



**Biological Resources Report for the  
Southwest Village Specific Plan  
San Diego, California  
Project No. 614791**

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## TABLE OF CONTENTS

Acronyms and Abbreviations .....	x
Summary .....	1
<b>1.0 Introduction .....</b>	<b>17</b>
1.1 Project Location .....	17
1.2 Project Background .....	17
1.3 Project Description .....	19
<b>2.0 Methods.....</b>	<b>78</b>
2.1 Program-level Methods .....	78
2.2 Project-level Survey Area .....	78
<b>3.0 Regulatory Framework.....</b>	<b>87</b>
3.1 Federal Regulations.....	87
3.2 State Regulations .....	87
3.3 Local Regulations .....	88
<b>4.0 Existing Conditions .....</b>	<b>101</b>
4.1 Program-level Area - Biological Resources .....	101
4.2 Project-level Survey Area - Biological Resources .....	105
<b>5.0 Sensitive Resources .....</b>	<b>183</b>
5.1 Sensitivity Criteria.....	183
5.2 Sensitive Vegetation Communities .....	184
5.3 Sensitive Plants .....	184
5.4 Sensitive Wildlife.....	201
5.5 Jurisdictional Resources .....	223
5.6 Wildlife Corridors .....	232
5.7 Designated Critical Habitats .....	233
<b>6.0 Compliance with the MSCP and VPHCP.....</b>	<b>349</b>
6.1 Program-level Consistency .....	349
6.2 Project-level Consistency.....	351
<b>7.0 Impact Analysis .....</b>	<b>404</b>
7.1 Direct Impacts .....	404
7.2 Indirect Impacts.....	505
7.3 Impacts to Wildlife Corridors .....	529
7.4 Land Use Consistency.....	532
7.5 Cumulative Impacts.....	535



## TABLE OF CONTENTS (cont.)

<b>8.0</b>	<b>Impact Summary and Mitigation .....</b>	<b>537</b>
8.1	Program-level Impact Summary and Mitigation Framework .....	538
8.2	Project-level Impact Summary and Mitigation Element .....	543
<b>9.0</b>	<b>Significance after Mitigation .....</b>	<b>590</b>
9.1	Program-level Significance .....	590
9.2	Project-level Significance.....	591
<b>10.0</b>	<b>References Cited .....</b>	<b>598</b>

## FIGURES

1:	Regional Location .....	40
2:	Project Location on USGS Map .....	41
3:	Project Location on City 800' Map .....	42
4:	Project Location in Relation to MHPA and 100 Percent Conserved Lands .....	43
5:	Otay Mesa Community Plan Southwest District Map .....	44
6:	Parcel Ownership .....	45
7:	Project Location in Relation to Other Preserve and Open Space Parcels .....	46
8:	Specific Plan Development Concept .....	47
9:	Specific Plan Development Phasing .....	48
10.1:	Grading Phasing.....	49
10.2:	Phase 1.....	50
11:	Project-level and Program-level Analysis Areas .....	51
12.1:	Otay Mesa Community Plan Adopted Trails Map .....	52
12.2:	Otay Mesa Community Plan Conceptual Trail Map Revisions.....	53
12.3:	Proposed Trail Network and Conceptual Trails .....	54
12.4:	Trail Network Phasing .....	55
13.1:	Slope Revegetation Areas.....	56
13.2:	Phase 1 Brush Management.....	57
13.3:	Phase 2 Impact Neutral Brush Management Zone 2 Areas Outside of the Impact Footprint.....	58
14.1:	Beyer Boulevard .....	59
14.2:	Beyer Boulevard Wildlife Crossings, Wildlife Fencing, and Retaining Walls.....	60
15.1:	Beyer Boulevard between Enright Drive and East Beyer Boulevard – Interim Condition .....	61
15.2:	Beyer Boulevard Widening between Enright Drive and East Beyer Boulevard – Ultimate Condition.....	62
15.3:	Beyer Boulevard between Enright Drive and East Beyer Boulevard - Ultimate 4-Lane Option .....	63
16.1:	State Route 905 & Caliente Avenue Westbound On-Ramp.....	64
16.2:	Caliente Avenue SR-905 Bridge Restriping and Signal Improvements.....	65
16.3:	Emergency Vehicle Access Road .....	66

## TABLE OF CONTENTS (cont.)

### FIGURES (cont.)

17:	Water and Sewer Lines .....	67
18.1:	Project-level Trail Restoration.....	68
18.2 - 18.7:	Trail Restoration Areas .....	69
19:	CDFW Conservation Easements.....	75
20.1:	Proposed Furby North Preserve Exchange Lands and Legal Access .....	76
20.2:	Proposed Legal Access to Southern Portion of the Furby North Preserve from Beyer Boulevard .....	77
21:	Project-level Survey Areas .....	85
22:	Candlelight and Southwind Projects .....	86
23:	Soil Types.....	102
24.1 - 24.15:	Existing Biological Resources – Vegetation Communities/Land Cover Types.....	139
25.1:	Wildlife Tracking Study Area.....	154
25.2:	Focal Species Swale Routes.....	155
25.3:	Coyote and Bobcat Hotspots.....	156
26.1 - 26.13:	Existing Biological Resources - Sensitive Plant Species.....	157
27.1 - 27.13:	Existing Biological Resources - Sensitive Animal Species .....	170
28.1:	Project Location in Relation to Spreading Navarretia Critical Habitat .....	235
28.2:	Project Location in Relation to Riverside Fairy Shrimp Critical Habitat.....	236
28.3:	Project Location in Relation to San Diego Fairy Shrimp Critical Habitat.....	237
29.1:	Suitable Quino Checkerspot Butterfly Habitat within the Extensive Habitat Assessment Areas.....	238
29.2:	Crotch's Bumble Bee Habitat Assessment.....	239
30:	Potential Jurisdictional Resources – Program-level Analysis Area.....	240
31.1 - 31.37:	Potential USACE Waters of the U.S.....	241
32.1 - 32.37:	Potential CDFW and RWQCB Waters of the State.....	278
33.1 - 33.32:	City of San Diego Wetlands .....	315
34:	Local Canyons and Culverts that Currently Support Wildlife Movement.....	347
35:	Direction of Wildlife Movement.....	348
36.1:	Pre-Project MHPA and VPHCP/MHPA Boundary .....	399
36.2:	Project-level Baseline MHPA Deletions .....	400
36.3:	Project-level Baseline MHPA Boundary Line Additions .....	401
36.4:	Project-Level VPHCP 100 Percent Conservation Deletions and Replacement MHPA Additions .....	402
36.5:	Post-Project MHPA and VPHCP/MHPA Boundary .....	403
37:	Program-level Impacts to Biological Resources – Sensitive Plant and Animal Species .....	406
38.1 - 38.6:	Impacts to Biological Resources Vegetation Communities/Land Cover Types.....	419
39.1 - 39.6:	Impacts to Biological Resources - Sensitive Plant Species.....	428
40.1 - 40.6:	Impacts to Biological Resources - Sensitive Animal Species .....	443
41.1 - 41.8:	Impacts to Potential USACE Waters of the U.S.....	474
42.1 - 42.8:	Program-level Impacts to Potential CDFW & RWQCB Waters of the State .....	482

## TABLE OF CONTENTS (cont.)

### FIGURES (cont.)

43.1 - 43.8:	Impacts to City of San Diego Wetlands.....	490
44:	Jurisdictional Resources within the Southwest Village Specific Plan Project, Candlelight Project and Southwind Project.....	498
45.1:	Resources Subject to City of San Diego Wetland Deviation .....	499
45.2:	Wetland Deviation for Beyer Boulevard and Central Avenue – Essential Public Projects Option .....	500
45.3:	Wetland Deviation for Caliente Avenue - Essential Public Projects Option .....	501
45.4:	Wetland Deviation - Biologically Superior Option North .....	502
45.5:	Wetland Deviation - Biologically Superior Option South .....	503
46:	Proposed Vernal Pool Restoration.....	504
47:	Beyer Boulevard Noise Contours.....	517
48.1 - 48.11:	City of San Diego Wetlands Outside the Project-level Grading Footprint .....	518
49:	Proposed Covenant of Easements and MHPA after Boundary Line Adjustment .....	544
50:	Mitigation Areas .....	545
51:	Mitigation with Project Design Features .....	546
52:	Long-term Management.....	553

### PHOTOGRAPHS

1:	Maritime Succulent Scrub Along the Beyer Boulevard Extension, Facing South. Date: February 18, 2020. ....	114
2:	Diegan Coastal Sage Scrub Near Vernal Pool Restoration Area, Facing Northeast. Photo Date: April 16, 2018 .....	116
3:	Disturbed Diegan Coastal Sage Scrub, Facing Northeast. Photo Date: September 11, 2019 .....	116
4:	Non-Native Grassland, Facing North. Photo Date: March 15, 2019 .....	118
5:	View of Non-wetland Water (Natural Flood Channel) within the Northern Portion of Phase 1, Facing East. Photo Date: March 15, 2018 .....	119
6:	View of Mule Fat Scrub within the Far Western end of the Beyer Park Parcel, Facing South. Photo Date: February 18, 2020.....	120
7:	View of Southern Willow Scrub within Phase 4 (on left hand side of photo), Looking East. Photo Date: February 13, 2020 .....	120
8:	View of Disturbed Wetland #234 within Phase 2, Looking West. Photo Date: March 30, 2020.....	122
9:	View of Disturbed Wetland #278 within the Southeastern Portion of Phase1, Looking West. Photo Date: February 27, 2020.....	123
10:	View of Disturbed Wetland #314 Adjacent to a Project-level Trail, Looking Northwest. Photo Date: March 26, 2020 .....	124

## TABLE OF CONTENTS (cont.)

### PHOTOGRAPHS (cont.)

11:	View of Disturbed Wetland #324 within Phase 2, Looking East. Photo Date: March 30, 2020 .....	125
12:	View of Disturbed Wetland #VPHCP 3153 within Phase 1, Looking South. Photo Date: March 26, 2020.....	126
13:	View of Disturbed Wetland #60 within Phase 1, Looking East. Photo Date: March 26, 2018.....	127
14:	View of High-Quality Vernal Pool #34 Supporting Dwarf Woollyheads ( <i>Psilocarphus brevissimus</i> ), a Vernal Pool Plant Indicator Species, within Phase 1, Facing Southeast. Photo Date: April 6, 2018 .....	129
15:	View of High-Quality Vernal Pool #VPHCP 3139 within Phase 1, Looking West. Photo Date: March 30, 2020.....	129
16:	Close-Up View of Adobe Popcorn-flower ( <i>Plagiobothrys acanthocarpus</i> ), Prairie Plantain ( <i>Plantago elongata</i> ), and Dwarf Woollyheads ( <i>Psilocarphus brevissimus</i> ) within High-Quality Vernal Pool #VPHCP 3139. Photo Date: March 30, 2020 .....	130
17:	View of Low-Quality Vernal Pool with San Diego Fairy Shrimp #68 within the Southern Portion of Phase 1, Looking East. Photo Date: March 26, 2018 .....	130
18:	View of Low-Quality Vernal Pool #239 within the Southern Portion of Phase 2, Looking Northwest. Photo Date: March 30, 2020 .....	131
19:	View of Low-Quality Vernal Pool with San Diego Fairy Shrimp #260 within the Southeastern Portion of Phase 1, Looking South. Photo Date: February 27, 2020.....	132
20:	View of Low-Quality Vernal Pool with San Diego Fairy Shrimp #235 within Phase 2, Looking East. Photo Date: March 30, 2020 .....	133
21:	View of Low-Quality Vernal Pool within Phase 1, Facing South. Photo Date: April 14, 2020.....	134
22:	Eucalyptus Woodland within Phase 1, Facing Southwest. Photo Date: September 11, 2019 .....	135
23:	Decumbent goldenbush ( <i>Isocoma menziesii</i> var. <i>decumbens</i> ) Observed Along Edge of Diegan Coastal Sage Scrub in Phase 1. Photo Date: March 26, 2019 .....	196
24:	Golden-ray pentachaeta ( <i>Pentachaeta aurea</i> ssp. <i>aurea</i> ) Observed in Non-native Grassland within Mitigation Lands. Photo Date: May 8, 2019 .....	196
25:	Otay Tarplant ( <i>Deinandra conjugens</i> ) Observed in Disturbed Land within the Western Portion of the Beyer Boulevard Survey Area. Photo Date: June 8, 2020....	197
26:	Flowering San Diego Barrel Cactus ( <i>Ferocactus viridescens</i> ) in Maritime Succulent Scrub, within the Northern Portion of Phase 1. Photo Date: April 1, 2019.....	198
27:	San Diego Bur-sage ( <i>Ambrosia chenopodiifolia</i> ) Growing in Maritime Succulent Scrub within the Southern Portion of Phase 1. Photo Date: February 26, 2018.....	198
28:	San Diego Button-celery ( <i>Eryngium aristulatum</i> var. <i>parishii</i> ) Observed in Vernal Pool #3145 in Phase 1. Photo Date: April 23, 2019 .....	200
29:	Flowering Seaside Cistanthe ( <i>Cistanthe maritima</i> ) (Foreground) Observed Just Outside of the Southwestern Corner of Phase 1. Photo Date: April 1, 2019.....	200

## TABLE OF CONTENTS (cont.)

### PHOTOGRAPHS (cont.)

30:	Quino Checkerspot Butterfly ( <i>Euphydryas editha quino</i> ) Observed within the Vernal Pool Restoration Area. Photo Date: April 1, 2019.....	208
31:	Riverside Fairy Shrimp ( <i>Streptocephalus woottoni</i> ) Observed in Vernal Pool #150 during Protocol Surveys. Photo Date: March 19, 2019.....	208
32:	Coast Horned Lizard ( <i>Phrynosoma blainvillii</i> ) in Non-Native Grassland. Photo Date: April 16, 2018 .....	212
33:	Two-Striped Garter Snake ( <i>Thamnophis hammondi</i> ) Observed within a Vernal Pool in VTM South. Photo Date: December 17, 2018 .....	213
34:	San Diego Desert Woodrat ( <i>Neotoma lepida intermedia</i> ) Observed under a Wooden Board within Non-Native Grassland within the project-level area. Photo Date: May 8, 2018.....	220

### TABLES

1:	Quino Checkerspot Butterfly Protocol Survey Years and Locations .....	82
2a:	Vegetation Communities/Land Cover Types within the Program-level Areas.....	103
2b:	Vegetation Communities and Land Cover Types within the Project-level Survey Areas .....	107
2c:	Vegetation Communities/Land Cover Types within the Phase 1 Project-level Areas.....	108
2d:	Vegetation Communities/ Land Cover Types within the Phase 2 Project-level Areas.....	109
2e:	Vegetation Communities/Land Cover Types within the Beyer Boulevard Extension Project-level Areas.....	110
2f:	Vegetation Communities/Land Cover Types within the Phase 4 Project Survey Areas .....	111
2g:	Vegetation Communities/Land Cover Types within the Emergency Vehicle Access Project Survey Areas.....	112
2h:	Vegetation Communities/Land Cover Types within the Off-site Improvements Project Survey Areas .....	112
3:	Sensitive Plant Species Observed or with a Moderate Potential to Occur within the Project-level Analysis Area .....	186
4a:	Sensitive Wildlife Species Observed and with a Moderate to High Potential to Occur within the Program-level Analysis Area.....	202
4b:	Sensitive Wildlife Species Observed and with a Moderate to High Potential to Occur within the Project-level Survey Area.....	205
5a:	Existing Potential Jurisdictional Resources within the Project-level Survey Areas.....	224
5b:	Existing Potential Jurisdictional Resources within the Phase 1 Project-level Survey Areas .....	225
5c:	Existing Potential Jurisdictional Resources within the Phase 2 Project-level Survey Areas .....	226

## TABLE OF CONTENTS (cont.)

### TABLES (cont.)

5d:	Existing Potential Jurisdictional Resources within the Beyer Boulevard Project-level Survey Areas.....	227
5e:	Existing Potential Jurisdictional Resources within the Phase 4 Project-level Survey Areas .....	228
5f:	Existing Potential Jurisdictional Resources within the Emergency Vehicle Access Road Project-level Survey Areas.....	229
6a:	Critical Habitats Located within the Program-level Survey Area .....	234
6b:	Critical Habitats Located within the Project-level Survey Area.....	234
7a:	Summary of Proposed MHPA BLA within the Project-level Areas .....	352
7b:	Summary of Proposed VPHCP Conservation Analysis within the Project-level Areas.....	382
7c:	Summary of Proposed MHPA and VPHCP Conservation Analysis within the Project-level Areas.....	386
8a:	Direct Impacts to Vegetation Communities/Land Cover Types within the Project-level Survey Areas Assuming an MHPA BLA .....	408
8b:	Direct Impacts to Vegetation Communities/Land Cover Types within the Phase 1 Project-level Areas Assuming an MHPA BLA.....	409
8c:	Direct Impacts to Vegetation Communities and Land Cover Types within the Phase 2 Project-level Areas Assuming an MHPA BLA .....	411
8d:	Direct Impacts to Vegetation Communities/Land Cover Types within the Beyer Boulevard Project-level Areas Assuming an MHPA BLA.....	412
8e:	Direct Impacts to Vegetation Communities/Land Cover Types within the Phase 4 Project Survey Areas Assuming an MHPA BLA.....	414
8f:	Direct Impacts to Vegetation Communities/Land Cover Types within the Emergency Vehicle Access Survey Areas Assuming an MHPA BLA .....	415
8g:	Direct Impacts to Vegetation Communities/ Land Cover Types within the Off-Site Improvements Survey Areas Assuming an MHPA BLA.....	417
9:	Resources within the Project-level Areas Containing Fairy Shrimp Based on Survey Results .....	435
10:	Mitigation and Project Design Feature Summary .....	442
11a:	Summary of Impacts to Potential Jurisdictional Resources within the Project-level Survey Areas.....	450
11b:	Summary of Impacts to Potential Jurisdictional Resources within the Phase 1 Project-level Survey Areas.....	452
11c:	Summary of Impacts to Potential Jurisdictional Resources within the Phase 2 Project-level Survey Areas .....	453
11d:	Summary of Impacts to Potential Jurisdictional Resources within the Beyer Boulevard Project-level Survey Areas .....	454
11e:	Summary of Impacts to Potential Jurisdictional Resources within the Phase 4 Project-level Survey Areas .....	455
11f:	Summary of Impacts to Potential Jurisdictional Resources within the Emergency Vehicle Access Road Project-level Survey Areas .....	456

## TABLE OF CONTENTS (cont.)

### TABLES (cont.)

12:	City of San Diego Wetlands Subject to a Wetland Deviation .....	457
13:	Indirect Impacts to Vernal Pool and Disturbed Wetlands Assumed to Contain San Diego Fairy Shrimp.....	512
14:	Otay Mesa Community Plan Final Environmental Impact Report and Southwest Village Biological Resources Report Issue Cross-reference .....	537
15a:	Mitigation Requirements and Proposed Mitigation for Project-level Sensitive Upland Vegetation Community Impacts with Mitigation Occurring Inside the MHPA Assuming an MHPA BLA.....	548
15b:	Mitigation Requirements for Impacts to the Sensitive Upland Vegetation Communities within the Phase 1 Project-level Analysis Area Assuming an MHPA BLA.....	549
15c:	Mitigation Requirements for Impacts to the Sensitive Upland Vegetation Communities within the Phase 2 Project-level Analysis Area Assuming an MHPA BLA.....	549
15d:	Mitigation Requirements for Impacts to the Sensitive Upland Vegetation Communities within the Beyer Boulevard Project-level Areas Assuming an MHPA BLA.....	550
15e:	Mitigation Requirements for Impacts to the Sensitive Upland Vegetation Communities within the Phase 4 Project Survey Areas Assuming an MHPA BLA.....	551
15f:	Mitigation Requirements for Impacts to the Sensitive Upland Vegetation Communities within the Emergency Vehicle Access Survey Areas Assuming an MHPA BLA.....	551
16:	Sensitive Plant Species Impact Summary.....	555
17:	Sensitive Wildlife Species Project-level Impact and Mitigation Summary .....	558
18a:	Mitigation Requirements for Direct Impacts to City of San Diego Wetlands .....	577
18b:	City of San Diego Wetland (Mule Fat and Southern Willow Scrub) Impacts and Required Mitigation.....	579
18c:	Mitigation Summary for Direct and Indirect Impacts to City of San Diego Wetlands .....	580

## TABLE OF CONTENTS (cont.)

### ATTACHMENTS

- 1: Trails Restoration Plan for the Southwest Village Specific Plan Project
- 2: Spring Survey Report, Southwest Village Wildlife Movement/Crossing Study and Addendum
- 3: Survey Dates, Times, and Weather Conditions
- 4: Plant Species Observed
- 5: Aquatic Resource Delineation for the Southwest Village Specific Plan
- 6: Wildlife Species Observed
- 7: Sensitive Plant Species Observed or with the Potential for Occurrence within the Program-Level and Project-Level Analysis Areas
- 8: Sensitive Wildlife Species Occurring or with the Potential to Occur within the Program-Level and Project-Level Analysis Areas
- 9: Southwest Village Specific Development Project: 2023 Quino Checkerspot Butterfly Survey Report
- 10a: USFWS letter to City of San Diego dated January 31, 2025
- 10b: USFWS letter to City of San Diego dated September 4, 2024
- 11: Southwest Village Specific Plan – Beyer Boulevard Alternatives Analysis
- 12: Geotechnical Study, Southwest Village Emergency Vehicle Access Road
- 13: Coastal Cactus Wren Mitigation Plan for the Southwest Village Specific Plan Project
- 14: Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan for the Southwest Village Specific Plan
- 15: Otay Tarplant and Native Grassland Mitigation Plan for the Southwest Village Specific Plan Project
- 16: Long-Term Management and Monitoring Plan for the Beyer Boulevard Extension Wildlife Movement Features
- 17: Vernal Pool and Quino Checkerspot Butterfly Habitat Management Plan for the Southwest Village Specific Plan Project
- 18: Wetland Plan for the Southwest Village Specific Plan
- 19: Conservation Easement Deed



## Acronyms and Abbreviations

°F	degrees Fahrenheit
ADT	average daily traffic
APN	Assessor's Parcel Number
ASMD	area specific management directives
BGEPA	Bald and Golden Eagle Protection Act
BLA	Boundary Line Adjustment
BMP	best management practice
BMZ	Brush Management Zone
BSO	Biologically Superior Option
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
City	City of San Diego
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
County	County of San Diego
CPU	Community Plan Update
CRPR	California Rare Plant Rank
dB(A)	A-weighted decibels
ESL	environmentally sensitive lands
EAS	Environmental Analysis Section
EVA	emergency vehicle access
FEIR	Final Environmental Impact Report
FESA	Federal Endangered Species Act
FEMA	Federal Emergency Management Agency
GPS	global positioning system
HMP	Habitat Management Plan
I-805	Interstate 805
ITP	Incidental Take Permit
LDC	Land Development Code
L <sub>eq</sub>	average sound level
MA	Major Amendment
MBTA	Migratory Bird Treaty Act
MCAS	Marine Corps Air Station
MHPA	Multi-Habitat Planning Area
MMC	Mitigation Monitoring Coordination office
MSCP	Multiple Species Conservation Program
NRCS	Natural Resource Conservation Service
OHWM	Ordinary High Water Mark

OMCP	Otay Mesa Community Plan
OMCP FEIR	Otay Mesa Community Plan Final Environmental Impact Report
PAR	Property Analysis Record
PDP SWQMP	Priority Development Project Storm Water Quality Management Plan
PRC	Public Resources Code
RECON	RECON Environmental, Inc.
RWQCB	Regional Water Quality Control Board
SDG&E	San Diego Gas and Electric
Specific Plan	Southwest Village Specific Plan
SR-905	State Route 905
TET	The Environmental Trust
USACE	United States Army Corps of Engineers
USBP	U.S. Border Patrol
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VPHCP	Vernal Pool Habitat Conservation Plan
VTM	Vesting Tentative Map

## Summary

The project includes adoption of the Southwest Village Specific Plan (Specific Plan) which provides a comprehensive policy framework intended to guide future development within the Southwest Village District of the City of San Diego (City) Otay Mesa Community Plan (OMCP). The Specific Plan would allow up to 5,130 attached and detached residences and will facilitate creation of a new village anchored by up to 175,000 square feet of commercial and retail uses in a mixed-use Village Core. Buildout of the Specific Plan would provide public facilities including dedication of a new elementary school, developed parks, public recreation trails, and natural open space and habitat conservation. Access to the Specific Plan area would be via two main access points, Caliente Avenue to the north and an extension of Beyer Boulevard to the west (to be built and analyzed as part of this project), connecting the Specific Plan area to the San Ysidro community.

Concurrent with the proposed Specific Plan, a Vesting Tentative Map (VTM) is proposed for the Phase 1 residential component of the Specific Plan. Implementation of the VTM would include construction of a Beyer Boulevard extension connecting the Specific Plan area to San Ysidro, development of up to 795 residential units, additional grading within Phase 2 areas of the Specific Plan to provide a source of fill soils for a balanced grading operation, and improvements to an existing dirt road to provide for secondary emergency vehicle access (EVA). While not part of the Phase 1 VTM, this report also evaluates trails, grading, and infrastructure components associated with Phase 2 and a portion of Phase 4.

This report includes a project-level analysis of certain components and a program-level analysis of the remainder Specific Plan components. The project-level analysis addresses Phase 1 grading and construction and associated infrastructure, improvements associated with the southern EVA road, as well as Phase 2 and a portion of Phase 4 rough grading, drainage, and other infrastructure improvements including the southeastern sewer lift station. The program-level analysis addresses implementation of the remaining Specific Plan development areas (Phase 3, a portion of Phase 4, and Phases 5 to 7). As future development is proposed within the program-level analysis areas, future project specific impact analysis would be required.

## Summary of Findings for Program-level Analysis Areas

Future development within program-level analysis areas of the Specific Plan (Phase 3, a portion of Phase 4, and Phases 5 to 7) would result in an approximately 131-acre impact area, including approximately 39 acres of impacts to sensitive vegetation communities including but not limited to grassland and Diegan coastal sage scrub, subject to future site-specific surveys and evaluation. There are also 58 acres mapped as extensive agriculture that, due to the time that has passed since it was in agricultural use and the typical vegetation changes over time for fallow agricultural lands, have been conservatively considered non-native grassland for a potential total of 97 acres of sensitive vegetation communities. Within the program-level areas, scattered vernal pool and/or wetland basins may contain San Diego fairy shrimp (*Branchinecta sandiegonensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), and sensitive plant species. Impacts to sensitive vegetation communities, wetland resources, and sensitive plants and wildlife would be considered significant. Wetland deviations would likely be required once future development is proposed to address

impacts to drainages and wetlands present within the program-level analysis areas, although site-specific surveys would be required to confirm presence. Indirect impacts to sensitive resources including the adjacent Multi-Habitat Planning Area (MHPA) may also result from development of program-level areas.

The project-level analysis included a comprehensive review of area wildlife movement with respect to impacts to wildlife corridors, as required by OMCP Mitigation Framework BIO-2. The analysis shows that implementation of the program-level portions of the Specific Plan would have a less than significant impact on wildlife movement corridors.

The Otay Mesa Community Plan Final Environmental Impact Report (OMCP FEIR) required a land use consistency analysis related to environmental policies contained in the OMCP. The analysis shows that implementation of the mitigation identified for the program-level areas would ensure impacts would be reduced to less than significant.

The requirements of the OMCP FEIR Mitigation Framework would be carried forward as mitigation for the program-level areas of the Specific Plan as applicable; however, the measures have been modified where appropriate, to include updated City requirements and to specifically address implementation of the Specific Plan. The Mitigation Framework for the program-level areas includes mitigation for sensitive plants and wildlife (SP-BIO-1) and migratory wildlife (SP-BIO-2). The program level analysis concludes impacts related to wildlife movement corridors would be less than significant; however, SP-BIO-2 would be implemented to address potential impacts of future project construction and operations to sensitive wildlife species nesting and foraging. These measures carry forward the OMCP FEIR Mitigation Framework BIO-1 and BIO-2. Additionally, the program-level mitigation includes mitigation for wetlands (SP-BIO-3) which carries forward OMCP FEIR Mitigation Framework BIO-4.

OMCP FEIR Mitigation Framework LU-2 requires implementation of the MHPA Land Use Adjacency Guidelines for projects adjacent to the MHPA. As the City requires implementation of the MHPA Land Use Adjacency Guidelines as a condition of any development adjacent to the MHPA, these measures would be implemented at the program-level as standard conditions, ensuring compliance with OMCP FEIR Mitigation Framework LU-2.

Consistent with the OMCP FEIR, impacts associated with implementation of the program-level areas would be significant for the issues of sensitive vegetation communities, sensitive plants, sensitive wildlife species, jurisdictional resources, and indirect impacts. Implementation of SP-BIO-1, SP-BIO-2, and SP-BIO-3 and compliance with the MHPA Land Use Adjacency Guidelines as a condition of any development adjacent to the MHPA would reduce impacts to less than significant.

Impacts related to the Multiple Species Conservation Program (MSCP) and Vernal Pool Habitat Conservation Plan (VPHCP), wildlife corridors, and land use consistency would be less than significant because each individual development that is proposed within the Specific Plan in the future would be required to undergo its own individual VPHCP/MSCP consistency analysis. All future projects brought forward would be required to demonstrate consistency with the MSCP and VPHCP.

## Summary of Findings for Project-level Analysis Areas

The project-level area covers approximately 219 acres and includes development areas in the northwest, southwest and southeast portions of the Specific Plan area in addition to off-site improvement areas including Caliente Avenue and Beyer Boulevard and approximately 0.96 miles (5,090 linear feet) of primitive trails south and southeast of the development area both within and outside of the Specific Plan boundary. The project-level components include grading and construction of Beyer Boulevard and Planning Areas 8 through 14 in addition to rough grading within Planning Areas 15 through 20 and portions of Planning Areas 1, 2, and 7 (within Phase 4), improvements to the southern EVA road, and future infrastructure and improvement areas including the Spring Canyon drainage outfall, the southeastern sewer pump station, and primitive trails. The following sensitive vegetation communities occur within the project-level survey area: maritime succulent scrub (Tier I), disturbed maritime succulent scrub (Tier I), native grassland (Tier I), Diegan coastal sage scrub (Tier II habitat), disturbed Diegan coastal sage scrub (Tier II habitat), non-native grassland (Tier IIIB habitat), mule fat scrub, southern willow scrub, disturbed riparian, disturbed wetlands, tamarisk scrub, vernal pools (with and without fairy shrimp), and natural flood channel. A total of 19 sensitive plant species were observed during the focused rare plant surveys and other biological surveys conducted in project-level areas. A total of 25 sensitive wildlife species were observed or assumed present within the project-level survey area during the general and focused surveys conducted for this project.

### *Impacts to 100 Percent Conserved Lands Associated with the Beyer Boulevard Extension*

As part of the project-level components, implementation of an extension of Beyer Boulevard would cross 100 percent conserved lands in order to provide vehicular access to the Specific Plan area from San Ysidro. Impacts to 100 percent conserved lands were anticipated in the OMCP FEIR. Specifically, the OMCP FEIR states: "If mobility element roads (i.e., Beyer Boulevard, Airway Road, and Del Sol Boulevard) impact existing conserved lands, an additional 1:1 ratio shall be added to the City required mitigation ratio in order to replace the lands that were previously preserved as open space." Consistent with the OMCP FEIR for impacts to conserved lands, an additional 1:1 ratio has been applied to City standard mitigation ratios for impacts to conserved land including West Otay Mesa A, West Otay Mesa B, and the Furby North Preserve.

Two of the conserved parcels, referred to as West Otay Mesa A and West Otay Mesa B, are protected by conservation easements held by California Department of Fish and Wildlife (CDFW). After entitlements are obtained from the City to allow the project to proceed, additional actions would be required by CDFW. It is anticipated that the existing easements would be amended to identify Beyer Boulevard and its slopes as an allowed use within the easement. In exchange for the CDFW easement modifications, a new conservation easement would be granted to CDFW, with the United States Fish and Wildlife Service (USFWS) identified as third-party beneficiary. The specific location of the new conservation easement would be determined through ongoing coordination with CDFW. In addition to a new conservation easement, two additional project design features are included as part of the project to support the requirements of CDFW and USFWS, including the following:

- An approximate 2.13-acre area is being considered for vernal pool restoration within the City-owned West Otay Mesa B parcel.

- An approximate 95.29-acre area of additional habitat preservation beyond City mitigation requirements is proposed to be dedicated in-fee title to the City for long-term management.

An additional conserved parcel owned by the County of San Diego (County) referred to as the Furby North Preserve would be impacted by the proposed Beyer Boulevard alignment. In order to allow Beyer Boulevard to cross this preserve, the County requires replacement land to offset the loss of parkland under the Parkland Preservation Act. The project proposes to meet this requirement by providing 7.98 acres of replacement land that would be conveyed to the County. This replacement land would be managed by the City as part of the surrounding MHPA. An action by the County Board of Supervisors would be required to consider acceptance of replacement land and to allow County ownership within the Furby North preserve to be quitclaimed to the City for management as right-of-way and manufactured slopes.

### *Consistency with MSCP and VPHCP*

The development of project-level areas would require a boundary line adjustment (BLA) pursuant to the MSCP. A MHPA BLA is required for impacts to MHPA lands, while a VPHCP conservation analysis is provided to address impacts to land considered baseline conservation in the VPHCP, referred to as 100 percent conserved lands, which include West Otay Mesa A, West Otay Mesa B, and the Furby North Preserve.

MHPA deletions total 14.88 acres, including 12.82 acres of sensitive vegetation communities and 2.07 acres of disturbed and urban/developed lands. MHPA addition areas total 18.08 acres, including 16.88 acres of sensitive vegetation communities and 1.20 acres of disturbed lands. Impacts to VPHCP 100 percent conserved lands total 19.36 acres including 17.54 acres of sensitive vegetation communities and 1.82 acres of disturbed lands. Deletions of VPHCP 100 percent conserved lands would be offset by MHPA additions totaling 27.37 acres of sensitive vegetation communities and 0.66 acres of disturbed lands. Addition areas to offset impacts to the 100 percent conserved lands include an 8.80-acre area of mesa top lands that expands the vernal pool preserve in addition to enhancement of a disturbed wetland to become a vernal pool to ensure 100 percent replacement vernal pool resources in the deletion areas. Overall, the BLA and 100 percent conserved lands replacement would result in a slight decrease in Tier I vegetation from the exchange of lands; however, in total, the MHPA would increase by 14.19 acres of sensitive vegetation communities. In addition, the trails restoration program would convert 7.83 acres of disturbed and non-native grassland to maritime succulent scrub, resulting in an overall increase in Tier I communities in the MHPA. The MHPA addition areas combined with restoration of maritime succulent scrub would serve to ensure there is an excess of Tier I habitat provided as a result of project activities.

The overall 44.55 acres of land to be added to the MHPA as part of the BLA process would be located adjacent to existing MHPA and would be conserved and managed by the City of San Diego with endowment funding. Where Beyer Boulevard crosses the MHPA, the developed portion of the roadway contains public utilities (water, sewer and stormwater infrastructure) and therefore is exempt from the City's ESL regulations, as a City linear utility project pursuant to the City's Land Development Code Section 143.0111. The Beyer Boulevard slopes within the MHPA and all portions of Beyer Boulevard within VPHCP 100 percent conserved lands are included within the VPHCP Conservation Analysis.

### *Sensitive Upland Vegetation Communities*

Implementation of the project-level components would result in impacts to 28.35 acres of maritime succulent scrub, 9.12 acres of disturbed maritime succulent scrub, 0.12 acre of native grassland, 33.24 acres of Diegan coastal sage scrub, 10.93 acres of disturbed Diegan coastal sage scrub, and 105.84 acres of non-native grassland. Mitigation for these impacts would be achieved through preservation and enhancement of a minimum of 153.23 acres of habitat of equivalent biological value in accordance with the Biology Guidelines (City of San Diego 2018) requirements and OMCP FEIR. To compensate for impacts to conserved lands (West Otay Mesa A, West Otay Mesa B, and the Furby North Preserve) in the location of the proposed Beyer Boulevard alignment, an additional 1:1 mitigation ratio would be provided for upland impacts above and beyond the City's standard mitigation ratio, consistent with the requirements of the OMCP FEIR. Impacts to sensitive upland vegetation communities would be mitigated via the preservation of 89.94 acres of maritime succulent scrub, 24.82 acres of disturbed maritime succulent scrub, 24.93 acres of Diegan coastal sage scrub, 2.36 acres of disturbed Diegan coastal sage scrub, and 18.89 acres of non-native grassland in the MHPA. This totals 160.94 acres, which provides an excess of 7.71 acres above the minimum requirement. Impacts to 0.12 acre of native grassland would be mitigated through creation of native grassland as detailed in the Otay Tarplant/Native Grassland Mitigation Plan (see Attachment 15).

