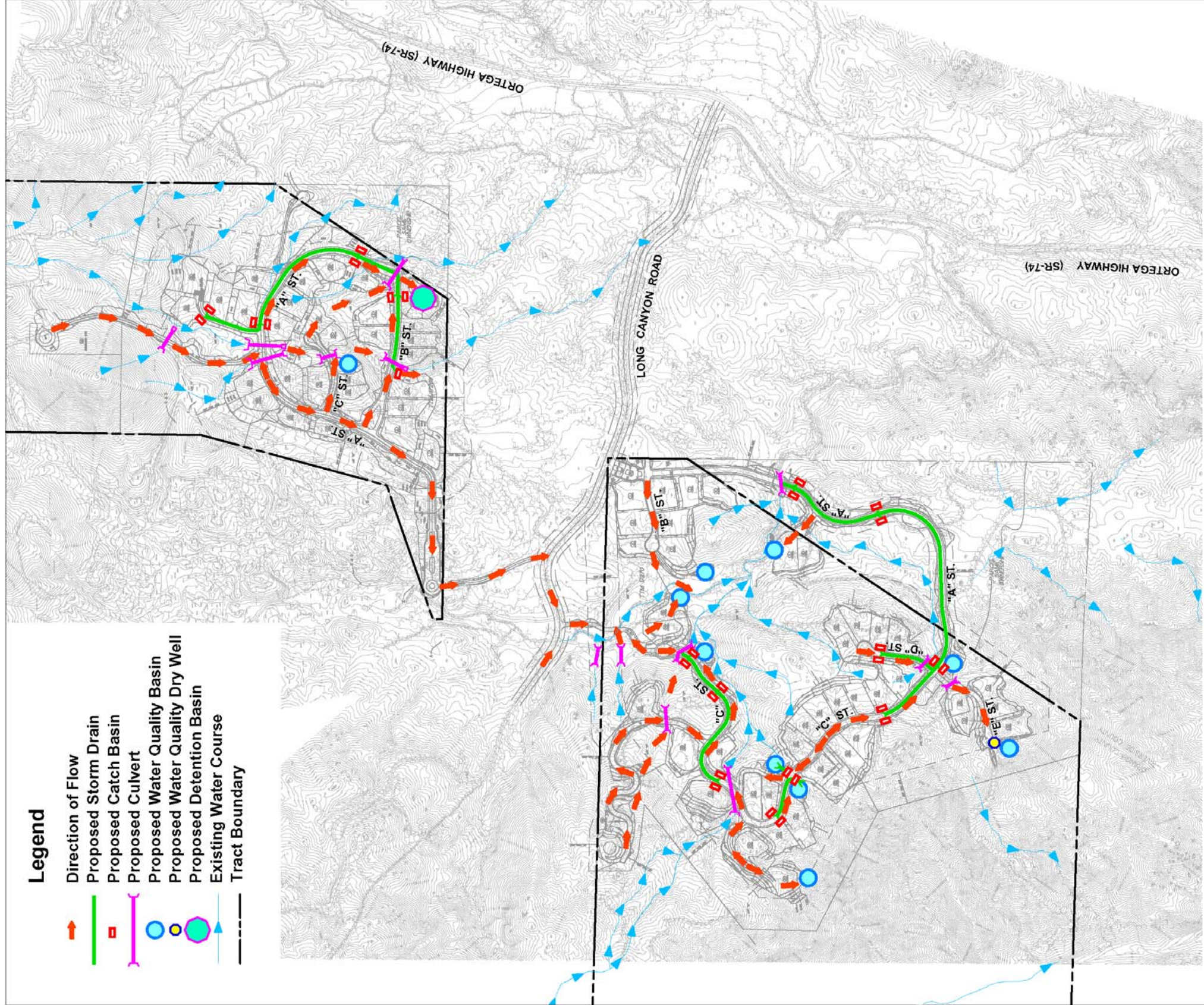
	NOT FOR CONSTRUCTION UNLESS SPECIFICALLY NOTED OTHERWISE	PREPARED BY DUONG T. DO PROJECT ENGINEER EXP. 06/27/16	DRAWN BY D. DO CHECKED BY DATE	NO. BY DATE REVISIONS DATE APP.
ON-SITE WASTEWATER TREATMENT SYSTEM TYPICAL LAYOUT		THE PRESERVE AT SAN JUAN ORANGE COUNTY, CALIFORNIA		FIGURE 1 OF XX SHEETS JOB NO. 9302-E

RESIDENTIAL ON-SITE WASTEWATER TREATMENT SYSTEM - TYPICAL LAYOUT

EXHIBIT 14

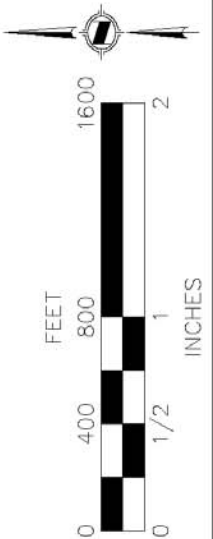
Source: Pace

THE PRESERVE
ORANGE COUNTY, CALIFORNIA



Legend

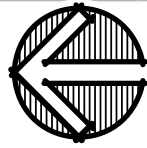
-  Direction of Flow
-  Proposed Storm Drain
-  Proposed Catch Basin
-  Proposed Culvert
-  Proposed Water Quality Basin
-  Proposed Water Quality Dry Well
-  Proposed Detention Basin
-  Existing Water Course
-  Tract Boundary



Drainage Exhibit
The Preserve (VTTM 17269 and VTTM 17270)

PLOTTED BY: Rose Smiljanich DATE: Jul. 13, 2014 02:01:47 PM FILE: F:\0188\Planning\OA_Project\EXH_General\EIR_Exhibits\Drainage Exhibit.dwg W.O.: 3852-1 EIR Exhibit "Drainage Exhibit" The Preserve TML 17269 & 17270

DRAINAGE
EXHIBIT 15



Source: Hunsaker

THE PRESERVE
ORANGE COUNTY, CALIFORNIA

reduce the potential for erosion. In addition, the project would utilize high efficiency/low precipitation irrigation fixtures and “drip” irrigation systems to minimize the potential for irrigation runoff. The proposed project would also use “smart controllers,” including rain shutoff devices, moisture sensors, and downloading of evapotranspiration rates to irrigation system programming for on-going efficiency of water conservation and reduced runoff.

The HMP criteria states that all PDP’s must ensure that post-Area Plan project site runoff flow rates and durations shall not exceed pre-development, naturally occurring runoff flow rates and durations by more than 10 percent of the time, from 10 percent of the 2-year runoff event up to the 10-year runoff event. With implementation of the project’s design features, post-development runoff flow rates and durations would not exceed these requirements.

Additionally, a Conceptual Water Quality Management Plan (WQMP) was prepared as part of the Area Plan design process and includes provisions for implementation and guidelines for long-term maintenance of the drainage and water quality facilities described above. Those would be the responsibility of the HOA for the Preserve at San Juan.

5.0 Area Plan Design Guidelines

The following Area Plan Design Guidelines, which include Project Design Features, site development standards, landscape guidelines, and fuel modification standards, are provided to ensure implementation of the intended character of the Preserve at San Juan residential community, while preserving large areas of natural open space, and avoiding or reducing potential effects to environmental resources.

5.1 Project Design Features

The Preserve at San Juan Area Plan has been designed to incorporate a number of project design features in order to prevent or lessen environmental impacts associated with the proposed project, which are listed below in **Table 3**.

Table 3 - Project Design Features

No.	Design Feature
PDF-1	Open space within the Preserve accounts for 414.6 acres or approximately 71 percent of the project site, which will be offered for dedication to the U.S. Forest Service.
PDF-2	Open space would be concentrated in the western and northern portions of the project site and the single-family residences would be clustered toward Long Canyon Road to create a buffer between the residential uses and the Cleveland National Forest lands to avoid or minimize potential environmental impacts.
PDF-3	The project has been designed to develop the flatter portions of the project site. However, some hills will be lowered and some valleys raised to create level building pads. This design will maintain similar topographic characteristics as the existing condition.
PDF-4	A conceptual landscape plan for the project has been prepared by a licensed landscape architect pursuant to the County's Standard Plans for landscape areas, adopted plant palette guides, OCFA requirements, and water conservation measures. The conceptual landscape plan has been designed to preserve open space areas and provide landscaping that would assist in carbon intake and minimize surface water runoff, incorporate the use of native/drought tolerant plant materials, avoid the use of invasive plants, and utilize only a small percentage of turf in the common landscape areas.
PDF-5	In accordance with the Tree Management Preservation Plan that was prepared by certified arborists, oak tree relocations will be within the project site, and monitoring will be performed following all tree plantings and relocations for a period of seven years. Oak trees will be maintained by the Homeowners Association as part of the project's covenants, conditions and restrictions.
PDF-6	Interior private streets have been designed to rural street standards, with no sidewalks and rolled curbs (except at the main entry where standard curbs will be used to control drainage). The paved widths of interior streets have been designed to have a minimum paved width of 28 feet to 32 feet.
PDF-7	The project has been designed to include an eastbound left-turn lane (300-foot storage length), a westbound right-turn lane (320-foot storage length), and a westbound acceleration on Ortega Highway at the intersection of Long Canyon Road.
PDF-8	Roads within the project site will be privately owned and maintained. Stop signs, stop bars, and stop legends will be provided for vehicles exiting the project phases at the intersection of Long Canyon Road. The gated entries to both Phases will be constructed and setback from Long Canyon Road at a distance that complies with the Orange County Standard Plan No. 1107, which is a minimum of 100 feet from the curb line of Long Canyon Road, to provide adequate vehicle stacking space.
PDF-9	The project circulation has been designed to be consistent with the County's design components of the General Plan-adopted Viewscape Typical Section including: an enlarged parkway, a hiking trail, and a lack of curbs.

Table 3 - Project Design Features

No.	Design Feature
PDF-10	The project includes a Fuel Modification Plan that is required to provide a landscape transition area along the interface between residential development and adjacent onsite open space areas to provide wildfire protection. Plant species for landscaping will be in accordance with the Orange County Fire Authority plant palettes and use predominantly native species.
PDF-11	The project includes a Fire Master Plan that was reviewed and approved by the Orange County Fire Authority. The Fire Master Plan provides enhanced construction features, requirements for fuel modification zones, and requirements for enhanced fire sprinkler systems per California Building Code Chapter 7A.
PDF-12	In order to minimize project hazards relative to vector control and public health concerns and comply with the Municipal Separate Storm Sewer System permit, the infiltration basins will be designed for a maximum 72-hour draw down period for retained runoff. The infiltration basins will employ approved vector control treatment measures as specified in the California Department of Public Health's recommendations for best management practices for mosquito control in collaboration with the Orange County Vector Control District to mitigate potential vector issues.
PDF-13	<p>The project has been designed to mimic the hydrological characteristics of the site in its natural, undeveloped state through clustering the residential sites, controlling development flows (runoff) with vegetated swales; infiltration basins; the incorporation of low impact development principles; and preserving the site's main drainage along the easterly boundary; thereby adhering to hydromodification requirements established by the current Municipal Separate Storm Sewer System Permit.</p> <ul style="list-style-type: none">• The project has been designed so that the design capture volume will be collected and infiltrated on-site. This amount will be retained and would not discharge off-site.• The design capture volume would remain within the basin; any volume in excess of infiltration basin capacity would be allowed to discharge from the basins via the spillway.• For areas where vegetated swales alone can account for the hydromodification, the downstream basins only capture and infiltrate the design capture volume.
PDF-14	<p>The project has been designed to implement the following Low Impact Development techniques:</p> <ul style="list-style-type: none">• Conservation of natural areas, including existing trees, other vegetation and soils.• Keeping streets at minimum widths and eliminating paved sidewalks in parkways.• Minimizing the impervious footprint of the project.• Minimizing disturbances to natural drainages.• Providing vegetated swales for water quality purposes.
PDF-15	<p>The project has been designed to include the following Best Management Practices to promote infiltration and slow down surface flows:</p> <ul style="list-style-type: none">• Impervious area dispersion.• Inclusion of native drought-tolerant landscaping/efficient irrigation.• Providing vegetated swales for hydromodification purposes.
PDF-16	The project includes a Hydrology Analysis that demonstrates that the proposed development would not overload existing drainage facilities downstream of the project site or exceed existing runoff velocities and peak discharge at discharge points for the 2-, 5-, 10-, 25-, and 100-year storm events.

Table 3 - Project Design Features

No.	Design Feature
PDF-17	<p>The project includes a Conceptual Water Quality Management Plan (WQMP) that has been prepared to identify preliminary best management practices (BMPs), to control pollutant runoff. The WQMP has been based on the Orange County Drainage Area Management Plan, Model WQMP, Technical Guidance Manual, and the County's WQMP template. The WQMP includes the following:</p> <ul style="list-style-type: none">• Detailed site and project description.• A description of potential stormwater pollutants.• Post-development drainage characteristics.• Low impact development BMP preliminary selection and analysis.• Preliminary structural and non-structural source control BMPs.• Preliminary site design and drainage plan.• GIS coordinates for all proposed LID and treatment control BMPs.• Preliminary Operation and Maintenance Plan that: (1) describes the long-term operation and maintenance requirements for BMPs; (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced BMPs; and (3) describes the mechanism for funding the long-term operation and maintenance of the referenced BMPs.
PDF-18	<p>Approximately 133.4 acres of the project site (portions of the site needing domestic water service) would be annexed into the Elsinore Valley Municipal Water District, Western Municipal Water District, and Metropolitan Water District service areas to provide water services. Areas of the project site that would remain in natural open space or are within the fuel modification areas that do not require irrigation, would not be annexed into the water service area.</p>
PDF-19	<p>The project includes two water storage tanks (one 615,000-gallon tank and one 525,000-gallon tank), to provide emergency storage to the residents of the project. The tanks will be visually screened with native/drought-tolerant landscaping and will be painted a neutral tone to blend with the surrounding environment.</p>
PDF-20	<p>Best management practices will be incorporated into the project to ensure that indirect impacts (i.e., edge effects) are avoided or minimized to the maximum extent possible. Utilization of "night sky friendly" light fixtures shall be used, lighting will be pointed away from offsite areas, and ambient light levels will be minimized to the maximum extent practicable.</p>
PDF-21	<p>Construction activities will be limited to the hours between 7:00 a.m. to 5:00 p.m., Monday through Saturday, excluding federal holidays, which is consistent with the County's Noise Ordinance. Additionally, the following measures will be implemented to reduce construction-related noise:</p> <ul style="list-style-type: none">• During all excavation and grading on-site, the construction contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent practicable. The construction contractor will place all stationary construction equipment so that emitted noise is directed away from noise sensitive receptors.• The construction contractor will stage equipment and material stockpiles in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors during project construction.• The construction contractor will limit haul truck deliveries to the same hours specified for construction equipment.• Electrically powered equipment to be used instead of pneumatic or internal combustion powered equipment, where feasible.• Unnecessary idling of internal combustion engines (e.g., in excess of 5 minutes) to be prohibited.

Table 3 - Project Design Features

No.	Design Feature
PDF-22	Protection measures for oak trees include fencing and protection of oak trees adjacent to construction areas. Placement of fill, storage of equipment, and grading will be prohibited within the dripline of any tree proposed for preservation. Retaining walls will be used to protect oaks proposed for preservation from surrounding cut and fill and any retaining walls will be placed outside of the root zone of the oak tree to be preserved.

5.2 Site Development General Design Guidelines

Zoning Implementation: The purpose and intent of these guidelines is to create a residential community with a rural character and environment with limited agricultural use for vineyards. The rural character includes deep setbacks for the residences and large areas of open space.

It is the intent of the Area Plan to implement the County’s existing zoning regulations of the AR District. Thus, development shall be in accordance with the requirements of the AR zone as provided in Section 7-9-59.8 of the County of Orange Municipal Code, and listed below:

- Minimum Building Lot Area:.....7,200 square feet
- Minimum Building Site Area.....14,000 square feet
- Maximum Building Height: Thirty-five (35) feet
- Maximum Building Site Coverage:..... Thirty-five (35) percent maximum
- Minimum Building Setbacks:..... Front – twenty feet (20)
Side yard – five (5) feet
Rear yard – twenty-five (25) feet

General Design Guidelines: To provide a neighborhood with rural characteristics, the project would be developed using natural looking materials and colors that are indigenous to the region and provide diversity for visual interest. The general design of the community common areas includes slumpblock masonry with either a mortarwash finish or left unfinished.

The colors of the residences would be natural in tone to blend into the surrounding open space area. Each residential structure would incorporate a minimum of three colors; for example, one body color, one trim color, and one accent or roof color; and no adjacent residences would have the same color scheme. Residences would have architecture on all sides of the structures that face roadways, elevations and roof planes would be varied and articulated to minimize the visually repetitious flat planes and similar building silhouettes. Similarly, adjacent residences are required to have varied setbacks or offsets.