### *Sensitive Plant Species*

The following 19 sensitive plant species are located within the project-level survey area: ashy spike-moss (*Selaginella cinerascens*), bobtail barley (*Hordeum intercedens*), California adolphia (*Adolphia californica*), California box-thorn (*Lycium californicum*), cliff spurge (*Euphorbia misera*), decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), golden-ray pentachaeta (*Pentachaeta aurea* ssp. *aurea*), Otay tarplant (*Deinandra conjugens*), Palmer's grapplinghook (*Harpagonella palmeri*), San Diego barrel cactus (*Ferocactus viridescens*), San Diego bur-sage (*Ambrosia chenopodiifolia*), San Diego button-celery, San Diego County viguiera (*Bahiopsis lacinata*), San Diego needlegrass (*Stipa diegoensis*), seaside cistanthe (*Cistanthe maritima*), snake cholla (*Cylindropuntia californica* var. *californica*), south coast saltscale/south coast saltbush (*Atriplex pacifica*), variegated dudleya (*Dudleya variegata*), and western dichondra (*Dichondra occidentalis*).

Of those species observed, Otay tarplant and San Diego button-celery are federally and state listed endangered, are narrow endemics, and covered under the MSCP and VPHCP. Variegated dudleya and snake cholla are narrow endemic and MSCP-covered species. San Diego barrel cactus is a MSCP-covered species. The remaining observed sensitive plant species are considered locally sensitive and have a rare plant ranking as assigned by California Native Plant Society (CNPS).

In addition, the five following species were identified as having a moderate potential to occur: graceful tarplant (*Holocarpha virgata* ssp. *elongate*), Orcutt's bird's-beak (*Dicranostegia orcuttiana* [= *Cordylanthus orcuttianus*]), San Diego goldenstar (*Bloomeria* [= *Muilla*] *clevelandii*), small-flowered microseris (*Microseris douglasii* ssp. *platycarpa*), and thread-leaved brodiaea (*Brodiaea filifolia*).

Thread-leaved brodiaea is federally listed threatened, state listed endangered, a narrow endemic, and is a MSCP-covered species. Orcutt's bird's-beak and San Diego goldenstar are MSCP-covered species. The remaining sensitive plant species with moderate potential to occur are considered

locally sensitive and have a rare plant ranking as assigned by CNPS. The remaining sensitive plant species with moderate potential to occur are considered locally sensitive and have a rare plant ranking as assigned by CNPS.

Implementation of the project-level areas would result in impacts to approximately 1,900 Otay tarplant individuals within an approximately 0.21-acre area. Impacts to Otay tarplant would be considered significant and mitigated through implementation of an Otay tarplant restoration effort providing a 4:1 replacement of impacted Otay tarplant within an approximately 1-acre area within the project's habitat mitigation area (see Attachment 15).

Significant impacts to 116 San Diego barrel cactus would result from removal of the species within Beyer Boulevard and Phases 1, 2 and 4. Significant impacts to 16 snake cholla would result from removal of the species within Beyer Boulevard and Phase 2. Mitigation for San Diego barrel cactus and snake cholla includes salvage of these species within the project-level areas and translocation to the proposed vernal pool preserve, as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) and the Coastal Cactus Wren Mitigation Plan (see Attachment 13).

Development of Phase 1 would impact 28 federally listed San Diego button-celery located within two vernal pools. Mitigation for impacts to this sensitive plant species would occur through salvage and transplanting of soil supporting impacted San Diego button-celery and in-kind restoration consistent within the proposed vernal pool restoration areas as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14).

Thread-leaved brodiaea was not observed; however, there is a moderate potential for the species to occur and impacts would be significant. A pre-construction survey would be conducted to identify any individuals that may be present within the impact footprint. Any individuals that cannot be avoided would be salvaged and transplanted into the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan area.

Impacts to non-MSCP covered plants species, including ashy spike-moss, bobtail barley, California adolphia, California box-thorn, cliff spurge, decumbent goldenbush, Palmer's grapplinghook, San Diego bur-sage, San Diego County viguiera, San Diego needlegrass, seaside cistanthe, south coast saltscale/south coast saltbush, and western dichondra, would be less than significant. These species were observed within the project-level survey area; however, impacts would be less than significant as the proposed project would not reduce any below a self-sustaining level based on the existing distribution and extent of each of these species.

Golden-ray pentachaeta and variegated dudleya were observed within the survey area but no individuals were located within the impact area. Given the level of survey effort conducted, it is expected that these plants would have been detected within the impact area if present; therefore, no impacts would occur.

Neither Orcutt's bird's-beak nor San Diego goldenstar were observed during multiple surveys conducted over the species blooming periods; however, there is a moderate potential to occur based on the presence of suitable habitat. Both of these species are covered species under MSCP. Orcutt's bird's-beak was covered based on the conservation of all four known populations within



the MSCP boundary. The proposed project would impact only a small percentage of the known suitable habitat for this species at both a local and regional scale; therefore, the project is not expected to impact the regional long-term survival of this species and therefore impacts would not be significant.

San Diego goldenstar is a covered species based on the fact that over 70 percent of the major populations, over 80 percent of the known occurrences, and 38 percent of the grasslands would be conserved and that the City of San Diego would avoid any populations within the 25 percent MHPA encroachment areas. The MSCP also provides species-specific conditions related to monitoring of a specific transplanted population and protection against edge effects within the preserved areas. Based on this level of MSCP coverage, current known occurrences of this species within southern California (Jepson Flora Project 2023), and that the loss of suitable habitat within the project impact area comprises a small portion of the suitable habitat available to this species on a local level and on a regional scale; this loss of habitat outside the MHPA would not be a significant impact for these species. Therefore, the project is not expected to impact the regional long-term survival of this species and would therefore not be significant.

Graceful tarplant and small-flowered microseris were not observed during multiple surveys conducted over these species' blooming periods; however, a moderate potential to occur remains based on presence of suitable habitat. If present, impacts to these species would be considered less than significant as the proposed project would not reduce any below a self-sustaining level based on the existing distribution and extent of this species.

While 18.15 acres of the project-level area is located within critical habitat designated for spreading navarretia (*Navarretia fossalis*), this plant species is not present and would not be impacted.

### ***Sensitive Wildlife Species***

The following 25 sensitive wildlife species are present within the project-level analysis area: San Diego fairy shrimp (*Branchinecta sandiegonensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), Quino checkerspot butterfly (*Euphydryas editha quino*), least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher (*Polioptila californica californica*), white-tailed kite (*Elanus leucurus*), burrowing owl (*Athene cunicularia*), Crotch's bumble bee (*Bombus crotchii*), orange-throated whiptail (*Aspidoscelis hyperythra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), red diamond rattlesnake (*Crotalus ruber*), two-striped gartersnake (*Thamnophis hammondi*), coast horned lizard (*Phrynosoma blainvillii*), northern harrier (*Circus hudsonius*), Cooper's hawk (*Accipiter cooperii*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), western spadefoot (*Spea hammondi*), yellow warbler (*Setophaga petechia*), yellow-breasted chat (*Icteria virens*), merlin (*Falco columbarius*), bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), California horned lark (*Eremophila alpestris actia*), grasshopper sparrow (*Ammodramus savannarum*), and San Diego desert woodrat (*Neotoma lepida intermedia*). Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) was not directly observed within the analysis area; however, it has a high potential to occur based on observations in habitat just off-site.

Four additional wildlife species were not observed within the project-level analysis area but have a moderate potential to occur within the project-level analysis area, including Coronado skink

(*Plestiodon skiltonianus interparietalis*), Bell's sage sparrow (*Amphilospiza belli belli*), loggerhead shrike (*Lanius ludovicianus*), and southern mule deer (*Odocoileus hemionus fuliginata*).

The project-level areas would result in a significant direct and indirect impact to 1.33 acres of habitat for San Diego fairy shrimp, including the Candlelight project, or a total of 1.06 acres of direct and indirect impact without Candlelight. Of those totals, one 0.03-acre vernal pool also contained Riverside fairy shrimp and one 0.17-acre seasonal basin ("VP12" per Alden 2013) within Candlelight would be impacted that also contains Riverside fairy shrimp. All disturbed wetlands and vernal pools are assumed to contain San Diego fairy shrimp since these species are widely present across the mesa. Mitigation for impacts to San Diego and Riverside fairy shrimp species would be addressed through a 2:1 inoculation of vernal pool surface area based on the surface area impacted, consistent with the requirements of the City's Biology Guidelines (2018a) for mitigating vernal pools with fairy shrimp. Direct and indirect impacts to a total of 1.33 acres (with Candlelight) or 1.06 acres (without Candlelight) of basins containing San Diego fairy shrimp would be mitigated by inoculation of a minimum of 2.66 acres (with Candlelight) or 2.12 acres (without Candlelight) of re-established vernal pool basins with San Diego fairy shrimp. Impacts to a 0.20-acre vernal pool/seasonal basin containing Riverside fairy shrimp would be mitigated through inoculation of a minimum of 0.40-acre of re-established vernal pool basins with Riverside fairy shrimp. As detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14), the restoration effort proposes to establish 3.86 acres of vernal pool basins and enhance 0.05 acre of existing vernal pool basins, all of which would be inoculated with fairy shrimp cysts to provide an excess of 1.20 to 1.74 acres of vernal pool creation and 0.05 acre of enhancement (with Candlelight requirements) beyond the mitigation ratios required by the City. Mitigation for impacts within the Candlelight and/or Southwind project areas would be implemented by the first project to proceed.

Significant direct impacts to Quino checkerspot butterfly would occur as a result of the removal of host and nectar plants (0.93 acre) within the project-level areas. Mitigation for impacts to host and nectar plants would be provided through preservation and enhancement of 0.96 acre of Quino checkerspot butterfly habitat and 0.93 acre of Quino checkerspot butterfly habitat restoration for a total of 1.89 acres of Quino checkerspot butterfly habitat preservation/enhancement and restoration. These enhancement and restoration efforts would compensate for the loss of Quino checkerspot butterfly suitable habitat. Potential impacts to Quino checkerspot butterfly during restoration activities would be mitigated through implementation of mitigation measures detailed in the respective mitigation and restoration plans, such as avoiding work within mapped nectar and host plants and following protective guidelines during herbicide application. Ultimately, formal consultation with the U.S. Fish and Wildlife Service (USFWS) would be required.

Impacts to least Bell's vireo nesting and foraging habitat would be considered significant due to the project impact to occupied wetland areas at the western end of the proposed Beyer Boulevard extension and suitable habitat adjacent to restoration areas in Spring Canyon. Mitigation required for anticipated impacts to least Bell's vireo nesting during construction and restoration activities would involve pre-construction surveys to determine presence of the species before grading activities commence and breeding season restrictions. Impacts to 0.28 acre of foraging habitat would be considered a significant direct impact to the species. Preservation of approximately 0.31 acre of southern willow scrub and proposed wetland creation (establishment) of 0.36 acre of riparian vegetation would mitigate for the loss of foraging habitat.

Focused surveys for coastal California gnatcatcher have been conducted over several years and have identified a number of pairs present both inside and outside the MHPA. Direct impacts to nesting individuals within the MHPA would be significant. Mitigation required for anticipated impacts would involve pre-construction/restoration surveys to determine presence of the species before grading activities commence. This measure also provides protection from construction and restoration noise if work is conducted within the MHPA during the breeding season. In addition, implementation of ASMDs to also monitor and attenuate noise impacts during the breeding season would be required. Impacts to 27.25 acres of foraging habitat within MHPA lands would be considered a significant direct impact to the species. Habitat-based mitigation via preservation of 160.94 acre of sensitive upland vegetation communities, including over 140 acres of coastal sage scrub and maritime succulent scrub, would mitigate for the loss of foraging habitat.

No active burrowing owl burrows were identified on-site. As the site does not support active burrows, the site has only a moderate potential to currently support burrowing owl. However, due to one incidental sighting and to support consistency with the MSCP conditions of coverage for burrowing owl, the project includes implementation of an artificial berm within the vernal pool preserve as a project design feature. In addition, based on the incidental sighting and the presence of burrowing owl in Otay Mesa, there is a potential for burrowing owl to colonize the site at a later date and be impacted during construction. This would be considered a significant impact that would be mitigated by the requirement for preconstruction burrowing owl surveys, consistent with the MSCP conditions of coverage for burrowing owl. If detected, a translocation plan will be required for any owls discovered within the impact area prior to or during construction, with coordination and the approval of the Wildlife Agencies, MSCP, and Environmental Analysis Section (EAS). In addition, the site supports 103.77 acres of foraging habitat for burrowing owl, the loss of which would be considered a significant impact to the species that would be mitigated through habitat-based mitigation via preservation of 160.94 acres of non-native grasslands and other sensitive upland vegetation communities. Any loss of foraging habitat through restoration activities such as in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species.

Mitigation for impacts to 0.63 acre of assumed occupied coastal cactus wren habitat (maritime succulent scrub dominated by coast cholla) in addition to 0.46 acre of indirect impacts to the species associated with post-project roadway noise levels above 60 dB would be mitigated through implementation of a coastal cactus wren habitat restoration effort to be located in proximity to the impact location, within the County's Furby North Preserve. Restoration for impacts to 1.09 acres of coastal cactus wren habitat would occur within a 2.54-acre restoration area comprising 0.72 acre of disturbed maritime succulent scrub (greater than 50 percent cover by non-native species) and 1.82 acres of enhancement to maritime succulent scrub (25 percent non-native cover). The project also would mitigate the loss of 20 acres of potential foraging habitat for this species in the vicinity of the Beyer Boulevard project component through habitat-based mitigation via the preservation of 160.94 acres of sensitive uplands. Indirect impacts associated with construction and restoration noise would be addressed through the implementation of the Breeding Season Avoidance/Preconstruction Survey mitigation measure and noise monitoring/attenuation measures which would mitigate this impact and reduce it to less than significant.

Crotch's bumble bees were observed incidentally during habitat assessment surveys conducted on approximately 510 acres during the spring of 2024. This species has the potential to occur within all habitats and land cover types, outside of the disturbed trails and roads, developed lands, vernal pools and natural flood channels, based on the species range and available nectar sources on-site. The majority of the survey area supports nectar resources, with approximately 80 acres supporting moderate to high cover of nectar resource for foraging. The entire survey area is considered suitable for nesting. Impacts to approximately 190 acres of potential Crotch's bumble bee nesting and foraging habitat would be considered significant based on the presence of individuals in the mitigation lands and the identification of suitable nesting and foraging habitat within the project-level analysis area, approximately 42 acres of which supports moderate to high cover of nectar resources. Mitigation would include habitat-based mitigation through the preservation of 160.94 acres of upland vegetation communities and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland plan areas, all suitable for foraging and nesting by this species. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for this species. This habitat preservation would reduce the impact to foraging and nesting habitat to less than significant. Species-specific mitigation for potential impacts to individual Crotch's bumble bee during construction and restoration would include preconstruction surveys to be conducted during the flight season prior to vegetation clearing or grading. A CDFW Incidental Take Permit would be required.

Western spadefoot surveys identified a potential 1.82 acres of occupied habitat within the survey area. The project would impact 1.33 acres of vernal pool and disturbed wetlands (direct and indirect impacts), which are all either known or assumed to support western spadefoot. These impacts to up to 1.33 acres of potential western spadefoot habitat would be considered significant. Implementation of the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) would replace a total of 3.86 acres of vernal pool habitat expected to support western spadefoot within a 33.71-acre vernal pool restoration area. Additionally, preservation of uplands habitats includes 23 vernal pools and disturbed wetlands that were observed to support western spadefoot. Impacts to individual spadefoot toad would be mitigated through the implementation of a monitoring plan that would relocate any individuals (eggs, tadpoles or adults) encountered within the project impact area. In addition, potential impacts to western spadefoot during restoration activities related to trail and vernal pool restoration activities would be mitigated through implementation of mitigation measures detailed in the respective mitigation and restoration plans.

Direct impacts to orange-throated whiptail and coast horned lizard are anticipated through potential incidental mortality during construction and restoration activities; however, these are mobile species and likely occur on-site in low numbers, and the project would be expected to result in the loss of very few individuals, if any. These species are also adequately covered by the MSCP with habitat conserved in the MHPA. Suitable habitat within the project impact area comprises a small fraction of the habitat available to this species both at a local level and on a regional scale. In addition, implementation of ASMDs would be required to manage for edge effects. Therefore, the potential loss of these individuals would not reduce their populations to less than self-sustaining and would not be significant.

Cooper's hawk has a moderate potential to nest within the project impact areas, particularly within tall trees found in Phase 1 and Phase 4 areas, and within the Spring Canyon wetland restoration area. Direct impact to nesting individuals would be significant. Establishment of the 300-foot impact avoidance area identified within the MSCP ASMDs would be required as a project condition of approval. Potential significant impacts to approximately 190 acres of foraging habitat within the impacted project-level area would be mitigated through habitat-based mitigation via the preservation of 160.94 acres of sensitive upland vegetation communities and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland plan areas, all suitable for foraging by this species. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for this species.

Northern harrier has a high potential to nest within the non-native grassland throughout the site. Direct impacts to nesting individuals would be significant. Establishment of the 900-foot impact avoidance area identified within the MSCP ASMDs would be required as a project condition of approval. Potential significant impacts to approximately 190 acres of foraging habitat within the impacted project-level area would be mitigated through habitat-based mitigation via the preservation of 160.94 acres of sensitive upland vegetation communities and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland, all suitable for foraging by this species. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for this species. Any loss of non-native grassland through restoration activities such as in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species.

Significant impacts to California fully protected white-tailed kite would result from the removal of 190 acres of foraging habitat. Potential significant impacts to approximately 190 acres of foraging habitat within the impacted project-level area would be mitigated through habitat-based mitigation via the preservation of 160.94 acres of sensitive upland vegetation communities and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland plan areas, all suitable for foraging by this species. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for this species. Direct impacts to nesting individuals would be significant and mitigated through implementation of breeding season avoidance, or implementation of preconstruction surveys and avoidance measures. Any loss of foraging habitat through restoration activities such as in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species.

Golden and bald eagles were each only observed once during many years of surveys conducted on this site. No direct impacts to either are anticipated as the project-level area lacks suitable nesting habitat for these species (tall trees and cliffs).

Southern California rufous-crowned sparrow has a high potential to nest and forage within the non-native grassland, maritime succulent scrub, and Diegan coastal sage scrub in project-level impact areas. Direct impact to nesting individuals would be significant and mitigated through the implementation of breeding season avoidance, or the implementation of preconstruction surveys

and avoidance measures. Direct impacts to approximately 75 acres of foraging habitat would be significant and mitigated through habitat-based mitigation via the preservation of 160.94 acres of sensitive upland vegetation communities and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland plan areas, all suitable for foraging by this species. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for this species. Restoration activities, specifically conversion of non-native grassland in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species.

Southern mule deer have a moderate potential to occur within the project areas, based on presence of suitable habitat. Suitable habitat within the project impact area comprises a small fraction of the habitat available to this species both at a local level and on a regional scale. Therefore, any potential impact, if present, would not reduce their populations to less than self-sustaining and would not be significant.

Yellow-breasted chat and yellow warbler have moderate potential to nest within the southern willow scrub and mule fat scrub habitats of the project impact area within the Beyer Boulevard and Caliente Avenue footprints and within the Spring Canyon wetland restoration area. The project impacts to approximately 0.77 acre of suitable habitat and nesting would be potentially significant. Preservation of approximately 0.31 acres of southern willow scrub and proposed wetland creation (establishment) of 0.36 acre of riparian vegetation and would mitigate for the loss of foraging habitat. Direct impacts to nesting individuals would be significant and mitigated through implementation of breeding season avoidance, or implementation of preconstruction surveys and avoidance measures.

Direct impacts to coastal whiptail, red diamond rattlesnake, two-striped garter snake, Coronado skink, and San Diego desert woodrat through potential incidental mortality during construction activities and removal of suitable habitat are anticipated. However, these species likely occur within the project-level area in low numbers, resulting in the loss of very few individuals, if any. Therefore, the potential loss of these individuals would not be significant. Approximately 190 acres of suitable habitat within the project-level impact area consisting of maritime succulent scrub, disturbed maritime scrub, Diego coastal sage scrub, disturbed coastal sage scrub, non-native grassland, and vernal pool habitats comprises a small fraction of the habitat available to these species on a regional scale. The loss of habitat within the project-level area would be less than significant for these species.

These following additional sensitive avian species may occur or have a potential to occur within various habitats within the project-level areas: merlin, California horned lark, Bell's sage sparrow, loggerhead shrike, and grasshopper sparrow. Direct impacts to nesting individuals would be significant and mitigated through implementation of breeding season avoidance, or implementation of preconstruction surveys and avoidance measures. Foraging habitat for all of these species would be impacted. Suitable habitat within the project impact area comprises a small fraction of the habitat available to this species both at a local level and on a regional scale. Therefore, the loss of foraging habitat would not reduce any of their populations to less than self-sustaining and would be less than significant for these species.

### *Jurisdictional Resources*

Wetland delineations were conducted within the project-level survey areas for U.S. Army Corps of Engineers (USACE) federal waters of the U.S., CDFW and California Regional Water Quality Control Board (RWQCB) waters of the state, and City wetlands and vernal pools. Impacts to these jurisdictional resources would be considered significant. Permits from the resource agencies would be required in order to authorize impacts to jurisdictional resources.

Direct impacts to City wetlands (non-isolated riparian habitat) would total 0.36 acre, requiring a minimum of 0.73 acre of mitigation per the City's Biology Guidelines, respectively (City of San Diego 2018). The wetland mitigation requirements would be achieved within Spring Canyon through 0.73 acre of wetland mitigation including a 1:1 creation component. The Southwest Village Wetland Plan proposes mitigation within Spring Canyon to satisfy the mitigation requirements including a minimum 0.36-acre wetland creation (establishment) and at least 0.37-acre wetland enhancement (rehabilitation) to create wetland function and values consistent with the requirements of the City's Biology Guidelines (see Attachment 18). An additional 0.43 acre of wetland creation (establishment) is proposed to satisfy RWQCB mitigation requirements for impacts to non-wetland waters/streambed and is not required by the City of San Diego. The Southwest Village Wetland Plan (see Attachment 18) proposes 0.36 acre of wetland creation (establishment) and 0.62 acre of wetland enhancement (rehabilitation) within an overall 2.18-acre Wetland Plan area within Spring Canyon. An additional 0.46 acre of wetland creation (establishment) would be implemented as part of the Nakano Wetland Plan (RECON 2024f), providing a total of 1.45 acres of wetland mitigation for Southwest Village. In addition to these mitigation components, the Southwest Village Wetland Plan includes implementation of project design features including an additional 1.20 acres of weed control and the requirement to ensure the remaining 3.46-acre portion of the upstream Nakano Wetland Plan is implemented upstream prior to the Southwest Village Plan area.

The project would result in significant direct and indirect impacts to vernal pools and disturbed wetlands. Disturbed wetland direct and indirect impacts would total 0.18 acre, and vernal pool direct and indirect impacts would total 0.91 acre impacts for a total of 1.09 acres of vernal pool and disturbed wetland direct and indirect impacts. Impacts to the single vernal pool with San Diego button-celery would be mitigated at a 3:1 ratio consistent with the requirements of the VPHCP. All remaining vernal pool and disturbed wetland impacts would be mitigated at a 2:1 ratio as required by the VPHCP. Implementation of the project-level areas would require 2.18 acres of mitigation for direct and indirect impacts to vernal pools and disturbed wetlands including the Southwind project or 2.10 acres without Southwind. Within the Southwind project area, the first project to proceed would be required to mitigate for their project impacts.

As detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14), the restoration effort proposes to establish 3.86 acres of vernal pool basins and enhance 0.05 acre of existing vernal pool basins, which would provide an excess of 1.68 acres of vernal pool creation (including impacts from the Southwind project) and 0.05 acre of enhancement beyond the standard mitigation ratios required by the City. If Southwind were to proceed first and mitigate for impacts separately and elsewhere, there would be an excess of 1.76 acres.

### *Indirect Impacts*

Indirect impacts to sensitive plants and vegetation communities within MHPA lands would be avoided through compliance with the MHPA Land Use Adjacency Guidelines, which would be conditions of project approval.

Indirect impacts to Quino checkerspot butterfly could result from the introduction of non-native species and generation of dust in the vicinity of Quino checkerspot butterfly host and nectar plants. Indirect impacts to Quino checkerspot butterfly would be mitigated through the following measures. Introduction of non-native species would be avoided through compliance with the Specific Plan plant palette which requires native plantings adjacent to open space and through use of native species in the restoration plan plant palettes. During construction of the vernal pool preserve, implementation of BMPs such as silt fences and watering would avoid dust generation. Prior to restoration activities, plant survey updates would be conducted to ensure avoidance of host and nectar plants. With implementation of these measures, indirect impacts to Quino checkerspot butterfly would be mitigated to less than significant.

As coastal California gnatcatcher is present or suitable habitat is present within the MHPA adjacent to the project-level analysis area including along the Beyer Boulevard extension, around the EVA road, and around the restoration areas, indirect noise impacts from construction and restoration activities could occur to this species within the MHPA if these actions are proposed during the breeding season. These impacts would be significant and mitigated as detailed in direct impact discussion above. Additionally, indirect impacts to coastal California gnatcatcher within adjacent MHPA would be mitigated through compliance with the City's Land Use Adjacency Guidelines when adjacent to MHPA lands and implementation of noise monitoring and attenuation consistent with species-specific ASMDs. Significant indirect impacts from Beyer Boulevard operational noise may occur to approximately 0.09-acre area of suitable habitat (Diegan coastal sage scrub) based on noise modeling and mitigated through habitat preservation as discussed in the direct impacts. This habitat preservation area includes 7.71 acres beyond the minimum required habitat preservation mitigation, which would also reduce the significant impact from operational noise impacts from Beyer Boulevard to less than significant.

Significant indirect impacts to coastal cactus wren may result from edge effects associated with development and construction and would be mitigated through the implementation of BMPs, including dust control erosion control, and silt fencing, and installation of masonry walls and wildlife fencing to preclude pedestrian and domestic animal trespass. Indirect impacts associated with construction and restoration noise would be addressed through implementation of the Breeding Season Avoidance/Preconstruction Survey mitigation measure and noise monitoring and attenuation measures. Significant indirect impacts from Beyer Boulevard operational noise to an approximately 0.46-acre area of suitable habitat (maritime succulent scrub) would be mitigated through additional habitat restoration of 0.46 acres as detailed in the direct impact discussion above.

Indirect impacts to least Bell's vireo from construction are not anticipated given that the occupied habitat within Beyer Boulevard footprint would be removed completely and the species would not be subject to construction or operational noise impacts. Indirect impacts associated with restoration noise may occur if activities are conducted during this species' breeding season. This would be



mitigated through implementation of pre-construction surveys to determine presence of the species before grading activities commence, and breeding season restrictions and/or noise attenuation measures, if present.

Indirect noise impacts to burrowing owl during restoration and construction would be significant and would require mitigation. Indirect noise impacts would be mitigated through compliance with City standard conditions which require avoidance of construction during the breeding season of February 1–August 31. If construction or restoration must occur during this period, pre-construction surveys would be completed, and if needed, noise reduction measures would be implemented in accordance with the City's Biology Guidelines (City of San Diego 2018).

Indirect impacts to western spadefoot could potentially occur during enhancement of jurisdictional resources within the 100-foot trail corridor or during vernal pool restoration activities, if work were to occur when ponding is present. These would be significant and mitigated through implementation of required VPHCP avoidance and minimization measures detailed in Section 6.2.2.2.a and measures detailed in Section 8.2.4.3 which limits activity to times of the year when no ponding is present. The trails restoration plan (see Attachment 1) and vernal pool restoration plan (see Attachment 14) require that no enhancement activities occur within vernal pools when ponded and herbicide application would not occur within a 10-foot buffer of vernal pools. Implementation of these measures would avoid indirect impacts to western spadefoot.

Implementation of grading within the project-level areas would result in indirect impacts to a total of 0.13 acre of vernal pools and disturbed wetlands either containing or assumed to contain San Diego fairy shrimp. This would be considered a significant indirect impact to San Diego fairy shrimp. Indirect impacts to San Diego fairy shrimp would be mitigated at a 2:1 ratio through inoculation of created vernal pools, as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14). Implementation of the mitigation for direct impacts would ensure indirect impacts to vernal pools and disturbed wetlands containing or assumed to contain San Diego fairy shrimp would be reduced to less than significant. Indirect impacts could potentially occur to San Diego fairy shrimp during enhancement of jurisdictional resources within the 100-foot trail corridor or during vernal pool restoration activities, if work were to occur when ponding is present. These would be significant and mitigated through implementation of required VPHCP avoidance and minimization measures detailed in Section 6.2.2.2.a and measures detailed the trails restoration plan (see Attachment 1) and vernal pool restoration plan (see Attachment 14) which requires that no enhancement activities occur within vernal pools when ponded and herbicide application would not occur within a 10-foot buffer of vernal pools. Implementation of these measures would mitigate for indirect impacts to San Diego fairy shrimp during restoration activities.

Indirect impacts to Crotch's bumble bee from construction and restoration activities could result from the introduction of non-native species and generation of dust in the vicinity of nectar plants. Indirect impacts to Crotch's bumble bee would be mitigated through the following measures. As detailed in Section 7.2.2.1, introduction of non-native species would be avoided through compliance with the Specific Plan plant palette which requires native plantings adjacent to open space. Additionally, within the vernal pool preserve where the majority of suitable habitat is present, only native species would be planted, suitable as Crotch's bumble bee nectar plants. Indirect impacts to Crotch's bumble bee would be avoided in areas adjacent to proposed grading through

implementation of dust control measures, erosion control, and fencing to demark the limits of disturbance. Additionally, prior to formalizing any primitive trails (e.g., narrowing the trail to 4 feet and restoring disturbed habitats surrounding the trail), sensitive plant survey updates would be conducted to ensure avoidance of sensitive plant species including significant nectar resources. Where needed to protect sensitive areas, peeler pole fencing and/or buffering sensitive plants from the trail would be implemented. With implementation of these measures, indirect impacts to Crotch's bumble bee would be mitigated to less than significant.

Potential indirect noise impacts to nesting Cooper's hawk, northern harrier, white-tailed kite, merlin, California horned lark, loggerhead shrike, yellow warbler, yellow-breasted chat, southern California rufous-crowned sparrow, grasshopper sparrow, and Bell's sage sparrow would be addressed through implementation of the Breeding Season Avoidance/Preconstruction Survey mitigation measure.

Indirect impacts to orange-throated whiptail, coastal whiptail, red diamond rattlesnake, two-striped garter snake, Coronado skink, southern mule deer, and San Diego desert woodrat would be less than significant with adherence to proper BMPs during construction and implementation of the City's Land Use Adjacency Guidelines for areas adjacent to MHPA and species-specific ASMDs. No nighttime lighting is proposed during construction or restoration activities.

Indirect impacts to sensitive wildlife present within the open space areas located along the proposed Beyer Boulevard extension would additionally be avoided through project design features such as wildlife fencing that would deter trespass into the surrounding open space. No primitive trails are located along the Beyer Boulevard alignment which would avoid human use impact within wildlife use areas. Additionally, very limited primitive trails are proposed within the surrounding open space and only where existing disturbance is present.

### ***Wildlife Corridors***

Impacts to wildlife corridors would be avoided through project design, specifically the design of the proposed Beyer Boulevard extension which incorporates three wildlife undercrossings and a wildlife overcrossing that would ensure wildlife movement between habitat areas within Moody Canyon and habitat south of the roadway extension. Wildlife fencing would ensure wildlife would not cross the road and instead be directed to crossing locations. Additionally, no primitive trail alignments are proposed near the wildlife overcrossing in order to ensure the area is compatible with wildlife movement and human presence is minimized. With the incorporation of project design features and implementation of a Long-Term Management and Monitoring Plan for the Beyer Boulevard wildlife movement features (see Attachment 16), impacts related to wildlife corridors would be less than significant.

### ***Land Use Consistency***

Implementation of the project-level areas would not conflict with any policies of the OMCP related to biological resources. Impacts related to conflicts with environmental policies would be less than significant.

## 1.0 Introduction

This report has been prepared according to guidelines set forth in the City of San Diego (City) Multiple Species Conservation Program (MSCP) Subarea Plan (1997) and the City Biological Resources Guidelines (2018a). This report also describes the project's compliance with City of San Diego Land Use Adjacency Guidelines in MSCP Subarea Plan Section 1.4.3 and the avoidance and minimization measures provided in Section 5.2.1 in the City's Vernal Pool Habitat Conservation Plan (VPHCP; City of San Diego 2019). Compliance with the Otay Mesa Community Plan (OMCP) is also discussed.

## 1.1 Project Location

The project is located in the community of Otay Mesa within the city of San Diego, and more specifically within the Southwest District of the Otay Mesa Community Plan (OMCP), south of State Route 905 (SR-905) and east of Interstate 805 (I-805; Figure 1). The project is located within Township 18 South, Range 01 West and Township 19 South, Range 01 West, of the U.S. Geological Survey (USGS) 7.5-minute topographic map, Imperial Beach, California quadrangle (Figure 2; USGS 1996) and is presented on the City 800-foot-scale map numbers 138-1749 and 138-1761 (Figure 3). The project area is surrounded by residential and commercial development to the north and undeveloped land to the east, west, and south. The City's Multi-Habitat Planning Area (MHPA), VPHCP/MHPA lands, and 100 percent conserved lands occur within and adjacent to the project area (Figure 4). The project area is not within the City's coastal overlay zone and the closest coastal overlay zone is approximately 0.59 mile to the west.

## 1.2 Project Background

### 1.2.1 Otay Mesa Community Plan

The OMCP provides a land use vision with associated land use policies for 9,300 acres located east of I-805, south of the Otay River, and west of the county of San Diego boundary. As a part of the OMCP, two areas were envisioned to be addressed by future Specific Plans, the Southwest Village Specific Plan and the Central Village Specific Plan. The Otay Mesa Central Village Specific Plan and associated OMCP amendment was approved in 2017. The Southwest Village Specific Plan envisioned by the OMCP to include 1,400 single-family residential units, 4,480 multi-family units, public facilities, commercial uses, and open space (Figure 5). The OMCP identified that the Specific Plans should be privately initiated and developed in collaboration with the City, and also specified that the Specific Plans would be considered amendments to the Community Plans. The OMCP additionally included a circulation plan that identified the extension of Beyer Boulevard from San Ysidro connecting through the Specific Plan area to Caliente Avenue, which would be needed to serve the Specific Plan area. Refer to Section 3.3.5, Otay Mesa Community Plan, for additional information regarding the regulatory framework of the OMCP.

## 1.2.2 Vernal Pool Habitat Conservation Plan

The VPHCP was approved by City Council in January 2018. The VPHCP provides a regulatory framework to protect, enhance, and restore vernal pool resources in specific areas within the City's jurisdiction, while improving and streamlining the environmental permitting process for impacts to seven threatened and endangered species not covered under the City's MSCP Subarea Plan, including five plant and two crustacean species. The VPHCP preserve area expands on the City's existing MHPA by including areas for conservation, referred to as VPHCP/MHPA. A total of 45.92 acres are identified as existing VPHCP/MHPA within the Southwest Village Specific Plan area, 38.83 acres 100 percent and 7.09 acres of 75 percent conservation (see Figure 4). The VPHCP identifies vernal pools as well as conservation areas within the Southwest Village Specific Plan area. In addition, the VPHCP identifies lands that are identified 100 percent conservation (see Figure 4) that represent lands designated for conservation/preservation including the original MHPA lands and land conserved by other entities.