The residences and front yards, rather than garages, would be the primary emphasis of the front elevation of each residential structure. Garage visibility should be minimized though the use of techniques such as varying garage door patterns, decorative windows, varying colors, splitting a double car garage door into two single doors, or using alternative garage configurations, such as side entry garages.

In addition, the design requirements for the residential structures, include fire prevention measures to reduce the level of risk to structures related to the potential of wildland fires.

These requires involve fire-resistant construction that includes the use of fire-resistant building materials and sprinklers, plant material selection, irrigation vegetation near residences, etc.

Specific design criteria for residences will be developed in conjunction with the development of Covenants, Conditions, and Restrictions (CC&Rs) to ensure proper implementation of the general design guidelines in this Area Plan by the HOA and an established Community Design Review Committee. CC&Rs will be reviewed by County Planning staff for conformance with the residential design guidelines within this Area Plan prior to issuance of a residential building permit, as required by a Condition of Approval for this Area Plan.

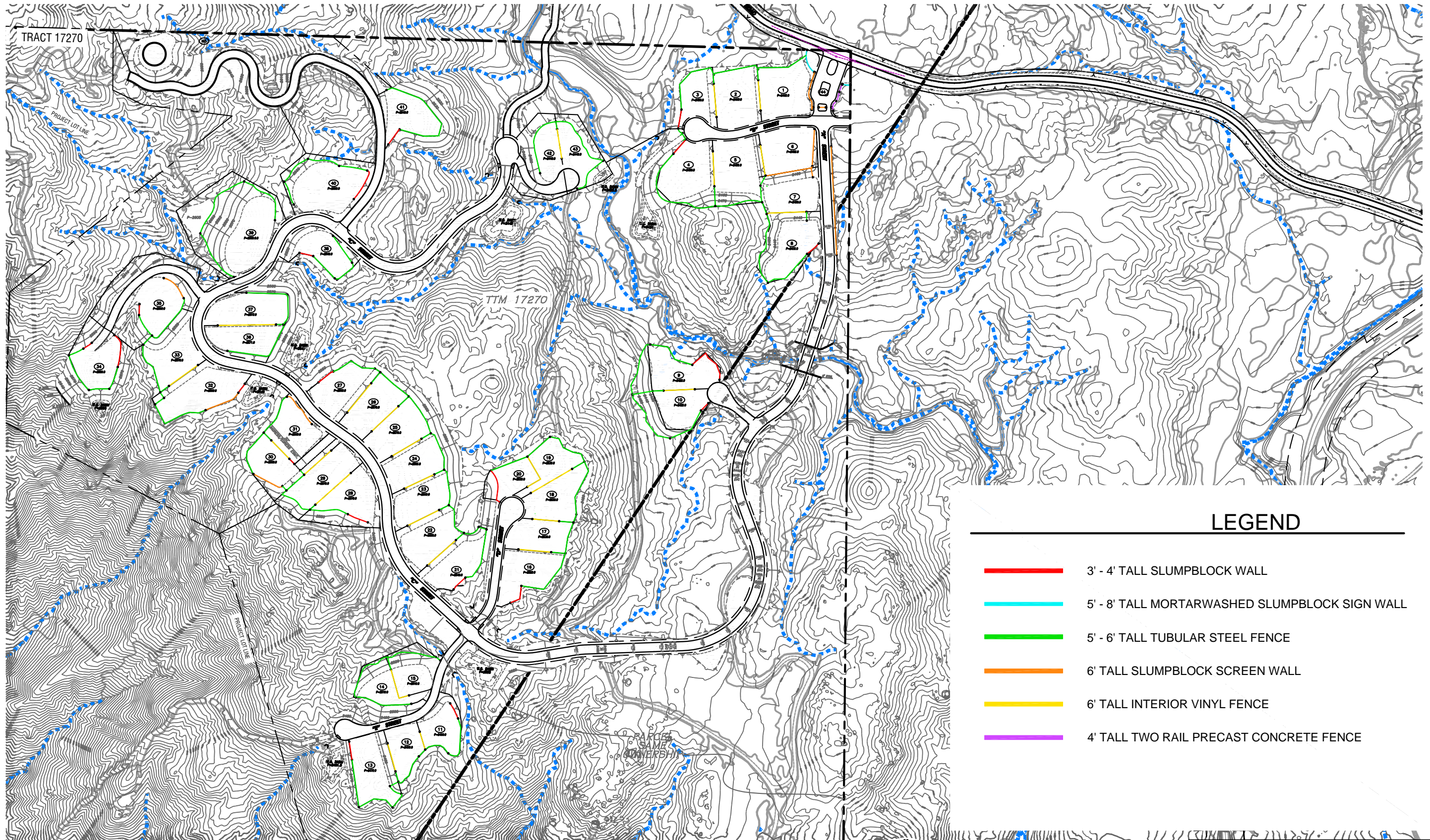
5.3 Hardscape Design Elements

The hardscape design elements were selected to correspond to the Area Plan project site's existing features and location. The proposed hardscape elements consist of site entry monuments and the walls and fences proposed for the residential lots. The materials, colors and textures would include a selection of slumpblock masonry with either a mortarwash finish or left unfinished in an adobe color. The site entry monuments would be mortarwashed slumpblock because it provides a refined appearance, while the adobe colored slumpblock would be used for the individual residential lots.

The fencing would consist of precast concrete two rail fencing with low mortarwashed slumpblock pilasters or high tubular steel fencing that would visually disappear and blend in the its surroundings. The tubular steel fencing is intended to be kept simple in style, so that it does not stand out or prevent the eye from seeing beyond the vertical element the fence creates. The two rail fencing and low pilasters would be used at the entries to both phases to help define the communities and control access to the adjacent open space, vineyards or fuel modification areas (See **Exhibit 16 through 19**).

5.4 Lighting

Lighting of streets and select landscaped areas would be provided for safety and security. Utilization of "night sky friendly" light fixtures shall be required. Maintaining the character of traditional materials would be consistent in style, color, and materials in order to maintain uniformity throughout the Area Plan project site.



TRACT 17270

TTM 17270

PROJECT LOT LINE

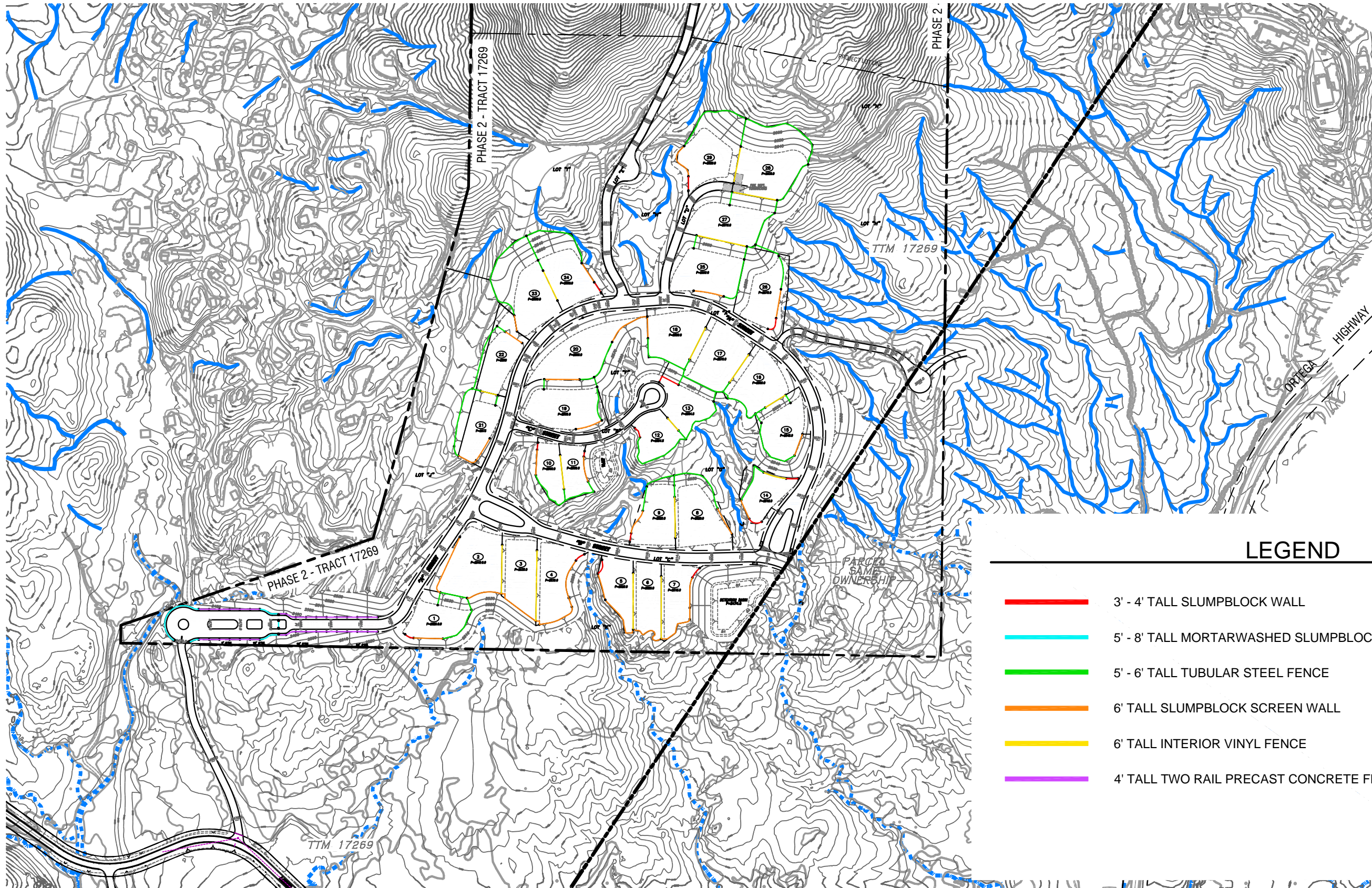
FENCE AND WALL PLAN - PHASE 1
EXHIBIT 16



LEGEND

- 3' - 4' TALL SLUMPBLOCK WALL
- 5' - 8' TALL MORTARWASHED SLUMPBLOCK SIGN WALL
- 5' - 6' TALL TUBULAR STEEL FENCE
- 6' TALL SLUMPBLOCK SCREEN WALL
- 6' TALL INTERIOR VINYL FENCE
- 4' TALL TWO RAIL PRECAST CONCRETE FENCE

THE PRESERVE
ORANGE COUNTY, CALIFORNIA



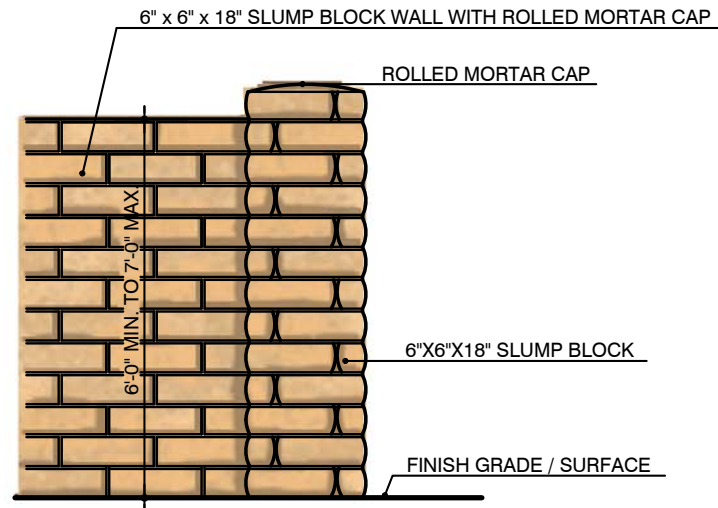
LEGEND

- 3' - 4' TALL SLUMPBLOCK WALL
- 5' - 8' TALL MORTARWASHED SLUMPBLOCK SIGN WALL
- 5' - 6' TALL TUBULAR STEEL FENCE
- 6' TALL SLUMPBLOCK SCREEN WALL
- 6' TALL INTERIOR VINYL FENCE
- 4' TALL TWO RAIL PRECAST CONCRETE FENCE

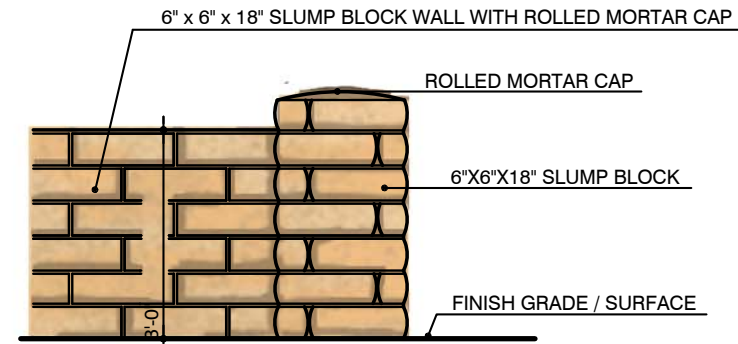
**FENCE AND WALL PLAN - PHASE 2
EXHIBIT 17**



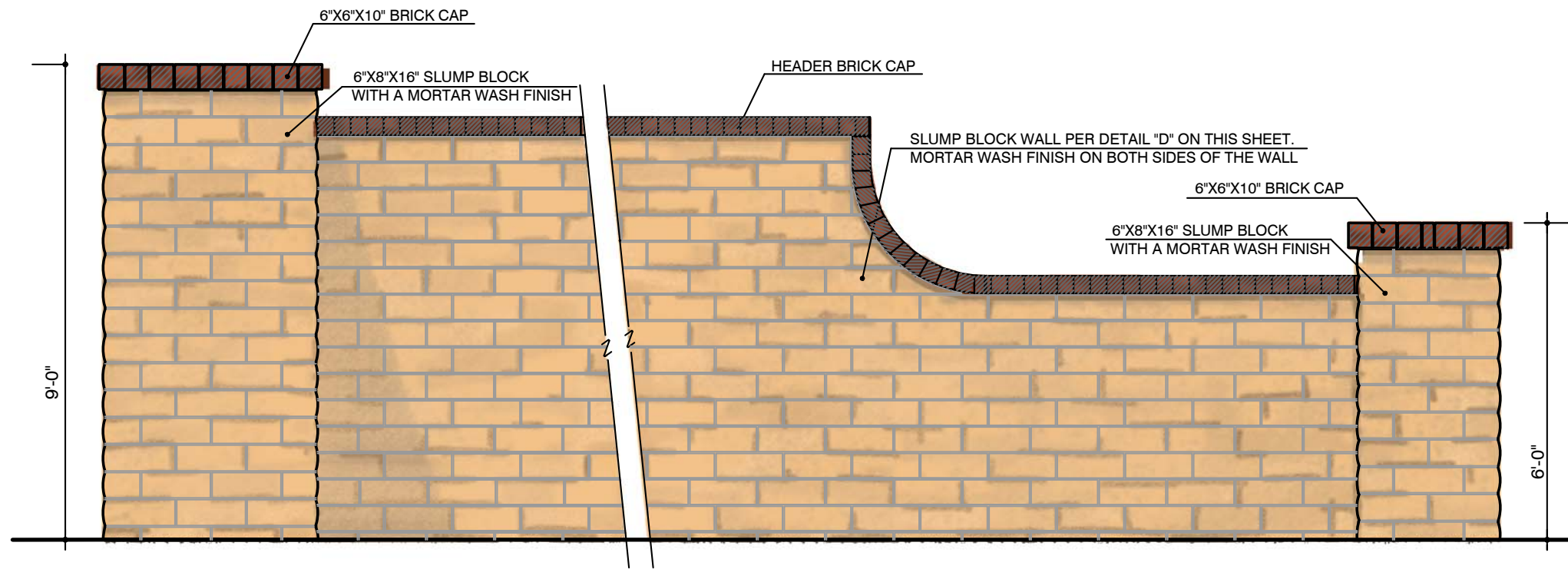
THE PRESERVE
ORANGE COUNTY, CALIFORNIA



A SLUMP BLOCK WALL & PILASTER PP-44-01

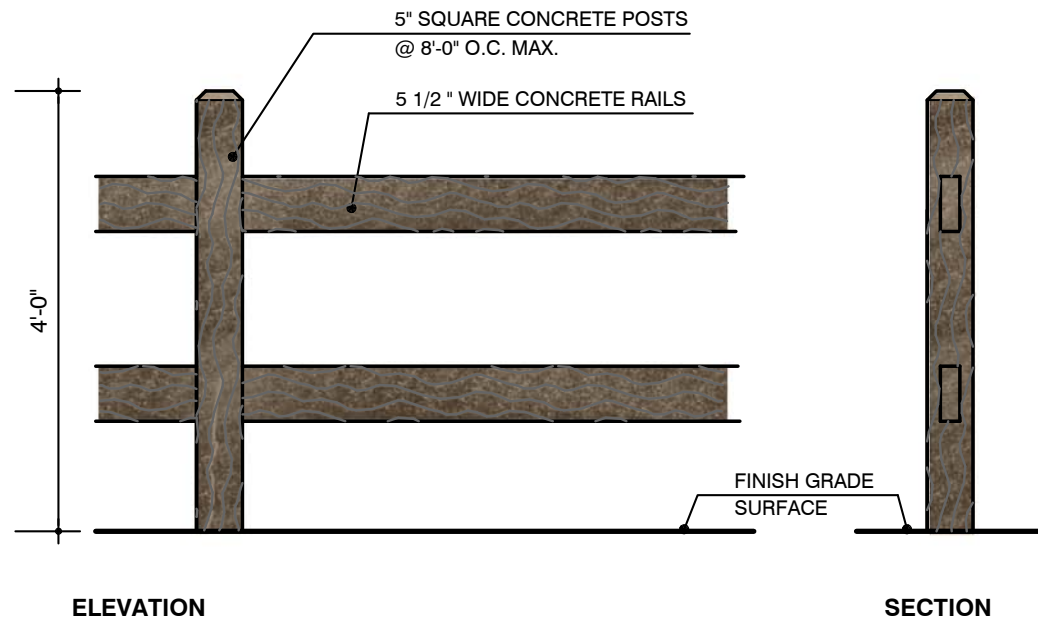


B LOW SLUMP BLOCK WALL AND PILASTER PP-44-01



C MORTAR WASH SLUMP BLOCK SIGN WALL & PILASTER PC-42-01

WALL DETAILS
EXHIBIT 18

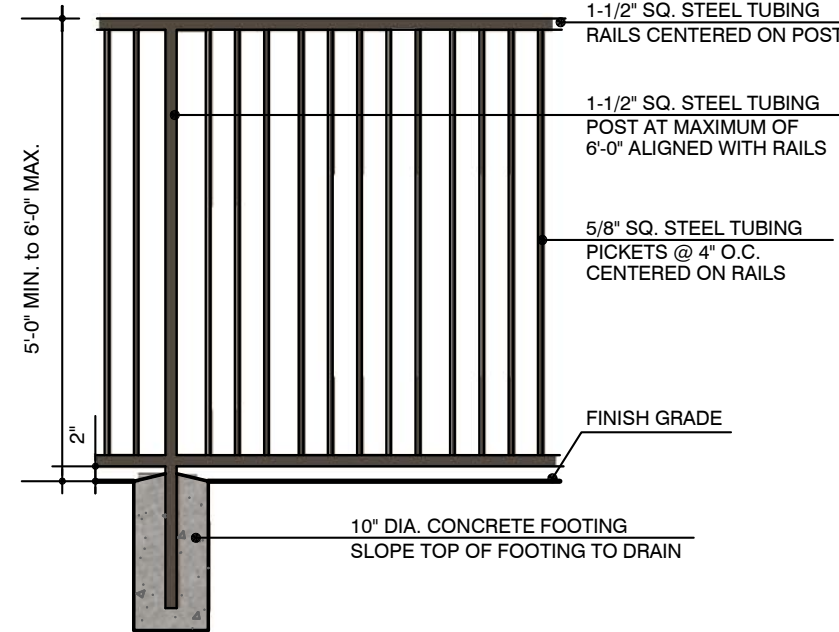


ELEVATION

SECTION

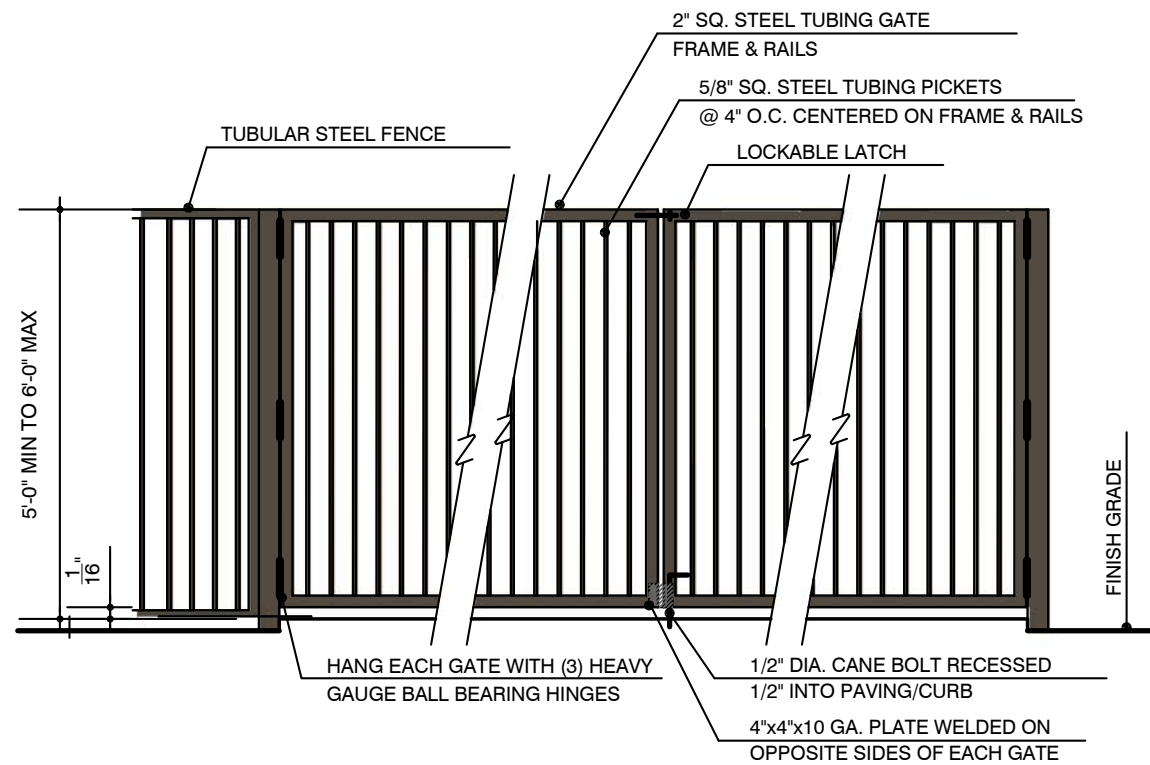
D CONCRETE RAIL FENCE

FP-44-01



E TUBULAR STEEL FENCE

FP-44-01



F TUBULAR STEEL GATE

FP-81-08



G VINYL FENCE IMAGE

FENCE DETAILS EXHIBIT 19

THE PRESERVE
ORANGE COUNTY, CALIFORNIA

6.0 Landscape Elements and Fuel Modification Plan

The Area Plan provides for various landscape elements, which include the following:

- Water Quality Swale
- Area Plan Project Site Entries
- Residential Lots
- Fuel Modification Zone 'A'
- Fuel Modification Zone 'B'
- Fuel Modification Zone 'C'
- Roadside Fuel Modification Zone
- Manufactured Slopes
- Vineyards

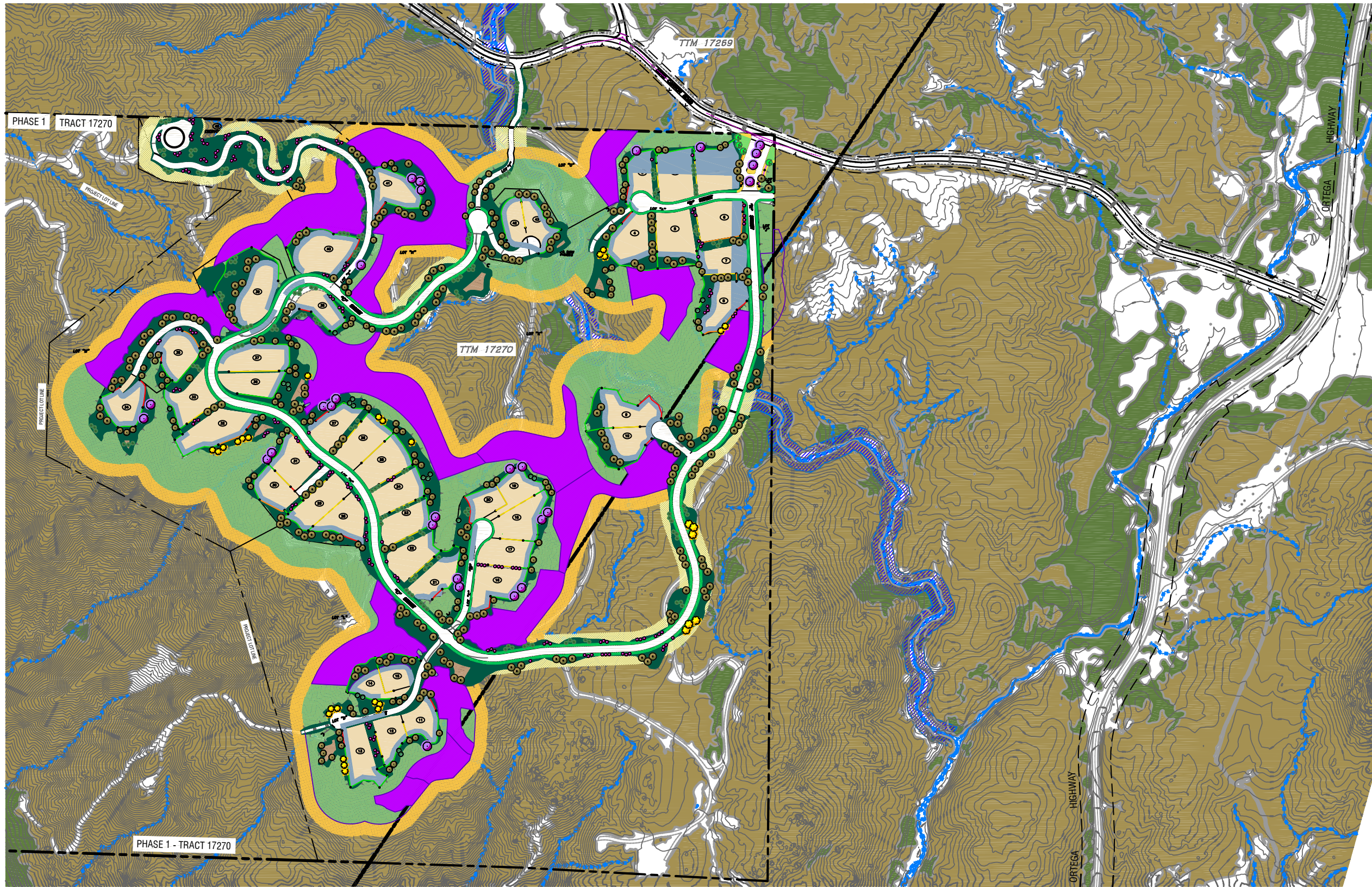
All landscaping selected for this Area Plan is consistent with applicable Orange County Landscape Standards and would be approved by the County at time of permit issuance (See **Exhibit 20, Conceptual Landscape Plan – Phase 1; Exhibit 21, Conceptual Landscape Plan – Phase 2; and Exhibit 22, Conceptual Landscape Legend**).

6.1 Water Quality Swales

Throughout the Area Plan project site, water quality swales would be installed adjacent and parallel to the roadways. The swales would vary in width and would meander wherever possible to create a natural appearance. The swales would be planted with a hydroseed mix of a blend of Fescue grasses, which would be left un-mown. This would create a meadow-like appearance, enhancing the rural community design while creating a feature that would capture, retain, and filter runoff from streets, residential areas, and other impervious surfaces. The water quality swales would generally be self-maintaining other than the need for water and the possible scalping of the grass every few years to eliminate thatch build-up.

6.2 Area Plan Site Entries

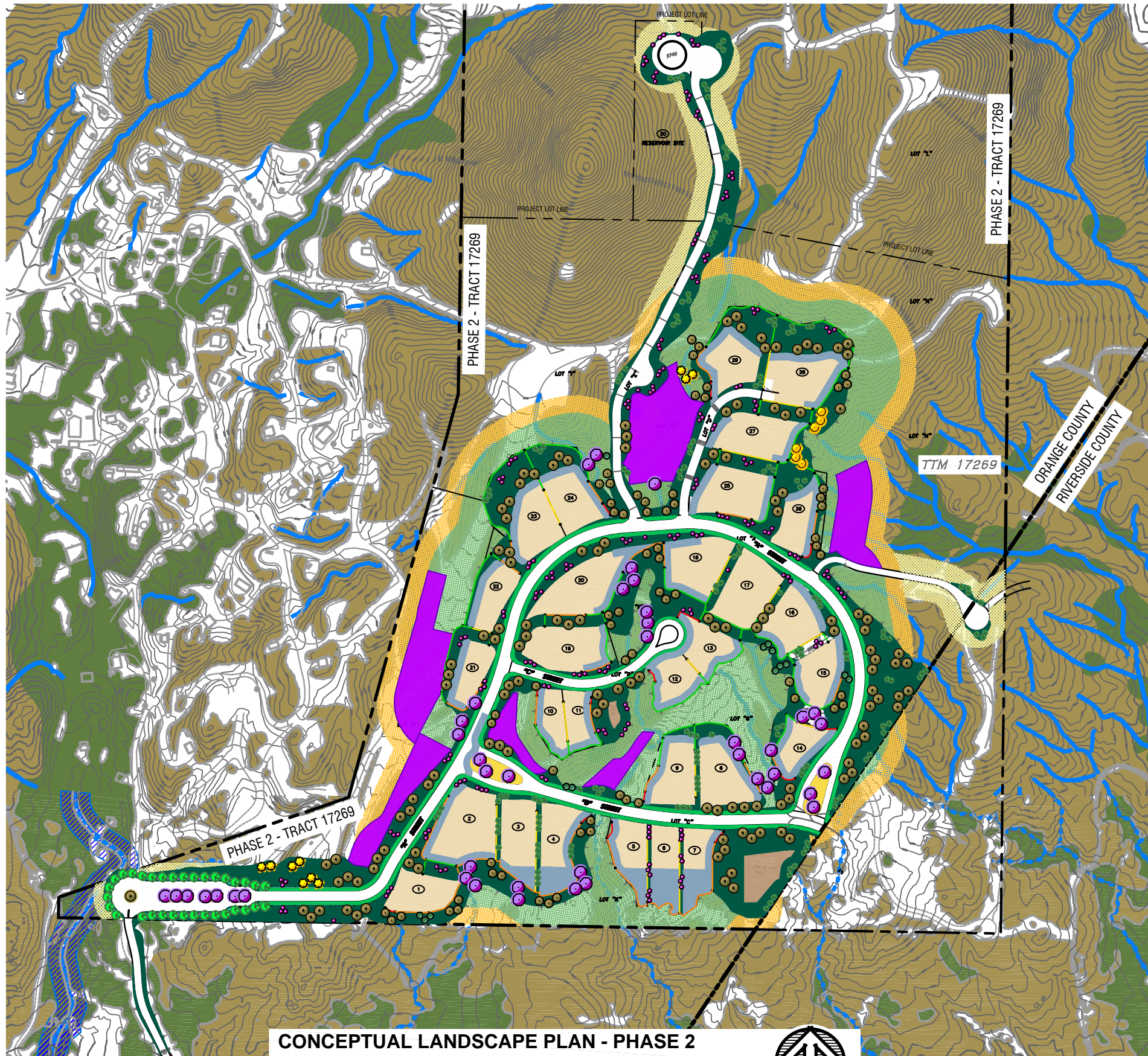
The main entries to Phase 1 and 2 from Long Canyon Road are designed to announce the community and establish an appearance that makes a positive statement and defines it from the surrounding area. The plant palette for the main entry locations for both phases would provide the character of an Early California Rancho with a mixture of native and indigenous plants. Large areas of mown Fescue turf would be installed on each entry corner with a back drop of layered shrub masses that would be framed by tall vertical Poplar trees. The turf would blend in with drought tolerant and native plant material along the edges of the areas. In addition, native California Sycamores would be installed in the medians that divide the entry drive areas. The Poplar and California Sycamore trees were selected to reflect the site's proximity to Long Canyon Creek and natural landscape surrounding the proposed development areas (See **Exhibit 23, Conceptual Planting Legend; Exhibit 24, Conceptual Entry Planting Plan – Phase 1; and Exhibit 25, Conceptual Entry Planting Plan – Phase 2**).