## 1.2.3 Conserved Land and Specific Plan Ownership

The area within and surrounding the Specific Plan area consists of land owned by various private and public entities as detailed in Figure 6. Tri Pointe Homes is one of the largest landowners in the Specific Plan area; but a number of other private parties own land within the Specific Plan area who each have the ability to develop. The City owns several one-acre parcels within the Specific Plan boundary that are intended for vernal pool conservation purposes. In addition to the various ownerships within the Specific Plan, the area west of the Specific Plan area, where the planned Beyer Boulevard connection is proposed, is constrained by land that has been conserved for biological resource protection, detailed on Figure 7. The planned alignment of Beyer Boulevard as envisioned in the City's OMCP would cross the following lands:

1. The County Furby North Preserve (Assessor's Parcel Number [APN] 6380707400) - The 83-acre Furby North Preserve was acquired by the County Department of Parks and Recreation in 2003 to contribute to the conservation of core habitat and contribute to the MSCP preserve system consistent with the City MSCP Subarea Plan. The Furby North Preserve is subject to a Resource Management Plan which provides management directives pursuant to the requirements of the City MSCP Subarea Plan and the Framework Resource Management Plan (County of San Diego 2012).
2. A privately-owned parcel known as "West Otay Mesa A" that has a California Department of Fish and Wildlife (CDFW) easement (former The Environmental Trust [TET] easement DOC#1997-0561037; APN 6450611000).
3. A City-owned parcel with a conservation easement held by CDFW known as "West Otay Mesa B". This parcel was previously owned by TET (DOC# 1997-561037, 1998-0131991, 1999-0672696, APN 645-061-0200).
4. The City's planned Beyer Park is located at the current terminus of Beyer Boulevard in San Ysidro.

The City of San Diego additionally owns and manages 228.63 acres of land to the east of the Specific Plan as part of the City's MSCP preserve.

## 1.3 Project Description

The project consists of the Southwest Village Specific Plan (Specific Plan) which is intended to guide development within the Specific Plan area consistent with the OMCP (Figure 8) and City of Villages Strategy. The Specific Plan boundary encompasses approximately 490 acres, would facilitate creation of a new village anchored by up to 175,000 square feet of commercial and retail uses in a mixed-use Village Core. The Specific Plan would provide public facilities including dedication of a new elementary school, developed parks, trails, natural open space, habitat restoration, and habitat conservation. Access to the Specific Plan area would be via two main access points, Caliente Avenue to the north and from a proposed extension of Beyer Boulevard to the west, connecting the Specific Plan area to San Ysidro. The project area includes improvements outside of the Specific Plan boundary, such as additional access improvements for Beyer Boulevard and Caliente Avenue, emergency vehicle access (EVA) road, water and sewer facilities, as well as trails, and stormwater infrastructure including drainage outfalls. The Specific Plan identifies a range of allowable residential densities for each planning area to allow for flexibility in future planning and design. The following land use designations are proposed:

- Medium-Low Density Residential allowing 8 to 22 dwelling units per acre
- Medium Density Residential allowing 15 to 29 dwelling units per acre
- High Density Residential allowing 20 to 44 dwelling units per acre
- Mixed-Use allowing up to 175,000 square feet of commercial and retail uses at a maximum Floor Area Ratio of 3.0 and multi-family attached residential units at a density range of 20 to 44 dwelling units per acre

Implementation of the Specific Plan would require a number of discretionary approvals including but not limited to an amendment to the OMCP to remove the Neighborhood Village designation and designate Specific Plan land uses and circulation changes, a rezone to implement Specific Plan land uses, and a Multi-Habitat Planning Area Boundary Adjustment.

For the purpose of the environmental analysis included in this report, a full buildout scenario for Specific Plan was analyzed. As the Specific Plan is under multiple property ownerships and the timing of buildout is not known at this time, the ultimate mix of residential densities cannot be known with certainty.

Key objectives of the Specific Plan include:

- Implement a Specific Plan consistent with the land use and mobility framework identified in the OMCP.
- Provide a comprehensive policy and regulatory framework that guides development for Southwest Village in accordance with the General Plan and OMCP.
- Provide balanced residential neighborhoods with a range of housing, including attached and detached options to accommodate increasing growth in the region and critically needed housing.

- Provide a Village Core that connects residential neighborhoods through a grid network including a comprehensive bicycle and pedestrian network that supports connections to transit.
- Provide public amenities and spaces including parks, paseos, trails, open space, and other amenities for active and passive recreation.

The Specific Plan would be implemented in phases as detailed in Figure 9. Phasing represented in Figure 9 is conceptual and implementation may occur in any order provided services are provided concurrent with development. This biology report analyzes implementation of the Specific Plan at both a project-level for phases currently proposed for implementation and at a program-level for future Specific Plan phases. Project-level analysis is provided for implementation of Phases 1, 2 and a portion of Phase 4 (see Figure 9). In addition to Phases 1, 2 and 4, the project-level analysis includes additional improvements that are depicted as their own phase, as represented on Figure 10.1. Project-level analysis phases include Phases 1, 2, and 4, Beyer Boulevard, off-site improvements, and EVA road. As shown, several of the project-level components are located outside of the proposed Specific Plan boundary, including Beyer Boulevard and Caliente Avenue road extensions, the southern EVA road, trails, and other infrastructure. Future development areas identified as program-level analysis areas on Figure 10.1 are evaluated at a program-level in this report. Figure 11 depicts the location of project-specific versus program-level areas.

The program-level area is located in the central and eastern portions of the Specific Plan area and consist of approximately 131 acres including an approximately 0.33 mile out and back trail southwest of the Specific Plan area. Anticipated future development within the program-level analysis areas of the Specific Plan is described in Section 1.3.1. Once future projects come forward within the program-level area, they would require additional review to verify existing on-site biological resources, identify project specific impacts, and propose project-specific mitigation. The program-level analysis herein is intended to address potential biological impacts at the program-level and provide a mitigation framework for the future development.

The project-level area includes approximately 220 acres and includes development areas in the north, west, south, southwest and southeast portions of the Specific Plan area in addition to off-site improvement areas including Caliente Avenue and Beyer Boulevard and approximately 0.96 mile of trails south and southeast of the development area both within and outside of the Specific Plan boundary. The project-level components include Phase 1 of residential development, infrastructure to support Phase 1, Beyer Boulevard, trail improvements to support Phase 2, and rough grading of the Phase 2 and 4 area and EVA and off-site improvements. These components are described further in Section 1.3.2.

## 1.3.1 Program-level Components

### 1.3.1.1 Residential and Mixed-Use Development

Future residential portions of the Specific Plan evaluated at the program-level include Phases 3, 5 through 7, and portions of Phase 4. This includes residential development within portions of Planning Areas 1, 2, and 7 in addition to Planning Areas 3 through 6, and 21, 22, and 24 through 27 as shown on Figure 9. Mixed-use development is anticipated within Phase 7 which includes Planning

Areas 24 through 27, located within the central portion of the Specific Plan area. These program-level areas are under a variety of ownerships and the timing of development is unknown at this time.

### 1.3.1.2 Infrastructure Improvements

Implementation of the Specific Plan would require a number of infrastructure improvements such as new roadways and water, sewer, drainage, and storm water infrastructure. Conceptual drainage analysis has been completed for the Specific Plan to identify the programmatic drainage design. While specific drainage plans are not available at this time, it is anticipated that two drainage outfalls would be required to convey drainage to the bottom of the canyons south of Planning Areas 5 and 6 (see Figure 9). A pump station in the northeast portion of the Specific Plan area would be required to support future development areas. At this time, project-specific details regarding these infrastructure improvements are unknown.

### 1.3.1.3 Conceptual Trail Network Revisions

The OMCP, which was adopted in 2014, included a conceptual trail network, as detailed on Figure 12.1. Per the OMCP Recreation Element Policy 7.2-5, the final trail alignments were to be finalized and analyzed with future Specific Plans and project-specific proposals. To carry forward the OMCP trail network planning effort and comply with Policy 7.2-5, the project includes refinements to the existing planned trail network both within and surrounding the Specific Plan area. Certain trails planned for implementation are addressed at the project-level and are discussed further in Section 1.3.2.5.a. The program-level trail alignments are conceptual (see Figure 11), meaning they would require further study and environmental review prior to implementation.

As part of this overall specific planning effort, the adopted OMCP trail network was reviewed as it was discovered that certain trail alignments shown on the OMCP trail map followed alignments that would be unsuitable for implementation due a variety of issues including erosion concerns, steep grade, and presence of sensitive biological resources. Therefore, as part of this planning process, City Parks and Recreation staff conducted several site visits with trail experts, City MSCP staff, biologists and other specialists to consider the best location for trails within and surrounding the Specific Plan area. The focus of this effort was to ensure trails were sited considering compatibility with existing biological resources and to avoid areas where trails would not be sustainable due to slope, erosion or other conditions.

Since Specific Plan area trails within the open space would ultimately connect to primitive trails outside of the Specific Plan, revisions to the OMCP trail network were warranted to ensure consistency with MSCP trail policies related to resource conservation and sensitive species avoidance.

Through detailed evaluation of adopted OMCP conceptual trail alignments with respect to this Specific Plan, it was determined that several alignments should be removed from the plan. As shown on Figure 12.2, a number of the conceptual trail alignments identified in the OMCP are proposed to be removed or revised. Trails proposed for revision are numbered on Figure 12.2 and described below:

- Trail 1 was an alignment that would have crossed a number of conserved properties including the County Furby North Preserve, West Otay Mesa A, and West Otay Mesa B (see Section 1.2.3) within Moody Canyon. Due to the presence of conserved properties and sensitive resources within Moody Canyon, this trail alignment is proposed to be eliminated from the OMCP trail network map.
- Trail 2 is an OMCP conceptual trail alignment that would remain where the trail follows the ridgeline. Connections off the ridge have been removed, as the area is steep and cannot support trail connections from that area.
- Trail 3 includes a number of segments that border land intended for vernal pool conservation. Portions of this conceptual trail are proposed for removal to avoid bringing trail users near existing and/or restored vernal pool areas that need to be protected from disturbance. The portions that would remain are designated as part of the Specific Plan perimeter trail.
- Trail 4 is an extensive east west trail alignment proposed for removal. Additionally, the connections to Trail 2 would be eliminated due to steepness. Portions of this trail were found to be inaccessible and not traversable upon field inspection. An alternative east/west trail was identified that would be sustainable for trail use.
- Trail 5 was eliminated as there were some difficult drainage crossings present along the alignment, unsuitable terrain, slopes and erosion issues.

The City is updating the OMCP trail map to identify conceptual connections, and no specific alignments would be shown until further study and confirmation of sensitive resources and trail sustainability is determined. The trails depicted on Figure 12.3 identify those trails that were determined to be sustainable and compatible with surrounding biological resources. Updates to the City's OMCP trail map requires an amendment to the OMCP, which is one of the entitlements requested with this project. One OMCP program-level primitive trail is identified, which is a single out and back trail (see Figure 12.3, conceptual trail alignments, program-level primitive trail).

Proposed trails within the Specific Plan development area include a perimeter trail at the edge of the development area, intended for use by pedestrians and bicyclists providing views toward the surrounding open space. The perimeter trail would provide a transition between the development area and the surrounding open space areas. The perimeter trail would be located within the development footprint within Brush Management Zone (BMZ) 1. The perimeter trail would be separated from the surrounding open space by revegetated 2:1 to 3:1 manufactured slope which would serve to deter access into the surrounding open space. The trail would have a natural surface that may include tread improvements such as stabilized decomposed granite. Perimeter trail tread widths would be 8 feet, except in areas abutting a 4:1 slope, where the trail tread would be 7 feet in width. Perimeter trails would generally be located within the manufactured slope around the edge of the development within slopes ranging from 2:1 to 4:1. A recreation easement would be recorded over each segment of perimeter trail to allow public access. Perimeter trails would be constructed concurrent with development. Outside of the Specific Plan development area, primitive trails are proposed within both existing and proposed MHPA. Primitive trails would have a maximum trail base width of 4 feet, but some trails may be less than this where sensitive resources are present. Trails would be natural dirt. Primitive trails have been sited to follow existing disturbed trail



alignments where feasible to limit impacts to sensitive resources. Primitive trails would be for passive recreational use only, e.g., hiking, walking and non-motorized bicycle. Equestrian use and motorized bicycles (i.e., e-bikes) would be prohibited; however, where accessible, motorized wheelchairs would be permitted.

The Specific Plan calls for disturbed lands located within a 50-foot buffer (100 feet total) around proposed trail alignments to be restored to native habitats to remove access to unofficial trails and encourage use of the official trail network. The program-level primitive trail is limited to a single out and back ridgeline trail totaling approximately 0.33 mile. The City may require implementation of additional primitive trails within the surrounding open space consistent with the OMCP concept trail plan.

#### 1.3.1.4 Conservation Areas

The Specific Plan includes land designated as open space (see Figure 8). Open space lands include land within the MHPA and/or VPHCP preserve and other land either already conserved or planned for conservation. Planning Area 28 is designated as general open space, with potential uses including passive open space, passive park, storm water and drainage facilities, and community gardens. Planning Areas 23, 29, and 30 include both existing and planned VPHCP/MHPA and MHPA conserved open space areas (shown with hatch overlay on Figure 8), and future uses in these areas would be limited to uses consistent with conservation land and would be required to comply with the VPHCP and MSCP MHPA policies and related regulations. Any development adjacent to conserved open space and/or sensitive biological resources would be required to demonstrate consistency with the City's VPHCP and MSCP Subarea Plan.

### 1.3.2 Project-level Components

Project-level components of the Specific Plan include Phase 1 of the residential development, infrastructure to support Phase 1, Phase 2 and 4 rough grading areas, Beyer Boulevard, the EVA road, and other off-site infrastructure improvements. Refer to Figure 10.1 for the project-level phasing areas and Figure 11 for all project-level analysis areas. Implementation of Phase 1 would include development of up to 920 multi-family (detached and attached) residential units, within Planning Areas 8 through 14. The supporting infrastructure would include construction of an EVA road, Beyer Boulevard and Caliente Avenue along with water, sewer, and transportation infrastructure improvements. Drainage outfalls, a pump station/sewer lift station, and trails are also part of the Phase 2 components. Discretionary actions required to implement the project-level components include, but are not limited to, a Site Development Permit, a MHPA Boundary Line Adjustment (BLA), replacement of VPHCP conservation land, and modifications to existing CDFW easements to identify Beyer Boulevard as an allowable road easement crossing conserved lands.

#### 1.3.2.1 Residential Components

The residential components evaluated at the project-level includes Phase 1, which includes Planning Areas 8 through 14. These Planning Areas are addressed in the VTM, which identifies up to 920 residential dwelling units. Implementation of residential components would occur in phases as detailed below.

**a. Phase 1a**

Phase 1a would involve construction of access to the Specific Plan area via Caliente Avenue and Central Avenue in addition to construction of the first 200 residential units. The anticipated site plan for Phase 1a is depicted on Figure 10.2. The Caliente Avenue extension south of its existing terminus to Central Avenue may be constructed by another developer or this project; therefore, this access is included as part of the project description in the event this project proceeds first. Phase 1a would involve construction of the first 200 residential units within Planning Areas 8 through 10 in addition to a temporary sewer lift station as depicted on Figure 10.2. Due to the area topography in relation to sewer treatment, a temporary sewer pump station would be required to serve these first 200 units until such time permanent sewer and water lines are constructed.

**b. Phase 1b**

Phase 1b would involve construction of up to an additional 499 units for a total of 699 residential units. The anticipated site plan for this phase is depicted on Figure 10.2. As part of this phase, an existing dirt road would be improved to provide an EVA road for emergency use (see Figure 16.3 and Section 1.3.2.3.e). Phase 1b would also require the construction of a temporary sewer lift station as depicted in Figure 10.2.

**c. Phase 1c**

Phase 1c would involve construction of the Beyer Boulevard extension in addition to the remaining residential units within Planning Areas 12 and 14. Refer to Figure 10.2 for the Phase 1c residential component and Figure 10.1 for the location of the Beyer Boulevard phase.

**d. Phase 2**

Rough grading would be conducted within Phase 2 areas. Additionally, Phase 2 includes implementation of drainage outfalls identified on Figure 10.1 and primitive trails (see Figures 12.3 and 12.4). Future site-specific grading and development plans would be required within Phase 2 areas as development is proposed.

**e. Phase 4**

Rough grading would be conducted within portions of Phase 4 areas, primarily supporting grading for Caliente Avenue, south of Central Avenue and residential development within Planning Area 7. Future site-specific grading and development plans would be required within Phase 4 areas as development is proposed. Grading estimates for Phase 4 include approximately 22,500 cubic yards of cut and 342,500 cubic yards of fill with anticipated import volumes of 320,000 cubic yards originating from other portions of the site.

### 1.3.2.2 Landscaping and Brush Management

A landscape plan has been prepared covering Planning Areas 8 through 14 in addition to the Beyer Boulevard extension and the EVA road. Landscape details for these areas are discussed below and detailed on the project landscape plans.

#### a. Slope Revegetation

Manufactured slopes located adjacent to natural open space would be revegetated with native plants, specifically within the areas depicted on Figure 13.1. The native plant palette for the slopes adjacent to natural open space areas include the following species which correspond to the “MHPA Adjacent Lands and Brush Management Zone 2 (BMZ 2) Plant Palette”:

- coastal deerweed (*Acmispon glaber* var. *glaber*)
- ocean locoweed (*Astragalus trichopodus* var. *lonchus*)
- California encelia (*Encelia californica*)
- California matchweed (*Gutierrezia californica*)
- coastal goldenbush (*Isocoma menziesii*)
- laurel sumac (*Malosma laurina*)
- purple needle grass (*Stipa pulchra*)
- white sage (*Salvia apiana*)
- Mojave yucca (*Yucca schidigera*)
- western blue-eyed grass (*Sisyrinchium bellum*)
- blue dicks (*Dipterostemon capitatus* [= *Dichelostemma capitatum*])
- San Diego bur-sage (*Ambrosia chenopodiifolia*)
- California sand-aster (*Corethrogyne filaginifolia*)
- saw-toothed goldenbush (*Hazardia squarrosa*)
- caterpillar phacelia (*Phacelia cicutaria* var. *hispida*)
- bladderpod (*Peritoma arborea*)
- jojoba (*Simmondsia chinensis*)
- foothill needle grass (*Stipa lepida*)
- fascicled tarweed (*Deinandra fasciculata*)
- California adolphia (*Adolphia californica*)
- California box-thorn (*Lycium californicum*)
- coast cholla (*Cylindropuntia prolifera*)
- coast prickly-pear (*Opuntia littoralis*)
- cliff spurge (*Euphorbia misera*)

An exterior manufactured slope plant palette is identified adjacent to the MHPA planted areas as detailed on Figure 13.1 including adjacent to the Beyer Boulevard extension and other exterior slope areas not adjacent to the MHPA. This plant palette is shown on the project landscape plan and includes native species and additional native groundcovers and native tree species including coast live oak (*Quercus agrifolia*), Nuttall’s scrub oak (*Quercus dumosa*), and blue elderberry (*Sambucus mexicana*). Refer to the landscape plan for additional details.

## b. Phase 1 Brush Management

Brush management is required on all premises that are within 100 feet of a structure and contain native or naturalized land. Brush management is proposed along the boundaries of the Phase 1 residential development area where development areas are located adjacent to open space, including Planning Areas 10, 12, and 14. Brush management consists of Zone 1 and Zone 2, which are shown on Figure 13.2. Zone 1 would be a 35-foot minimum width, while Zone 2 would be 65 feet wide, although final layouts of brush management zones may exercise zone reduction provisions set forth under San Diego Municipal Code 142,0421(f). Alternative compliance is proposed in Planning Area 10 (lots 1319, 27-29 and 52-54 ), Planning Area 12 (lots 63 and 88 through 98), and Planning Area 14 (lots 117 through 135) due to constraints related to adjacency to open space preserves. Dwelling units with alternative compliance brush management zones would be required to comply with the City's FPB Policy B-18-01, "Mitigation for Reduced Brush Management Zones". Alternative compliance would generally include installation of fire rated walls, upgraded openings with dual-glazed, dual-tempered panes along brush side of structures plus a 10-foot perpendicular return along adjacent wall faces. Where glass panes are proposed adjacent to open space, bird safe glass would be used to prevent bird collisions. Bird safe glass would include the use of glass with ultraviolet reflective patterns visible to birds but transparent to the human eye (such as GlasPro Bird Safe Ultraviolet Reflective Glass), or etched or patterned glass that provide a visual barrier. Patterned or etched glass would have vertical stripes at least ¼ inch wide with a maximum spacing of 4 inches, or horizontal stripes that are at least ¼ inch wide with a maximum spacing of 2 inches (U.S. Fish and Wildlife Service [USFWS] 2021).

With the proposed MHPA BLA, all BMZ 1 and 2 areas would be outside of both existing and proposed MHPA. Vegetation management within BMZ 2 would be consistent with City Landscape Manual, Section III: Brush Management which requires BMZ 2 plants to not be cut below six inches which allows for impacts to native habitats to be avoided.

All manufactured slopes within BMZ 2 would be revegetated with native species and would be protected through a covenant of easement. Fire management within BMZ 2 would be the responsibility of a private entity (e.g., homeowners association [HOA]). The easement would ensure permanent protection of the habitat while providing allowance for ongoing vegetation management for fire protection purposes. Refer to the Specific Plan plant palette for a list of allowed plant species within MHPA adjacent areas in BMZ 2 above.

## c. Phase 2 Brush Management

Detailed site planning is not complete for Phase 2 residential development areas (e.g., Planning Areas 15, 16, 17, 19, and 20 shown on Figure 9). Therefore, detailed brush management zones are not provided at this time. Brush management zones consistent with the City's Land Development Code (LDC) would be provided as part of Phase 2 Implementation, providing 100 feet of defensible space or approval of alternative compliance consistent with allowances in the LDC. Although Phase 2 site planning is not available at this time, a buffer between the impact limits and the proposed mitigation lands has been provided to accommodate future impact neutral BMZ 2. A 50-foot buffer was provided between the edge of the grading footprint and adjacent open space as detailed in Figure 13.3. This buffer would ensure that brush management for Phase 2 areas does not encroach

into proposed MHPA or mitigation lands. If alternative compliance is required for phase 2 and fire safe glass panes are proposed adjacent to open space, bird safe glass would be required.

### 1.3.2.3 Roadway Improvements

#### a. Caliente Avenue and Central Avenue

Access to proposed Phase 1a residential development would require the construction of Caliente Avenue north of the Specific Plan boundary from its current terminus in Otay Mesa, south to the planned connection with Central Avenue. Phase 1a would include the construction of this segment of Caliente Avenue as well as Central Avenue west of Caliente Avenue. Caliente Avenue south of Central Avenue is part of the Phase 4 component. Portions of these improvements extend through the Candlelight and Southwind projects.

#### b. Beyer Boulevard

Implementation of the project-level areas would require construction of an extension of Beyer Boulevard providing access from San Ysidro to the Specific Plan area. Beyer Boulevard improvements are required both within and outside of the Specific Plan boundary (Figure 14.1).

##### *Beyer Boulevard East*

As detailed in the Specific Plan, Beyer Boulevard within the Specific Plan boundary is referred to as Beyer Boulevard East and would be constructed as a modified 4-lane Urban Major.

##### *Beyer Boulevard West*

The extension of Beyer Boulevard West of the Specific Plan from Enright Drive to West Avenue is referred to as Beyer Boulevard West, which is planned as a modified 4-lane Urban Collector. Although planned as a modified 4-lane Urban Collector, the roadway is constrained by environmental resources and the Specific Plan specifies that this segment would be built with 2 instead of 4 lanes (see Figure 14.1). All manufactured slopes surrounding Beyer Boulevard would be revegetated with native plant species consistent with the surrounding habitats, as detailed in Section 1.3.2.1.

Along the western extent of the proposed Beyer Boulevard extension, a 6-foot-tall masonry wall would be constructed on the north side of the road to provide separation and noise attenuation from the adjacent habitat. Two San Diego Gas and Electric (SDG&E) access points with gates are proposed along Beyer Boulevard to provide ongoing access to SDG&E easements and power lines within the surrounding open space (Figure 14.2). A number of retaining walls have been incorporated into the roadway design, largely to limit habitat impacts. Retaining walls include 4-foot to 12-foot retaining walls along the north and south sides of Beyer Boulevard to minimize impacts to conserved properties including the Furby North Preserve, West Otay Mesa A, and West Otay Mesa B (see Figure 14.2). Refer to Section 1.3.2.5 for additional actions required related to these properties.

### *Beyer Boulevard West Wildlife Crossings*

Due to the surrounding open space along Beyer Boulevard West, the roadway is designed to allow for wildlife movement through culverts and a wildlife overcrossing. For consistency with the City MSCP Subarea Plan and Area Specific Management Directives for Otay Mesa, a 32-foot-by-60-foot wildlife overcrossing is proposed along the Beyer Boulevard alignment in the location of one of the highest wildlife use areas (see Figure 14.2). The overcrossing is sited and designed to mimic the existing topographic conditions and convey animals in the location of existing wildlife movement patterns at a high use drainage swale area. The wildlife overcrossing would be sited approximately 515 feet east of the development area. Each end of the overcrossing is designed to include flared entrances to encourage wildlife entry. Surrounding slopes would be revegetated with native vegetation to match surrounding habitats. Wildlife fencing would be incorporated, as discussed further below.

In addition to the wildlife overcrossing, three additional small animal crossing features have been designed as part of the Beyer Boulevard extension where it crosses conserved lands. Three 6-foot-tall culverts, ranging from 103-105 feet in length, would be installed to provide passage for small mammals between Moody Canyon and habitat areas to the south. These culvert undercrossings would provide multiple opportunities for small animal movement and incorporate wildlife passage into the roadway design. The culvert crossings would also be designed with a flare at the ends to encourage entry. While the culverts are designed to convey drainage during rain events, the drainage design would ensure a flood free crossing for animals during rain events.

Fencing is proposed along the length of Beyer Boulevard on both the north and south sides to prevent wildlife crossings along the roadway and to funnel wildlife toward the wildlife crossings. Fencing on the north side of Beyer Boulevard is estimated to be installed for an approximately 3,997-foot length, while fencing along the south side of Beyer Boulevard would extend approximately 3,112 feet. Along the west side of Beyer Boulevard, where vehicular access is needed for an SDG&E easement, a gate would be added that would allow for vehicular entry while keeping wildlife from entering the roadway. The precise location (elevation) of the fencing on the slope would be determined during the final engineering of the Beyer Boulevard extension. The following are key design features related to the proposed wildlife overcrossing and the three small animal under crossings that would be implemented, as recommended by the project's wildlife movement study (Wildlife Tracking Institute 2022):

- Chain-link fencing would be installed along the length of Beyer Boulevard. Fencing would funnel wildlife toward the culvert undercrossings and the wildlife overcrossing, while preventing wildlife from crossing the roadway.
- The height of the fencing would be based on the slope aspect in relation to the fence, with fence heights being 6 feet up to 8 feet depending on the orientation of the slope. Fence heights vary with topographic conditions to ensure adequate control of wildlife movement away from the roadway. Where the fence is located mid-slope with wildlife usage area located above the fence line, the fence would need to be 8 feet tall. Where the fence is located at grade or with wildlife use area located downslope of the fence, a 6-foot fence height would be sufficient.

- Wildlife fencing shall be buried 6 inches to prevent animals from burrowing under. Additionally, a fine mesh shall be installed along the bottom two feet of the fence to prevent small animal movement through the fence.
- The wildlife overcrossing surface shall be planted with native plants and native soil, approximately 3 feet deep. Soils for the overcrossing shall originate from the surface layer of surrounding native soils. As detailed in the project landscape plants, the following plant palette is identified for the wildlife overcrossing:
  - Coastal cholla (*Cylindropuntia prolifera*)
  - California encelia/Bush sunflower (*Encelia californica*)
  - Laurel sumac (*Malosma laurina*)
  - Coast prickly pear (*Opuntia littoralis*)
  - Bladderpod (*Peritoma arborea*)
  - Lemonade berry (*Rhus integrifolia*)
  - Black sage (*Salvia mellifera*)
  - Mojave yucca (*Yucca schidigera*)
  - Purple needlegrass (*Stipa pulchra*)
  - Small flowered needlegrass (*Stipa lepida*)
- Native bushes (such as lemonade berry and laurel sumac) found in the area that attain 6- to 8-foot heights should be placed along the sides of the overcrossing to screen the road and provide refugia.
- Micro-refugia (e.g., rock structures) shall be incorporated onto the overcrossing and undercrossing surface for small animal stopping points/shelters.
- Native plant landscaping on the southern slope at the wildlife overcrossing shall be designed with vegetation that would grow in a dense manner to deter human views toward the overcrossing and deter human use. Native cactus and other uninviting species shall be selected to deter human access.

### ***Beyer Boulevard between Otay Mesa Road and Enright Drive (San Ysidro)***

As detailed in Figure 15.1, the current Beyer Boulevard in San Ysidro between Otay Mesa Road and Enright Drive is proposed to be improved with revised striping within the existing right-of-way limits. This is an interim improvement that would ensure adequate roadway functioning until the final roadway improvement is implemented as part of Phase 4 of the Specific Plan.

The limits of disturbance for this segment assume a wider area in anticipation of the requirement to widen this segment to 4 lanes to its ultimate improvement width which would require acquisition of right-of-way from the San Ysidro School District. The ultimate Beyer Boulevard improvement between Enright Drive and Beyer Boulevard West is depicted on Figure 15.2. The required timing for this improvement corresponds to implementation of Phase 4 of the Specific Plan prior to issuance of occupancy permits for the 3,301<sup>st</sup> dwelling unit (after construction of an elementary school and a 17.6-acre public park), although it may be implemented sooner.

The ultimate improvement in this area would include construction of an approximately 6,900-linear-foot retaining wall ranging in height from 1 to 16 feet at its highest point located along the northern side of the road adjacent to the San Ysidro School District property (Figure 15.3).

### c. West Avenue and Street A

Internal to the Specific Plan, implementation of Phase 1 would also include construction of West Avenue and Street A to provide access to residential development areas.

### d. SR-905 and Caliente Avenue Improvements

The project proposes improvements to the SR-905 and Caliente Avenue interchange. The improvements detailed below shall be completed and operational prior to occupancy of the 201<sup>st</sup> dwelling unit.

#### *SR-905 Westbound On-Ramp Widening*

Widening the westbound SR-905 on-ramp at Caliente Avenue is proposed to ensure adequate roadway operations. This improvement involves adding a lane within the existing California Department of Transportation (Caltrans) right-of-way (Figure 16.1).

#### *Restriping and Signal Modifications within the Caliente Avenue Bridge over SR-905*

Intersection reconfiguration of Caliente Ave/SR-905 westbound ramps are proposed to install a second northbound left turn lane (through re-striping on the bridge over SR-905), construct a second receiving lane to the on-ramp, and restripe the number one left turn lane from 100 feet of storage to 300 feet of storage (Figure 16.2). Traffic signal modifications, designed to the satisfaction of the City Engineer and Caltrans Engineer, may also be required.

### e. Emergency Vehicle Access Road

The project is subject to the City's Fire Protection and Prevention regulations (San Diego Municipal Code Section 511.0104), which adopted the 2022 California Fire Code, Appendix D, Section D106.2., "Multiple-Family Residential Developments with Significant Fire Risk," which states that multi-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system. Accordingly, the project requires a secondary access route prior to occupancy of the 201<sup>st</sup> unit. The secondary emergency access is proposed to be provided through either the construction of Beyer Boulevard or through improving an existing utility road south of the Specific Plan area to an EVA road that meets secondary emergency access requirements (see Figure 10.3). The Beyer Boulevard connection is required to be operational prior to occupancy of the 700<sup>th</sup> unit for transportation and circulation purposes.

In the event the EVA road is implemented as a component of this project, improvements would involve grading, scraping, and placement of surfacing including concrete, asphalt, and/or decomposed granite or gravel. The road width would be 20-feet wide in most places and would narrow to 14-feet in one location to avoid sensitive environmental resources. Grading is required



along portions of the road to reduce the steepness and achieve a maximum 15 percent grade and resurfacing the roadway is required in some areas due to the grade. Approximately 1.99 acres of grading would be required with the remaining disturbance limited to scraping the road to achieve a consistently flat surface. Approximately 0.74-acre of the roadway would require concrete surfacing in areas that would be at a 15 percent grade. A 0.12-acre portion of the road would require asphalt due to steep grades, while the remaining portions of the road (approximately 2.09 acres) would be surfaced with decomposed granite or gravel for stabilization. Grading quantities include approximately 6,780 cubic yards of cut and 8,220 cubic yards of fill, which is captured as part of the overall project-level grading quantities reported in Section 1.3.2.4.a due to grading balancing. Where grading is required, all slope disturbance would be restored to native habitats consistent with the surrounding area. The resurfacing would involve placement of decomposed granite, asphalt, and concrete surfacing in certain areas depending on grade.

The EVA road would provide a secondary emergency only vehicle access once 200 units are constructed. Ultimately, after buildout of Phase 2 residential components and public roadways including South Caliente Avenue, the EVA road access would be provided from the intersection of South Caliente Avenue and D Street. The EVA road would be HOA owned and maintained. Access to the EVA road would be gated at the edge of development and locked with a 'Knox box' for City of San Diego's use only in order to prohibit public vehicular access; however, pedestrian and non-motorized bicycles would be permitted along the EVA road to allow connection to the proposed primitive trail network. Public access beyond the EVA road and trail access points would be prohibited with signage notifying the public to stay only on designated trails. Signage would also be provided along the edges of the EVA road to provide public notice that access to the surrounding open space is prohibited, with the exception of access to formal primitive trails. Manufactured slopes associated with the EVA road would be revegetated with native plants consistent with the surrounding habitats as detailed on the project landscape plans and depicted on Figure 13.1.

To address concerns that the proposed EVA road improvements could destabilize the landslide complex that exists in the area, a geotechnical evaluation was conducted by Geocon, Inc. which identified the hillside has a slope stability factor of safety of 1.24 in the existing condition. Improvements to the road would not exacerbate this risk and would slightly increase stability due to grading, increasing the factor of safety to 1.25 as detailed in Attachment 12. Additionally, due to the factor of safety being above 1.0, future movement of the landslide in general is not expected to occur. Refer to Attachment 12 for additional information regarding landslide risk and stability.

### 1.3.2.4 Grading and Infrastructure

#### a. Grading

The project-level grading component includes grading within Phase 1 areas including (Planning Areas 8 through 14), the Beyer Boulevard extension, the EVA road, and off-site improvement areas. Rough grading areas include Phase 2 (Planning Areas 15 to 20) and Phase 4 (a portion of Planning Area 1 and Planning Area 7). Grading volumes include 1,936,352 cubic yards of cut and 1,850,224 cubic yards of fill, with anticipated export volumes of approximately 86,128 cubic yards, which would be placed within rough grading areas located within Planning Areas 15 through 18 or used grading balancing for the EVA road and Phase 4 areas.

Grading volumes for Phase 4 are included in the overall grading volumes discussed above, but individually include 22,500 cubic yards of cut and 342,500 cubic yards of fill originating from other portions of the project site. Grading volumes for the EVA road are similarly included in the overall grading volumes discussed above, but individually include 6,780 cubic yards of cut and 8,220 cubic yards of fill, with anticipated import volumes of 1,440 cubic yards coming from other portions of the project site.

Anticipated grading phasing is depicted on Figure 10.1. As shown, grading would be implemented in phases, with Phase 1 including grading to allow the development of up to 920 residential units, Phase 2 including the rough grading areas, the EVA road phase including grading within the EVA road area, the Beyer Boulevard phase includes grading for the Beyer Boulevard extension and off-site improvements are identified as their own phase.

## **b. Drainage and Stormwater Management**

### ***Phase 1***

The project drainage design involves on-site detention of stormwater in underground vaults to capture, treat and control stormwater flow volumes. Drainage in the post-project condition would flow west within Beyer Boulevard to a planned detention basin to be shared with the planned Beyer Park. Additionally, stormwater flows would be discharged within the surrounding open space at the drainage locations shown on Figure 10.1. The project's drainage design has been planned so that none of the project runoff discharges into the landslide area due to recommendations from the geotechnical engineer related to landslide stability.