CONCEPTUAL LANDSCAPE PLAN - PHASE 1
EXHIBIT 20



THE PRESERVE
ORANGE COUNTY, CALIFORNIA



CONCEPTUAL LANDSCAPE PLAN - PHASE 2

EXHIBIT 21

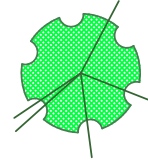


THE PRESERVE
ORANGE COUNTY, CALIFORNIA

LEGEND



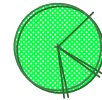
ARBUTUS 'MARINA'
Marina Madrone
Utilized on internal slopes and along road edges abutting natural areas



PLATANUS RACEMOSA
California Sycamore
Utilized at the entries, in street islands, at street intersections and where the street adjoins a stream area



CERCIS OCCIDENTALIS
Western Redbud
Utilized on internal slopes and along road edges abutting natural areas



POPULUS FREMONTII
Western Cottonwood
Entry backdrop accent tree



HETEROMELES ARBUTIFOLIA
Toyon Tree
Utilized on internal slopes and along road edges

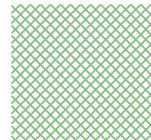


QUERCUS AGRIFOLIA
Coast Live Oak
Most widely used tree throughout the site within slope areas, fuel modification areas and adjacent to roads.



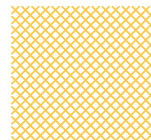
FUEL MODIFICATION ZONE A

Homeowner installed and maintained minimum 20' wide area at the outer edge of the lot pad and is a part of the Fuel Management program. Non-combustible construction within this zone only. Fuel Modification consists of permanently irrigated landscape with plant material from a list approved by the OCFA.



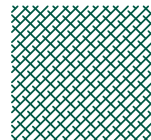
FUEL MODIFICATION ZONE B

Builder provided HOA maintained Fuel Modification area a minimum of 150 feet wide consisting of permanently irrigated landscape with plant material approved by the OCFA.



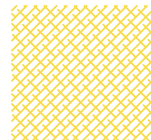
FUEL MODIFICATION ZONE C

Builder provided HOA maintained 50' Dry Zone (50% thinning native shrubs & trees and removal of all flammable undesirable species as directed by the OCFA). Zone 'C' shall be a non-irrigated area. Specimen trees shall be retained as directed by the Owner's representative, but must be thinned a minimum of 50% including removal of all low hanging foliage within three times (3x) the height of the understory shrubs or ten (10) feet, whichever is greater, along with dead or broken branches. All accumulated plant debris on the ground shall be removed.



SPECIAL MAINTENANCE AREA - HYDROSEED MIX

Builder installed Private Homeowner maintained or HOA maintained slopes within the site. Landscape design and maintenance requirements to reduce the chances of ignition from wildfires. Fuel Modification consists of permanently irrigated landscape with the design approved by OCFA.



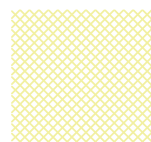
ROADWAY MEDIANS & ISLANDS - SOD AT ENTRIES

Builder provided HOA maintained entry area with sodded fescue grass and permanent irrigation.



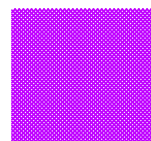
WATER QUALITY SWALE - FESCUE & DG

Builder provided 6' to 9' wide HOA maintained areas along streets and roadways, between the back of curb and the right-of-way. Fuel Modification consists of 2' of decomposed granite adjacent to the curb, and 4' to 7' of permanently irrigated hydroseeded fescue mix.



ROADSIDE BRUSH CLEARANCE

Builder provided HOA maintained 20'-50' wide Fuel Modification zone consisting of removal of all undesirable plant species and thinning of at least 50% of all existing vegetation beyond the right-of-way as directed by the OCFA. Any plant material installed must be fully irrigated and from the approved OCFA plant list.



PROPOSED VINEYARDS

LEGEND



AGAVE ATTENUATA
Agave



ENCELIA CALIFORNIA
California Encelia



CEANOTHUS GRISEUS HORIZONTALIS
Carmel Creeper



ROMNEYA COULTERI
Matilja Poppy



ALOGYNE HUEGELII
Blue Hibiscus



LANTANA CAMARA
Lantana



CEANOTHUS GRISEUS 'SANTA ANA'
Santa Ana Carmel Creeper



ROSA CALIFORNICA
California Wild Rose



ANIGOZANTHUS FLAVIDUS 'RED'
Red Kangaroo Paw



MUHLENBERGIA RIGENS
Deer Grass



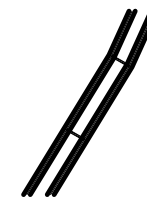
CISTUS HYBRIDUS
White Rockrose



ARBUTUS UNEDO 'COMPACTA'
Compact Strawberry Tree



RHUS INTEGRIFOLIA
Lemonade Berry



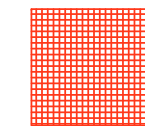
HORIZONTALLY DIVIDED DOUBLE CURTAIN VINYARD TRELLIS
11' - 12' spacing between rows. 6' - 8' between vines



ARCTOSTAPHYLOS HOOKERI
Monterey Manzanita



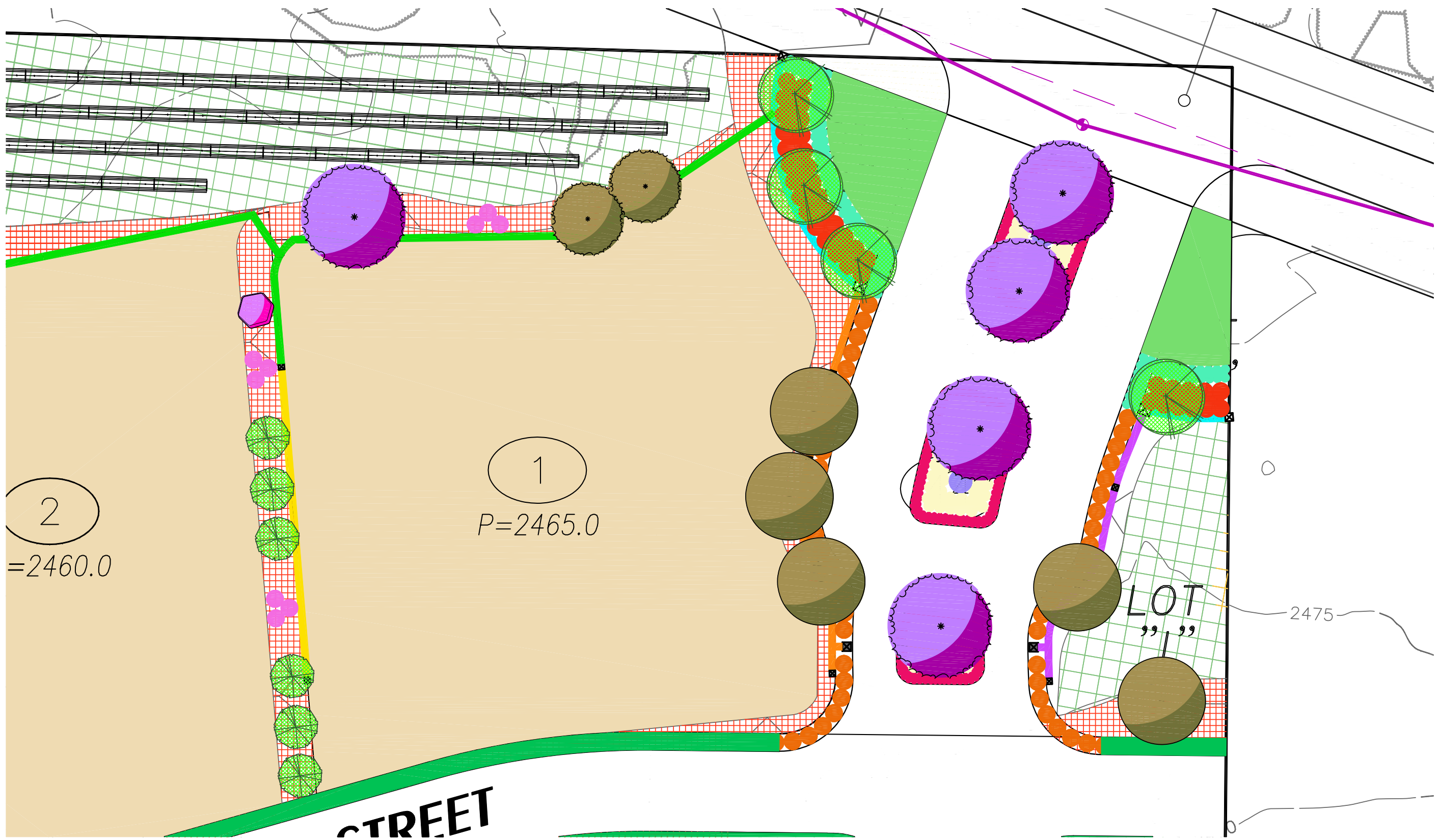
RHUS OVATA
Sugar Bush



HYDROSEED MIX SPECIES

- Minulus aurantiacus aurantiacus
- Acmispon glaber scoparius
- Eriophyllum confertiflorum
- Stipa pulchra
- Vulpia microsperma
- Muhlenbergia microsperma
- Lasthenia californica
- Lupinus truncatus
- Agrostis pallens
- Sisyrinchium Bellum
- Isocoma menziesii
- Collinsia heterophylla
- Clarkia bottae
- Pseudognaphalium californicum



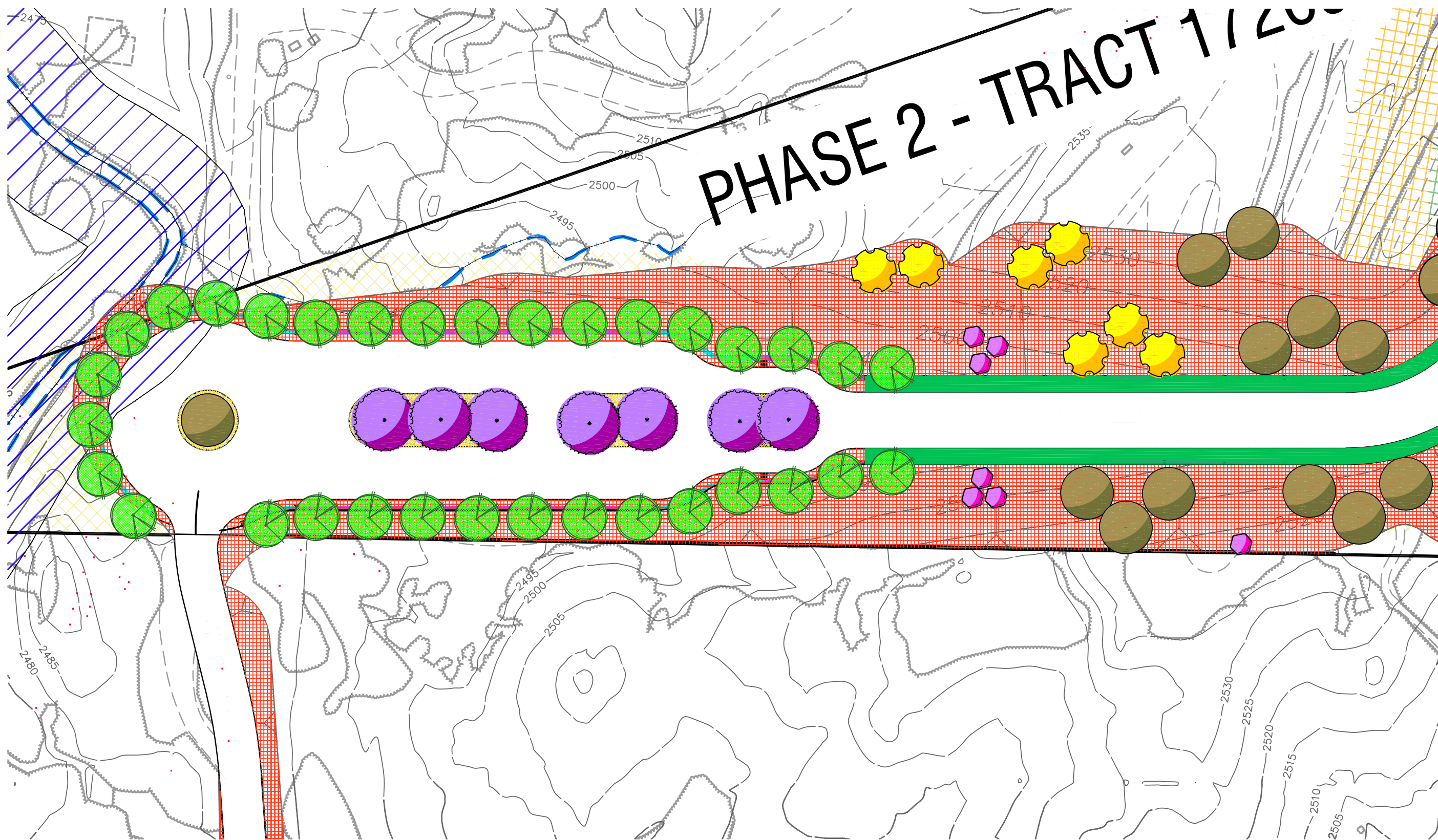


CONCEPTUAL ENTRY PLANTING PLAN - PHASE 1
EXHIBIT 24



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

PHASE 2 - TRACT 1 / 20



CONCEPTUAL ENTRY PLANTING PLAN - PHASE 2
EXHIBIT 25



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

6.3 Residential Lots

Each residential lot would be the responsibility of the owner to landscape and would be regulated by Architectural Design Guidelines that would be implemented through a review process with the HOA. The Architectural Design Guidelines would include an approved plant palette for residential homeowners to use. Installation of plants not on the approved plant palette list, would require approval of a variance by the HOA, whereby the owner would need to provide justification for its use.

6.4 Fuel Modification Requirements

The Area Plan project site is located within a high fire hazard area and a fuel modification plan with fuel modification zones is required per Guideline C-05 of the Orange County Fire Authority (OCFA) and Section 317 of the California Fire Code. A fuel modification zone is an area of land where combustible vegetation has been removed and/or the area is modified with drought-tolerant, fire-resistant plants in order to provide protection to structures from wildland fires. The minimum width of a fuel modification area is 170 feet, and in some cases, the width increases due to type of terrain and/or type and mass of vegetation.

The Area Plan project site has had some previous fuel management completed, and has been subject to wildland fires in the past. A fire burned the southern portion of the Area Plan project site that started on June 27, 1989 (the Ortega Fire), which consumed 7,880 acres. In addition, a fire on September 23, 2010 burned lands adjacent to the Area Plan project site along Long Canyon Road. This fire started during fuel abatement work being completed by the forest service along the roadway and burned upslope and away from the Area Plan project site.

6.5 Fuel Modification Site Planning

The Preserve at San Juan Area Plan was designed with utilization of the most accurate software tools for predicting wildland fire behavior. The BEHAVE Fire Behavior Prediction and Fuel Modeling System (upon which the “Fire Behavior Analysis and Report: The Preserve at San Juan” was based). BEHAVE is a computer modeling system that is utilized by wildland fire experts nationwide in pre-fire defense planning to establish fire behavior and design development to be safe from wildland fires.

Wind Ninja, wind modeling software, was used to predict wind flow in the drainages around the Area Plan project site; FlamMap, a fire behavior mapping and analysis program was used to compute potential fire behavior characteristics (spread rate, flame length, fire line intensity, etc.) over an entire area; and Fire Family Plus was used for analysis of fire danger in combination with weather events. Wind Ninja and FireFamilyPlus are used to establish inputs to the fire behavior models based on historical data and relative outputs for specific locations with respect to increases or decreases in input variables (See **Exhibit 26, Conceptual Fuel Modification Plan – Phase 1** and **Exhibit 27, Conceptual Fuel Modification Plan – Phase 2**).

The plant palette for each fuel modification zone area has been researched to ensure it meets the following criteria:

- The plant is appropriate for the climatic zone of the Area Plan project site, both in

Precise fuel modification plan shall be designed in which all irrigated 'B' zones and SMA will be designed and re-planted with ground cover that shall cover the entire ground between groups of shrubs and trees.



Protected habitat land use is not within the fuel modification zones, as future maintenance activities would conflict with safety requirements herein and would be more difficult, costly and problematic for landowners. There is no existing federally protected animal or bird habitat within the fuel modification areas we are proposing and the land use for fuel modification in the future shall not revert to a protected habitat land use. Maintenance is required in late Spring and early Fall each year. The project landscape architect has researched the soil and steepness of the slopes and there are no geological issues preventing the required maintenance to be preformed.

CONCEPTUAL FUEL MODIFICATION PLAN - PHASE 1 EXHIBIT 26



PLANT REMOVAL LIST
ATTACHMENT 21 - UNDESIRABLE PLANT SPECIES (TARGET SPECIES)
List of plant species to be removed from the site, including species names, common names, and removal methods.

INCLINE MEASUREMENT
INCLINE MEASUREMENT FOR SELECTED SLOPES
Diagram showing slope measurement techniques and a table of slope percentages.

IDENTIFICATION MARKER DETAIL
Diagram showing the placement and use of identification markers for fuel modification zones.

SYMBOL LEGEND
List of symbols used in the plan, including symbols for access points, identification markers, construction requirements, maintenance access coverings, and radiating heat walls.

FUEL MODIFICATION LEGEND
List of fuel modification zones (A through Z) and their corresponding colors and patterns, along with descriptions of each zone's characteristics and maintenance requirements.

PERIMETER RADIANT HEAT BLOCK WALL
Diagram showing the construction details of a perimeter radiant heat block wall, including materials and dimensions.

RADIANT HEAT WALL TEMPERED GLASS (OR EQUAL) AND PRECISION BLOCK
Diagram showing the construction details of a radiant heat wall with tempered glass or precision block, including materials and dimensions.

PLANT REMOVAL LIST
ATTACHMENT 21 - UNDESIRABLE PLANT SPECIES (TARGET SPECIES)
List of plant species to be removed from the site, including species names, common names, and removal methods.

FUEL MODIFICATION MAINTENANCE NOTES
Detailed notes regarding the maintenance requirements for the fuel modification zones, including timing, methods, and safety considerations.

PLANT REMOVAL LIST
ATTACHMENT 21 - UNDESIRABLE PLANT SPECIES (TARGET SPECIES)
List of plant species to be removed from the site, including species names, common names, and removal methods.

FUEL MODIFICATION MAINTENANCE NOTES
Detailed notes regarding the maintenance requirements for the fuel modification zones, including timing, methods, and safety considerations.

PLANT REMOVAL LIST
ATTACHMENT 21 - UNDESIRABLE PLANT SPECIES (TARGET SPECIES)
List of plant species to be removed from the site, including species names, common names, and removal methods.

FUEL MODIFICATION MAINTENANCE NOTES
Detailed notes regarding the maintenance requirements for the fuel modification zones, including timing, methods, and safety considerations.

THE PRESERVE

ORANGE COUNTY, CALIFORNIA

Page 49

SCALE: 1" = 100' 0"

NORTH

PLAN SET: 08/26/2016

PLAN CONTROL DATE: 08/26/2016

THE PRESERVE AT SAN JUAN, LLC
4000 MARINACA PARKWAY, SUITE 200
RYAN, CALIFORNIA 92570

H&A
ROBERT MITCHELL & ASSOCIATES
2000 MARINACA PARKWAY, SUITE 200
RYAN, CALIFORNIA 92570

firesale
1111 CALIFORNIA AVENUE, SUITE 200
SAN CLAYTON, CA 94577
WWW.FIRESALE.COM

SHEET
CFM-2
OF 3

CONCEPTUAL FUEL MODIFICATION PLAN
THE PRESERVE AT SAN JUAN
FUEL MODIFICATION LAYOUT
OCFA REVISION SR# 190994

© The Preserve 2016. All rights reserved. This document is the property of The Preserve and is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of The Preserve. August 26, 2016

altitude and location.

- All of the plant material is rated as either 'LOW' or "VERY LOW" in the State of California's Water Use Classifications of Landscape Species (WUCOLS); except for the OWTS dispersal areas of fuel modification Zone B, which would contain "MODERATE" water use plant material.
- Native plant material would be used extensively throughout the Area Plan project site.
- The plant palette was reviewed by the project biologists to ensure that none of the plants would be detrimental to the existing natural vegetation.
- No plants would be installed that are listed as being invasive to native habitat.
- All plants proposed for fuel modification zones are appropriate for such use.
- All of the plants proposed are available from localized wholesale sources.

Maintenance of the all fuel modification areas would be maintained by the HOA and CC&R's will be written to include an OCFA approved annual self-inspection procedure and certification by the HOA by an outside consultant to ensure adequate and timely maintenance of any and all Fuel Modification zones as well as oversight by OCFA.

6.6 Fuel Modification Zones

Fuel Modification Zone A

Zone A are areas within the graded pad area of the residential lots and varies from approximately 15 to 100 feet in width. Within this zone, each homeowner would be responsible for plant selection (per the HOA's Architectural Design Guideline acceptable plant list) and maintenance. Automatic irrigation systems are required and would be installed to maintain healthy vegetation with high moisture content. Plants in this zone would be highly fire resistant and trees would not be permitted within 10 feet of combustible structures (measured from the edge of a full growth crown). In addition, only noncombustible construction would occur in Zone A.

Fuel Modification Zone B

Zone B is the primary fuel modification zone that consists of a 150 foot-wide area as measured from the edge of the residential lot and includes manufactured slope areas, natural open space and/or vineyards. Per OCFA criteria, this zone is required to have permanent irrigation, and plant material for Zone B would be selected from a native and drought-tolerant plant palette approved by the Fire Marshal, and the plants would be installed in a manner and density consistent with the Master Fire Plan's requirements.

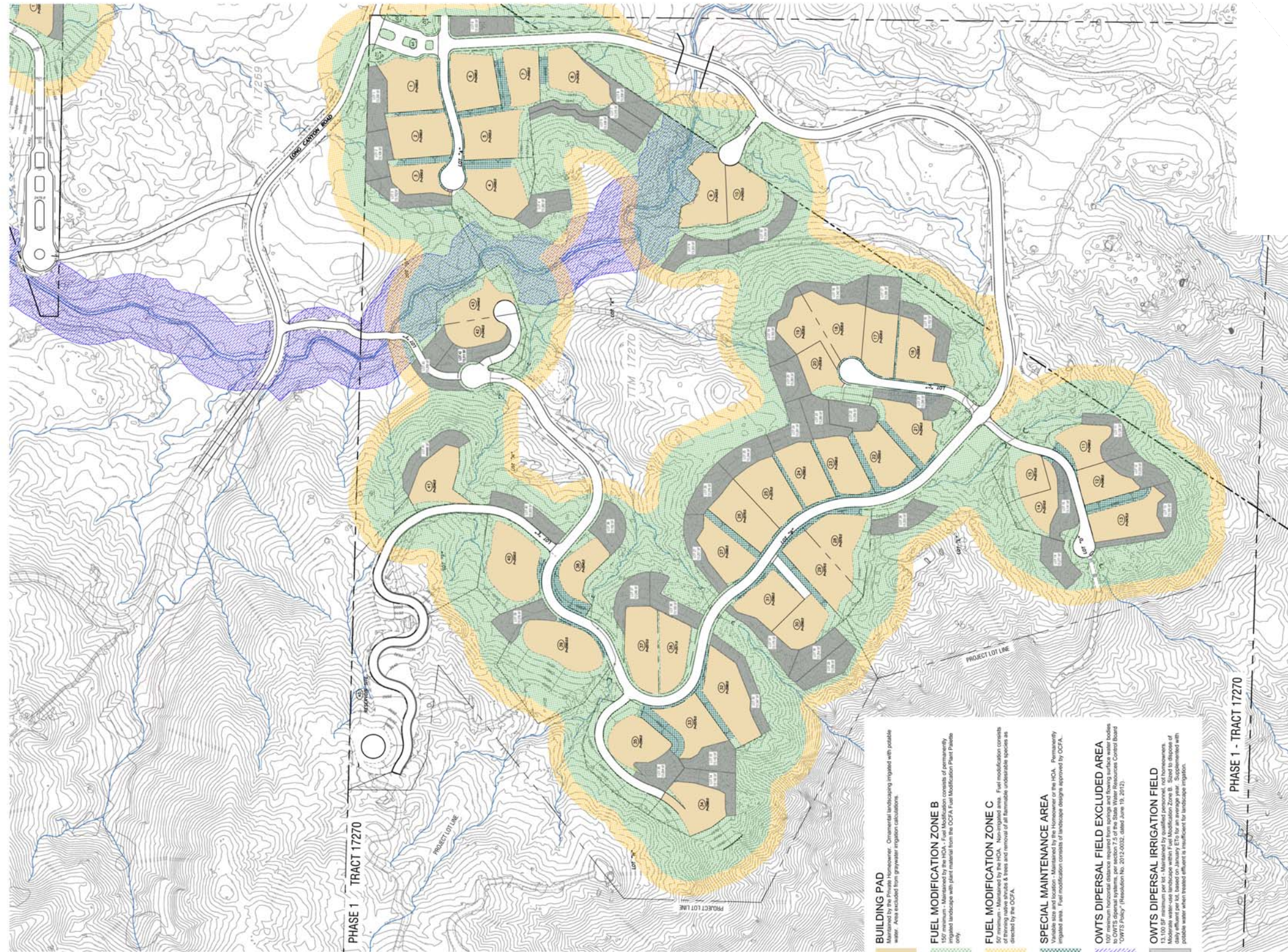
Zone B would contain two different planting palettes and two different sources of irrigation water. The area of Zone B areas closest to the residences would be irrigated with treated effluent from the residence's OWTS. The treated water would be pumped to underground emitter / soaker lines on a daily basis. To reuse the treated effluent, the plant palette would consist of moderate water use plants, which would provide for the full disposal of treated wastewater within the Area Plan project site. In the warmer months, should treated effluent quantity not be sufficient to meet the irrigation needs of the vegetation, supplemental irrigation

with domestic water would be provided to ensure proper plant health, vitality, and moisture content. The OWTS dispersal and irrigation locations are shown on **Exhibits 28** through **30**, **Water Reuse Study**, and the planting plan for the OWTS irrigation areas is shown in **Exhibit 31**.

Areas not irrigated by treated effluent would have a plant palette of 'Low' water use plants. This would provide water conservation and meet the fuel modification requirements for Zone B. All of the trees within Zone B would be grouped in clusters of no more than three with a minimum ten-foot separation from the mature canopy of any other tree and/or shrub cluster. The ground within Zone B would consist of the existing plant material that has been thinned as required by the Fire Marshal or would be hydroseeded with a mix of low ground cover plantings. This seed mix would be approved by the Fire Marshal.

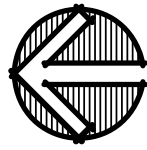
Zone B would be irrigated and maintained by the HOA. The specific requirements for Zone B include:

- 1) Removal of plant species that are inappropriate for Zone B.
- 2) All dead and downed plant materials shall be removed.
- 3) Groundcover shall be maintained at a height not to exceed 18-inches.
- 4) In order to maintain proper coverage, native grasses, shall be allowed to go to seed.
- 5) Native grasses shall be cut after annual seeding. Cut height shall not exceed 8-inches.
- 6) Shrubs would be maintained at heights ranging from eighteen inches to four feet to limit fuel mass larger than 50 percent of Zone B.
- 7) All trees, shrubs, and tree-form shrubs (tree form shrubs are shrubs that do naturally exceed 4 feet in height) over four feet in height would be installed in maximum groupings of three that would be separated by a distance of three times the diameter of the largest individual mature crown (or fifteen feet, whichever is greater).
- 8) Tree-form shrubs less than 4-feet in height and other shrubs would be spaced such that they do not create an excessive fuel mass and can be maintained in accordance with specified spacing as indicated on the landscape plan.
- 9) Trees and tree-form shrub pruning and spacing would be in conformance with OCFA standards.
- 10) Irrigation would be designed to supplement native vegetation, and establish and maintain planted natives and ornamentals.
- 11) Any plants selected for planting in this zone would be selected from the OCFA Approved Plant list for irrigated zones for the geographical area. In addition, planting would be in accordance with planting guidelines and spacing standards established in the OCFA guideline.
- 12) In Zones B sensitive and/or protected species would be identified on the fuel modification plans and tagged in the field.

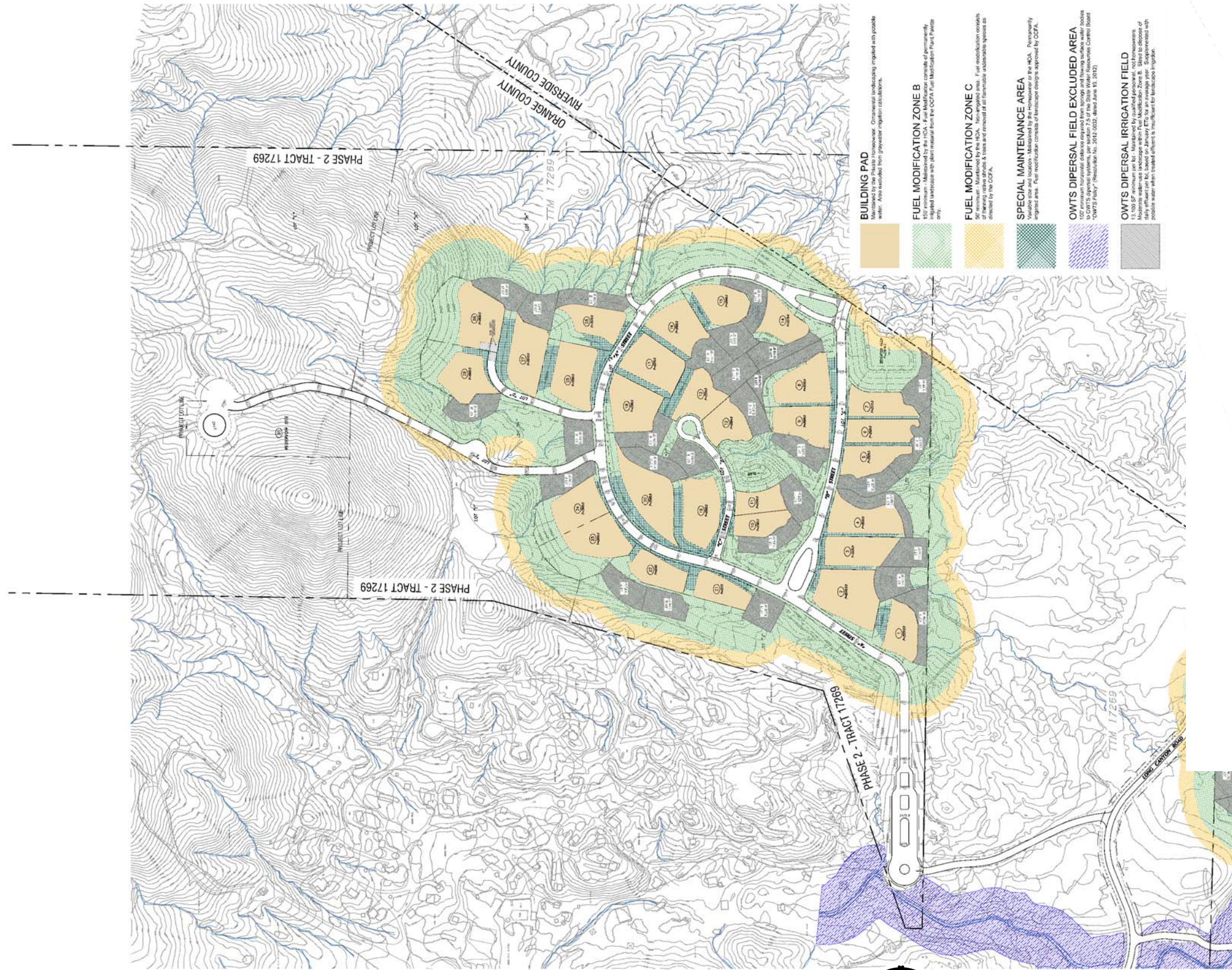


- BUILDING PAD**
 Maintained by the Private Homeowner. Ornamental landscaping irrigated with potable water. Area excluded from graywater irrigation calculations.
- FUEL MODIFICATION ZONE B**
 100' minimum - Maintained by the HOA. Fuel Modification consists of permanently installed landscaping with plant material from the OCA Fuel Modification Plant Tables only.
- FUEL MODIFICATION ZONE C**
 50' minimum - Maintained by the HOA. Non-irrigated area. Fuel modification consists of removing native shrubs & trees and removal of all flammable undesirable species as directed by the OCA.
- SPECIAL MAINTENANCE AREA**
 Variable size and location. Maintained by the Homeowner or the HOA. Permanently irrigated area. Fuel Modification consists of landscape design approved by OCA.
- OWTS DIPERSAL FIELD EXCLUDED AREA**
 100' minimum horizontal distance required from springs and flowing surface water bodies to OWTS dispersal systems, per section 7.5 of the State Water Resource Control Board OWTS Policy (Resolution No. 2012-0022, dated June 19, 2012).
- OWTS DIPERSAL IRRIGATION FIELD**
 100' minimum horizontal distance required from springs and flowing surface water bodies to OWTS dispersal systems, per section 7.5 of the State Water Resource Control Board OWTS Policy (Resolution No. 2012-0022, dated June 19, 2012). Supplemental with potable water when treated effluent is insufficient for landscape irrigation.