The overall drainage characteristics in the post-project condition would remain similar to the pre-project condition for the residential areas associated with Phase 1a, with drainage discharging to the west at the bottom of the slopes providing flows toward existing drainages within Moody Canyon (see drainage discharge points on Figure 10.1). Due to the proximity of the San Ysidro landslide complex, drainage associated with the proposed Beyer Boulevard extension and residential development areas south of Beyer Boulevard would be diverted either north to the proposed stormwater system down Beyer Boulevard and into the proposed detention basin at the west end of Beyer Boulevard, or south/southeast toward Spring Canyon. The location of the proposed Beyer Boulevard detention basin and drainage discharge points associated with Phase 1 development areas are depicted on Figure 10.1.

Post-project storm water runoff would be treated to the City Storm Water Standards, as discussed in "Priority Development Project Storm Water Quality Management Plan (PDP SWQMP) for South Otay Mesa (Preliminary Engineering)," prepared by Rick Engineering Company. Additionally, to manage stormwater in interim conditions during construction phasing, temporary construction basins would be constructed within Phase 2 as a part of rough grading.

### ***Phase 2***

While not proposed or required with Phase 1 development, anticipated Phase 2 drainage facilities are evaluated at the project-level. Drainage outfall 1 and 2 would be required to support future Phase 2 residential development areas (see Figure 10.1). These drainage facilities would involve

installation of underground drainage conveyance pipes to convey drainage toward lower elevations, outside of the landslide formation. At the outlet of pipe where it surfaces, rip rap would be installed. Flows would be controlled to manage velocities to avoid erosive conditions. Following installation of the drainage pipes, the disturbance areas would be revegetated with native species consistent with the City's Landscape Regulations (Chapter 14, Article 2, Division 4 of the SDMC) and Land Development Manual which requires disturbed areas adjacent to areas of native vegetation to be revegetated with indigenous native plant materials (Section 4.1 of Landscape Standards).

### **c. Water and Sewer Improvements**

#### ***Pump Station/Sewer Lift Station***

The southeast portion of the Specific Plan area is planned to include a pump station (e.g., sewer lift station) as part of the wastewater infrastructure necessary to support the development of Southwest Village Specific Plan, and is analyzed at the project-level. The pump station was identified as an allowed use in the VPHCP; therefore, it would be located within the VPHCP preserve and would occupy a maximum of 2 acres, just east of Planning Area 18. The pump station would be installed as part of Phase 2 of the project.

#### ***Water and Sewer Improvements***

Water and sewer line improvements are required to serve the project. Phase 1a and 1b (see Figures 10.2 and 10.3) of the project would involve installation of two separate temporary pump stations that would connect to a 4-inch private force main to be installed within Central Avenue and Caliente Avenue. The force main within Caliente Avenue would extend north to Airway Drive within the existing roadway. These pump stations would be temporary until Beyer Boulevard and the ultimate water and sewer connections are constructed.

Implementation of the Beyer Boulevard phase would require extension of water and sewer lines within the footprint of the proposed Beyer Boulevard extension. West of the extension of Beyer Boulevard, water and sewer line extensions are required to connect to surrounding pipeline and facilities as detailed in Figure 17. As shown, a 16-inch water line connection would extend west within existing Beyer Boulevard in San Ysidro and north within Otay Mesa Road and Otay Mesa Place connecting to the Princess Park Pump Station located at 1740 Masterson Lane. Sewer line improvements would require construction of a pipeline within East Beyer Boulevard and Center Street connecting to existing sewer lines. Construction of water and sewer lines would require installation using a backhoe straddling the new pipeline installation trench, requiring a disturbance width of 20 feet along pipeline installation locations.

### **1.3.2.5 Other Project Components**

#### **a. Trail Network**

Consistent with the OMCP Recreation Element Policy 7.2-5, the final trail alignments within the Specific Plan area were to be finalized and analyzed with future specific plans and project-specific proposals. Additionally, due to the connection of the Specific Plan trail network to the surrounding

OMCP conceptual trail network, the overall trail network surrounding the Specific Plan area was evaluated as part of the project. The existing OMCP conceptual trail network is depicted on Figure 12.1. As shown, a number of conceptual trail alignments were identified as part of the OMCP. Through implementation of a trail planning process associated with development of the Specific Plan, revisions to the OMCP trail map are proposed including elimination of a number of trails as detailed in Section 1.3.1.3. As part of the project-level components, portions of the trail network are proposed to be implemented, specifically the Phase 1 and 2 trails depicted on Figure 12.4.

The major trails within the Specific Plan area include a perimeter trail which would be located around the perimeter of the development areas, offering views toward the surrounding open space. An existing utility trail would be maintained to provide a connection to the southern border wall road. From the utility trail, access would be provided to two primitive trails including one out and back trail segment west of the utility road and another east-west primitive trail to the east (see Figure 12.3). The eastern primitive trail may ultimately provide connections to future primitive trails associated with the OMCP trail network; however, at this time, specific alignments are not known.

Trails proposed for implementation as part of the Phase 1 development include the perimeter trails bordering the edge of the proposed residential development area, identified as Phase 1 trails on Figure 12.4. The remainder of the project-level perimeter trail would be implemented as future subdivision maps are proposed, corresponding with Phase 2. Perimeter trail specifications are described in Section 1.3.1.3.

Approximately 0.96 mile of primitive trails (4 feet wide) are proposed to be improved both within the Specific Plan and south of the Specific Plan boundary. Trail improvements would include trail stabilization, erosion control, and closure of unauthorized trail routes in proximity to proposed formal trail alignments. Trail closures would primarily be implemented through restoration of disturbance within a 100-foot corridor surrounding the primitive trail alignment (50-foot buffer on each side) as a project design feature as depicted on Figure 18 and described in more detail in Section 1.3.2.6.a. Primitive trails would have a natural soil/dirt surface and would be for passive recreation only, e.g., hiking, walking, and non-motorized bicycle. Equestrian use and motorized bicycles (i.e. e-bikes) would be prohibited; however, where accessible, motorized wheelchairs would be permitted.

## **b. CDFW Conservation Easements**

CDFW holds conservation easements over two parcels that would be affected by the proposed Beyer Boulevard extension, referred to as West Otay Mesa A and West Otay Mesa B (soil) (Attachment 19). California Fish and Game Code Section 1348.3 governs conservation easements recognizing that the purpose of CDFW conservation easements is to ensure protection of lands deemed suitable for wildlife preservation, the process to identify Beyer Boulevard as an allowed use through these conservation easements requires several actions on the part of both the City and CDFW. The existing CDFW easements would be amended to identify Beyer Boulevard and its slopes as an allowed use within the easements. Refer to Figure 19 for the location of the required easement amendment area for Beyer Boulevard.

California law requires compliance with a statutory process when a governmental agency seeks to exercise its powers of eminent domain over conserved land. Due to the easement amendments being for a public road purpose, the City is committed to complying with the requisite notice, consultation, opportunity to state objections, necessity of use, and findings supported by substantial evidence in a Resolution of Necessity as outlined at California Fish and Game Code Section 1348.3. To facilitate modifications to CDFW held conservation easements, the City would consider approval of resolutions to acquire real property interests and initiate condemnation proceedings for the Beyer Boulevard right-of-way and slopes. Granting of a new CDFW conservation easement would be required prior to the City initiating condemnation proceedings and prior to amending the original conservation easements. CDFW would hold the replacement conservation easement, USFWS would be identified as a third-party beneficiary, and the City would be the long-term habitat manager with endowment funding provided by the applicant/owner. The specific location of the proposed replacement conservation easement would be determined through ongoing coordination with CDFW. In addition to a granting a new conservation easement to CDFW, two additional project design features are included as part of the project to support the requirements of the Wildlife Agencies, including the following:

- An approximate 2.13-acre area is proposed for vernal pool restoration within the City-owned West Otay Mesa B parcel. This potential restoration area is depicted on Figure 19.
- An approximate 95.29-acre area of additional habitat preservation beyond City mitigation requirements is proposed to be dedicated to the City in ownership for long-term management, depicted on Figure 19. This area includes approximately 44.41 acres of maritime succulent scrub, 24.95 acres of disturbed maritime succulent scrub, 13.66 acres of Diegan coastal sage scrub, 0.92 acre of disturbed coastal sage scrub, 6.16 acre of non-native grassland, 0.07 acre of disturbed wetland, 0.19 acre of natural flood channel, 0.16 acre of vernal pool with fairy shrimp, and 6.29 acres of disturbed land. This area is a project design feature to provide additional habitat preservation to support impacts to land conserved in CDFW held conservation easements and considered 100 percent conserved under the VPHCP.

### c. County of San Diego Furby North

Beyer Boulevard would traverse the County of San Diego's (County's) Furby North Preserve, which is land considered 100 percent conserved under the VPHCP, but is not protected by a CDFW conservation easement. The County considers the land within Furby North Preserve to be public parkland protected under the California Public Park Preservation Act of 1971. The California Public Park Preservation Act (California Public Resources Code [PRC] Sections 5400 et seq.) is the primary instrument for protecting and preserving parkland and provides provisions that ensures no net loss of parkland and facilities.

Construction of Beyer Boulevard and its slopes would occur within a total of 3.73 acres of land within the Furby North Preserve including 3.12 acres of maritime succulent scrub, 0.04 acre of disturbed maritime succulent scrub, 0.02 acre of vernal pool, and a 0.55-acre of disturbed land. This area would be transferred to the City in ownership and for management as part of its public roadway network. A County Board of Supervisors action would be required to authorize the land required

for Beyer Boulevard and its slopes to be conveyed to the City in ownership. See Figure 20.1 for the portion of the County Furby North Preserve that would be quitclaimed to the City.

In order to demonstrate compliance with the Parkland Preservation Act, replacement land has been identified south of the Specific Plan area that would be conveyed to the County in ownership with the City providing long-term management. The location of the replacement land is depicted on Figure 20.1. The replacement land totals 7.98 acres and would include 7.80 acres of maritime succulent scrub, 0.06 acre of disturbed wetland, and a 0.11-acre area of disturbed land. The City would manage these lands as part of the overall MSCP.

Like the land to be removed from the Furby North Preserve, the replacement land would be for habitat conservation purposes. The County and the City would enter into an agreement regarding the City long-term management responsibilities on County owned land, to ensure the land is managed consistent with the City's MSCP.

### ***Legal Access to Southern Portion of the Furby North Preserve***

After construction of Beyer Boulevard, the southern portion of the Furby North Preserve would be bisected by a City Public Road. In order to ensure ongoing legal access to this segment of the County preserve, the applicant proposes to grant a 20-foot access easement to the County that would provide access from Beyer Boulevard to the Furby North Preserve. Refer to Figure 20.2 for a graphic depicting the proposed easement in relation to Beyer Boulevard. An access gate is planned to be constructed along the southern side of Beyer Boulevard to provide SDG&E access to facilities south of the road. This gate and access road would also be used to provide the County access to the southern segment of Furby North. An easement is proposed to be granted on the map.

### ***Legal Access to the Replacement Lands***

The County requires a legal access easement to the replacement lands. Figure 20.1 depicts a proposed interim access easement from the existing terminus of Caliente Avenue in Otay Mesa through the Specific Plan area. The interim access easement is proposed through the Specific Plan area to provide the County legal access through the Specific Plan area until such time that public roads are constructed. The interim easements would extinguish as public roads are constructed, providing public access through the Specific Plan area. Ultimate County access to the Furby North replacement lands would be through the Specific Plan area public roads and via an access easement to be granted to the County over the EVA road. Access to the EVA road would be via a gated access at the intersection of Caliente Avenue and Street D.

## **1.3.2.6 Project Design Features**

### **a. Trail Restoration/Closures**

In order to close unauthorized trails, restoration of disturbed land and non-native grassland areas within a 100-foot-wide trail corridor (50 feet on each side of the trail) is proposed (Figure 18.1 to 18.7 and Attachment 1 for the Trails Restoration Plan). Habitat enhancement would be implemented in areas of disturbed coastal sage scrub, disturbed maritime succulent scrub, and disturbed jurisdictional resources. Habitat restoration would be implemented in areas of disturbed lands and

non-native grasslands. Where disturbed jurisdictional resources including disturbed wetlands and vernal pools are located within the restoration corridor, those resources would be enhanced through removal of non-native species when no ponding is present. Four isolated ponding features mapped as disturbed wetlands within the restoration corridor would be weeded and seeded with common vernal pool plant species which would result in these features (totaling 0.45 acre) qualifying as vernal pools.

At trailheads leading into the primitive trail network surrounding the open space, trash cans would be provided and signage would be installed to notify trail users to remain on designated trails and inform users of the sensitive resources present. Within the primitive trail network, the trail would be a natural dirt surface. Where needed to protect sensitive resources such as jurisdictional resources or sensitive plant species, peeler pole fencing would be installed to ensure trail users do not disturb these features.

Restoration and enhancement within the trail corridor is a project design feature and not mitigation; therefore, the restoration effort would be completed consistent with the City's Landscape Standards for revegetation adjacent to native vegetation (Section IV), which requires a 25-month monitoring period. A Trails Restoration Plan is included as Attachment 1 and identifies details including site preparation, plant production and installation, seed application methods, and irrigation methods, a proposed schedule, and success criteria, along with measures to ensure the restoration effort does not result in significant impacts to rare plants, sensitive wildlife or jurisdictional resources.

The construction of the main east-west trail located east of the existing utility road would occur after completion of the project's Otay tarplant (*Deinandra conjugens*) restoration which requires the existing road for management and monitoring access. After the restoration is signed off by the City of San Diego Mitigation Monitoring Coordination office (City MMC), the trail would be established and narrowed to a 4-foot-wide primitive trail with restoration implemented within the 100-foot corridor.

#### **b. Artificial Burrow/Earthen Berm**

A constructed earthen berm shall be installed within the project's mitigation lands in order to expand opportunities for burrowing owl nesting locations within the Otay Mesa area. Pilot holes would be installed in the berm to offer opportunities for nesting. The proposed berm is proposed within the vernal pool preserve and is intended to support regional efforts to expand suitable burrowing owl nesting locations in the Otay Mesa area. Attachment 13 provides more discussion on design and approach.

#### **c. Bird Safe Glass**

Where alternative compliance requires walls with glass panes for fire safety adjacent to open space within Phase 1 or 2, bird safe glass shall be used to prevent bird collisions. Bird safe glass shall include the use of glass with ultraviolet reflective patterns visible to birds but transparent to the human eye (such as GlasPro Bird Safe Ultraviolet Reflective Glass), or etched or patterned glass that provide a visual barrier. Patterned or etched glass shall have vertical stripes at least ¼ inch wide with

a maximum spacing of 4 inches, or horizontal stripes that are at least ¼ inch wide with a maximum spacing of 2 inches (USFWS 2021).

#### d. EVA Road Gate and Signage

At the intersection of South Caliente Avenue and D Street, access to the EVA road would be gated with a City Fire Department approved gate to prohibit public vehicular access. Signage would be installed noticing the public of trail access to primitive trails via the EVA road. Signage shall be installed along the boundary of the EVA road prohibiting public access into the surrounding open space and directing the public to stay on formalized primitive trails.

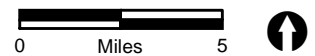
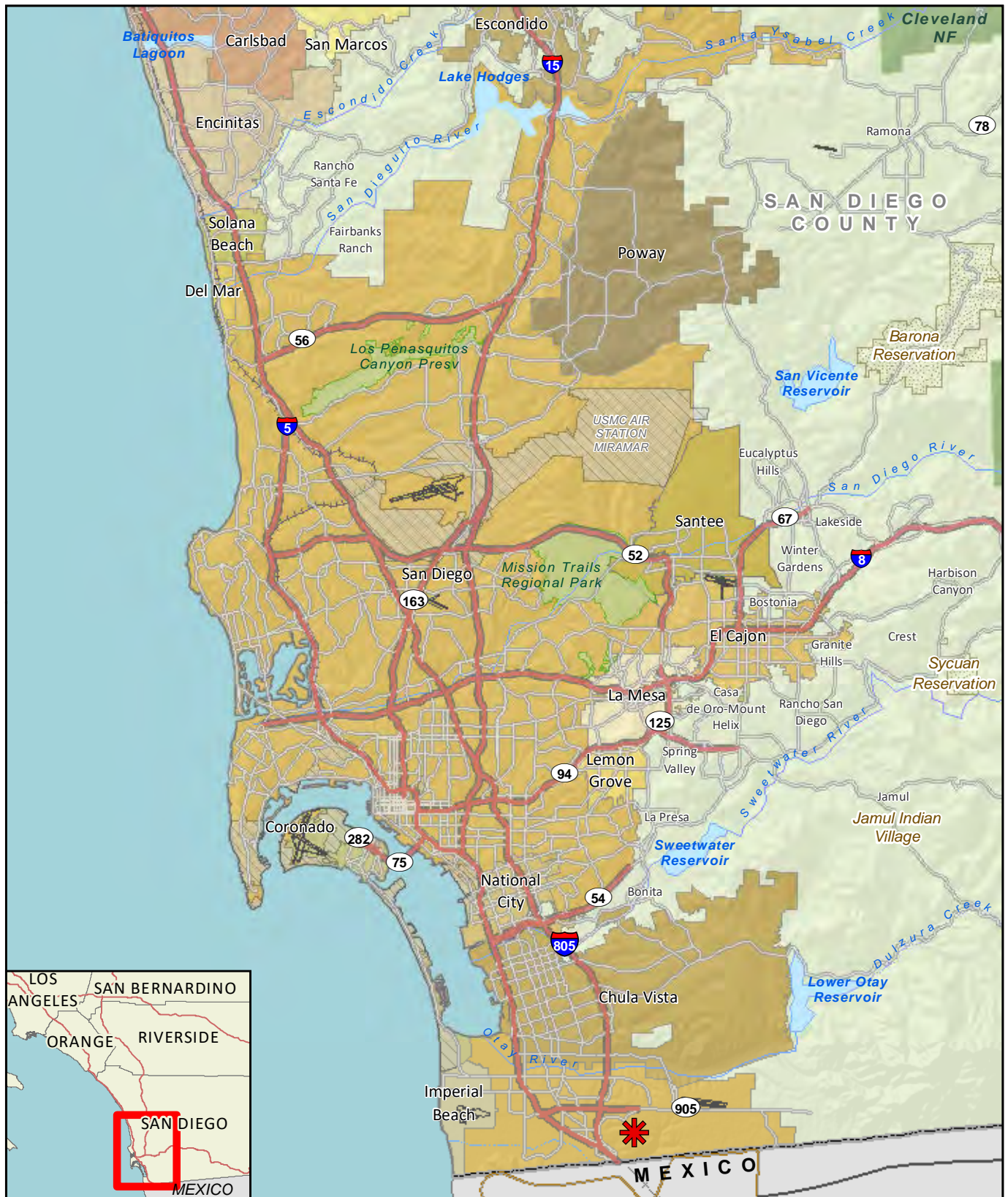
#### 1.3.2.7 Project-level Phasing Summary

A summary of the project-level phasing is provided below to further describe the relationship between the Specific Plan Development Phasing represented in Figure 9, the grading phasing represented in Figure 10.1, and the various project components described throughout Section 1.3.2. The project elements shown below are listed in the order of anticipated implementation.

Grading Phase	Project-level Components	Planning Areas (PA)	Relationship to VTM
Phase 1 and Off-site improvements (SR-905/ Caliente)	<ul style="list-style-type: none"> <li>First 200 units and associated Phase 1a grading areas (Figure 10.2)</li> <li>Temporary pump station</li> <li>Central Avenue</li> <li>Off-site improvements - State Route 905 and Caliente Avenue Westbound On-Ramp (see Figure 16.1 and 16.2)</li> </ul>	PA 8 and portions of PA 9 & 10	Part of VTM 2188969
Phase 1, Phase 2, and EVA road	<ul style="list-style-type: none"> <li>Second phase of Phase 1 residential development (201 to 699 units) (Figure 10.3)</li> <li>Southern EVA road improvements (Figure 16.3)</li> <li>Temporary pump station</li> <li>Rough grading within Phase 2</li> </ul>	PA 8, 11-14 and portions of PA 10	Part of VTM 2188969 and grading borrow areas
Phase 1, Phase 2, Phase 4, Beyer Boulevard, and off-site improvements (water/sewer)	<ul style="list-style-type: none"> <li>Third phase of Phase 1 residential development (700 to 920 units) (Figure 10.4)</li> <li>Rough grading in Phase 2</li> <li>Beyer Boulevard Extension and Wildlife Features (see Figures 14.1, 14.2, and 15.1)</li> <li>Off-site improvements – water and sewer lines (see Figure 17)</li> </ul>	Remaining portions of PA 13 and 14	Part of VTM 2188969
Phase 2	<ul style="list-style-type: none"> <li>Rough grading to support Phase 1 and Beyer Boulevard grading balancing</li> <li>Future grading plan and VTM required to allow residential in Phase 2. At that time, the following improvements would proceed: <ul style="list-style-type: none"> <li>Spring Canyon Drainage Outfall</li> </ul> </li> </ul>	PA 15-20	Grading borrow Area for VTM 2188969. Future VMT/Grading Plan required



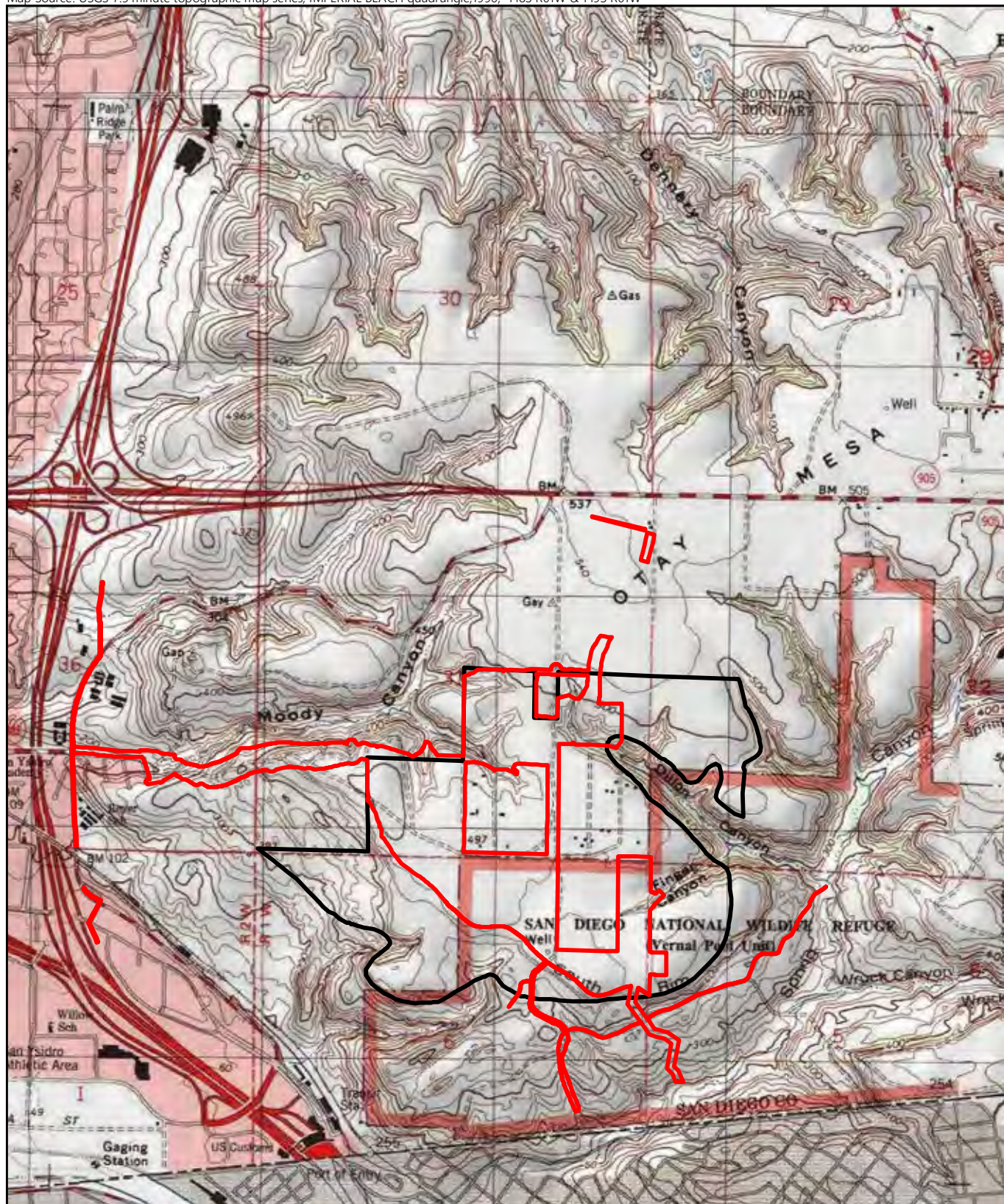
Grading Phase	Project-level Components	Planning Areas (PA)	Relationship to VTM
	<ul style="list-style-type: none"><li>○ Sewer Lift Station in Vernal Pool Preserve (PA 30)</li><li>○ Project-level primitive trails including trail restoration efforts within the 100-foot trail buffer (see Figure 18.1 to 18.7)</li></ul>		prior to development.
Phase 4	<ul style="list-style-type: none"><li>● Rough grading impacts analyzed.</li><li>● Future grading plan and VTM required to allow Phase 4 development.</li></ul>	Portions of PA 1, 2 and 7	Outside of VTM 2188969. To be processed with a future VTM



 Project Location

FIGURE 1  
Regional Location





- Project-level Analysis Area
- Specific Plan Boundary

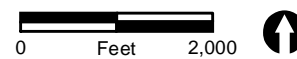
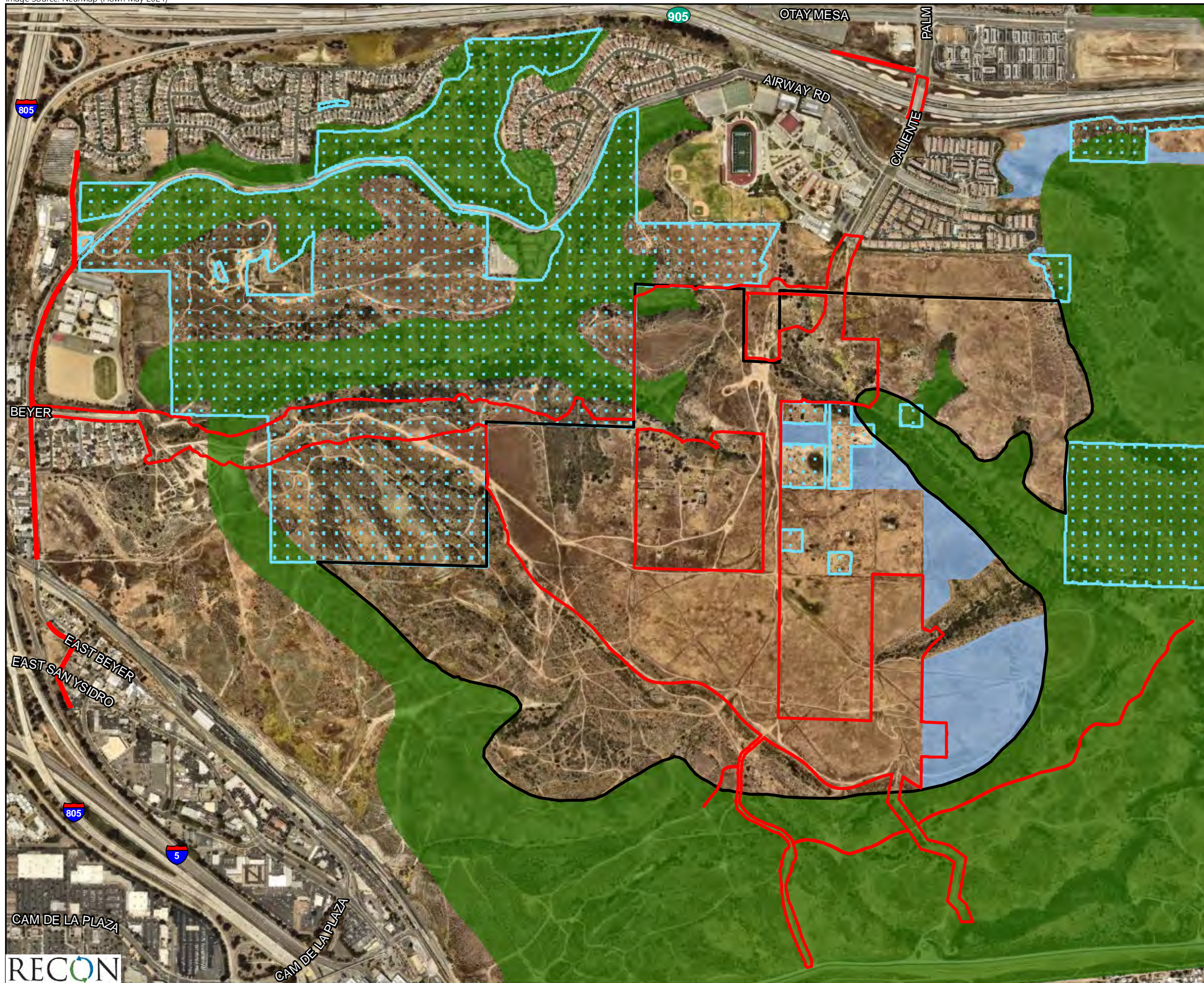


FIGURE 2  
Project Location on USGS Map



FIGURE 3  
Project Location on City 800' Map



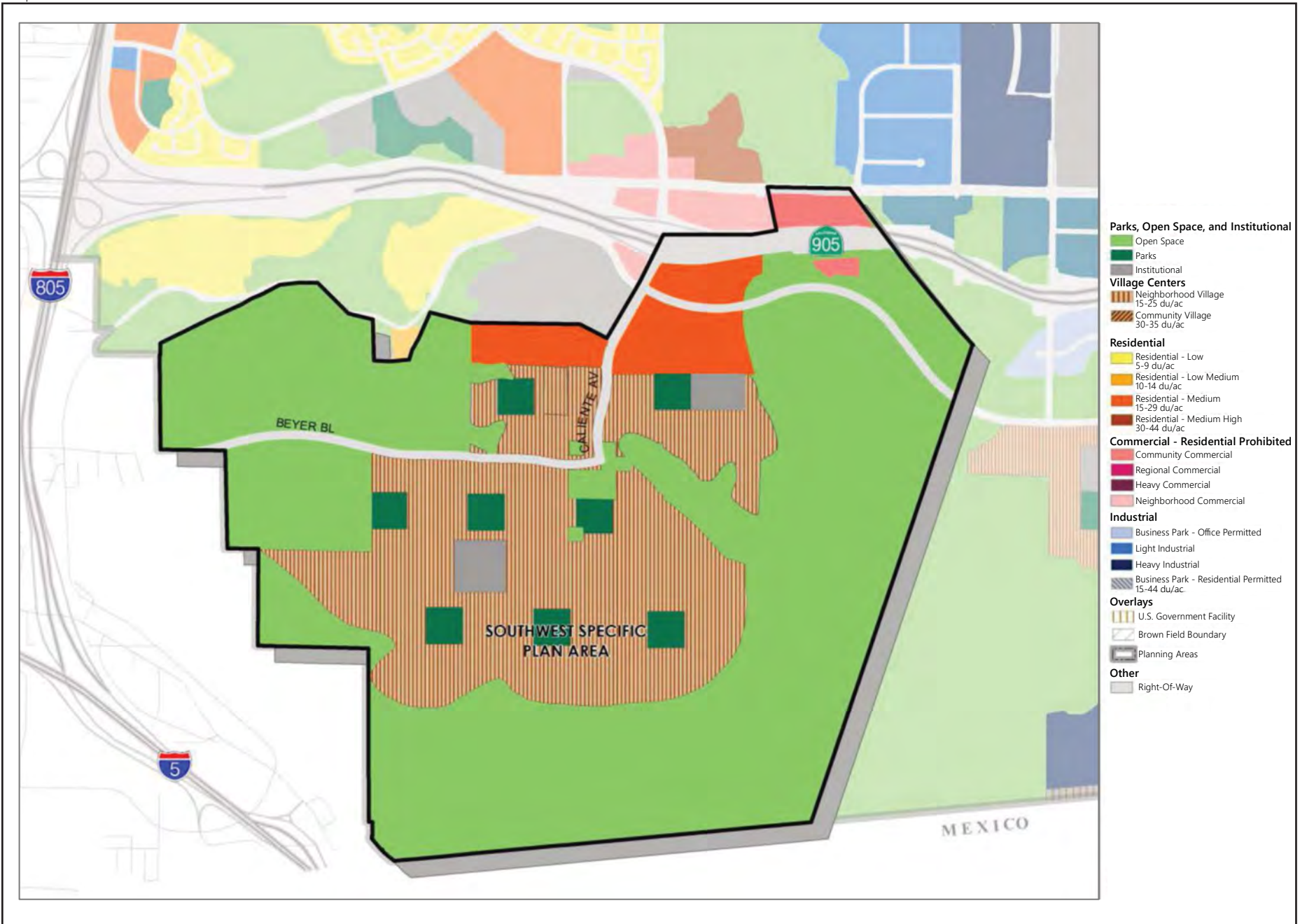


- Project-level Analysis Area
- Specific Plan Boundary
- Baseline MHPA
- VPHCP/MHPA
- 100 Percent Conservation

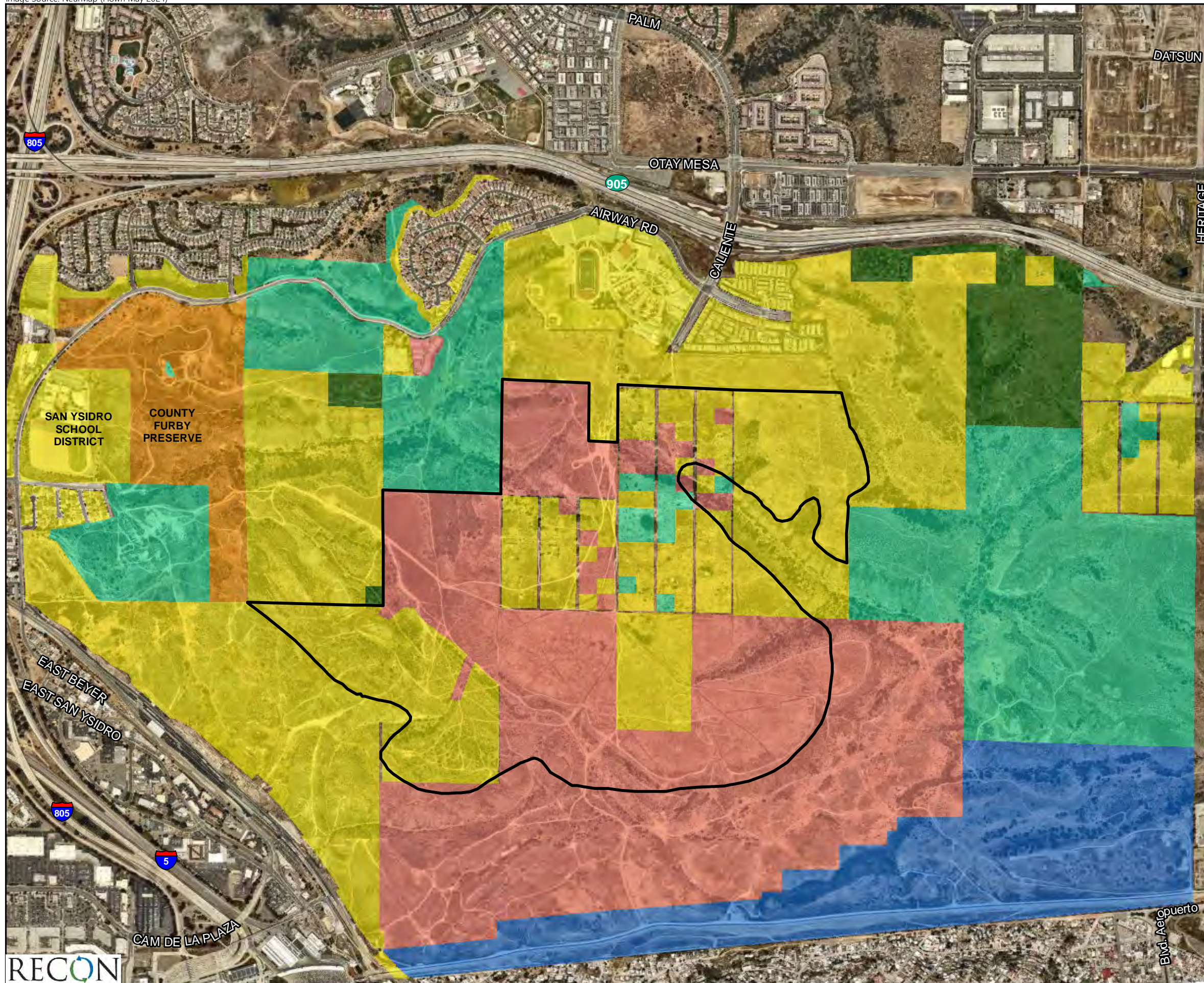


FIGURE 4  
Project Location in Relation to MHPA  
and 100 Percent Conserved Lands