**WATER REUSE PLAN - PHASE 1
 EXHIBIT 28**

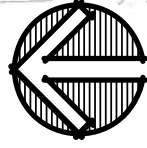


THE PRESERVE
 ORANGE COUNTY, CALIFORNIA

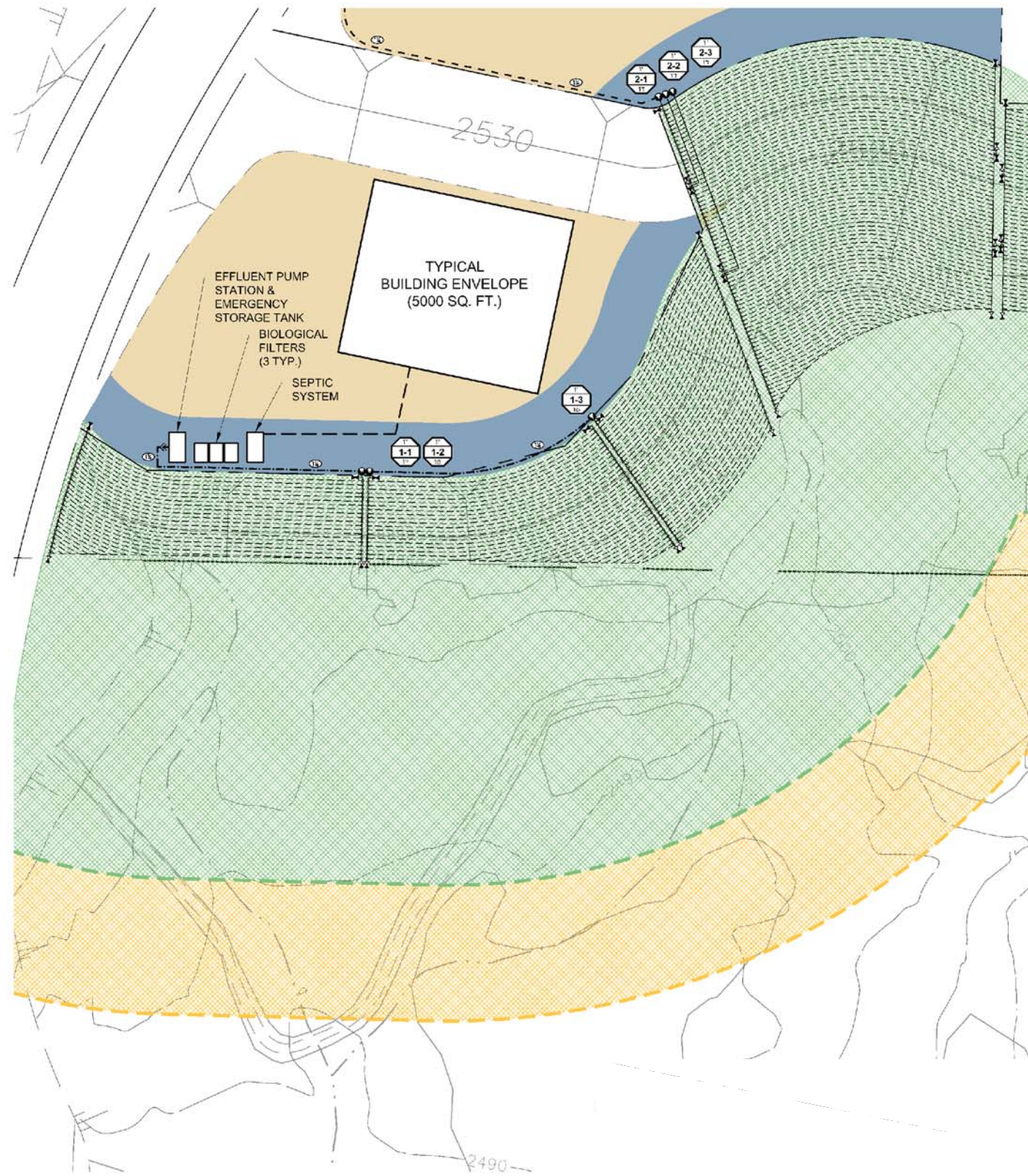


- BUILDING PAD**
Maintained by the Private Homeowner. Commercial landscaping irrigated with potable water. Area excluded from groundwater recharge calculations.
- FUEL MODIFICATION ZONE B**
150' minimum. Maintained by the HOA. Fuel Modification consists of permanently irrigated landscape with plant material from the OCPA Fuel Modification Plant Phase 09.
- FUEL MODIFICATION ZONE C**
150' minimum. Maintained by the HOA. Fuel Modification consists of watering native shrubs & trees and removal of all flammable succulents species as dictated by the OCPA.
- SPECIAL MAINTENANCE AREA**
Irrigated area. Fuel modification consists of landscape design approved by OCPA.
- OWTS DIPERSAL FIELD EXCLUDED AREA**
100' minimum horizontal distance required from storage and flowing surface water bodies. This area is excluded from the OWTS Dipersal Field. (Resolution No. 2012-0522, dated June 19, 2012)
- OWTS DIPERSAL IRRIGATION FIELD**
15,000 GPD minimum per lot. Maintained by qualified personnel, not homeowners. This area is excluded from the OWTS Dipersal Field. (Resolution No. 2012-0522, dated June 19, 2012)

**WATER REUSE PLAN - PHASE 2
EXHIBIT 29**



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

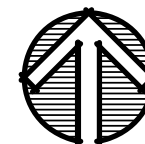


FUEL MODIFICATION LEGEND	
	ZONE A - 20'
	ZONE B - 150'
	ZONE C - 50'

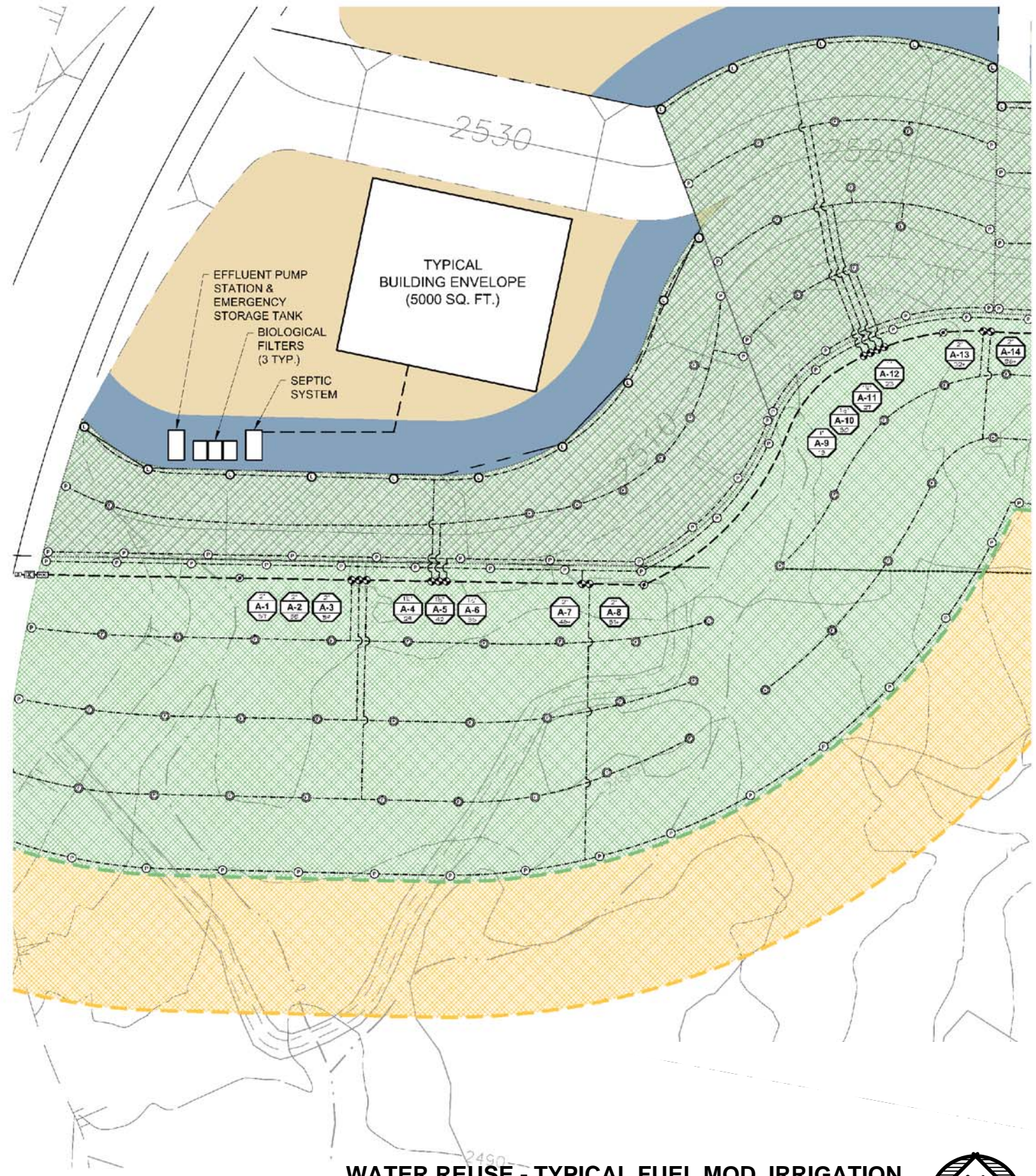
LEGEND	
	POINT OF CONNECTION TO EFFLUENT PUMP STATION
	PVC LINE TO PUMP STATION (BURIED)
	REMOTE CONTROL VALVE
	PVC SUPPLY & FLUSH MANIFOLDS w/ DRIPLINE ADAPTERS
	0.5 GPH DRIPLINE w/ EMITTERS @ 18" O.C. & LINES @ 18" O.C.
	DRIPLINE AIR VACUUM BREAKER AT HIGH POINTS
	PVC BALL VALVE FOR FLUSHING & DRAINING AT LOW POINTS

- NOTES**
- OWTS DISPERSAL FIELDS WILL BE DESIGNED AND INSTALLED TO MEET THE STANDARDS OF THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2012-0032 - "OWTS POLICY", INCLUDING SETBACKS (SECTION 7.5) AND BURIAL DEPTH (SECTION 8.1.4).
 - EACH HOME IS PROJECTED TO PRODUCE UP TO 320 GALLONS OF TREATED EFFLUENT PER DAY. THE EFFLUENT WILL BE REUSED FOR IRRIGATING PLANTING WITHIN FUEL MODIFICATION ZONE B.
 - A POTABLE WATER SUPPLEMENT LINE TO THE EFFLUENT PUMP STATION WILL INSURE THE AVAILABILITY OF 320 GALLONS PER DAY OF WATER OUTPUT FROM EACH RESIDENTIAL ONSITE TREATMENT SYSTEM (OWTS).
 - THE OUTPUT OF EACH TREATMENT SYSTEM WILL BE CONNECTED TO A SUBSURFACE DRIPLINE DISPERSAL SYSTEM ADJACENT TO THE LOT.
 - DISPERSAL IRRIGATION FIELDS WILL BE PLACED ON FILL SLOPES AND NATURAL AREAS. PLACEMENT ON CUT SLOPES WILL BE AVOIDED.
 - IRRIGATION FIELDS WILL PRIMARILY BE AT THE SAME OR LOWER ELEVATIONS THAN THE LOT THEY SERVE.
 - OWTS DISPERSAL FIELDS ARE SIZED (13,100 SQ. FT. MINIMUM) TO PROVIDE ALL THE DAILY NEEDS OF WATER FOR THE PLANTS IN FUEL MODIFICATION ZONE B IN THE MONTH OF JANUARY (1.10" PER MONTH ON AVERAGE).
 - IN ALL OTHER MONTHS, THE DISPERSAL SYSTEM WILL BE SUPPLEMENTED WITH A SEPARATE H.O.A. OVERHEAD SPRAY IRRIGATION SYSTEM. REFER TO THE "TYPICAL FUEL MOD. IRRIGATION" PLAN.
 - IRRIGATION FIELD CONTROL VALVES WILL BE CONNECTED TO CONTROLLERS SEPARATE FROM THE H.O.A.'S OVERHEAD IRRIGATION SPRAY SYSTEM CONTROLLERS. BOTH WILL BE MANAGED BY QUALIFIED PERSONNEL, NOT HOMEOWNERS.
 - A TYPICAL DISPERSAL IRRIGATION FIELD FOR EACH LOT WILL HAVE 3-4 ZONES RUNNING AT 13-17 GALLONS-PER-MINUTE AND REQUIRE APPROXIMATELY 18-24 MINUTES OF TOTAL RUN TIME PER DAY (6 MINUTES PER ZONE). THIS EQUALS A PRECIPITATION RATE OF 0.04" OF WATER PER DAY.

**WATER REUSE - TYPICAL DISPERSAL FIELDS
EXHIBIT 30**



THE PRESERVE
ORANGE COUNTY, CALIFORNIA



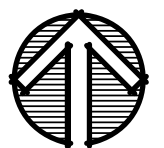
FUEL MODIFICATION LEGEND	
	ZONE A - 20'
	ZONE B - 150'
	ZONE C - 50'

LEGEND	
	WATER METER DEDICATED TO IRRIGATION
	BACKFLOW PREVENTER IN VANDAL-RESISTANT ENCLOSURE
	POINT OF CONNECTION EQUIPMENT IN PLASTIC VAULT
	PVC MAIN LINE (BURIED)
	REMOTE CONTROL VALVE
	UV-RESISTANT PVC LATERAL LINE (ON GRADE)
	LOW-ANGLE ROTOR SPRINKLER HEAD
	PART-CIRCLE ROTOR SPRINKLER HEAD
	FULL-CIRCLE ROTOR SPRINKLER HEAD
	QUICK-COUPLING VALVE FOR SUPPLEMENTAL WATERING

NOTES

- FUEL MOD. IRRIGATION WILL BE DESIGNED AND INSTALLED TO COMPLY WITH COUNTY OF ORANGE ORDINANCE NO. 09-010 - "LANDSCAPE IRRIGATION CODE".
- FUEL MODIFICATION ZONE B EXTENDS A MINIMUM OF 150 FT. FROM ZONE A, AND SHALL BE CLEARED OF ALL UNDESIRABLE PLANT SPECIES, IRRIGATED, AND PLANTED WITH SPECIES FROM THE OCFA APPROVED PLANT LIST.
- A TYPICAL IRRIGATION SYSTEM FOR FUEL MOD. ZONE B WILL CONSIST OF A DEDICATED 2" POTABLE WATER SERVICE, BURIED PVC MAIN LINES, ELECTRIC CONTROL VALVES, AND UV-RESISTANT PVC LATERAL LINES INSTALLED ON GRADE.
- OVERHEAD SPRAY ROTOR SPRINKLER HEADS WILL BE USED WHEREVER POSSIBLE TO EFFICIENTLY AND EFFECTIVELY IRRIGATE THE FUEL MOD. PLANTING.
- IRRIGATION ZONES WATERING OVER THE IRRIGATION FIELDS WILL BE SEPARATED FROM THE ZONES WATERING THE REST OF FUEL MOD. ZONE B. THIS WILL ALLOW THESE ZONES TO BE SEPARATELY SCHEDULED TO COMPENSATE FOR THE TREATED EFFLUENT IRRIGATION AND THE HIGHER WATER REQUIREMENT PLANTS USED IN THE DISPERSAL FIELD AREAS. THIS SEPARATION WILL ALSO ALLOW FOR PERIODIC LEACHING OF SALTS IN THE IRRIGATION FIELDS, WHICH RESULT FROM BOTH THE USE OF TREATED EFFLUENT WATER AND SUBSURFACE DRIP IRRIGATION TECHNOLOGY.
- IRRIGATION ZONES WILL BE FURTHER DIVIDED INTO SOUTHWEST AND NORTHEAST SOLAR EXPOSURES TO ACCOMMODATE THEIR DIFFERING WATER NEEDS.
- THE OVERHEAD SPRAY SYSTEM VALVES WILL BE CONNECTED TO A CONTROLLER SEPARATE FROM THE DISPERSAL FIELD CONTROLLERS. THE OVERHEAD SPRAY SYSTEM CONTROLLER WILL BE MANAGED BY THE H.O.A.'S LANDSCAPE MAINTENANCE CONTRACTOR.
- A TYPICAL IRRIGATION ZONE WILL RUN AT 50-60 GALLONS-PER-MINUTE AND HAVE A PRECIPITATION RATE OF 0.50"-1.50" OF WATER PER HOUR.

WATER REUSE - TYPICAL FUEL MOD. IRRIGATION EXHIBIT 31



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

Vineyards: The proposed Area Plan includes 34.5 acres of vineyards that would be planted throughout fuel modification zone B within both phases of the Area Plan. The vineyards would contribute to meeting the project's fuel modification needs, and enhance the aesthetic quality and character of the Area Plan site. Wine making facilities and/or other grape processing facilities are not included in the Area Plan and would not be implemented by the project. The grapes grown in the vineyards would be harvested and sold off-site.