Specific Plan Boundary

Parcel Ownership

- City of San Diego
- County of San Diego
- State of California
- Federal Government
- Tri Pointe Homes
- Other Private Ownership

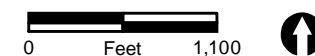
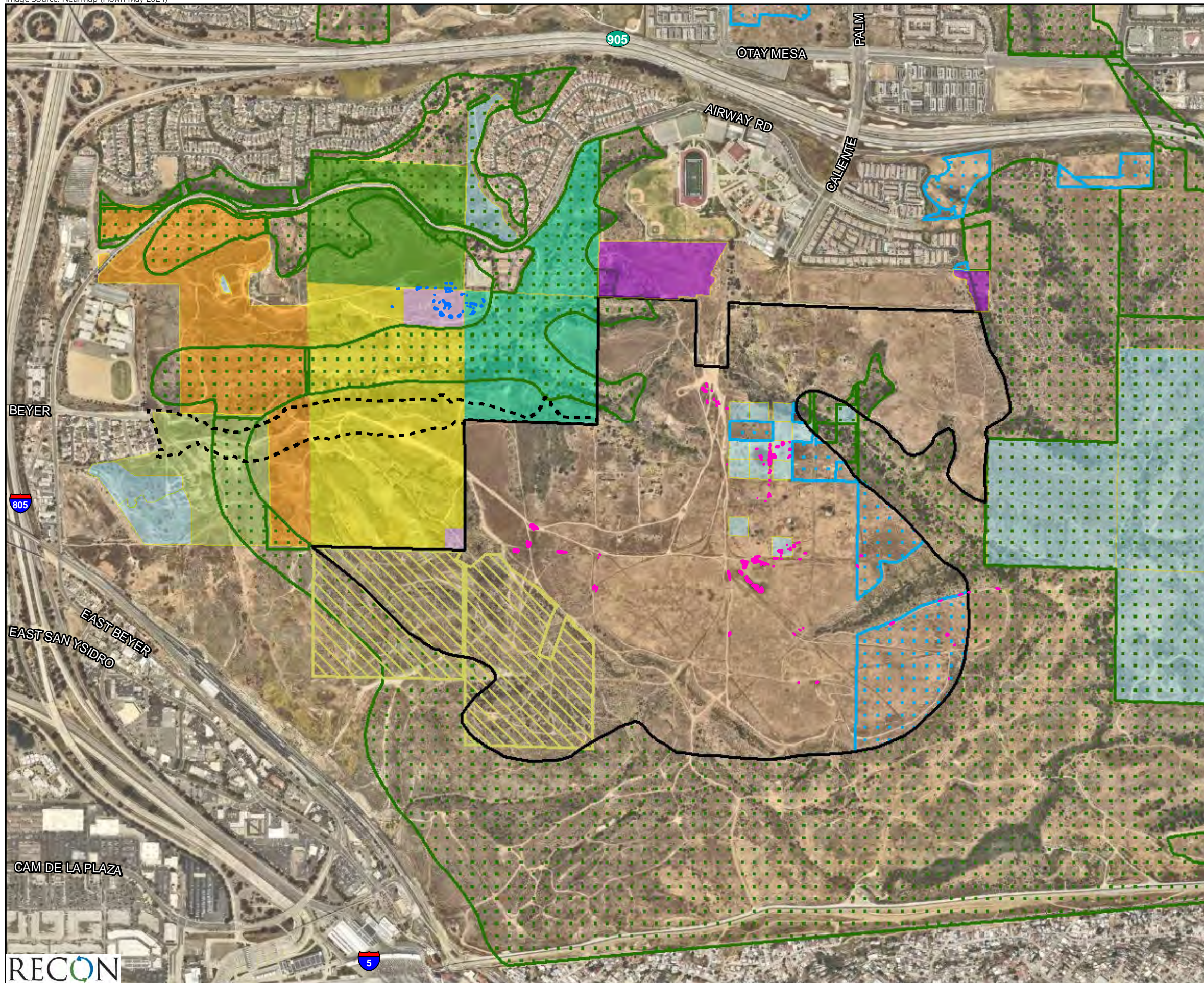


FIGURE 6  
Parcel Ownership





- Specific Plan Boundary
- Planned Beyer Boulevard
- City of SD MHPA
- VPHCP MHPA
- VPHCP Complex J13
- VPHCP Complex J32
- Pipitone Covenant of Easement
- West Otay A  
(Private/CDFW Easement Holder)
- West Otay A  
(Caltrans)
- West Otay B  
(City of SD, CDFW Easement Holder)
- West Otay C  
(City of SD)
- County of San Diego  
Furby North Preserve
- Planned Candlelight Preserve
- City of San Diego
- City of San Diego  
Planned Beyer Park



FIGURE 7  
Project Location in Relation to  
Other Preserve and Open Space Parcels



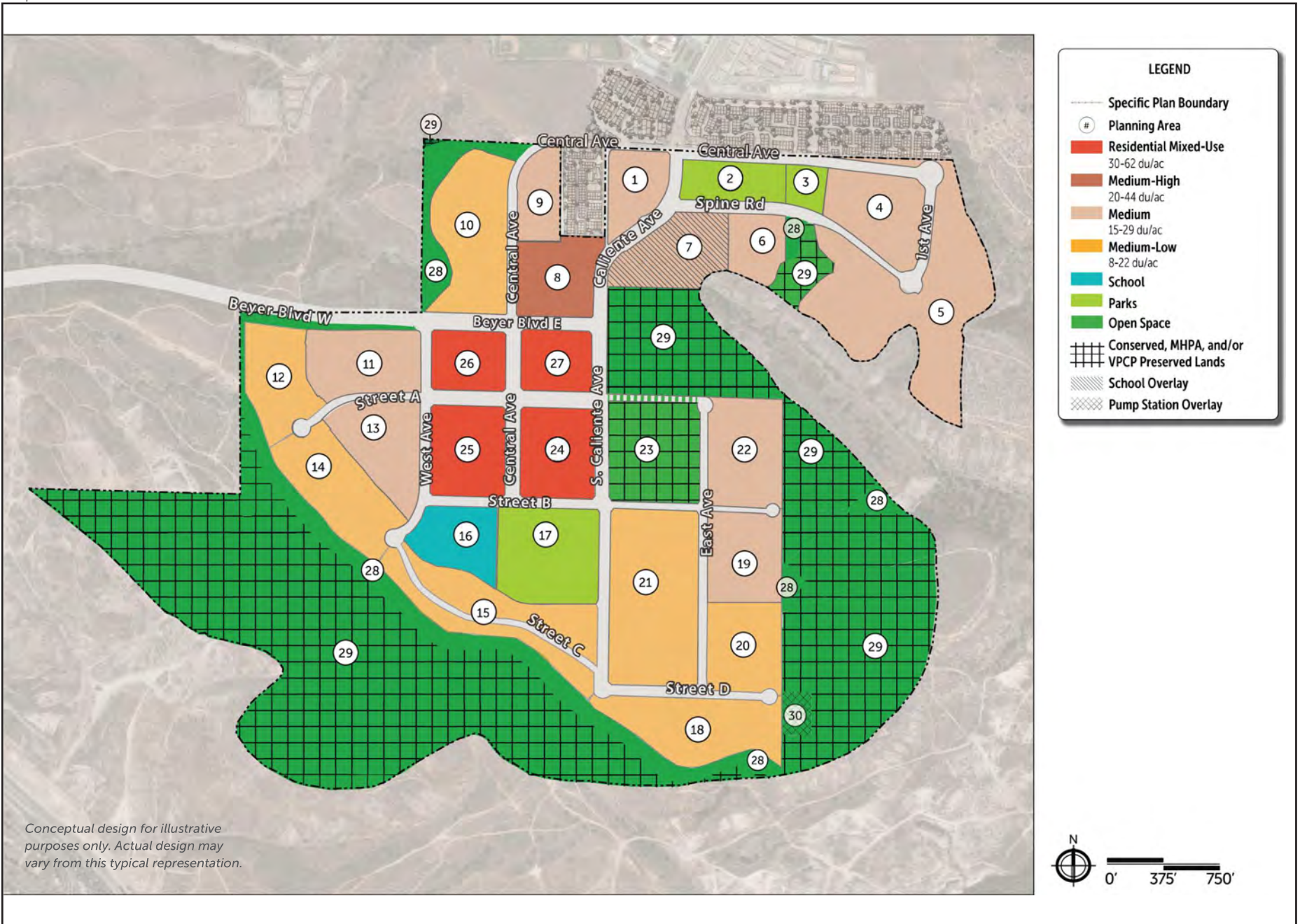


FIGURE 8  
Specific Plan Development Concept

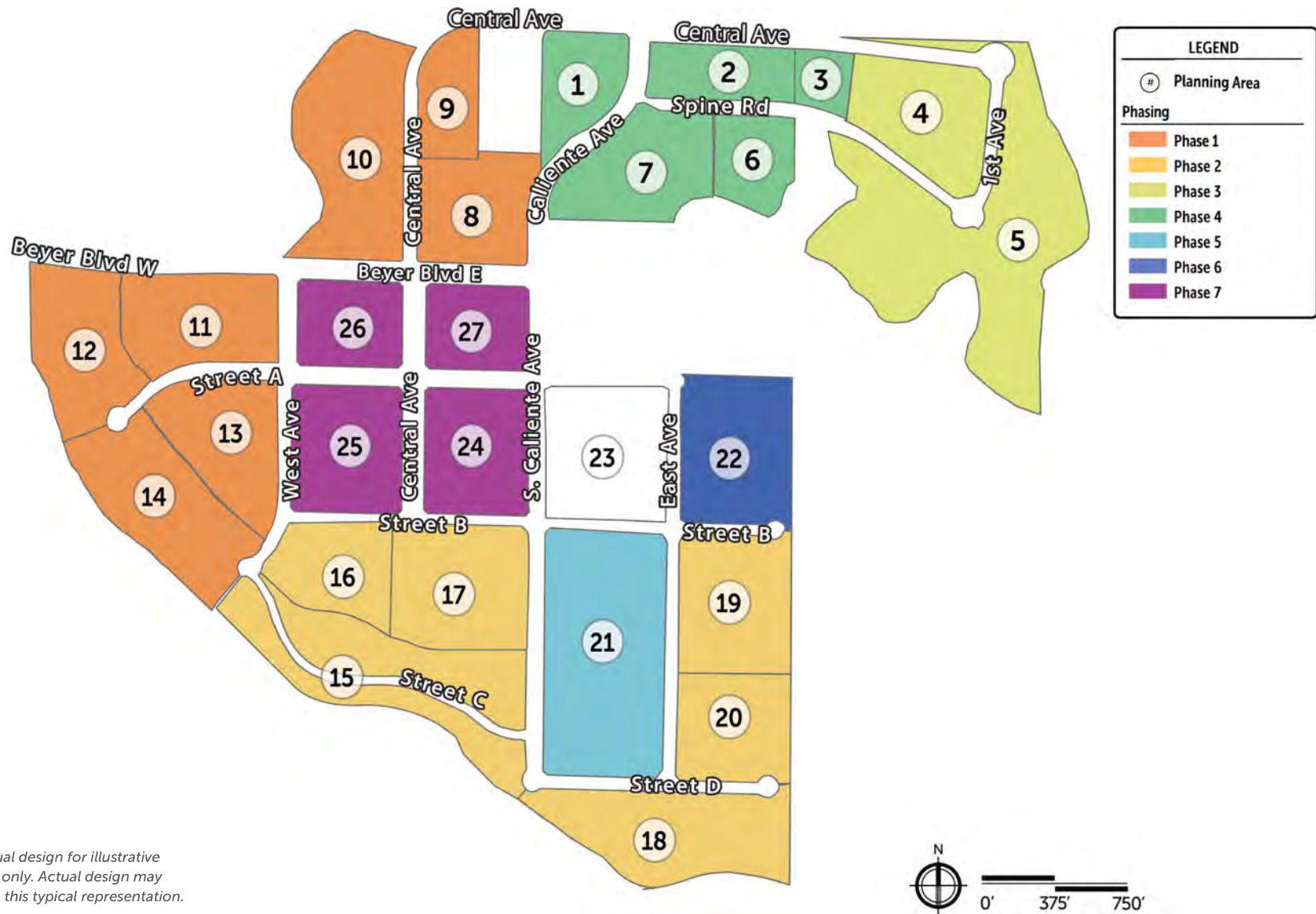
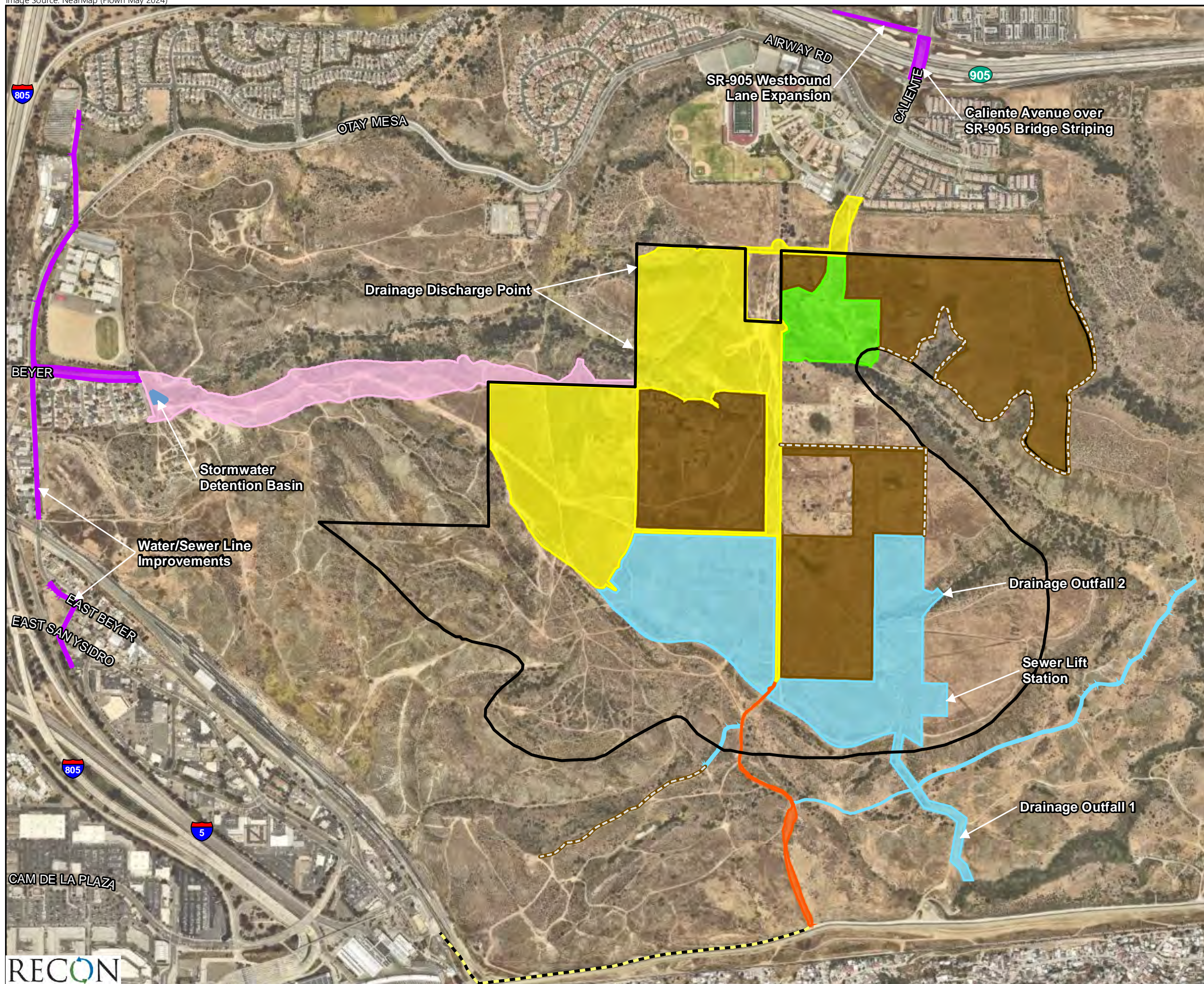


FIGURE 9  
Specific Plan Development Phasing





- Specific Plan Boundary
- Phase 1
- Phase 2
- Phase 4
- Beyer Boulevard
- Off-site Improvements
- Emergency Vehicle Access Road
- Emergency Vehicle Access Road - No Improvements Required (Existing Road)
- Program-level Analysis Phases 3-7
- Program-level Conceptual Trails\*

\* Program-level Conceptual trails require further evaluation and study to identify final alignments. The identification of conceptual trail alignments graphic does authorize public use of trails.

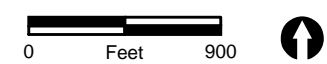


FIGURE 10.1  
Grading Phasing



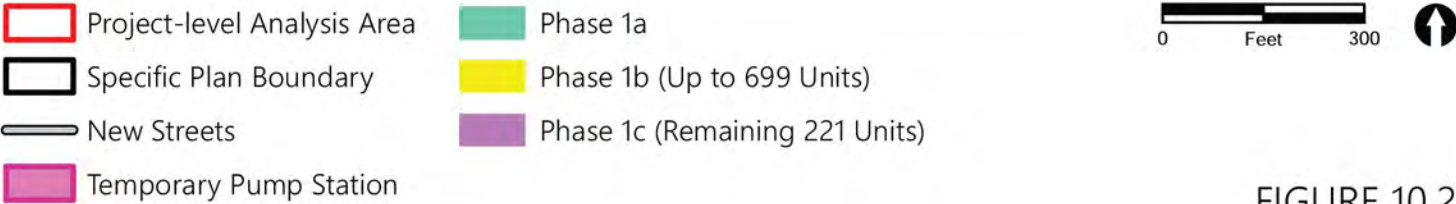
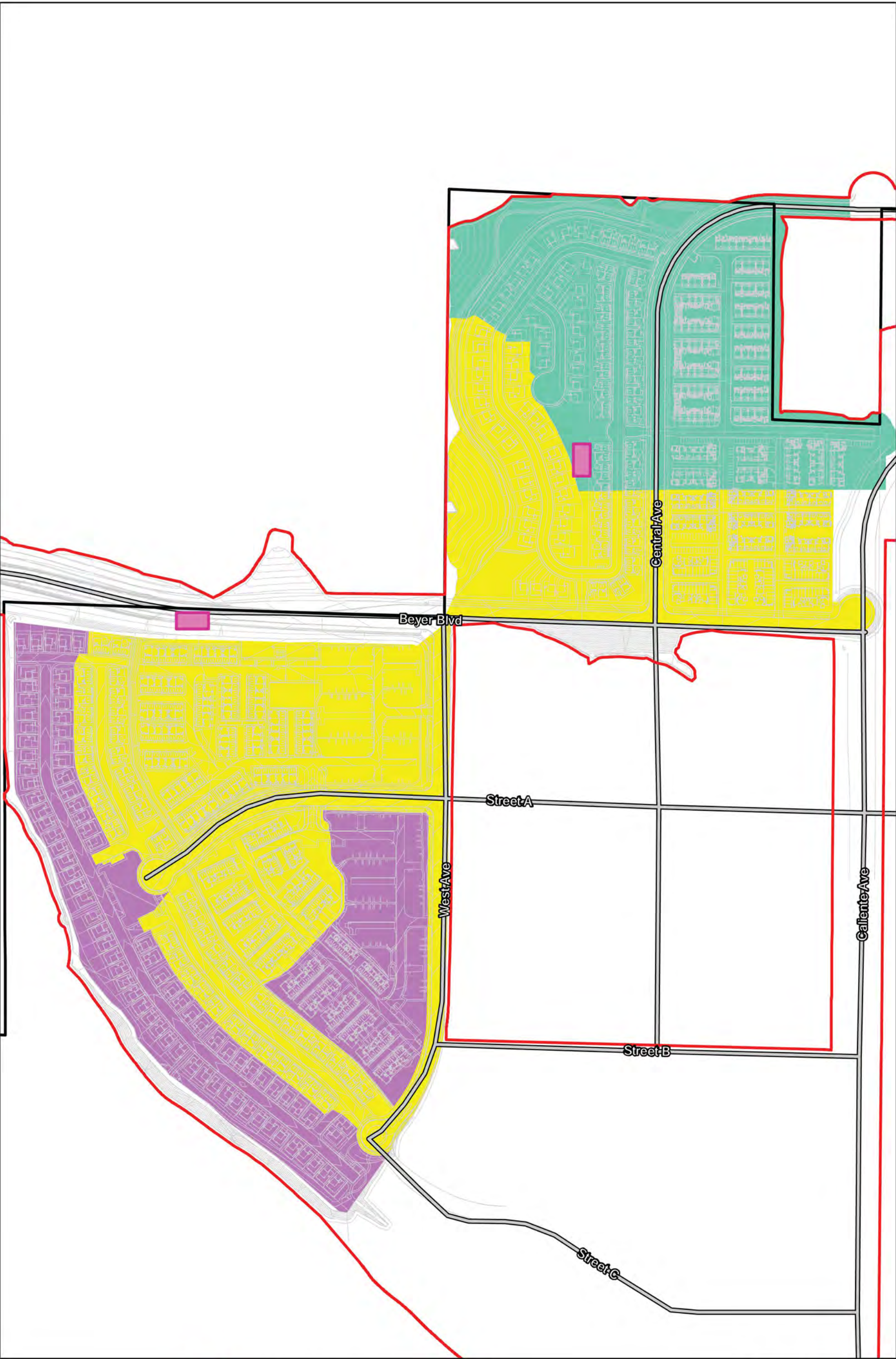
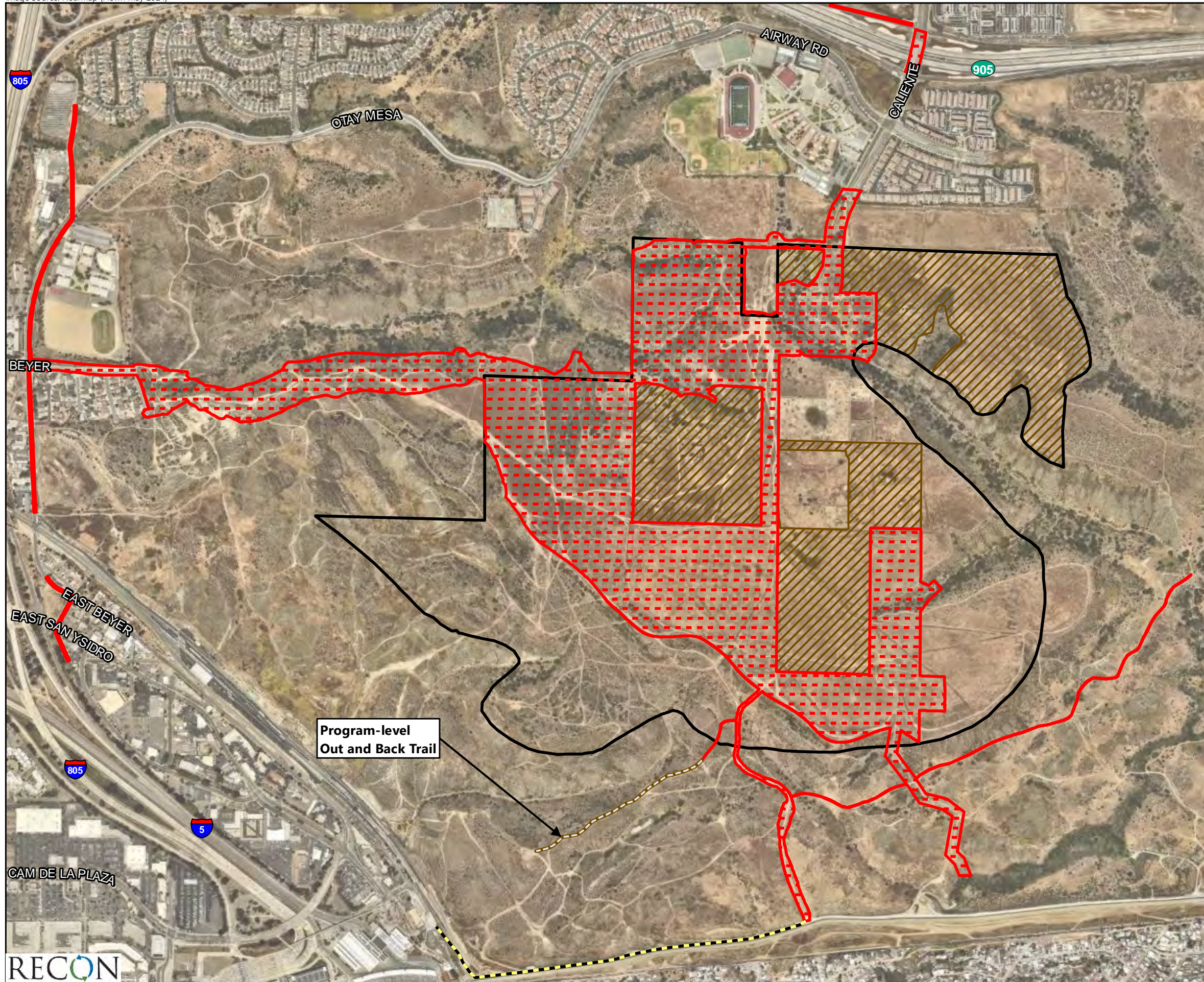


FIGURE 10.2  
Phase 1





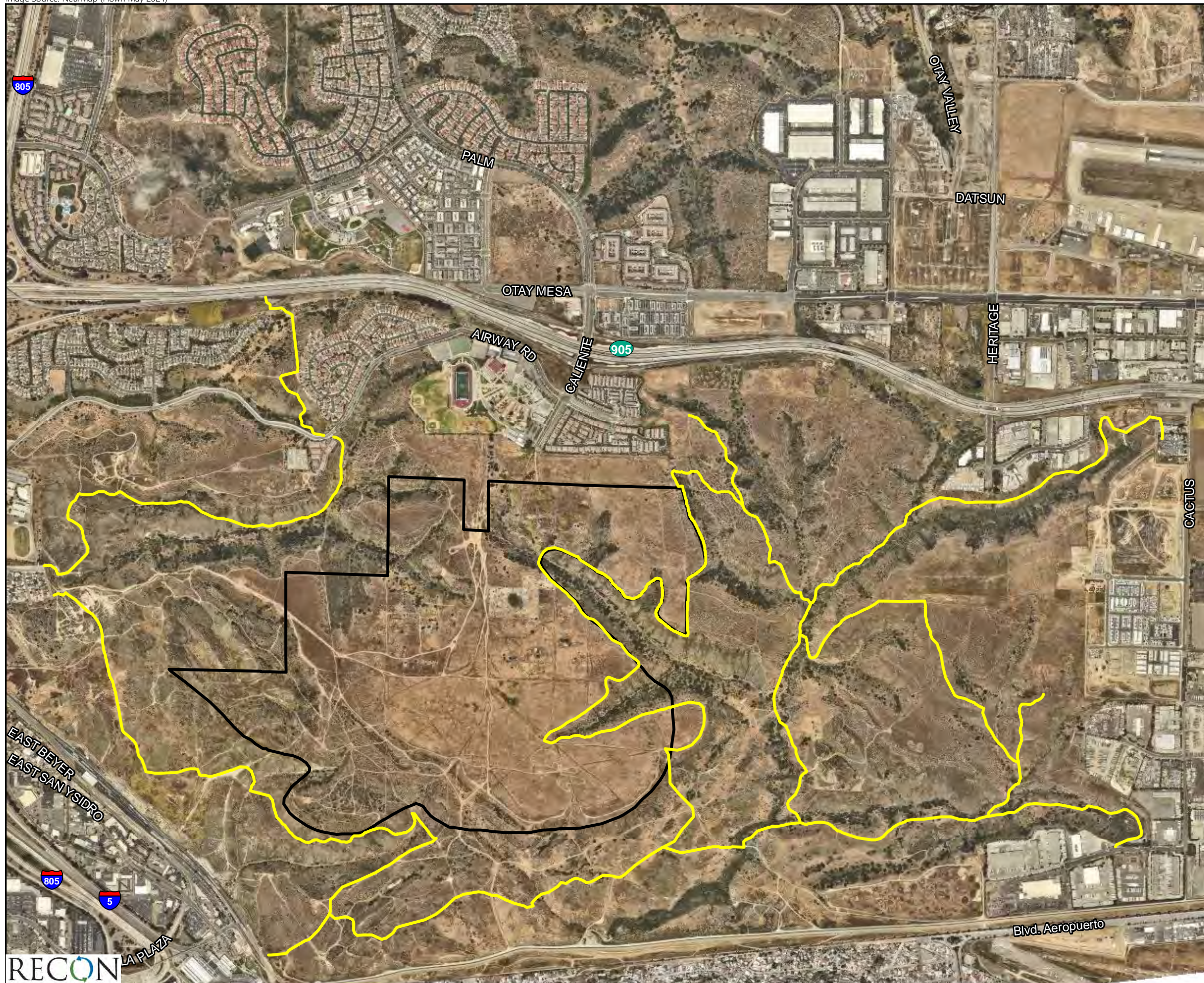
- Project-level Analysis Area
- Emergency Vehicle Access Road - No Improvements Required (Existing Road)
- Specific Plan Boundary
- Program-level Analysis Area
- Program-level Conceptual Trails\*

\* Program-level Conceptual trails require further evaluation and study to identify final alignments. The identification of conceptual trail alignments graphic does authorize public use of trails.



FIGURE 11  
Project-level and  
Program-level Analysis Areas





- Specific Plan Boundary
- Otay Mesa Adopted Trails

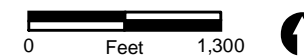


FIGURE 12.1  
Otay Mesa Community Plan  
Adopted Trails Map





- Specific Plan Boundary
- Existing Utility Road
- Primitive Trail Alignments (1.29 miles)
- Perimeter Trail (3.79 miles)
- Public Sidewalk (1.01 mile)\*
- Adopted OMCP Conceptual Trail Alignments to be Eliminated (6.47 miles)
- # Numbers Correspond to Descriptions in the Biology Report Section 1.3.1.3

\*Note: Sidewalks would also be provided throughout the Specific Plan

Depiction of trail alignments is conceptual and does not authorize public use of trails. Formal trail establishment requires project level evaluation, determination of consistency with the City of San Diego MSCP Subarea Plan, and further CEQA review prior to implementation.

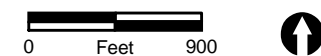
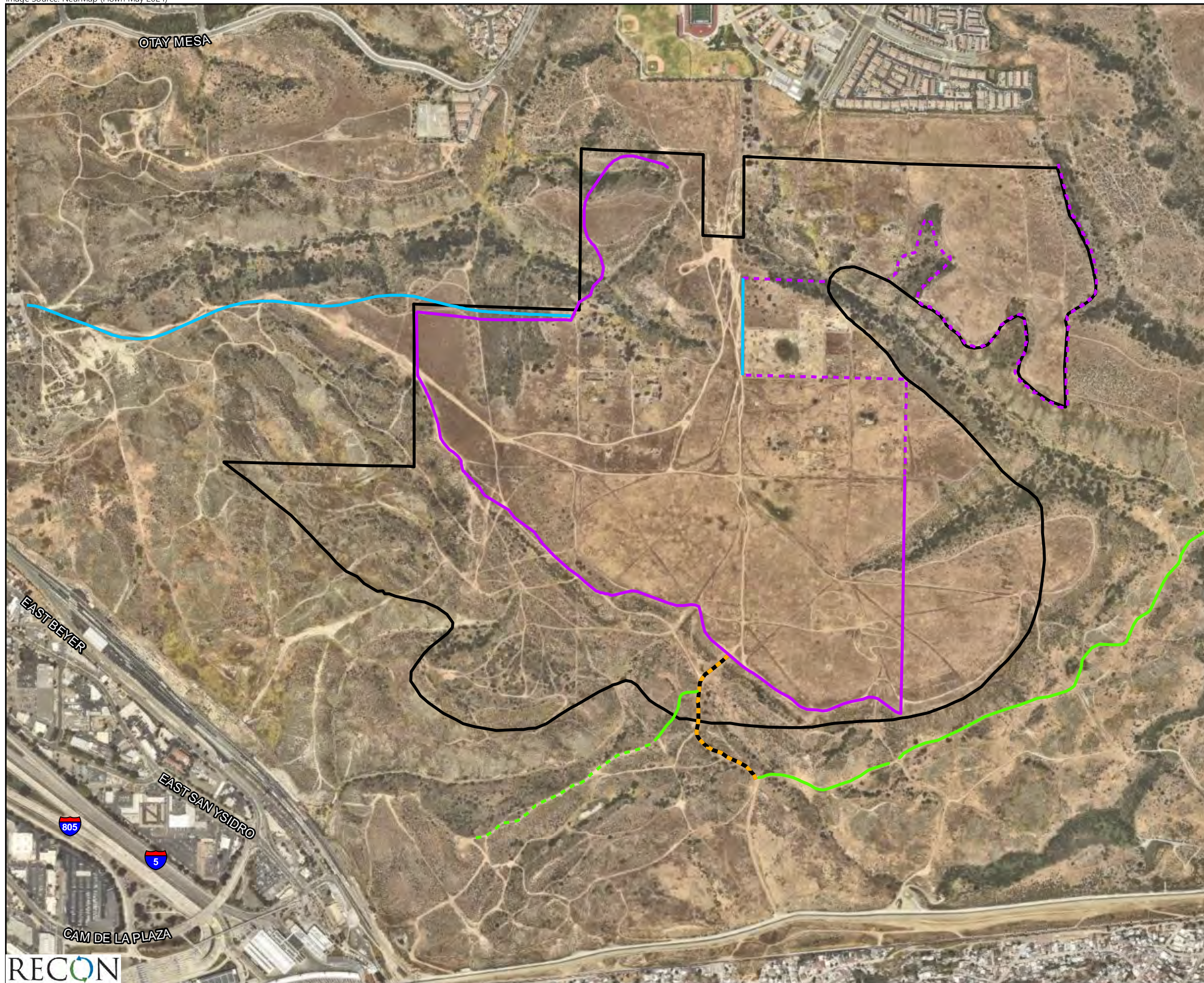


FIGURE 12.2  
Otay Mesa Community Plan  
Conceptual Trail Map Revisions





- Specific Plan Boundary
- Proposed Trails (Project-level)**
  - Public Sidewalk
  - Perimeter Trail  
(7 to 8 ft Tread, Borders Development Area)
  - Primitive Trail (Maximum 4-foot Tread)
  - Existing Utility Road
- Conceptual Trail Alignments (Program-level)\***
  - Perimeter Trail  
(7 to 8 ft Tread, Borders Development Area)
  - Primitive Trail (Maximum 4-foot Tread)

\* Conceptual trail alignments require further evaluation and study to identify final alignment. The identification of conceptual trail alignments on this graphic does authorize public use of trails.

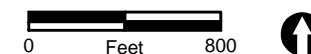
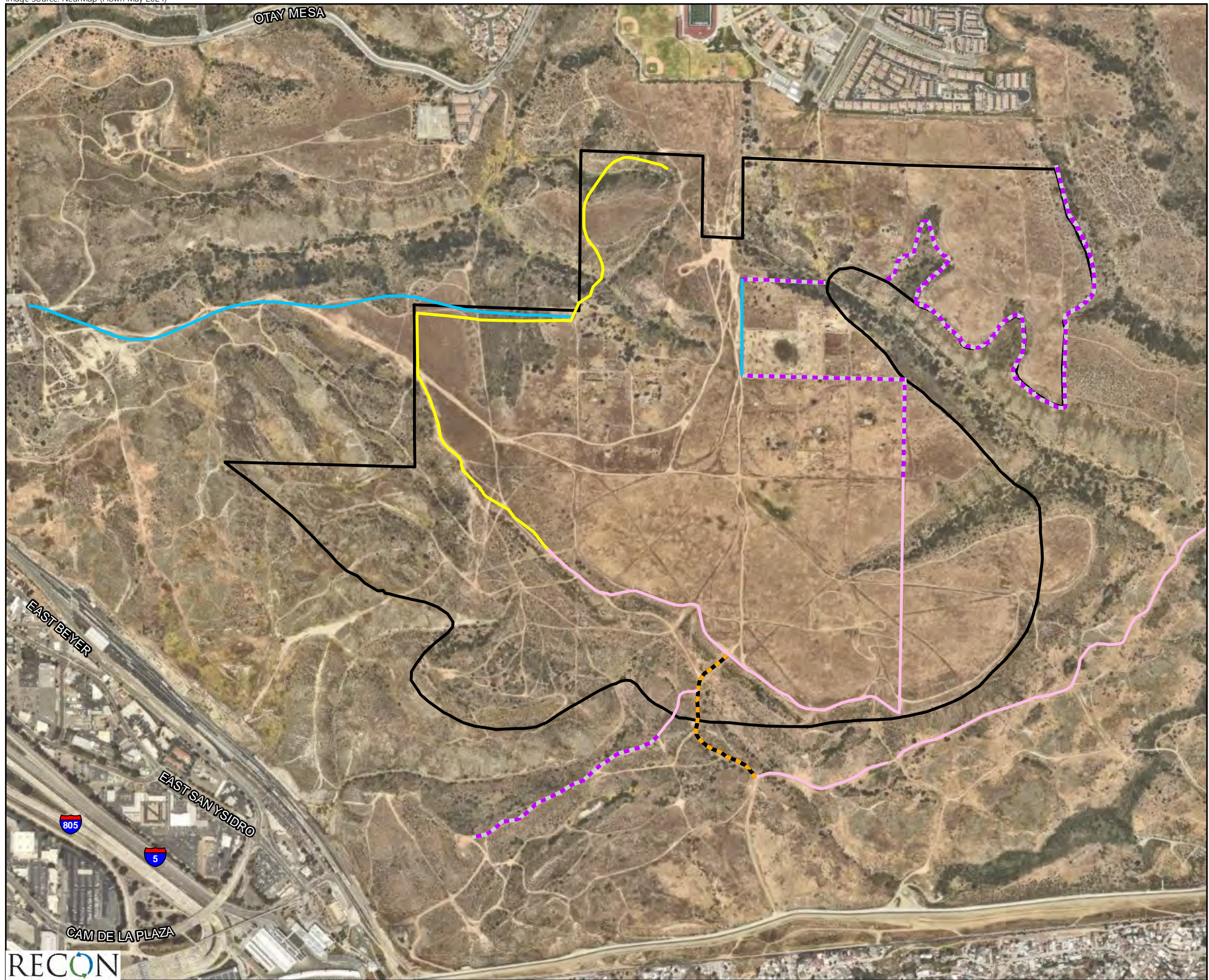


FIGURE 12.3  
Proposed Trail Network  
and Conceptual Trails





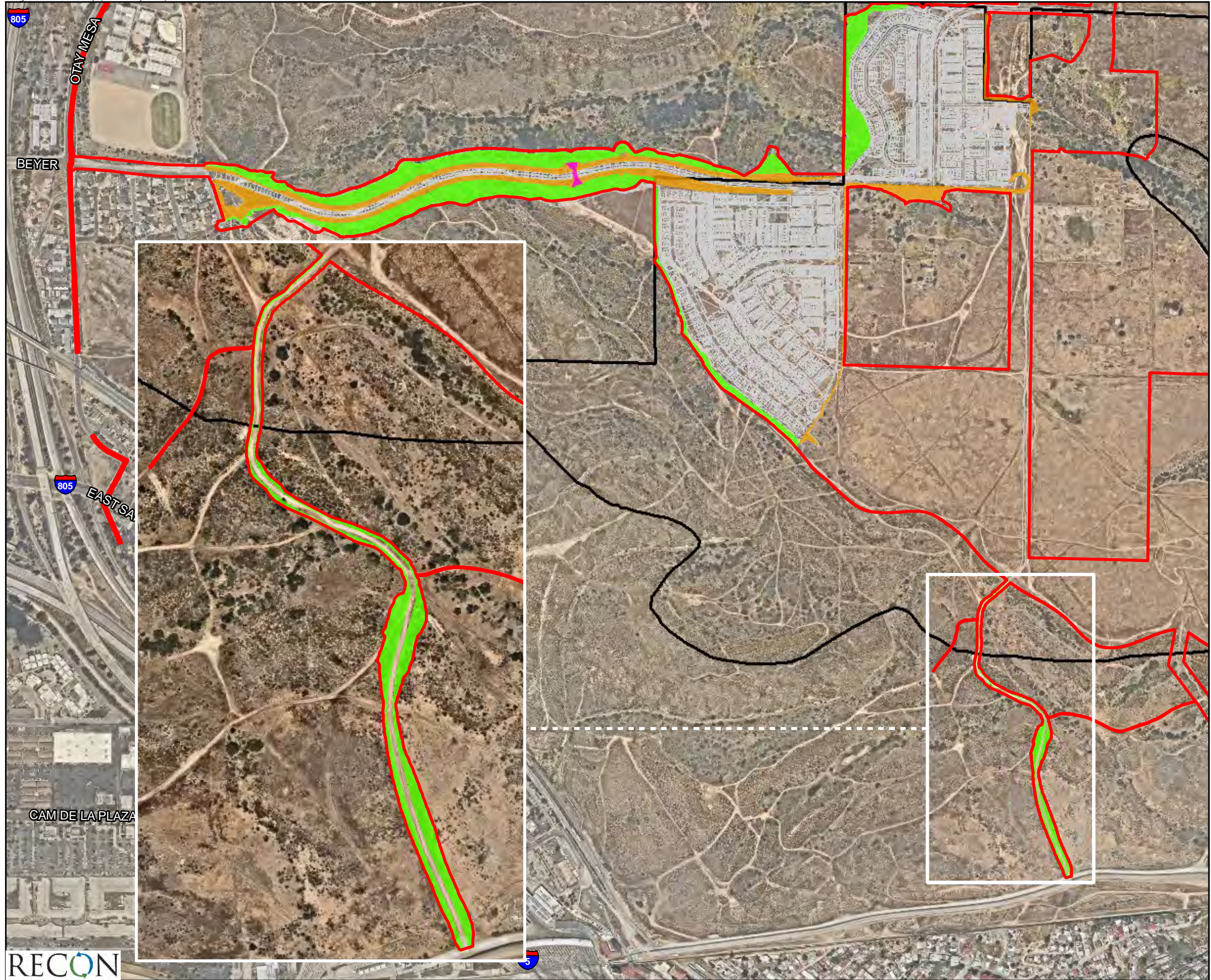
- Specific Plan Boundary
- Trail Network Phasing**
- Phase 1 Trail
  - Phase 2 Trail
  - Phases 3-7 Program Level Conceptual Trail Alignments\*
  - Public Sidewalk
  - Existing Utility Road

\* Conceptual trail alignments require further evaluation and study to identify final alignment. The identification of conceptual trail alignments on this graphic does authorize public use of trails.



FIGURE 12.4  
Trail Network Phasing





- Project-level Analysis Area
- Specific Plan Boundary
- Site Plan
- Revegetation Planting Palette\***
- Exterior Manufactured Slopes
- MHPA Adjacent Lands and BMZ2
- Wildlife Overcrossing

\*Refer to the project landscape plan for planting details for each plant palette

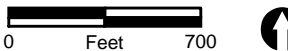
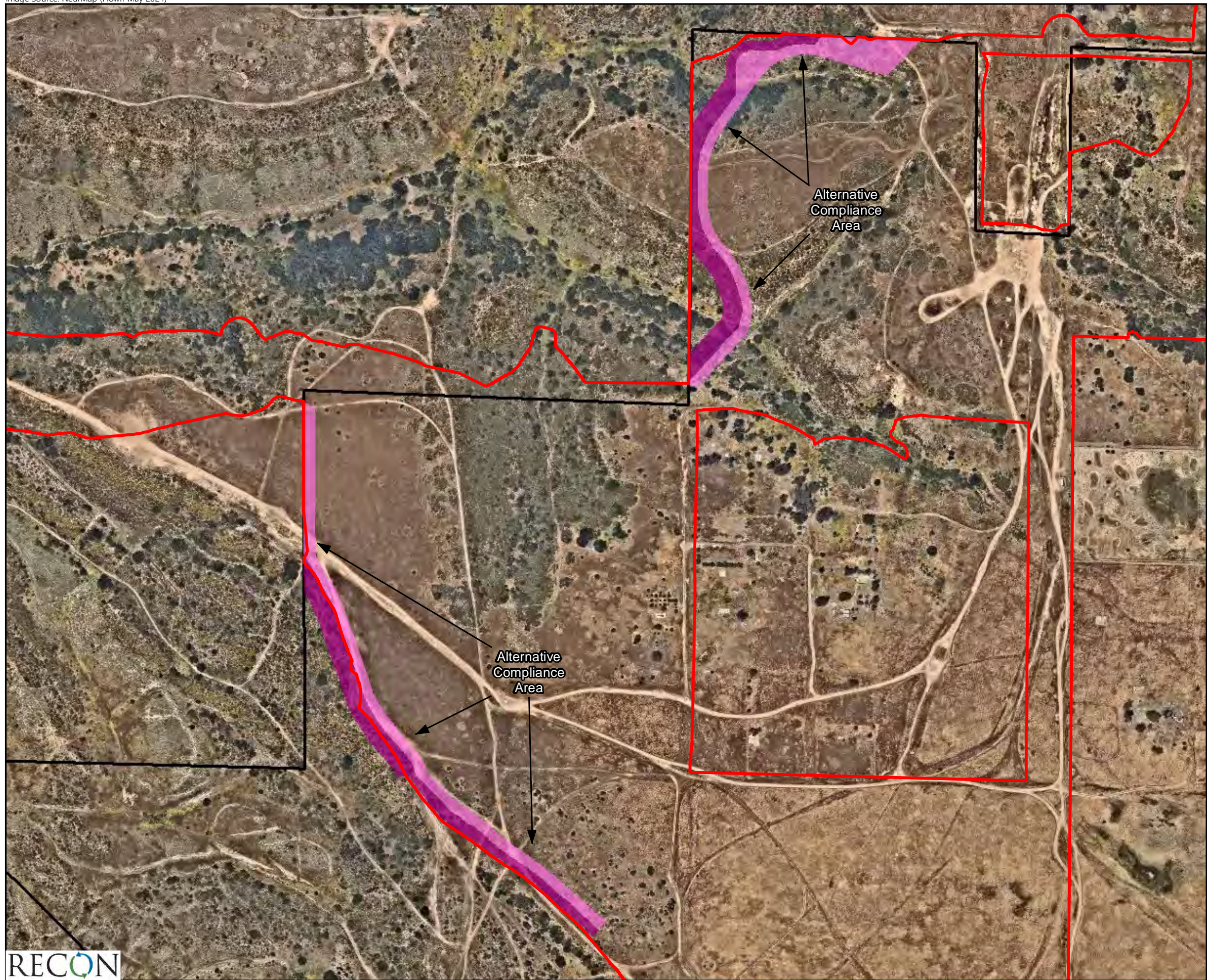


FIGURE 13.1  
Slope Native Revegetation Areas





- Project-level Analysis Area
- Specific Plan Boundary
- Brush Management Zone 1
- Brush Management Zone 2

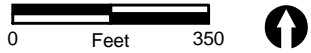
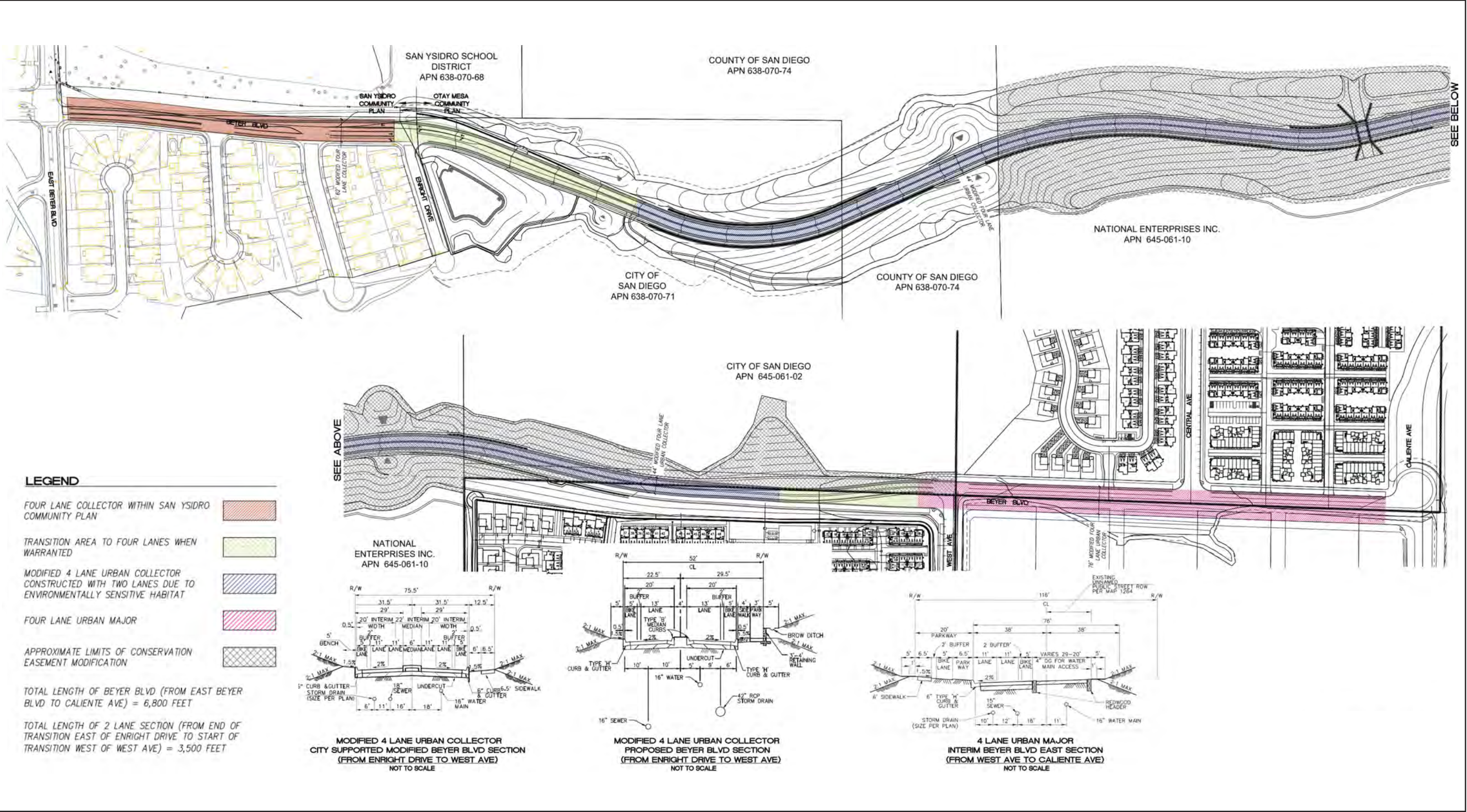


FIGURE 13.2  
Phase 1 Brush Management





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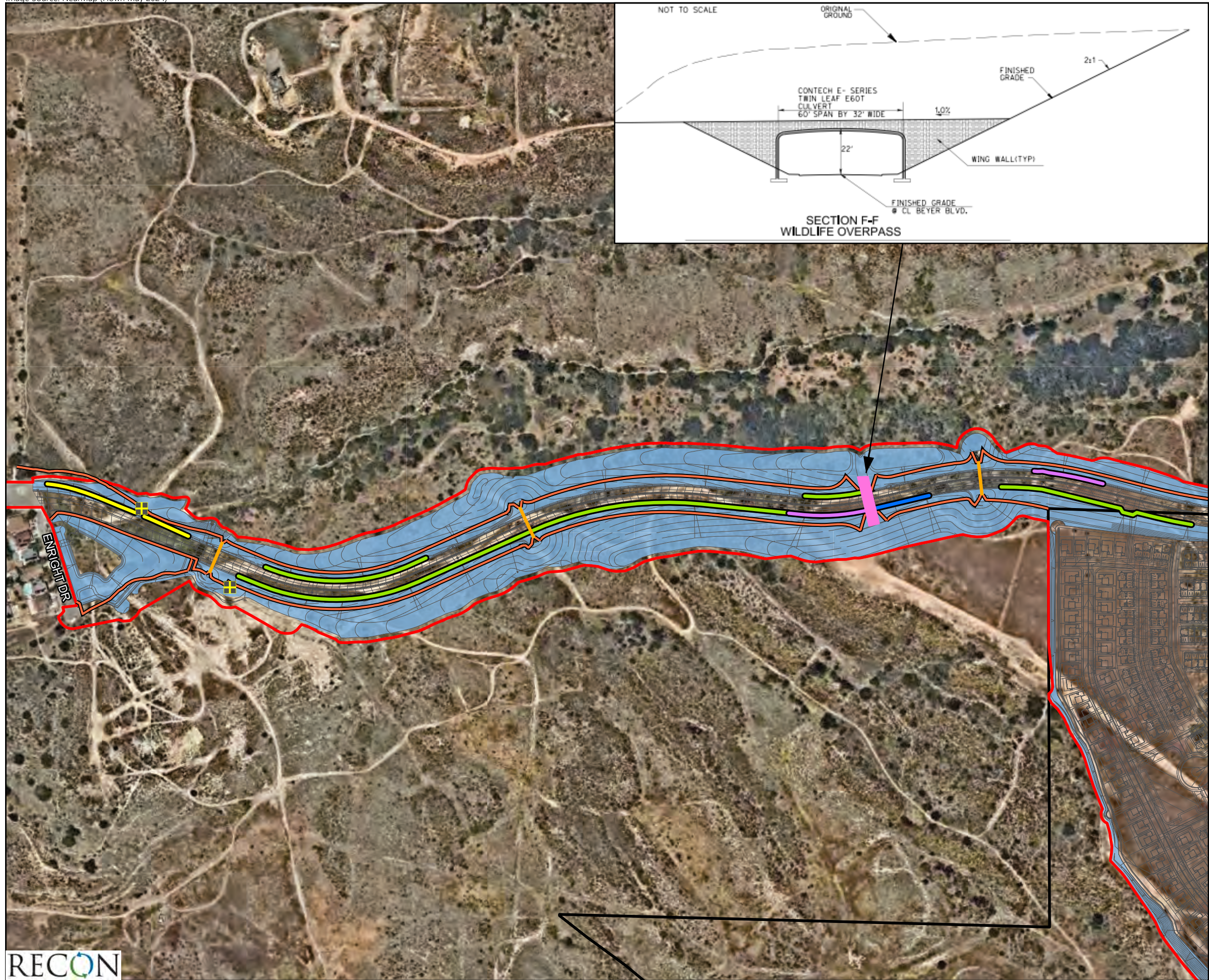
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FIGURE 14.1

Beyer Boulevard



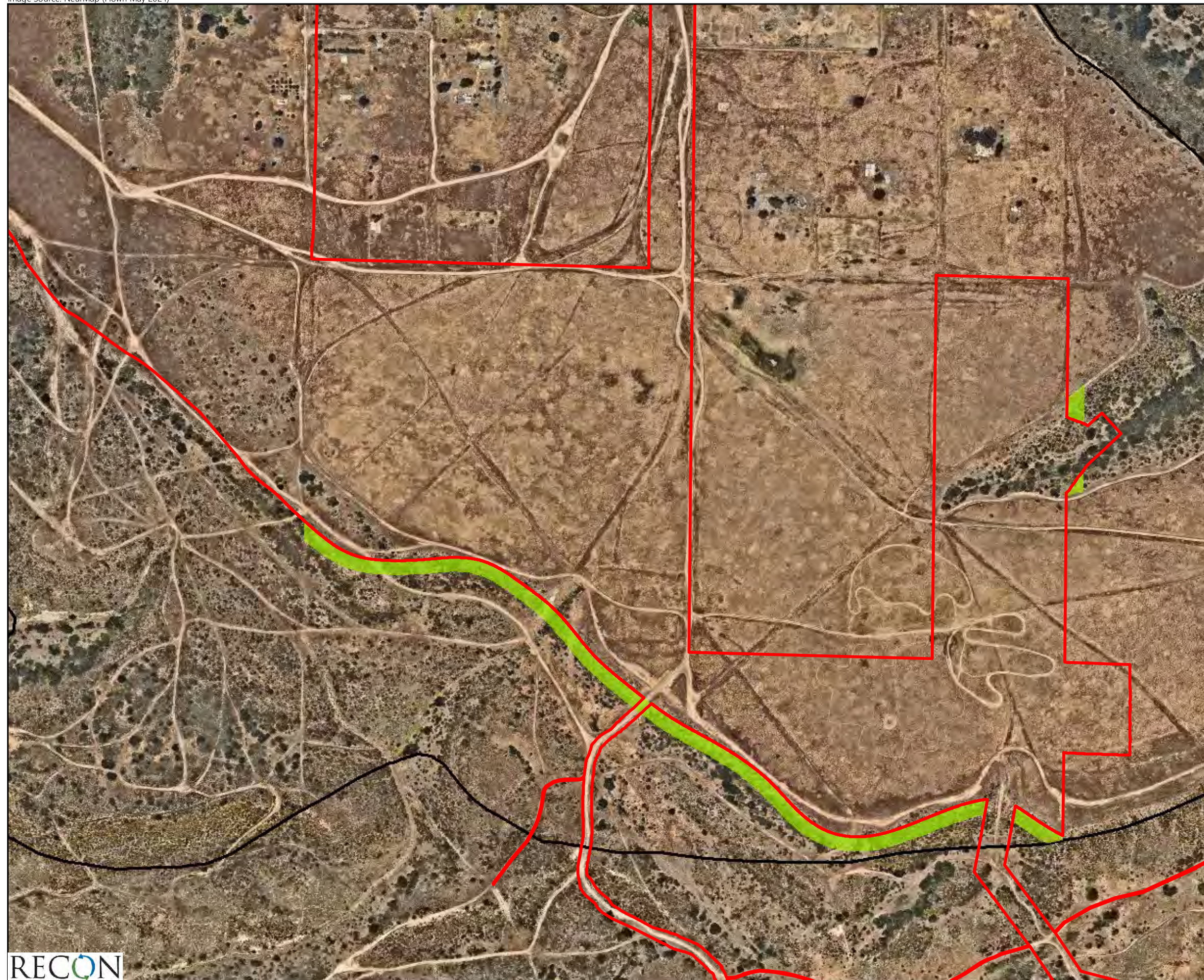





- Project-level Analysis Area
- Specific Plan Boundary
- 4-foot Retaining Wall
- 6-foot Masonry Noise Wall
- 0 - 8-foot Retaining Wall
- 12-foot Retaining Wall
- SDG&E Access Gate
- Wildlife Fence
- Critter Crossing Culvert (6' dia.)
- Wildlife Overcrossing (32' wide by 60' long)
- Site Plan
- Beyer\_Slopes Manufactured Slopes to be Revegetated with Native Species



FIGURE 14.2  
Beyer Boulevard Wildlife Crossings,  
Wildlife Fencing, and Retaining Walls





-  Project-level Analysis Area
-  Specific Plan Boundary
-  Phase 2 Concept Brush Management Zone 2

*Note:* Phase 2 brush management zones would be defined during Phase 2 Implementation and would be required to comply with the City's Land Development Code (LDC), providing 100 feet of defensible space or approval of alternative compliance.

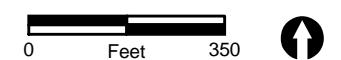


FIGURE 13.3  
Phase 2 Impact Neutral Brush  
Management Zone 2 areas  
outside of the Impact Footprint



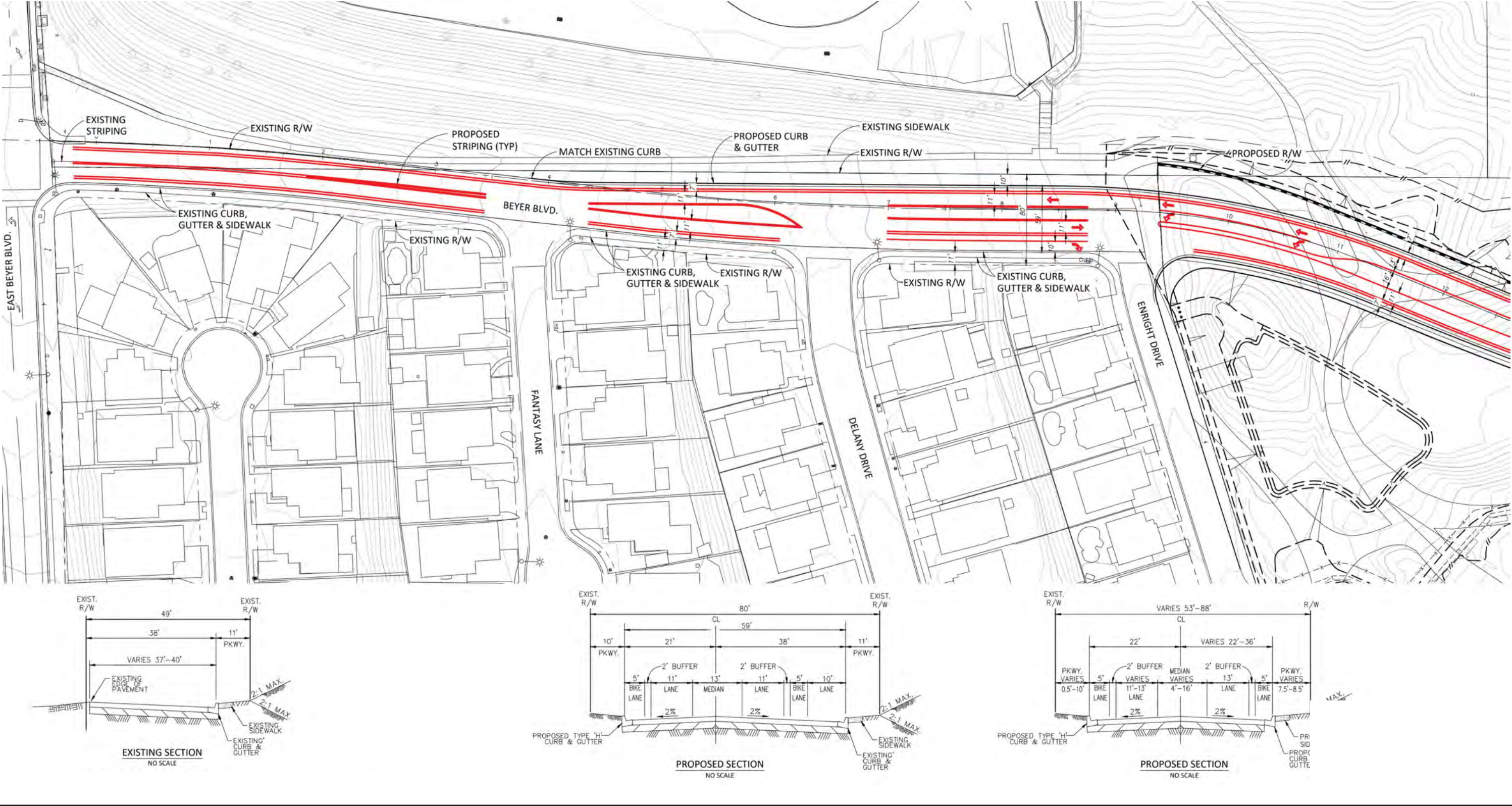
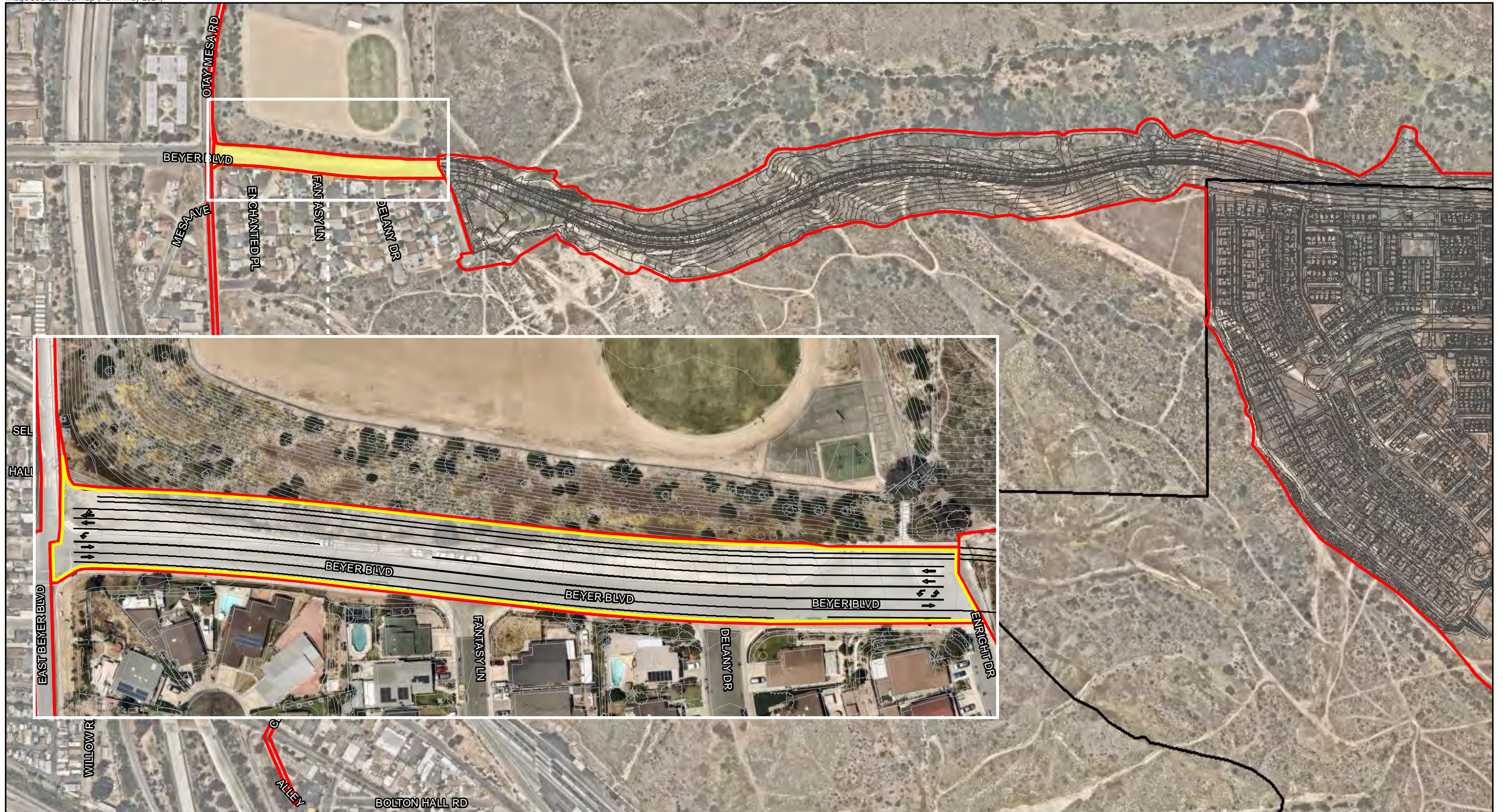


FIGURE 15.1  
Beyer Boulevard between Enright Drive and East Beyer Boulevard - Interim Condition





- Project-level Analysis Area
- Beyer Boulevard Widening
- Specific Plan Boundary
- Site Plan



FIGURE 15.2  
Beyer Boulevard Widening between  
Enright Drive and East Beyer Boulevard -  
Ultimate Condition