The vineyards would be owned, operated, and maintained by the HOA. HOA fees would fund the operation and maintenance of the vineyards; homeowners would not be individually responsible for the vineyards other than through payment of regular HOA assessments. Any income related to harvesting and selling grapes off-site would help defer the HOA costs, which would be reflected in the homeowner's HOA assessments.

Vineyards are as good or better than traditional fuel modification zone plantings. Within the vineyard areas vines would be planted in rows of twelve-feet on center with vines at every six-feet along with steel and wire trellises. The vines would be irrigated with domestic water by means of a drip or bubbler system to conserve water. The ground would be kept with limited low growing grasses and ground covers, so as not to compete with the vines or make tending the vines difficult. The water required for the vines with use of a drip or bubbler system is similar to other vegetation that is appropriate for Zone B (See **Exhibit 33, Conceptual Vineyard Planting Plan**).

The following requirements for the vineyards would ensure that they would not result in a buildup of fuel, such as an accumulation of dead and/or downed vegetation material, and would maintain moisture.

- a. A ten-foot firebreak (mineral earth or other noncombustible surface) shall be cleared between the perimeter of the orchard trees or row of grape vines and native vegetation or ornamental landscaping.
- b. Vineyards shall be kept:
 - Clean of dead and/or downed trees or shrubs.
 - Free of combustible debris including, but not limited to, dead branches and dead foliage.
 - Ground litter must be removed annually prior to the start of fire season.
 - Free of all tree/vine trimmings: no cut wood may be staked.
- c. All dead grasses between rows of trees or vines shall be removed (cut to 4-inches or less).
- d. Only noncombustible materials may be used within 100 feet of any structure. Wood stakes, trellis or other supports cannot be used in this zone.
- e. Vineyards must be irrigated and/or maintained so the vegetation is maintained in a health, turgid state.
- f. Irrigation lines shall be buried PVC or plastic pipe or galvanized steel pipes if above ground.
 - Vines shall be limbed up to not touch the ground.



CONCEPTUAL VINEYARD PLANTING PLAN
EXHIBIT 33



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

- Properly maintain vines per industry standards to ensure the overall health and vigor of the grove (i.e. proper irrigation, pest management, fruit production).
- Provide access to vineyards for maintenance activities and emergency purposes.

Service roads and paths would be developed around the vineyard areas for harvesting and maintenance activities. These would provide additional emergency access routes through the Area Plan project site.

Roadside Fuel Modification: This is a 50-foot wide area on both sides of the roadways within the Area Plan project site that is included in Zone B and would be selectively thinned. However, much of this area would be disturbed during grading operations. When this occurs, the revegetation would be installed in the clusters and spacing required for Zone B, described above, but in a random manner consistent with a natural appearance.

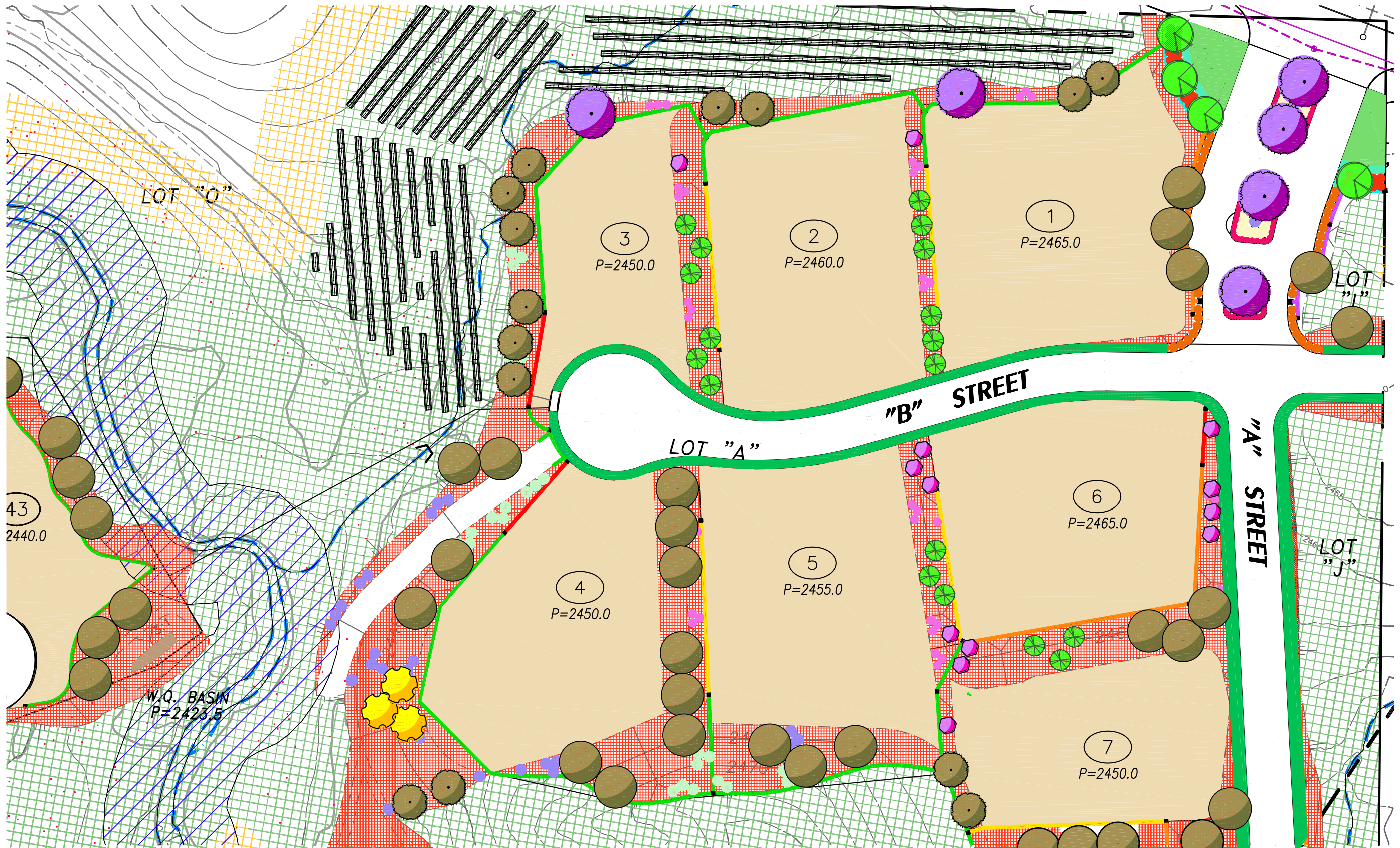
The roadside fuel modification plant palette would be made up of predominantly California native trees and shrubs that would blend and integrate into the open space vegetation. The landscaping objective is to make the roadway a secondary element and an extension of its natural surroundings. All plant palettes have been and would continue to be reviewed by project biologists to ensure that no plant could become invasive or result in an impact on the existing vegetation. The roadside fuel modification plant palette would also be reviewed and approved by OCFA to ensure that it meets the standards for use within each fuel modification zone.

Interior Manufactured Slopes: All manufactured slopes would be included in Zone B and would be planted and irrigated to help stabilize the slope area, retain appropriate moisture content and to work as a part of the fuel modification. The manufactured slope areas would be landscaped with trees that would be grouped in clusters of no more than three with a minimum thirty-foot separation from an adjacent mature canopy of any other tree or cluster. The plant palette for the manufactured slope areas would include California native trees and typical Chaparral vegetation. Shrubs are proposed to be planted in clusters of no more than three with a minimum ten-foot separation from the mature canopy of other tree, shrub, and/or shrub cluster. The shrubs would include a mixture of low water use ornamentals and California natives. The ornamentals would be kept to the manufactured slopes between homes, and not areas abutting native vegetation. The ground would be hydroseeded with a mix of low ground cover plantings that have low fuel content. This seed mix would be approved by OCFA (See **Exhibit 34, Conceptual Lot & Mfr. Slope Planting Plan**).

Fuel Modification Zone C

Zone C consists of the last 50 feet fire protection for the residential lots. It is located no closer than 150 feet to the edge of the lot to no more than 200 feet from the edge of the lot. Zone C would be maintained by the HOA. No new plantings or irrigation is proposed within Zone C. The existing plant material in Zone C would be thinned per OCTA requirements, and seasonal grasses would be managed to reduce the potential for fire to travel.

Zone C would not include vineyards, new plantings or irrigation unless it falls within a manufactured slope area. When this occurs, the landscaping would be consistent with the following specific requirements:



CONCEPTUAL LOT & MFR. SLOPE PLANTING PLAN
EXHIBIT 34



THE PRESERVE
ORANGE COUNTY, CALIFORNIA

- 1) Removal plant species that are inappropriate for Zone C.
- 2) All dead and downed plant materials shall be removed.
- 3) In order to maintain proper coverage, native grasses, shall be allowed to go to seed prior to abatement. Native grasses shall be cut after annual seeding, and the cut height shall not exceed 8-inches.
- 4) Tree-form shrubs less than 4-inches in height and other shrubs shall be spaced such that they do not create an excessive fuel mass and can be maintained in accordance with specified spacing as indicated on the landscape plan.
- 5) Oak specimen trees shall be retained as directed by the Owner's Representative and approved by the OCFA. These trees shall be thinned to a minimum of 50 percent and all hanging foliage within three times (3X) the height of the understory shrubs or ten-feet, whichever is greater, shall be removed.
- 6) All accumulated plant debris on the ground shall be removed.

7.0 General Plan Consistency

The Preserve at San Juan Area Plan is consistent with applicable goals and policies of the Orange County General Plan (General Plan). **Table 4** describes the consistency between the Area Plan and the relevant goals, objectives, and policies from the General Plan.

Table 4 – General Plan Consistency Table

Goals, Objectives and Policies	Area Plan Consistency
Land Use Element	
<p>Policy 1 Balanced Land Use. To plan urban land uses with a balance of residential, industrial, commercial, and public land uses.</p>	<p>Consistent. The project would introduce up to 72 single-family while preserving 414.6 acres of open space, which provides a balance of land uses.</p>
<p>Policy 2 Phased Development. To phase development consistent with the adequacy of public services and facilities within the capacity defined by the General Plan.</p>	<p>Consistent. The project would develop infrastructure to ensure the adequacy of services. In addition, the project would pay development fees and future homeowners would pay taxes which would be utilized by affected government services and facilities to offset the incremental increase in service demands created by the project.</p>
<p>Policy 4 Housing Densities. To provide a variety of residential densities which permit a mix of housing opportunities affordable to the County's labor force.</p>	<p>Consistent. The project would introduce up to 72 single-family homes in an undeveloped area, which would contribute to the ability of the County to meet demands for housing, particularly single-family homes.</p>
<p>Policy 5 Land Use/Transportation Integration. To plan an integrated land use and transportation system that accommodates travel demand for all modes of transit.</p>	<p>Consistent. The project's proposed roadway improvements to the existing transportation system along with implementation of the prescribed mitigation measures identified in the EIR would accommodate project traffic along with projected increases in traffic.</p>
<p>Policy 7 New Development Compatibility. To require new development to be compatible with adjacent areas.</p>	<p>Consistent. The project would be designed to complement and blend with the character of existing environmental adjacent to the project site.</p> <p>Landscaped areas and fuel modification zones would be provided adjacent to residential development areas to serve as natural buffers between the open space areas and proposed development areas. The project would include 414.6 acres of permanent open space, which would preserve a large portion of the site's natural, physical environment.</p> <p>In addition, access to and from Phases 1 and 2 would be from improved local streets.</p>
<p>Policy 8 Creative Design Concepts. To encourage innovative concepts which contribute to the solution of land use problems.</p>	<p>Consistent. The Preserve at San Juan land use plan responds to the physical site development constraints found within and surrounding the project site. The preservation of 414.6 acres of open space is a key project element. The project incorporates the following design elements:</p> <ul style="list-style-type: none"> • Clustering residential sites on level portions of the project site reduces the need for grading activity, and provides for retention of large areas of open space. • Incorporation of native and drought tolerant plant materials into landscaping areas.

Policy 9 Enhancement of Environment. To guide development so that the quality of the physical environment is enhanced.

- Homeowners would be encouraged to utilize drought tolerant plant materials in private yard areas.
- Use of “night sky friendly” outdoor lighting within streets, private outdoor spaces, and public gathering spaces.
- Providing a design responsive to the physical setting by preserving existing natural drainages within the project site.
- Reducing fire hazards through the implementation of a fuel modification plan as well as appropriate buffering of land uses with an OCFA approved plant palette.
- Implementation of a plant palette to reuse and dispose of treated wastewater.

Consistent. The purpose of this policy is to ensure that land use activities seek to enhance the physical environment. This policy does not mean that environmental enhancement precludes development. It recognizes the need to improve both the manmade and natural environments. Where aspects of the natural environment are deemed to be truly important, this policy requires that measures be taken to preserve these aspects.

Consistent with this policy, the proposed project would preserve a substantial portion of the natural, physical environment, which includes blue line streams, natural oak woodlands, habitat areas, sensitive species, wildlife movement areas, in addition to other resources.

Additionally, an Oak tree mitigation program would be implemented that would preserve, restore, and enhance on-site oak groves through sustainable tree plantings (as well as native tree planting).

In addition, runoff from the developed areas of Phases 1 and 2 would be collected in vegetated swales that would be constructed as part of the project. The swales would retain, filter, and infiltrate the increased flow anticipated from the increased impervious surface created with development of the Area Plan and would also decrease pollutants in the runoff. Prior to the issuance of a grading permit, a final WQMP would be developed for implementation by the HOA, the entity owning and maintaining the swales. The WQMP would provide guidelines to reduce pollution levels in storm water discharge. The EIR includes a detailed discussion of the drainage and water quality treatment features to be implemented by the project and the Conceptual WQMP prepared as part of development of this Area Plan.

Policy 14 To guide physical development within the County while protecting water quality through required compliance with urban and stormwater runoff regulations.

Consistent. Runoff from the developed areas of the project would be collected in vegetated swales that would retain, filter, and infiltrate the increased flow anticipated from the increased impervious surface

- Identification of resources shall be completed at the earliest state of project planning and review such as general plan amendment or zone change.
- Evaluation of resources shall be completed at intermediate stages of project planning and review such as site plan review, as subdivision map approval or at an earlier stage of project review.
- Final preservation actions shall be completed at final stages of project planning and review such as grading, demolition, or at an earlier stage of project review.

Archaeological Resources Policies

- To identify archaeological resources through literature and records research and surface surveys.
- To evaluate archaeological resources through subsurface testing to determine significance and extent.
- To observe and collect archaeological resources during the grading of a project.
- To preserve archaeological resources by:
 - Maintaining them in an undisturbed condition;
 - Excavating and salvaging materials and information in a scientific manner.

Paleontological Resources Policies

- To identify paleontological resources through literature and records research and surface surveys.
- To monitor and salvage paleontological resources during the grading of a project.
- To preserve paleontological resources by maintaining them in an undisturbed condition.
- To develop, utilize, and promote effective technical conservation and restoration strategies.

Policy 5 Water Quality. To protect water quality through management and enforcement efforts.

Policy 3 Energy Conservation. To encourage and actively support the utilization of energy conservation measures in all new and existing structures in the

Consistent. A Conceptual WQMP has been prepared for this Area Plan. The Final WQMP would be reviewed and approved by the County as part of the project’s Final Subdivision Map prior to issuance of a grading permit for the project. The Final WQMP would implement BMPs to comply with applicable existing regulations for eliminating or minimizing pollutants in storm water runoff during construction and operation of the project. The Final WQMP and BMPs would constitute management and enforcement efforts consistent with this policy.