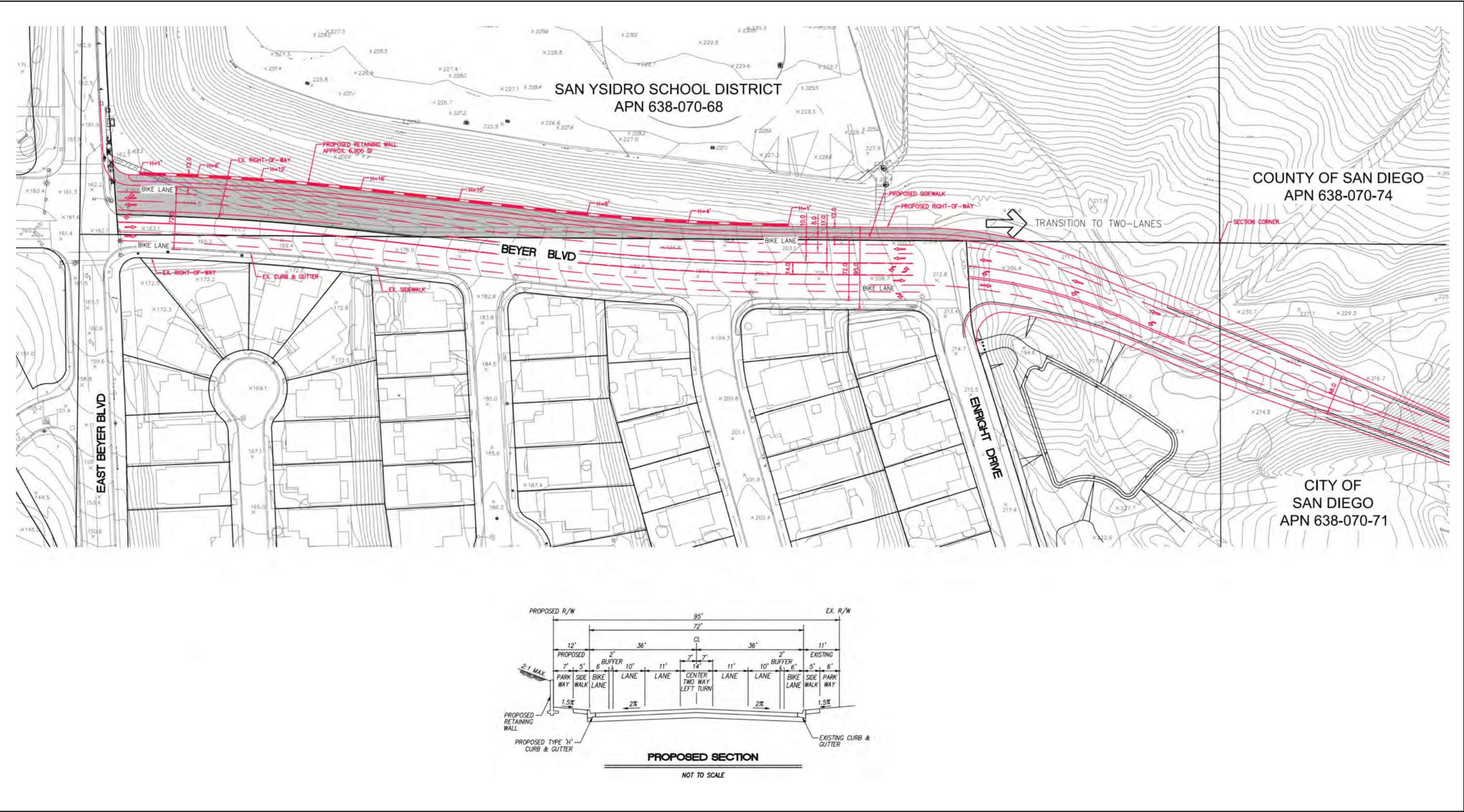
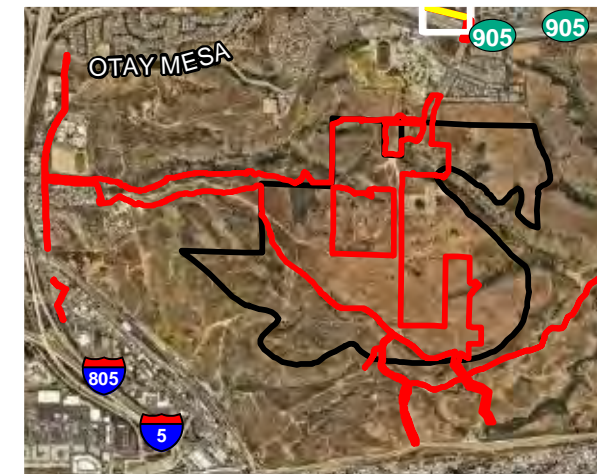
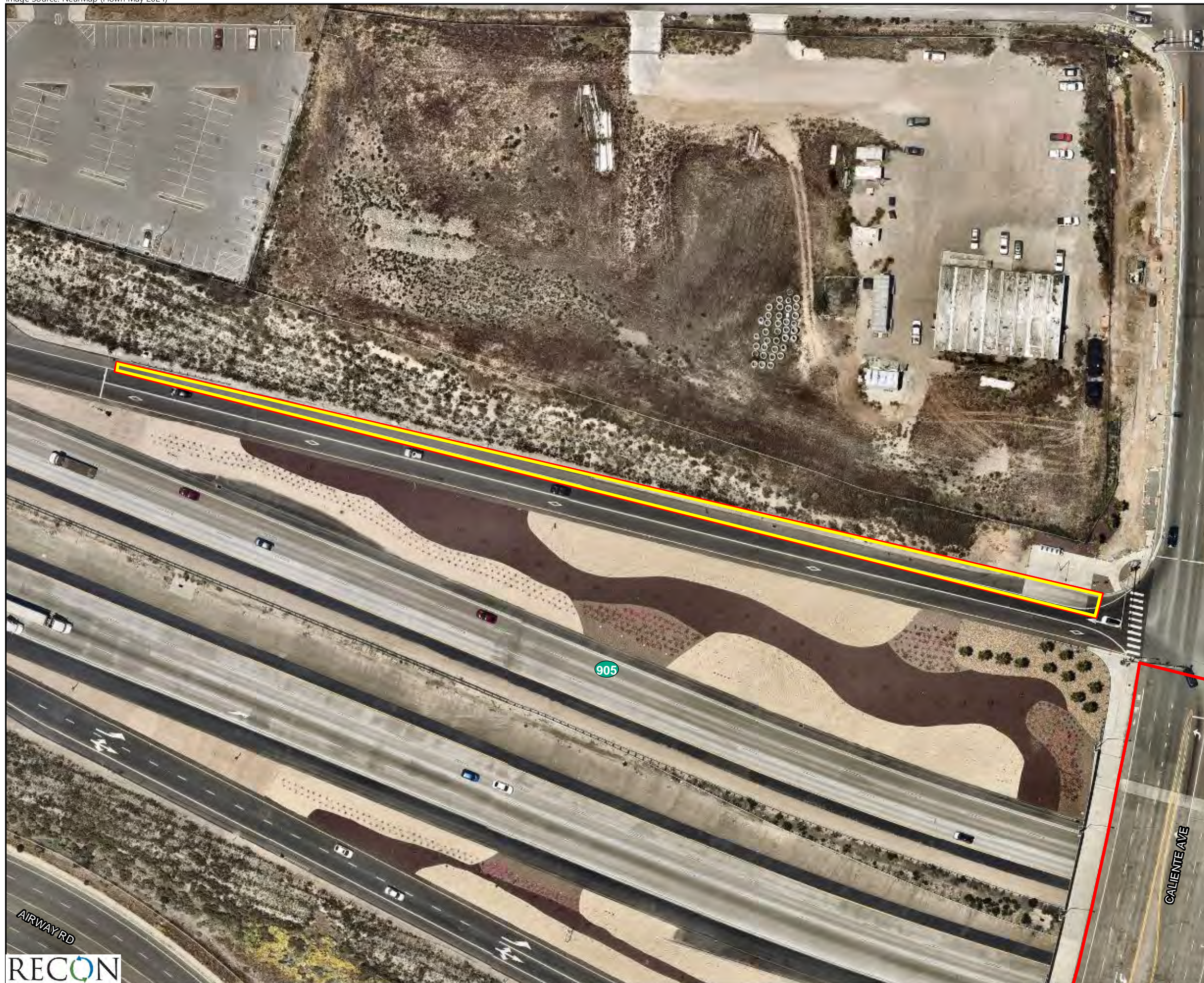


FIGURE 15.3  
Beyer Boulevard between Enright Drive and East Beyer Boulevard - Ultimate Four Lane Option





- Project-level Analysis Area
- Road Widening
- Specific Plan Boundary



FIGURE 16.1  
State Route 905 & Caliente Avenue  
Westbound On-Ramp



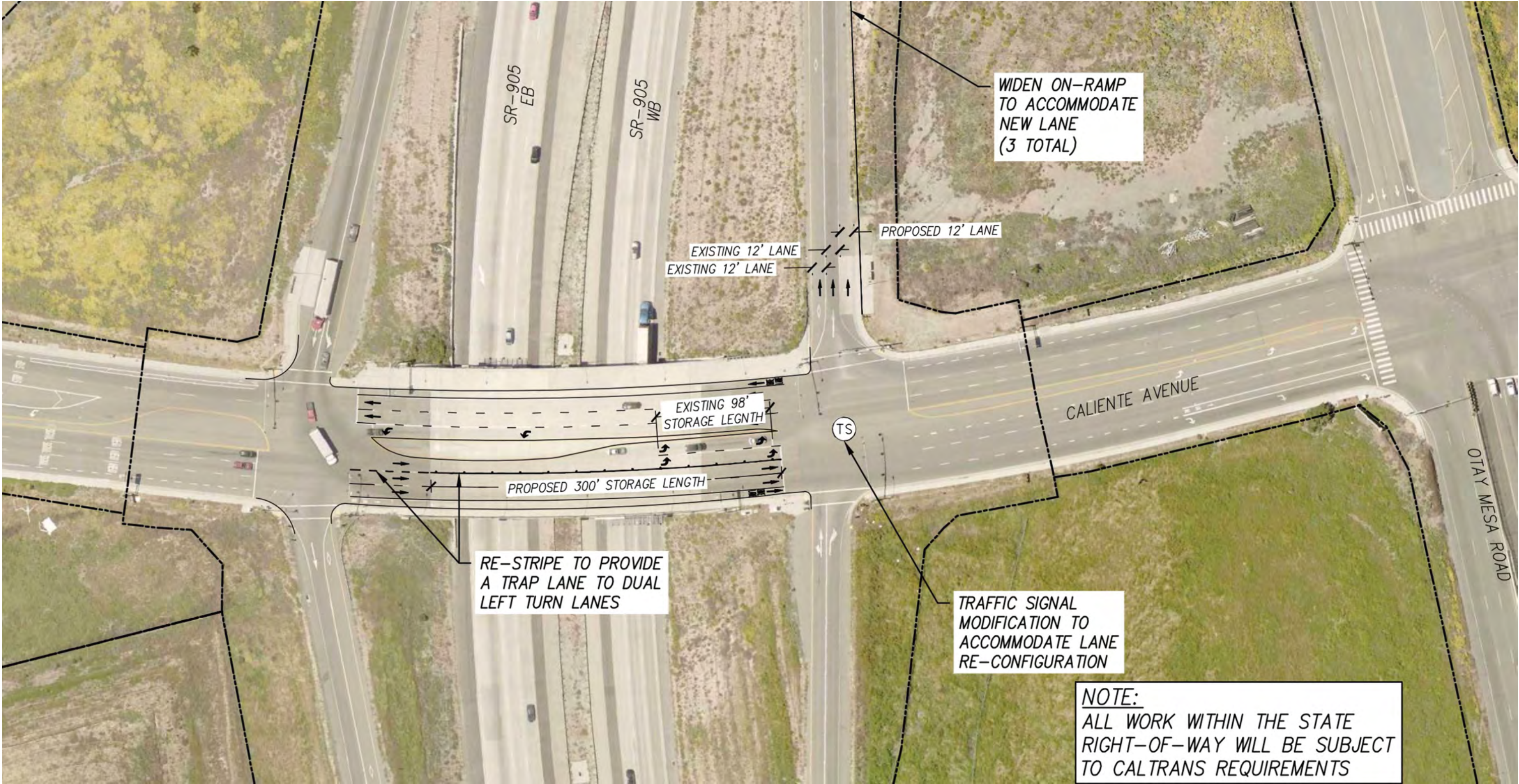
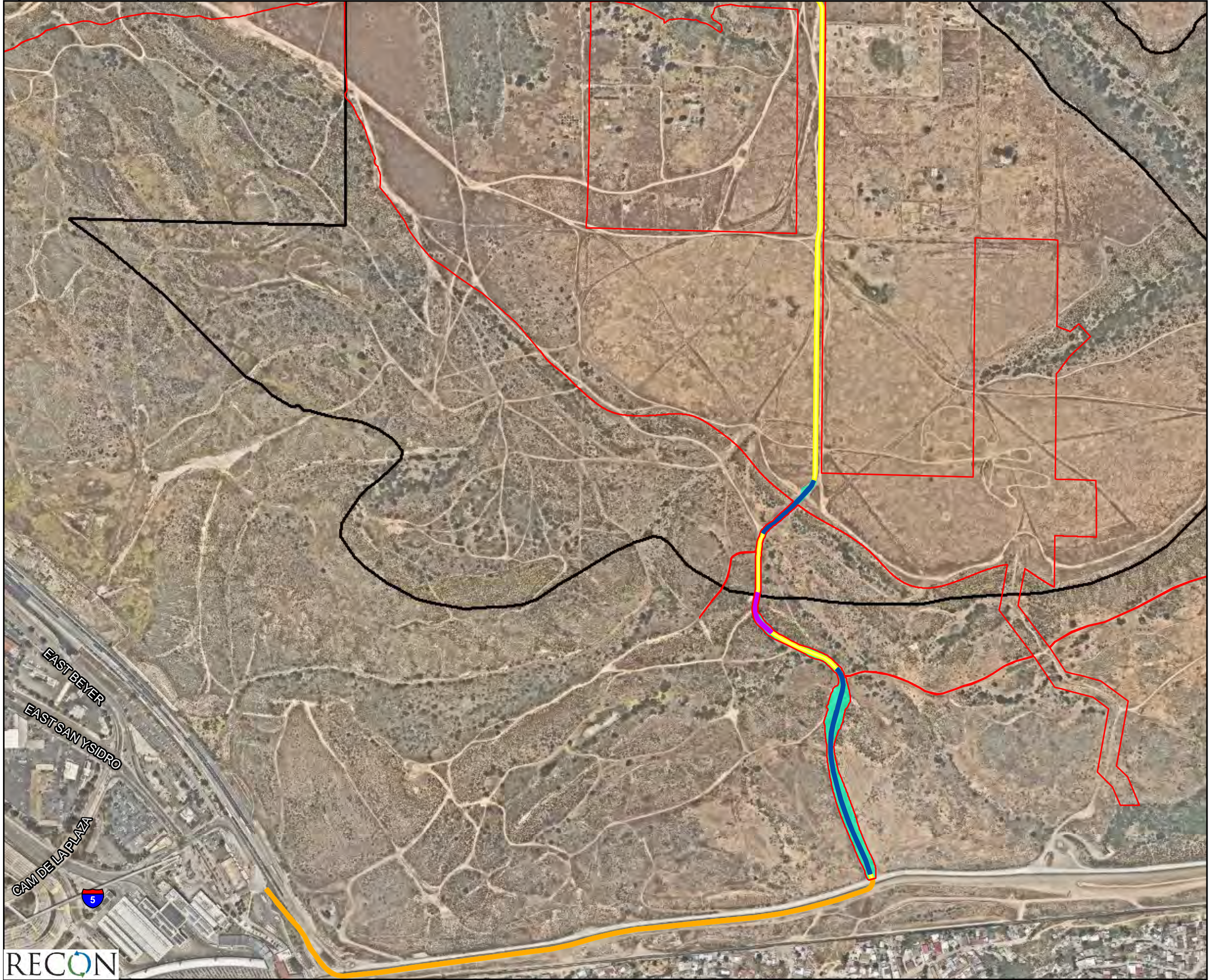


FIGURE 16.2  
Caliente Avenue SR-905 Bridge Restriping and Signal Improvements





- Project-level Analysis Area
- Specific Plan Boundary
- 20-foot Wide Emergency Vehicle Access (EVA)\***
  - Asphalt Paving Required
  - Concrete Paving Required (15% Grade)
  - Decomposed Granite/Gravel Surfacing
  - Existing Access Road
  - Grading

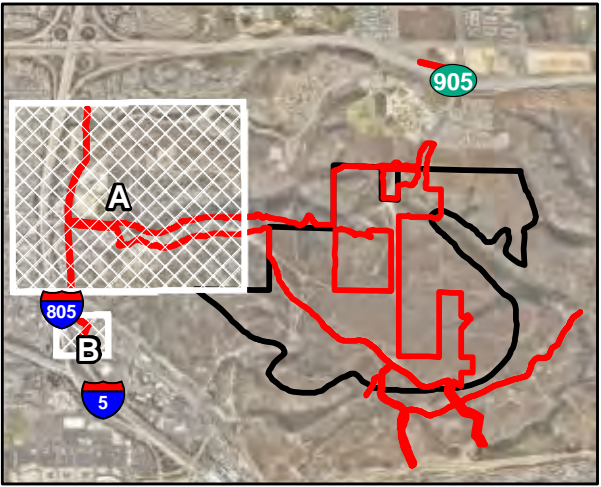
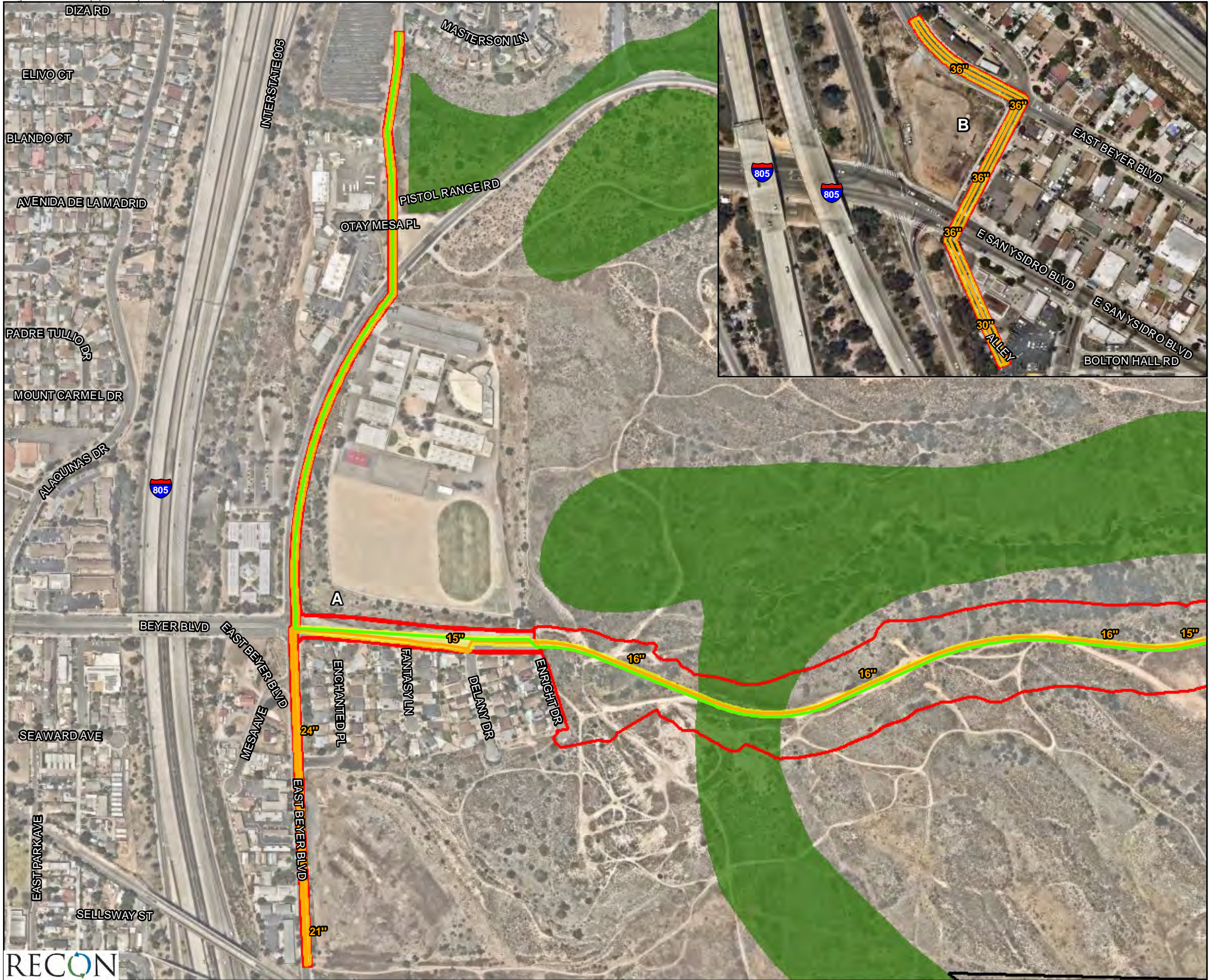
\*Narrows to 14 feet to avoid grading into sensitive resources

Note: The ultimate location of the emergency access route on the top of the mesa is conceptual and may shift within the project-level grading footprint based on need.



FIGURE 16.3  
Emergency Vehicle Access Road





- Project-level Analysis Area
- Specific Plan Boundary
- Construction Area
- Water Line Improvement  
(16" Pipeline Installation)
- Sewer Line Improvement  
(15" - 36" Pipeline Installation)
- City of SD MHPA

Note: Water and Sewer improvements assume a 20-foot disturbance limit



FIGURE 17  
Water and Sewer Lines



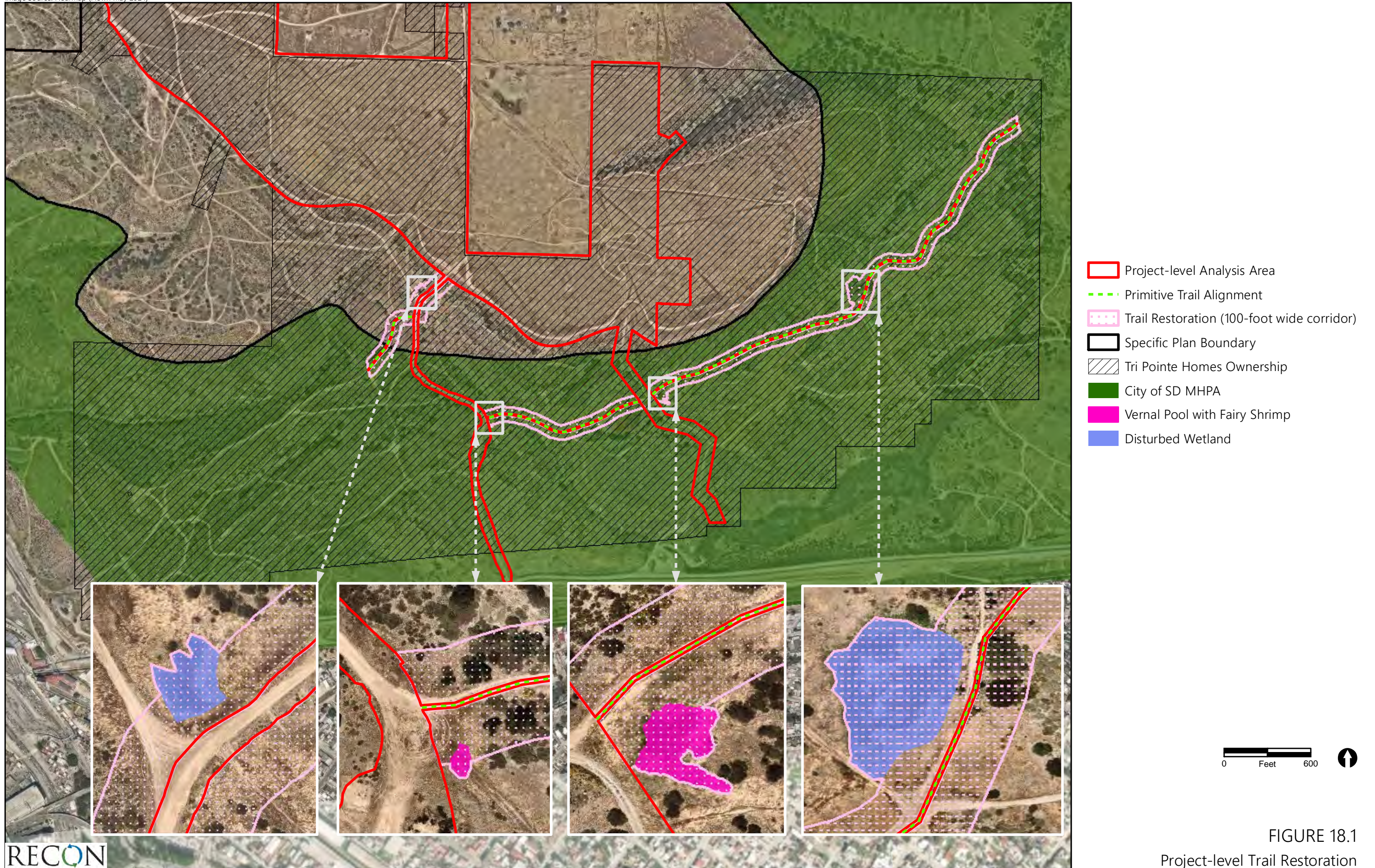
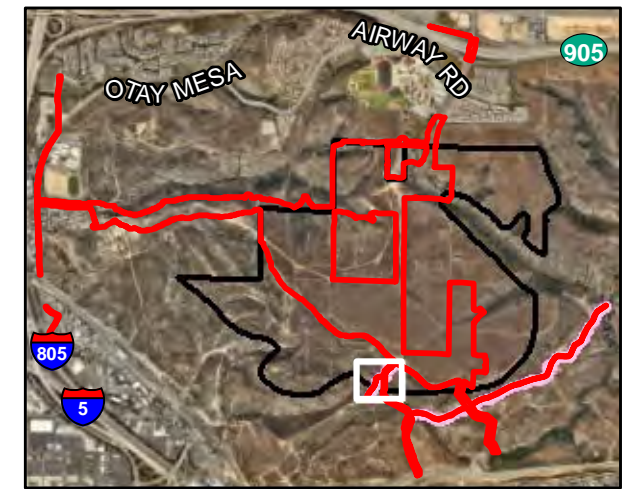


FIGURE 18.1  
Project-level Trail Restoration





- Project-level Analysis Area
- Trail Restoration
- Specific Plan Boundary
- Primitive Trail Alignment
- Vegetation Communities**
- Diegan Coastal Sage Scrub
- Maritime Succulent Scrub
- Disturbed Maritime Succulent Scrub
- Non-native Grassland
- Disturbed Wetland
- Disturbed Land



FIGURE 18.2  
Trail Restoration Areas



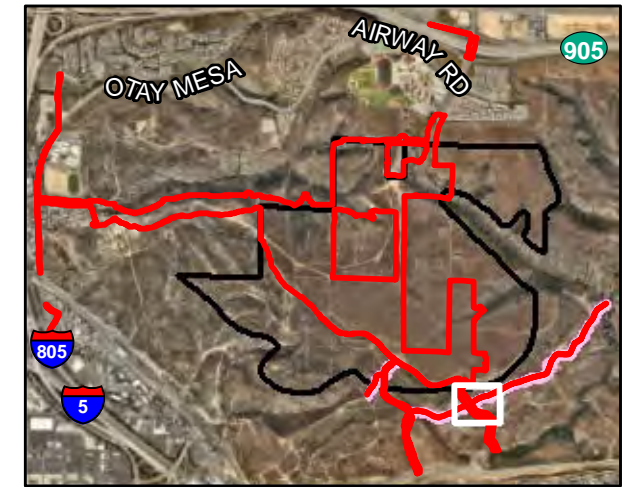


- Project-level Analysis Area
- Trail Restoration
- Specific Plan Boundary
- Primitive Trail Alignment
- Vegetation Communities**
- Maritime Succulent Scrub
- Disturbed Maritime Succulent Scrub
- Non-native Grassland
- Vernal Pool with Fairy Shrimp
- Disturbed Land



FIGURE 18.3  
Trail Restoration Areas





- Project-level Analysis Area
  - Trail Restoration
  - Specific Plan Boundary
  - Primitive Trail Alignment
- Vegetation Communities**
- Maritime Succulent Scrub
  - Disturbed Maritime Succulent Scrub
  - Non-native Grassland
  - Tamarisk Scrub
  - Vernal Pool with Fairy Shrimp
  - Disturbed Land



FIGURE 18.4  
Trail Restoration Areas





- Project-level Analysis Area
  - Trail Restoration
  - Specific Plan Boundary
  - Primitive Trail Alignment
- Vegetation Communities**
- Maritime Succulent Scrub
  - Disturbed Maritime Succulent Scrub
  - Non-native Grassland
  - Disturbed Wetland
  - Disturbed Land



FIGURE 18.5  
Trail Restoration Areas





- Project-level Analysis Area
- Trail Restoration
- Primitive Trail Alignment
- Vegetation Communities**
- Diegan Coastal Sage Scrub
- Maritime Succulent Scrub
- Disturbed Maritime Succulent Scrub
- Non-native Grassland
- Disturbed Wetland
- Disturbed Land



FIGURE 18.6  
Trail Restoration Areas



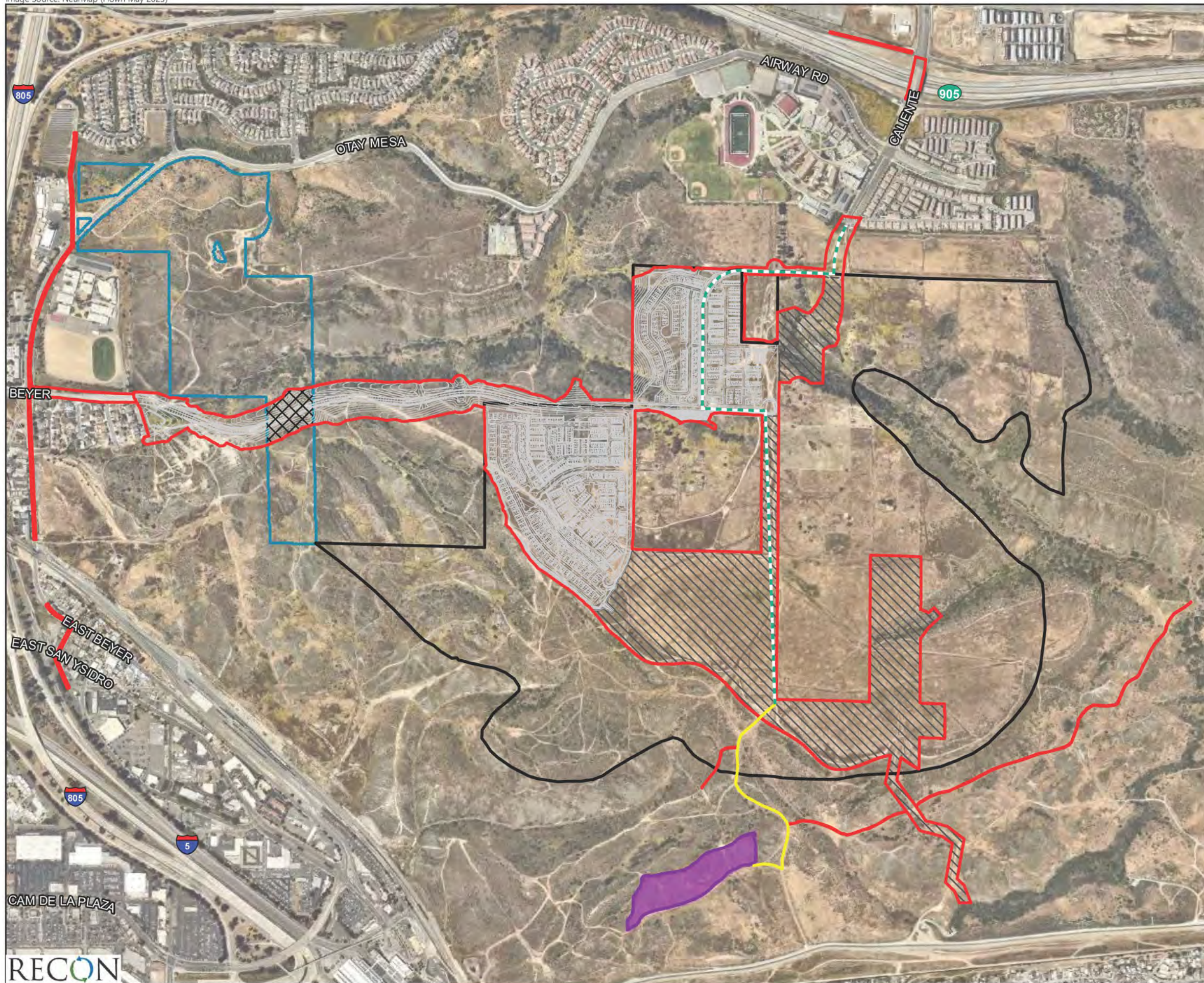


- Project-level Analysis Area
- Trail Restoration
- Primitive Trail Alignment
- Vegetation Communities**
  - Diegan Coastal Sage Scrub
  - Disturbed Maritime Succulent Scrub
  - Non-native Grassland
  - Disturbed Land



FIGURE 18.7  
Trail Restoration Areas





- Project-level Analysis Area
- Project-level Analysis - Rough Grading Only
- Phase 1 Site Plan
- Specific Plan Boundary
- Furby North Preserve
- Furby North Preserve Area to be Quitclaimed to the City for Public Road
- Land to be conveyed to the County of San Diego for ownership, with City of San Diego long term management
- Interim Access Easement to be Extinguished after Public Roads Constructed
- Permanent Access Easement to be Granted to the County of San Diego



FIGURE 20.1  
Proposed Furby North Preserve  
Exchange Lands and Legal Access

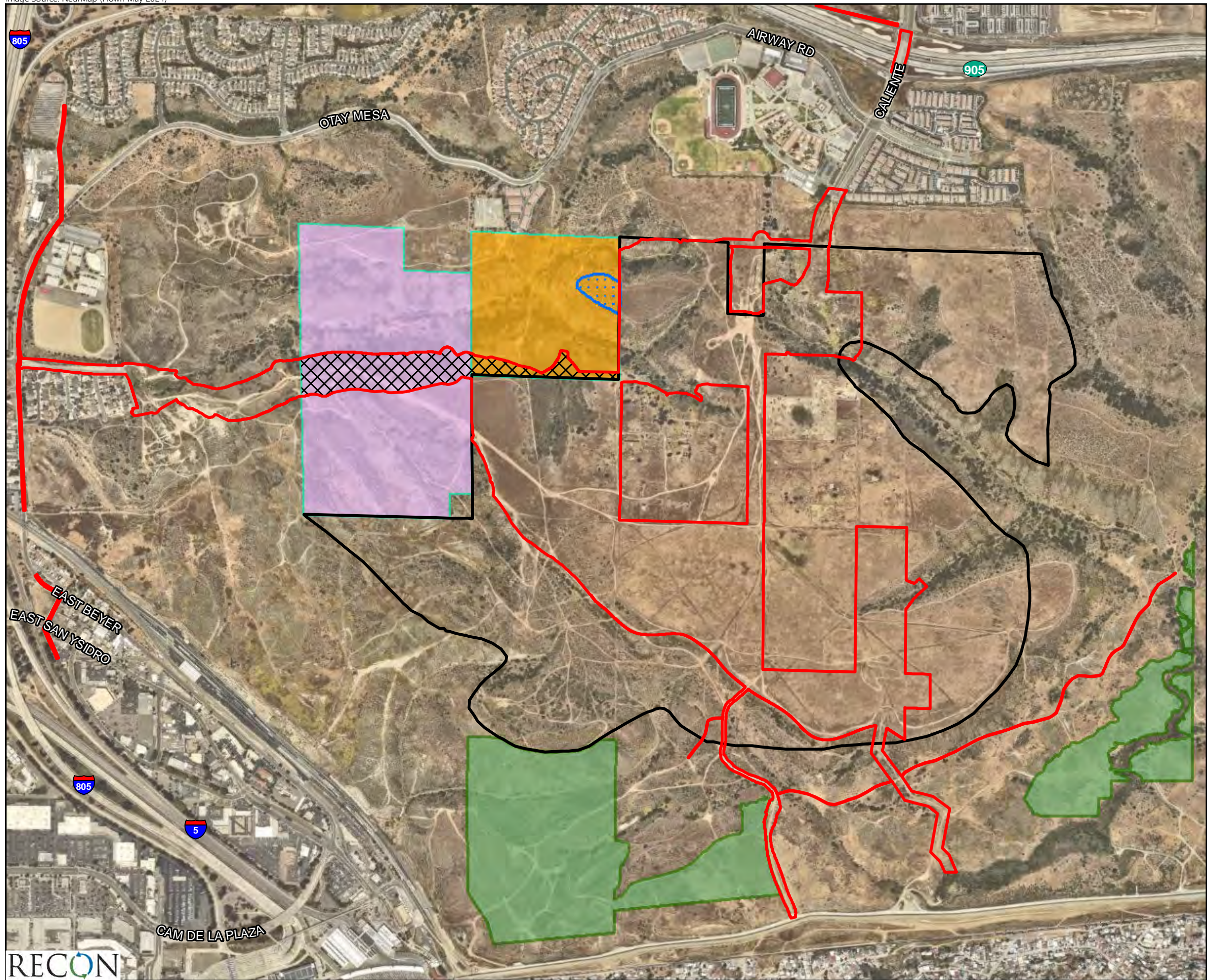


— Furby North Preserve  
— 20 Foot Access Easement to the County of San Diego

FIGURE 20.2

## Proposed Legal Access to Southern Portion of the Furby North Preserve from Beyer Boulevard





- Project-Level Impacts
- Specific Plan Boundary
- CDFW Conservation Easements - West Otay A
- CDFW Conservation Easements - West Otay B
- CDFW Conservation Easement Area to be Amended to Allow Beyer Boulevard
- Potential Vernal Pool Restoration Area
- Additional Potential Habitat Preservation



FIGURE 19  
CDFW Conservation Easements



## 2.0 Methods

This section describes the survey methods for both the program and project-level areas for the Specific Plan.

### 2.1 Program-level Methods

The analysis for the program-level analysis areas of the Specific Plan is largely based on review of secondary source data and mapping information to provide a general overview of resources present, with the exception of the surveys described below. Future development areas within the program-level analysis area of the Specific Plan would require site-specific biological surveys prior to development. A number of studies would be required at the time future development is proposed, including a wetland delineation, fairy shrimp surveys, burrowing owl surveys, rare plant surveys, Quino checkerspot butterfly (*Euphydryas editha quino*) surveys, and coastal California gnatcatcher (*Poliophtila californica californica*) surveys.

#### 2.1.1 General Biological Surveys

General biological surveys were completed in April 2020 along program-level Specific Plan trail alignments in order to identify any key biological resources present and to identify the surveys that would be required in order to implement future program-level trails.

#### 2.1.2 Wildlife Tracking Surveys

Wildlife Tracking Company conducted spring and summer wildlife tracking surveys in 2020 within the Specific Plan and surrounding area in order to identify wildlife movement regimens in the surrounding area, species presence/absence, connectivity (gene pool exchange integrity), prey presence/absence available in the vicinity, and habitat quality related to specific species (Wildlife Tracking Company 2020; Attachment 2a). Presence of wildlife was documented by observation or by sign (e.g. tracks, scat, scraps, rubs, kill sites, cache sites, dens, burrows, trails, runs, hair, or feathers). Eighty-two specific survey collection points were positioned within and surrounding the Specific Plan area and surveyed for animal sign, and cameras were set in key locations for five to seven days. In 2022, an addendum to the Wildlife Study was prepared to address the proposed Beyer Boulevard wildlife overcrossing and culverts/under crossings and provide design recommendations for these project features (Wildlife Tracking Company 2022; Attachment 2b).