Consistent. The project would include the following energy conserving features:

County.	<ul style="list-style-type: none"> • Builder-installed indoor appliances, including dish-washers, showers and toilets, would be low-water use. • Drought-tolerant, native landscaping would be used. • Smart Controller irrigation systems would be installed public and common area landscaping.
---------	--

Transportation Element

<p>Policy 1.2 Apply conditions to land use development projects to ensure that the direct and cumulative impacts of these projects are mitigated consistent with established level of service policies.</p> <p>Objective 2.1 Plan, develop and implement a circulation system in the unincorporated areas, which is consistent with the Master Plan of Arterial Highways and circulation plans of adjacent jurisdictions.</p> <p>Policy 2.4 Apply conditions to development projects to ensure compliance with OCTA's transit goals and policies.</p> <p>Policy 2.5 Apply conditions to development projects to ensure implementation of the Circulation Plan as applicable.</p> <p>Policy 3.1 Maintain acceptable levels of service on arterial highways pursuant to the Growth Management Element of the General Plan.</p> <p>Policy 3.2 Ensure that all intersections within the unincorporated portion of Orange County maintain a peak hour level of service "D", according to the County Growth Management Plan Transportation Implementation Manual.</p> <p>Policy 3.3 Evaluate all proposed land use phasing plans for major development projects to ensure maintenance of acceptable Levels of Service on arterial highway links and intersections.</p> <p>Policy 5.1 Establish "traffic impact fees" for application to County development projects with measureable traffic impacts, as defined in the Growth Management Element of the General Plan. These fees may serve as local matching funds for Orange County Measure "M"</p>	<p>Consistent. This Area Plan includes roadway improvements that would ensure that circulation facilities would continue to operate within an appropriate level of service.</p> <p>Consistent. This Area Plan would include local streets within the developed portions of both project phases that would not conflict with the Master Plan of Arterial Highways and circulation plans of adjacent jurisdictions.</p> <p>Consistent. The EIR determined that the Area Plan would result in less than significant impacts to alternative transportation facilities. Any transit program requirements related to bus or rail would be provided by OCTA upon the agency's review of the tentative tract map.</p> <p>Consistent. This Area Plan includes roadway improvements that would ensure that would ensure adequate and safe roadway capacity. Project implementation would not conflict with implementation the County's Circulation Plan. Appropriate conditions of approval will be applied to the project by the County to ensure compliance with applicable County General Plan circulation policies.</p> <p>Consistent. As described above, This Area Plan includes roadway improvements that would ensure acceptable levels of service on the nearby arterial highway.</p> <p>Consistent. This Area Plan includes roadway improvements that would ensure that key intersections serving the project site would operate at a LOS "D" or better.</p> <p>Consistent. The EIR evaluated the cumulative impacts of all proposed development projects in the area of the Area Plan and includes roadway improvements that would ensure that all nearby arterial highways and intersections serving the project site would operate at acceptable levels of service.</p> <p>Consistent. The project would pay all applicable traffic impact fees as defined in the Growth Management Element of the General Plan as required by the County of Orange.</p>
---	---

state and federal highway funding programs.

Policy 5.2 Use uniform analytical methods, in conformance with the Growth Management Plan, Measure M, and the Congestion Management Plan (CMP) to aid in transportation planning and impact evaluation and support the development and utilization of sub-area models to address detailed transportation issues.

Policy 5.5 Require as conditions of approval that the necessary improvements to arterial highway facilities, to which a project contributes measurable traffic, be constructed and completed within a specified time period or ADT/peak hour milestone to attain a Level of Service "D" at the intersections under the sole control of the County.

Policy 5.7 Requires a condition of approval, that a development mitigation program, development agreement or developer fee program be adopted to ensure that development is paying its fair share of the costs associated with that development pursuant to Policy 5.1 ("Traffic Impact Fees").

Growth Management Element

Goal 2 Ensure that adequate transportation facilities, public facilities, equipment, and services are provided for existing and future residents.

Objective 2 The circulation system shall be implemented in a manner which achieves the established Traffic Level of Service Policy.

Consistent. The EIR includes a traffic analysis that utilizes methodologies and computer modeling approved by the County of Orange. The traffic study is consistent with traffic modeling that occurs within the local and regional project vicinity to aid in transportation planning.

Consistent. As described above, this Area Plan includes roadway improvements that would ensure that key intersections serving the project site would operate at a LOS "D" or better.

Consistent. The project would pay all applicable traffic impact fees as defined in the Growth Management Element of the General Plan as required by the County of Orange.

Consistent. This Area Plan would include local streets within the developed portions of both project phases and improvements to existing roadways to ensure adequate transportation facilities for existing and future residents.

Consistent. The Area Plan would implement a circulation system within the developed portions of the Area Plan and offsite roadway improvements to achieve the required level of service.

Public Services and Facilities Element

Policy 1 Phasing and Funding. To implement public facilities in a manner that supports the implementation of the overall land use development policies and the needs of County residents and is consistent with the funding capabilities of the County. Proponents of planned communities or tentative tract or parcel maps in conventionally zoned communities shall provide ultimate, fair share infrastructure improvements for regional services as required by County and service provider plans in effect at the time of project implementation. Proponents shall also participate, on a fair share basis, in provision of community level facilities. The County and service providers shall strive to provide facilities and services necessary to complete the service system.

Water System

Policy 1 To ensure the adequacy of water system capacity and phasing, in consultation with the service providing agency(ies), in order to serve existing and future development as defined by the General Plan.

Consistent. Conditions of approval would be applied to the Project requiring payment of adopted development impact fees to address the project's fair share cost for public services and facilities. The project would pay applicable development fees for its fair share cost pertaining to schools, police service, fire protection services, and libraries. In addition, the project would implement roadway and water storage and supply improvements to serve the project

Consistent. The Area Plan has been coordinated with the water service provider who has prepared a Will Serve letter for the proposed project, which states that the water system would be adequate to serve the proposed project.

Wastewater System

Policy 1 To protect quality in both delivery systems and groundwater basins through effective wastewater system management.

Consistent. The onsite wastewater treatment systems have been designed to provide secondary treatment, reuse, and disposal of wastewater within the project site. The use of treated effluent for fuel modification irrigation provides an effective wastewater management system that protects water quality.

Orange County Fire Authority

Goal 1 Provide a safe living environment ensuring adequate fire protection facilities and resources to prevent and minimize the loss of life and property from structural and wild land fire damages.

Consistent. The Area Plan would implement a Fire Master Plan with fuel modification zones that would minimize the risk of wildfires and the potential for loss of life and property from structural and wildland fire damage. With the implementation of the project's fuel modification features, the risk of wild land fires to the proposed project would be substantially reduced.

Goal 2 To provide an adequate level of paramedic service for emergency medical aid in order to minimize trauma of injury of illness to patients.

Consistent. The incremental increase of population generated by the Area Plan would not affect the ability of medical providers to provide adequate levels of paramedic service. Due to the limited increase in development that would occur from the Area Plan, the effect on paramedic services would be negligible, and would not be sufficient to require expansion of existing hospitals or require construction of new facilities. The Area Plan would implement all applicable safety and fire features per the OCFA requirements, thus minimizing the demand for paramedic services. Further, conditions of approval would be applied to the project requiring payment of adopted development impact fees to address the project's fair share cost of medical services and facilities.

Objective 1 To achieve desired level of fire protection and paramedic service through coordinated land use and facility planning.

Consistent. Compliance with the applicable regulatory requirements and implementation of the Project Description Features including the approved fuel modifications and Fire Master Plans would ensure that the project would not significantly affect fire level of protection services. Further, conditions of approval would be applied to the project requiring payment of adopted development impact fees to address the project's fair share cost for fire and paramedic protection services and facilities.

Policy 3 Site Design Criteria. Require all land use proposals to implement adequate site design so as to maximize fire protection and prevention in order to minimize potential damages. The site design criteria shall be established to reflect the levels of protection needed for projects in various fire hazard areas. Such criteria shall include consideration as to: structure type and density, emergency fire flow and fire hydrant distribution, street pattern and emergency fire access, fuel modification programs, automatic fire sprinkler systems, and other requirements as determined by the Fire Chief. In accordance with the Insurance Services Office (ISO) suggested standards, ultimate fire protection rating shall be maintained by General Plan

Consistent. The following features of the Area Plan would ensure the project is consistent with this policy.

- The project would be designed to provide fire-resistant construction for all structures, including utilizing fire-resistant building materials and sprinklers.
- Three fuel management zones are planned for the project would provide fire protection for development within the Area Plan from the potential of fire hazard.
- A fire Master Plan would be approved by the Orange County Fire Authority for the Area Plan, which provides appropriate fire safety protective

increase in demand for library services and facilities created by the project.

Recreation Element

Goal 1 Provide adequate local park sites to meet the recreation needs of existing and future residents and preserve natural resources within unincorporated Orange County.

Policy 2.32 To acquire park lands by requiring residential developers to provide a minimum of 2.5 net acres of usable local park land (i.e. park land that is relatively level, served by utilities, for multipurpose playfields, court sports, etc) for each prospective 1,000 residents. In no case shall the credit given for park land and improvements exceed the total requirements under the Local Park code. No credit banking shall be permitted when a developer provides full requirement in acreage and also provides improvement.

Policy 2.4 To acquire local park lands in unincorporated areas to provide active recreation facilities to meet the needs of present and future residents through dedications, or irrevocable offers of dedication, in fee title from residential developers.

Consistent. The project's residents would create additional recreational demands on existing parks and recreation facilities. The project is not proposing new park or recreational facilities; however, is adjacent to large areas of recreational open space. In addition, the project would be required to pay established in-lieu park fees to mitigate impacts to local and neighborhood park facilities that serve the project area.

Consistent. See response to Goal 1 above.

Consistent. See response to Goal 1 above.

Noise Element

Policy 4.1 To enforce the County's Noise Ordinance to prohibit or mitigate harmful and unnecessary noise within the County.

Goal 5 To fully integrate noise considerations in land use planning to prevent new noise/land use conflicts.

Consistent. The project would comply with the County's Noise Ordinance during both construction and operation.

Potential operational noise impacts would be mitigated with implementation of Project Design Features and the EIR prescribed mitigation measures. While construction noise may temporarily exceed levels permitted by the County of Orange Noise Ordinance, such noise is treated as being in compliance if it occurs during the designated construction hours prescribed by the Noise Ordinance. As the project's construction activities would occur during the designated construction hours, the project would comply with the Noise Ordinance.

The project's operational noise from the residential land uses would not exceed the County's exterior or interior noise standards. However, Project Description Features and EIR prescribed mitigation measures would be implemented to ensure that project related mechanical equipment is appropriately located and that the residential structures comply with noise insulation standards.

Consistent. The project's proposed single-family land uses would not result in noise in excess of the County's exterior or interior noise standards. In addition, developed portions of the Area Plan would be surrounded by vegetated buffer areas (fuel modification zones) that would prevent noise related land use

Policy 5.1 To utilize the criteria of acceptable noise levels for various types of land uses as depicted in Table VIII-2 (in the County of Orange General Plan Noise Element) in the review of development proposals.

Policy 5.4 To stress the importance of building and design techniques in future site planning for noise reduction.

Goal 6 To identify and employ mitigation measures in order to reduce the impact of noise levels and attain the standards established by the Noise Element, for both interior areas and outdoor living areas for noise sensitive land uses.

Policy 6.2 Continue enforcement of Chapter 35 of the Uniform Building Code, currently adopted edition, and the California Noise Insulation Standards (Title 25 California Administrative Code).

Policy 6.3 To require that all new residential units have an interior noise level in living areas that is not greater than 45 decibels CNEL with it being understood that standard construction practices reduce the noise level by 12 decibels CNEL with the windows open and 20 decibels CNEL with the windows closed. Higher attenuation than listed above may be claimed if adequate field monitoring or acoustical studies are provided to and approved by the County.

Policy 6.5 All outdoor living areas associated with new residential uses shall be attenuated to less than 65 decibels CNEL.

Policy 6.7 To apply noise standards as defined in the Noise Element for noise-sensitive land uses.

conflicts.

Consistent. The project's proposed residential uses would be within the acceptable noise levels as depicted in Table VIII-2 of the County's General Plan. In addition, and as described above, Project Description Features and EIR prescribed mitigation measures would be implemented to ensure that project related noise effects would be minimized.

Consistent. As described above, the developed portions of the Area Plan would be surrounded by buffers that would reduce noise effects on adjacent land uses. In addition, Project Description Features and EIR prescribed mitigation measures would be implemented to ensure that project related noise effects are limited.

Consistent. The project would comply with the County of Orange Noise Ordinance. Additionally, the project would implement Project Description Features and mitigation measures prescribed by the Project EIR to minimize noise to the extent feasible. During project operation, project residents and surrounding noise sensitive receptors would not be exposed to noise levels that would exceed the standards established by the Noise Element.

Consistent. All new residential units developed as part of the project would be constructed in accordance with the applicable provisions of Chapter 35 of the Uniform Building Code and the California Noise Insulation Standards (Title 25 California Administrative Code).

Consistent. The project would develop all residential units developed in accordance with the County adopted noise standards. In addition, as described above, the new residential units would be constructed in accordance with the applicable provisions of Chapter 35 of the Uniform Building Code and the California Noise Insulation Standards (Title 25 California Administrative Code).

Consistent. The Area Plan project site is surrounded by rural and open space land use. There are no known noise generators that would result in outdoor noise levels exceeding 65 CNEL. In addition, the project would construct all residential uses in accordance with the County adopted noise standards.

Consistent. The proposed residential uses would be developed and operated consistent with the Noise Element standards for noise-sensitive land uses. As described above, Project Description Features and EIR prescribed mitigation measures would be implemented, which would apply the noise standards within the Noise Element.

Housing Element

Strategy 5a Encourage the use of energy conservation features in residential construction, remodeling and existing homes.

Consistent. Residential development as part of the project would conform to Title 24 energy requirements. Other energy conserving features incorporated as part of the project include:

- Builder-installed indoor appliances, including dishwashers, showers and toilets, would be low-water use.
 - Drought-tolerant, native landscaping would be used.
 - Smart Controller irrigation systems would be installed.
-

8.0 Implementation and Administration

This section establishes the procedures for implementation of this Area Plan.

8.1 Interpretation

Unless otherwise provided herein, any ambiguity concerning the content or application of the Preserve at San Juan Area Plan shall be resolved by the County of Orange Director of Planning or the Director's designee, in a manner consistent with the purpose and intent established in this Area Plan.

8.2 Severability

If any portion of this Area Plan is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining portions thereof. The legislative body hereby declares that they would have enacted this Area Plan, and each portion thereof, irrespective of the fact that any one or more portions be declared invalid or ineffective.

8.3 Applicability

The Preserve at San Juan Area Plan is a comprehensive plan for the development of the project site, which includes both Phase 1 and 2. The design and development criteria contained within this Area Plan apply to all development proposed within the project site. The land use plan of this Area Plan establishes the boundaries of residential planning areas and open space areas and establishes the type, pattern, and intensity of land use within each land use area. This Area Plan includes a plan for infrastructure and public improvements to serve the development, landscape, fuel modification areas. In addition, this Area Plan includes Project Description Features and design criteria applicable to all development within the project site.

8.4 Subdivision Maps

Development of the Preserve at San Juan Area Plan is subject to approval of subdivision maps pursuant to the requirements of the Orange County Subdivision Code. Following approval of tentative subdivision maps, final maps approved by the County and recorded with the County become the legal documentation defining lots within the Area Plan project site. Vesting Tentative Tract Map No. 17269 and 17270 submitted by the applicant for approval by the County implements this Area Plan requirement. Approval by the County of the Tentative Tract Maps consistent with this Area Plan, would establish, among other things, development phasing and the operation, and maintenance of public facilities, infrastructure improvements, and services for the Preserve at San Juan.

The Preserve at San Juan Area Plan contains undisturbed, natural, open space. Prior to recordation of a final map to allow development of building sites, delineated open space areas, would be placed within an open space easement for permanent preservation. Maintenance of the open space easement would be the responsibility of the HOA.

8.5 Environmental Impact Report

Pursuant to the requirements of the California Environmental Quality Act (CEQA), implementation of the Preserve at San Juan Area Plan would require certification of an Environmental Impact Report (EIR) that would evaluate, disclose, and mitigate to the extent

feasible, the potential environmental impacts that could result from construction and operation of the proposed project. The County of Orange is the Lead Agency and has prepared an EIR that has been distributed to public agencies and the public to solicit comments related to environmental effects of the proposed project. The EIR will be the environmental document of reference for agencies when approving development permits or considering subsequent discretionary approvals.

8.6 Compliance with Project Description Features and Mitigation Measures

Development within the Area Plan project site shall comply with all of the Project Description Features (listed in Section 5.1) and all of the mitigation measures as provided in the Preserve at San Juan Mitigation Monitoring and Reporting Program (MMRP) that is approved by the County as part of the Final EIR for the Area Plan.

8.7 Homeowner Association

An HOA will be established to provide maintenance for and fund the following:

- Open space areas
- Landscaping within common areas
- Fuel modification zones
- Vineyards
- Irrigation facilities
- Community and neighborhood entries and signage
- Community perimeter walls and fencing
- Landscape of slopes internal to the development areas
- Common area lighting
- Implementation of CR&Rs

8.8 Area Plan Amendments

Any change to the Preserve at San Juan Area Plan that has not been deemed by the County of Orange Director of Planning or the Director's designee, to be a "modification" that keeps within the purpose and intent of this Area Plan and is consistent with the County General Plan, would constitute an Area Plan Amendment.

Area Plan amendments shall be reviewed and approved pursuant to the procedures established in Orange County Zoning Code Section 7-9-150, "Discretionary Permits and Procedures." In the event the proposed amendment requires supplemental environmental analysis pursuant to CEQA, the entity requesting the Area Plan Amendment would be responsible for any and all costs associated with preparing the necessary CEQA documentation.

Appeals related to any determination of the Director of Planning or the Director's designee may be made pursuant to the provisions of Orange County Zoning Code Section 7-9-150.4 "Appeals."