### 2.2 Project-level Survey Area

Site-specific surveys were completed for the project-level survey area which totals 611.99 acres, as shown in Figure 21. Surveys conducted included general biological surveys, rare plant surveys, wet and dry season vernal pool fairy shrimp focused surveys, Quino checkerspot butterfly focused surveys and habitat assessments, coastal California gnatcatcher focused surveys, burrowing owl (*Athene cunicularia*) breeding season surveys, western spadefoot surveys, Crotch's bumble bee



habitat assessment, and jurisdictional resource delineations. For reporting convenience, all survey dates, times, personnel, and weather conditions are summarized in Attachment 3.

The impact analysis presented in this report is broken down according to the anticipated grading phasing (see Figure 10.1), to reflect the fact that the project-level areas would be implemented in phases. Additionally, within each phase, certain areas are reported separately to provide clarity on higher mitigation ratios required for certain areas and to specify impacts that may be mitigated by other projects. For example, there are two projects, the Candlelight and Southwind projects, whose footprint overlaps with portions of the Southwest Village project-level footprint (Figure 22). These project areas are reported separately throughout this report as the first project to proceed would be required to implement mitigation for those project areas. Biological resource data for the Candlelight project area is based on the certified Candlelight Environmental Impact Report (Project No. 40329; SCH No. 2013101036) and the associated Biological Technical Report prepared by Alden Environmental Inc. dated June 27, 2013, which are incorporated by reference herein. Impacts associated with conserved lands along the Beyer Boulevard extension are also reported separately since these areas are subject to additional approval processes and mitigation requirements.

## 2.2.1 General Biological Resources Surveys

General biological surveys were conducted by RECON Environmental Inc. (RECON) biologists between November 2017 and 2024, covering all survey areas as detailed in Attachment 3. Biological surveys were completed in phases, as project areas were added or modified ultimately covering the entire project-level survey area. In order to verify resources and document updated site conditions, a general biological resources survey update was conducted in February, March, June, and October 2023 and January through June 2024 to provide any necessary updates to vegetation mapping and to verify conditions within the EVA road and water/sewer line improvement areas and additional areas within the Phase 4 grading area. Results of the survey updates for each resource are discussed in the subsections below. The survey updates included vegetation mapping and spring rare plant surveys for the entire project-level analysis area. The survey updates included confirming the boundaries of the suitable coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) habitat, the extent of Otay tarplant within and adjacent to the limits of the Beyer Boulevard alignment, updating the boundaries of suitable habitat for Quino checkerspot butterfly, verifying the location of snake cholla (*Cylindropuntia californica* var. *californica*), and checking for signs of burrowing owl use. Additionally, during these survey updates, the project-level area was assessed for suitability for Crotch's bumble bee (*Bombus crotchii*). A focused search of ponding basins that previously did not support vernal pool indicator plants was conducted to verify the appropriate categorization of these basins. Vegetation community classifications follow Holland (1986) as modified by Oberbauer (1996). All plant species observed were also noted, and plants that could not be identified in the field were identified later in the laboratory using taxonomic keys. The general biological surveys included a directed search for sensitive plants that would have been apparent during the time of those surveys. Limitations to the compilation of a comprehensive floral checklist were imposed by seasonal factors, such as blooming period. All wildlife observed during the surveys were also noted. Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were noted.



Floral nomenclature for common plants follows the Jepson Online Herbarium (Jepson Flora Project 2023), for ornamental plants Brenzel (2001), and for sensitive plants CNPS (2022). Vegetation community classifications follow Oberbauer et al. (2008), which is based on Holland's 1986 Preliminary Descriptions of the Terrestrial Natural Communities of California. Zoological nomenclature for birds is in accordance with the American Ornithological Society Checklist (Chesser et al. 2021); for mammals with Bradley et al. (2014); and for reptiles with Crother (2017). Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for the species (Jennings and Hayes 1994; Unitt 2004; CNPS 2023; Reiser 2001) and species occurrence records from the California Natural Diversity Database (CNDDB; CDFW 2022a), the All Species Occurrences Database (USFWS 2022), and SanBIOS (County of San Diego 2022).

## 2.2.2 Rare Plant Surveys

Rare plant surveys were conducted within the entire project-level survey area as detailed in Attachment 3. An analysis of potential rare plant occurrence was done prior to the field surveys to identify which species would require rare plant surveys. Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for the species (CNPS 2023, Reiser 2001), species occurrence records from the CNDDB (CDFW 2022a), the City's MSCP, and other sites in the vicinity of the project-level survey area. The known blooming period for potentially occurring species was also taken into account when scheduling the focused rare plant surveys so that the detectability of these species was maximized.

The project-level survey area was traversed on-foot during the focused surveys, with portions of the site given extra focus, depending on the blooming period of the rare plant and level of disturbance. Special attention was given to potential vernal pools and areas supporting native scrub or native herbaceous vegetation. Determinations were made in the field as to the suitability of the observed habitat conditions in the project-level survey area to support rare plant species. For instance, some areas contain steep slopes and dense vegetation which decreased accessibility and the likelihood to detect small, inconspicuous plant species in those areas. Surveyors recorded the locations of all rare plant species when encountered via a combination of hand-mapping on an aerial map and using a tablet linked to a sub-meter global positioning system (GPS) unit. In addition, a species list of all plants observed was compiled during the course of the surveys (Attachment 4).

Updated verification surveys were completed in spring and summer 2023 to verify the extent of rare plants and update mapping as needed (see Attachment 3).

## 2.2.3 San Diego and Riverside Fairy Shrimp Surveys

Both wet season and dry season vernal pool branchiopod/fairy shrimp focused surveys were conducted within the project-level survey areas between 2017 and 2020 (see Attachment 3). The purpose of these surveys was to determine the presence of federally listed endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*) and Riverside fairy shrimp (*Streptocephalus woottoni*). The USFWS survey requirements for fairy shrimp have been accomplished for the project through one complete round of wet season and dry season focused surveys within a three-year period. Due to the time that has passed since fairy shrimp surveys were completed and the substantial time and



effort required to complete updates surveys, for the purposes of this report, any unoccupied pools are assumed to be occupied.

### 2.2.3.1 Wet Season Surveys

During the 2017/2018 wet season, surveys were conducted in Beyer Boulevard and Phases 1 and 2 within 113 depressions to determine the presence or absence of San Diego fairy shrimp and Riverside fairy shrimp. Wet season surveys were also conducted during the 2018/2019 rainy season within 170 mapped depressions. Since the 2017/2018 wet season surveys were conducted under drought conditions and may have been inconclusive, and because new survey areas were added, 2018/2019 wet season fairy shrimp surveys were conducted within 74 basins that did not inundate, or only inundated to less than 3 centimeters in depth during the previous rainy season, as well as additional areas in the southeast portion of the project-level survey area. A third wet season survey was conducted in the 2019/2020 rainy season to cover an additional 129 basins. All surveys were conducted in accordance with the USFWS Survey Guidelines for the Listed Vernal Pool Branchiopods (USFWS 1997a).

### 2.2.3.2 Dry Season Surveys

Per the 2017 USFWS survey guidelines, in order to be considered adequately surveyed, one wet season survey and one dry season survey conducted within all basins within a 3-year period. Soil collection for all sample years were conducted according to these USFWS survey guidelines by personnel authorized under RECON's permit number TE-797665.

Soil samples were collected in phases over the various survey years including soil collections within 115 basins during 2018 surveys; 125 basins during 2019 surveys, and 126 basins in 2020. In each year, soil samples were shipped to Peter Balfour of ECORP for cyst analysis. Helm Biological conducted cyst rearing on the soils that were found to support cysts. After several hatching attempts, all results were provided to RECON for inclusion with our survey results.

## 2.2.4 Quino Checkerspot Butterfly Surveys

Surveys for Quino checkerspot butterfly were completed within the project-level survey area between the years 2018 through 2023 (see Attachment 3). Table 1 identifies the locations, acreages, and years of all Quino checkerspot butterfly surveys.

RECON conducted surveys in 2018 within suitable Quino checkerspot butterfly habitat within north-central portions of the project-level analysis area (RECON 2018a). Additional focused surveys were conducted in 2019, 2020, 2021, and 2022 within new areas added to the development footprint. Typically, each year's survey areas did not overlap with areas surveyed in the previous year. However, repeat protocol surveys were conducted in 2020 within the same areas as the 2018 surveys during an above average rain year to confirm the presence/absence of Quino checkerspot butterfly and further document the extent of host and nectar plants. Additionally, the 2023 protocol surveys covered the entire project-level analysis area where suitable habitat existed.



Table 1 Quino Checkerspot Butterfly Protocol Survey Years and Locations	
Year	Locations
2018	Portions of Phase 1 and Beyer Boulevard (76 acres)
2019	Existing VPHCP/MHPA areas within the southern project-level survey area, 1-acre parcel associated with Phase 1b, small area within southern portion of Phase 1b, and small area at tip of western storm drain (38.16 acres)
2020	Phase 1, a Portion of Phase 2, and Beyer Boulevard, and program-level trails (138.5 acres)
2021	New portions of Phase 2, portions of Phase 1 and Phase 4 (27.9 acres)
2022	New portions of Beyer Boulevard and Phase 2 and a portion of the project-level trails in the south (6.58 acres)
2023	The entire project-level analysis area with suitable habitat, including the project-level trails
2024	Extensive habitat assessments of the proposed mitigation lands conducted.

Protocol adult flight season surveys for this species were conducted in accordance with the Quino checkerspot butterfly Survey Guidelines (USFWS 2014) by qualified biologists under recovery permit TE-797665. Surveys were conducted weekly beginning the third week of February with surveys conducted no fewer than four days apart and were completed by the second Saturday in May. RECON followed USFWS recommendations which require that site assessments be conducted for all projects within this species' potential range, as defined by the recommended Quino Survey Area (USFWS 2014), to determine if a site contains areas where surveys should be conducted. If surveys are not conducted for a site within this species' potential range, any portion of the site containing suitable habitat would be assumed to be occupied by Quino checkerspot butterfly (USFWS 2009a).

During the focused surveys, the surveyors walked throughout suitable habitat, including slopes and mesa tops, at a slow pace (fewer than 10 acres per hour). Surveys were conducted when ground temperatures were at least 60 degrees Fahrenheit (°F) on sunny days or 70°F during overcast conditions, with sustained wind speeds below 15 miles per hour. Surveyors recorded all butterflies and potential nectar plants observed during the surveys, and mapped primary and secondary host plant locations, making note of significant patches of nectar plants using GPS receivers with sub-meter accuracy.

A single Quino checkerspot butterfly was identified within the southeastern portion of the survey area (outside the project-level grading footprint) during the 2019 focused surveys. As a result of the observation, a large portion of Phases 1, Beyer Boulevard, and Phase 2 previously surveyed in 2018 were resurveyed in 2020 to ensure the presence or absence of this species and to facilitate a streamlined consultation process with USFWS. For portions of the project-level survey area that fell within a 1-kilometer radius of the observation, extensive habitat assessments were conducted to document the habitat condition and suitability within these areas. During these habitat assessments, all host and nectar patches were mapped. All focused surveys were conducted under USFWS Permit TE-797665 by RECON permitted biologists and habitat assessments were conducted by permitted biologists and botanists familiar with Quino habitat resources.

In March 2023, USFWS requested that project-wide protocol surveys begin which included habitat assessments within the project-level analysis areas and the vernal pool preserve areas. Updated findings were incorporated into all results and mapping.



In February 2024, an additional protocol survey was initiated within the boundary of the EVA road in the southern portion of the project-level analysis area and an expanded project area within the Caliente Road/Phase 4 project component.

In addition, an extensive habitat assessment of the mitigation lands was conducted during the 2024 adult flight season to document the extent of the potential Quino checkerspot butterfly habitat, supporting host plant and nectar sources. RECON performed two survey visits within the APNs 6670103000 6670103100, 6670102800, 6670401300, and the southern halves of APNs 6670101500 and 6670100600; totaling 326 acres, excluding the EVA road footprint.

## 2.2.5 Coastal California Gnatcatcher Surveys

Focused surveys for the federally threatened coastal California gnatcatcher were conducted in suitable habitat in 2018 within the MHPA and areas in the southern portion of the project-level survey area (see Attachment 3). Additional gnatcatcher surveys were completed in 2020 to cover all remaining suitable habitat areas. The coastal California gnatcatcher focused surveys were conducted in accordance with USFWS survey protocol (USFWS 1997b) under USFWS Permit #TE-797665 by RECON permitted biologists. All bird species observed during the surveys were noted. Since all suitable habitat areas are assumed occupied, updated gnatcatcher surveys are not warranted.

## 2.2.6 Burrowing Owl Surveys

Burrowing owl breeding season surveys were performed in Phases 1, Beyer Boulevard and portion of Phase 2 in 2018 and in remaining portions of Phases 1, 2 and 4 in 2020 within all suitable habitat areas plus a 150-meter buffer from the edge of mapped suitable habitat (see Attachment 3). Verification surveys were conducted in spring 2023. In some areas, the 150-meter buffer was surveyed using binoculars, where access onto private property was restricted. Surveys were also conducted within the southern portion of the project-level survey area, including around the EVA road, to identify the mitigation potential of these areas. Burrowing owl surveys were conducted in accordance with the guidelines developed by the CDFW (2012) to determine the presence or absence of the species. Meandering transects were walked through all suitable habitat within the project-level survey areas.

## 2.2.7 Western Spadefoot Surveys

A focused survey for western spadefoot was conducted during the 2024 rainy season to update occupancy of this species within the project-level survey area and the mitigation lands (see Attachment 3). RECON biologists familiar with western spadefoot identification (eggs, tadpoles, and adults) visited 338 vernal pools/ponding basins within the project-level impact area, including Tri Pointe Homes' owned lands south of the development (APNs 6670103000 6670103100, 6670102800, 6670401300, and the southern halves of APNs 6670101500 and 6670100600) to document if western spadefoot is present. Each pool was visited once to verify the presence/absence of all basins that ponded sufficiently during the 2024 season.



## 2.2.8 Crotch's Bumble Bee Habitat Assessment Surveys

A habitat assessment for Crotch's bumble bee was conducted during the 2024 flight season to map potential habitat within the project-level survey area and the proposed mitigation areas by qualified biologists (see Attachment 3). The surveys focused on flowering native and non-native plants, excluding areas that are paved in urban/developed land, and evaluated the survey area for potential nesting. The habitat assessment was conducted in accordance with current CDFW guidance (CDFW 2023). A habitat assessment was conducted rather than a presence/absence survey in coordination with CDFW based on the expectation that the project would assume occupancy based on presence of suitable habitat. Several Crotch's bumble bees were incidentally observed within the south and southeastern mitigation areas.

## 2.2.9 Jurisdictional Resource Delineation

Jurisdictional resource delineations were completed in 2018 through 2022 for the project-level survey areas. A detailed description of the wetland delineations can be found in the wetland delineation report prepared for the project (RECON 2024a; Attachment 5). The jurisdictional resource delineations performed for the project followed the guidelines set forth by the U.S. Army Corps of Engineers (USACE), including the 1987 Corps of Engineers Wetlands Delineation Manual, the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, and the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 1987, 2008a, 2008b, respectively). All potential jurisdictional resources were assessed for the presence of any of the three USACE wetland parameters, including hydrophytic vegetation, hydric soils, and wetland hydrology. The project-level survey areas were examined for potential USACE non-wetland waters of the U.S., Regional Water Quality Control Board (RWQCB) and CDFW waters of the State, and City wetlands. In areas where signs of ponding were evident, special attention was paid to USACE vernal pool indicator species (USACE 1997).

## 2.2.10 Wildlife Tracking Surveys

The wildlife tracking surveys described in Section 2.1.2 address the project-level survey areas (see Attachment 2a). The Wildlife Tracking Institute additionally evaluated wildlife movement specifically related to the proposed Beyer Boulevard extension (see Attachment 2b).





 Project-level Survey Area

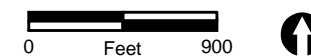
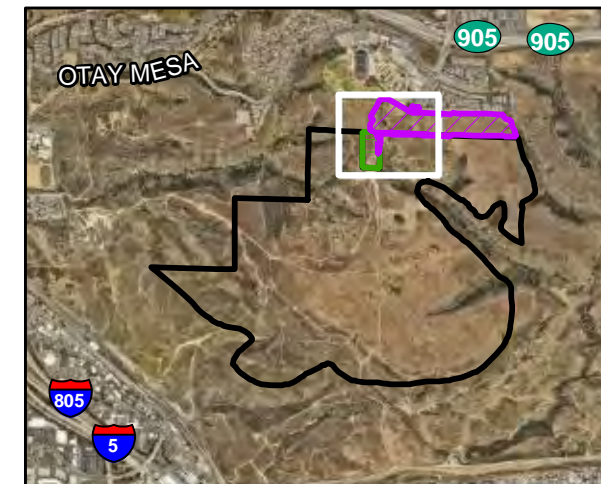


FIGURE 21  
Project-level Survey Areas





- Project-Level Analysis Area
- Candlelight Project Impacts
- Southwind Project in Entitlements
- Specific Plan Boundary



FIGURE 22  
Candlelight and Southwind Projects



## 3.0 Regulatory Framework

The following is a summary of key regulations relevant to the biological analysis.

### 3.1 Federal Regulations

The Federal Endangered Species Act (FESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered 'take' under the FESA. Section 9(a) of the FESA defines 'take' as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." The FESA is administered by the USFWS.

The federal Migratory Bird Treaty Act (MBTA) was established to provide protection to the breeding activities of migratory birds throughout the United States. The MBTA protects migratory birds and their breeding activities from take and harassment. The project is designed to comply with MBTA, which precludes direct impacts to nesting birds and raptors.

Bald and Golden Eagle Protection Act (BGEPA) was passed in 1940 to protect the bald eagle and amended in 1962 to include the golden eagle (16 United States Code 668 et seq.). This act prohibits the take, possession, sale, purchase, barter, offering to sell or purchase, export or import, or transport of bald eagles and golden eagles and their parts, eggs, or nests without a permit issued by the USFWS. The act prohibits any form of possession or taking of either eagle species and the statute imposes criminal and civil sanctions as well as an enhanced penalty provision for subsequent offenses. In November 2009, the USFWS published the Final Eagle Permit Rule (74 FR 46836–46879) providing a mechanism to permit and allow for incidental (i.e., non-purposeful) take of bald and golden eagles pursuant to the BGEPA. In February 2011, the USFWS released Draft Eagle Conservation Plan Guidance, aimed at clarifying expectations for take permit acquisition by wind power projects consistent with the 2009 rule.

### 3.2 State Regulations

The California ESA (CESA) is similar to FESA in that it provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Section 2081 subdivision (b) of the California Fish and Game Code allows CDFW to authorize take of species listed as endangered, threatened, or candidate pursuant to CESA.

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.3 of the California Fish and Game Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls), or of their nests and eggs.

The California Fish and Game Code, Section 3511, dealing with fully protected species states that these species "... may not be taken or possessed at any time and no provision of this code or any



other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research. This language arguably makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. The project is designed to comply with Sections 3503, 3503.3, and 3511, which precludes direct impacts to nesting birds and raptors, including fully protected species.

### 3.3 Local Regulations

#### 3.3.1 City of San Diego ESL Regulations

The purpose of the Environmentally Sensitive Lands (ESL) Regulations (LDC §143.0101 through §143.0160) is to protect, preserve and, where damaged, restore environmentally sensitive lands and the viability of the species supported by those lands. The ESL Regulations apply to all proposed development when environmentally sensitive lands, including sensitive biological resources, steep hillsides, floodplains, or coastal bluffs, are present. The regulations are designed to ensure that development occurs in a manner that protects natural resources and the natural and topographic character of the area and retains biodiversity and interconnected habitats.

The City's Biology Guidelines (2018a) and the ESL Regulations state that impacts to wetlands should be avoided and unavoidable impacts should be minimized to the maximum extent practicable. A wetland buffer shall be maintained around all remaining wetlands as appropriate to protect the functions and values of the wetland.

#### 3.3.2 Multiple Species Conservation Program

The MSCP is a comprehensive habitat conservation planning program for southwestern San Diego County. A goal of the MSCP is to preserve a network of habitat and open space, thereby protecting biodiversity, while streamlining environmental permitting for development. Local jurisdictions, including the City, implement their portions of the MSCP through subarea plans, which describe specific implementing mechanisms.

The City's MSCP Subarea Plan was approved in March 1997. The MSCP Subarea Plan is a plan and process for the issuance of permits under the federal and state Endangered Species Act and the California Natural Communities Conservation Planning Act of 1991. The primary goal of the MSCP Subarea Plan is to conserve viable populations of sensitive species and to conserve regional biodiversity while allowing for reasonable economic growth.

In July 1997, the City signed an Implementing Agreement with USFWS and CDFW. The Implementing Agreement serves as a binding contract between the City, USFWS, and CDFW that identifies the roles and responsibilities of the parties to implement the MSCP and Subarea Plan. The agreement became effective on July 17, 1997 and allows the City to issue Incidental Take Authorizations under the provisions of the MSCP. Applicable state and federal permits are still required for wetlands and listed species that are not covered by the MSCP.



### 3.3.3 MSCP Subarea Plan

The City's subarea encompasses 206,124 acres within the MSCP study area. The subarea is characterized by urban land uses with approximately three-quarters either built out or retained as open space/park system. The City's MHPA represents a "hard line" preserve, in which boundaries have been specifically determined. It is considered an urban preserve which is constrained by existing or approved development and is comprised of linkages connecting several large areas of habitat. The City's MHPA is approximately 56,831 acres and includes approximately 47,910 acres within City jurisdiction, and additional City-owned lands (8,921 acres) in the unincorporated areas around San Vicente Reservoir, Otay Lakes, and Marron Valley.

The MHPA is the area within which the permanent MSCP preserve would be assembled and managed for its biological resources. The MHPA contains specific conservation goals and objectives based on a project's specific location within the MHPA and whether the land is public or private. Within the MHPA, limited development may occur.

#### 3.3.3.1 MHPA Land Use Adjacency Guidelines

To avoid indirect impacts to the MHPA, Land Use Adjacency Guidelines were developed to manage land uses adjacent to the MHPA. The MHPA Land Use Adjacency Guidelines would be incorporated as conditions of approval to preclude indirect project impacts from proposed adjacent development. These guidelines address the issues of drainage, toxins, lighting, noise, barriers, invasive species, brush management, and grading/development.

#### 3.3.3.2 MSCP Subarea Plan: Otay Mesa MHPA Management Directives

Otay Mesa is in the southern area of the MHPA. The MSCP Subarea Plan describes the Otay Mesa areas of the MHPA and its vision as a network of open and relatively undisturbed canyons containing a full ensemble of native species and providing functional wildlife habitat and movement capability. The City's MHPA Guidelines for Otay Mesa are described in Section 1.2.1 of the City's Subarea Plan (1997).

#### 3.3.3.3 MSCP Subarea Plan: Specific Management Policies and Directives for Otay Mesa

Section 1.5.3 of the City of San Diego MSCP Subarea Plan (1997) describes the specific management and directives for the Otay Mesa area. The major issues that require consideration for management in the Otay Mesa area include intense land uses and activities adjacent to and in covered species habitat and linkages; off-road-vehicle activity; dumping, litter, and vandalism; enhancement and restoration needs; exotic (non-native), invasive plants and animals; illegal immigration and U.S. Border Patrol (USBP) activities; and utility, facility and road repair, construction, and maintenance activities.



### 3.3.4 Vernal Pool Habitat Conservation Plan

As introduced in Section 1.2.2, the City's VPHCP, adopted in 2018, provides a framework to protect, enhance, and restore vernal pool resources within the City, while improving and streamlining the environmental permitting process for impacts to threatened and endangered species associated with vernal pools. The VPHCP provides coverage for threatened and endangered vernal pool species that do not currently have federal coverage under the MSCP Subarea Plan. The VPHCP is compatible with and expands existing MHPA lands to conserve additional lands with vernal pool resources. VPHCP covered species includes the following seven threatened and endangered species:

1. Otay Mesa mint (*Pogogyne nudiuscula*)
2. San Diego Mesa mint (*Pogogyne abramsii*)
3. Spreading navarretia (*Navarretia fossalis*)
4. San Diego button-celery (*Eryngium aristulatum* var. *parishi*)
5. California Orcutt grass (*Orcuttia californica*)
6. Riverside fairy shrimp (*Streptocephalus woottoni*)
7. San Diego fairy shrimp (*Branchinecta sandiegonensis*)

The VPHCP includes measures to avoid or minimize the impact of the taking of covered species. Development on premises that does not contain ESL but is located adjacent to a premise that does contain ESL shall comply with the Land Use Adjacency Guidelines in MSCP Subarea Plan Section 1.4.3 and VPHCP Section 5.2.1.

### 3.3.5 Otay Mesa Community Plan

As discussed in Section 1.2.1, the OMCP provides the land use, mobility, and policy framework for the proposed Southwest Village Specific Plan. The OMCP provides a long-range, comprehensive policy framework for growth and development in the Otay Mesa community through 2062. The OMCP identifies a land use strategy with land use designation proposals to create villages, activity centers, and industrial/employment centers along major transportation corridors, while strengthening cultural and business linkages to Tijuana, Mexico via the Otay Mesa Port of Entry. The Land Use Element established a number of land use planning goals for the planning area, such as providing a distribution of land uses that provides sufficient capacity for a variety of uses, facilities, and services needed to serve Otay Mesa, providing distinct villages that include places to live, work, and recreate; diversified commercial uses that serve local, community, and regional needs; and sufficient industrial land capacity to maintain Otay Mesa as a subregional employment center, among others. The OMCP included the same nine elements contained in the City's 2008 General Plan, with goals and policies for each element. The nine elements are: Land Use; Mobility; Urban Design; Economic Prosperity; Public Facilities, Services, and Safety; Recreation; Conservation; Noise; and Historic Preservation.

The OMCP Conservation Element in particular contains the following policies relevant to biological resources:



**Policy 8.1-6:** Implement Area Specific Management Directives and Conditions of Coverage as stated in Table 3-5 of the MSCP Subarea Plan for Species protected in Otay Mesa and identified in Table 8-1.

**Policy 8.1-7:** Require preservation, restoration, management, and monitoring within identified vernal pool preservation areas in accordance with City, state, and federal policies and regulations. The boundaries of vernal pool preserve areas should be of sufficient size and shape to protect the vernal pool basins, watersheds, functional buffers, and areas necessary to maintain vernal pool ecosystem function and species viability.

- a. Design, as feasible, the preserve areas to provide connectivity between vernal pools, surrounding open space, and nearby vernal pool complexes.
- b. Conduct management and monitoring of preserved and restored vernal pool sites in accordance with the citywide regulations and Biology Guidelines.

**Policy 8.1-8:** Amend the Otay Mesa Community Plan as needed for consistency with an adopted Vernal Pool Habitat Conservation Plan (HCP).

**Policy 8.1-11:** Encourage the development of a comprehensive approach to habitat identification, management, and establishment of preservation nodes in order to address long term survival of the burrowing owl on Otay Mesa.

### 3.3.6 Otay Mesa Community Plan Final Environmental Impact Report

The OMCP was evaluated in a PEIR (No. 30330/304032; SCH No. 2004051076) that was certified by the San Diego City Council on March 11, 2014, via Resolution No. R-308810. The OMCP Final Environmental Impact Report (FEIR; City of San Diego 2013) concluded that the project would result in significant and unmitigated environmental impacts to air quality, greenhouse gas emissions, noise, traffic/circulation, and utilities. The following issue areas were determined to be significant but mitigated to below a level of significance with mitigation: land use, biological resources, historical resources, hydrology/water quality, geology, and paleontological resources. All other impacts analyzed in the EIR were determined to be less than significant.

Pertinent to biological resources, the OMCP FEIR (Section 5.4) provides an analysis of biological resource impacts associated with implementation of the OMCP. Additionally, the OMCP FEIR Land Use Section 5.1 addressed potential land use conflicts related to consistency with environmental and biological regulations.

The environmental analysis for the Specific Plan tiers from the OMCP FEIR, which anticipated development of the Specific Plan area in addition to the proposed Beyer Boulevard extension through MHPA and 100 percent conserved lands. This biological analysis provides information for use in preparing a Subsequent EIR tiering from the biological analysis and OMCP FEIR Mitigation Framework. The findings of the OMCP FEIR related to biological resources are detailed below. Details of the OMCP FEIR Mitigation Framework are discussed below and provided in Section 3.3.7.



### 3.3.6.1 Sensitive Plants and Animals

The OMCP FEIR found that impacts to sensitive plants and animals would be significant, both directly through the loss of habitat and indirectly by placing development adjacent to the MHPA. Additionally, impacts to federal or state listed species, MSCP covered species, and species with a CNPS Rare Plant Ranking would be significant.

The OMCP FEIR concluded that future projects would be required to implement Mitigation Framework BIO-1, which requires site-specific biological surveys to determine the potential for sensitive species, along with the requirement for site-specific mitigation, if necessary, to reduce impacts to sensitive species or habitats. Specifically, BIO-1 requires future projects to conduct a habitat assessment to determine whether or not protocol surveys are needed. BIO-1 identified that if burrowing owl habitat or signs are encountered on or within 150 meters of the project site, breeding season surveys would be required and if burrowing owl are present, site-specific avoidance measures would be required including preparation of a Conceptual Burrowing Owl Mitigation Plan that includes take avoidance (preconstruction) surveys, site surveillance, and the use of buffers, screens, or other measures to minimize construction-related impacts. Implementation of the Mitigation Framework BIO-1 would ensure that impacts to sensitive plants and animals would be less than significant.

### 3.3.6.2 Migratory Wildlife

The OMCP FEIR concluded that future development, including construction or extension of mobility element roadways, utility lines, and/or temporary construction activities within the MHPA, has the potential to interfere with nesting, reduce foraging habitat, and obstruct wildlife movement as a result of noise, construction activities, habitat loss, and/or fragmentation. The analysis identified that the Beyer Boulevard would run along Moody Canyon within the MHPA, crossing conserved lands. Direct or indirect impacts to migratory wildlife nesting, foraging, and movement was determined to be significant.

The OMCP FEIR's includes Mitigation Framework BIO-2, which requires a site-specific biological resource survey for projects that may have a potential impact to areas within the MHPA. The report would need to identify the limits of local-scale wildlife corridors or habitat linkages and analyze potential impacts in relation to local fauna, and the effects of conversion of vegetation communities (e.g., non-native grassland to riparian or agricultural to developed land) and include measures to be implemented during construction-related activities to minimize direct impacts on sensitive wildlife species and to provide for continued wildlife movement through the corridor. Measures to minimize direct impacts on wildlife movement, nesting or foraging activities shall be addressed in the biological resources report and shall include recommendations for preconstruction protocol surveys to be conducted during established breeding seasons, construction noise monitoring and implementation of any species-specific mitigation plans (such as a Burrowing Owl Mitigation Plan) in order to comply with the Community Plan Implementation Overlay Zone Type A (CPIOZ A).



### 3.3.6.3 Sensitive Habitats

The OMCP FEIR determined that future projects could result in significant impacts to sensitive habitat, specifically to Tier I, II, and IIIB habitat areas, which include maritime succulent scrub, native grassland, Diegan coastal sage scrub, non-native grassland, riparian scrub, vernal pools, and basins with fairy shrimp. OMCP FEIR Mitigation Framework BIO-1 was found to reduce impacts to sensitive habitat to a less than significant level as this measure would require preparation of a biological resources report consistent with the City's Biology Guidelines.

### 3.3.6.4 MSCP

The issue of MSCP compliance was addressed in OMCP FEIR Sections 5.1, Land Use and 5.4, Biological Resources. THE OMCP FEIR found that potential impacts to sensitive vegetation communities from MHPA boundary adjustments would be less than significant because any adjustments would be required to meet the equivalency criteria for approval. In addition, the FEIR found that MHPA adjacency impacts would be addressed at the project-level, and projects adjacent to MHPA would be required to comply with the MHPA Land Use Adjacency Guidelines through implementation of Mitigation Framework LU-2, which would reduce MHPA adjacency impacts to less than significant. The FEIR also determined that the OMCP would be consistent with the vision for the Otay Mesa MHPA as the open space network would remain intact and the OMCP incorporated policies for adhering to the MSCP Management Directives. Therefore, impacts related to MSCP were found to be less than significant.

### 3.3.6.5 Invasive Plants

In regard to invasive plant impacts, the OMCP FEIR determined that impacts could be potentially significant due to the introduction of invasive plants within the MHPA during future grading and development. The FEIR determined that the introduction of invasive species into the MHPA would be addressed through implementation of OMCP FEIR Mitigation Framework LU-2 which requires implementation of MHPA Land Use Adjacency Guidelines of the MSCP, reducing impacts to less than significant.

### 3.3.6.6 Wetland Impacts

The OMCP FEIR concluded that future projects implemented in accordance with the OMCP may result in significant impacts to wetlands, vernal pools and vernal pool species, as well as both wetland and non-wetland streambed waters regulated by the USACE, CDFW, and the City of San Diego, and would thus require a deviation from the ESL Regulations. The FEIR determined that future projects implemented in accordance with the OMCP which cannot demonstrate compliance with the Community Plan Implementation Overlay Zone Type A (CPIOZ A) because impacts to wetlands/jurisdictional resources cannot be avoided would be required to implement OMCP FEIR Mitigation Framework BIO-4 which addresses compliance with the City's ESL regulations including requirements for wetland deviations. With implementation of OMCP FEIR Mitigation Framework BIO-4, impacts to wetlands were found to be reduced to less than significant.



### 3.3.6.7 Noise Generation

The OMCP FEIR determined that there is a potential for temporary noise impacts to wildlife from construction and permanent noise impacts from the introduction of noise generating land uses adjacent to MHPA. Temporary and/or permanent noise impacts to wildlife within the MHPA were found to be significant. The FEIR determined that impacts to sensitive wildlife species (including temporary and permanent noise impacts) resulting from future projects implemented in accordance with the OMCP would be mitigated to less than significant with implementation of OMCP FEIR Mitigation Framework BIO-1 through BIO-4 and LU-2.

### 3.3.6.8 Land Use Consistency

The OMCP FEIR Land Use section addressed consistency with the biological resources regulations as part of the Regulation Consistency and Environmental Plan Consistency analysis. The FEIR found that at the program-level, the OMCP would not conflict with the City's ESL and that future development would be required to comply with the City's ESL regulations. Therefore, impacts related to conflicts with the City's ESL regulations would be less than significant. The FEIR found that the OMCP would be consistent with General Plan Conservation Element policies in addition to the City's MSCP. The FEIR acknowledged that future MHPA BLAs may be required but that project-specific application of MHPA BLAs, application of MHPA Land Use Adjacency Guidelines (as required through Mitigation Framework LU-2), and application of Specific Management Directives for Otay Mesa would ensure impacts related to MSCP consistency would be reduced to less than significant.

## 3.3.7 Otay Mesa Community Plan Final Environmental Impact Report Mitigation Monitoring and Reporting Program

The following cites the mitigation framework that was adopted with the approval of the OMCP. The OMCP FEIR envisioned future development with potential environmental impacts within Otay Mesa would be considered in light of this mitigation framework.

### OMCP Mitigation Framework LU-2 – MHPA/Land Use Adjacency Guidelines

**LU-2:** All subsequent development projects that are implemented in accordance with the Community Plan Update (CPU), which is adjacent to designated MHPA areas shall comply with the Land Use Adjacency Guidelines of the MSCP in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. Mitigation measures include, but are not limited to, sufficient buffers and design features, barriers (rocks, boulders, signage, fencing, and appropriate vegetation) where necessary, lighting directed away from the MHPA, and berms or walls adjacent to commercial or industrial areas and any other use that may introduce construction noise or noise from future development that could impact or interfere with wildlife utilization of the MHPA. The project biologist for each proposed project would identify specific mitigation measures needed to reduce impacts to below a level of significance. Subsequent environmental review would be required to determine the significance of impacts from land use adjacency and compliance with the Land Use Adjacency Guidelines of the MSCP. Prior to approval of any subsequent development project in an area adjacent to a designated MHPA, the



City shall identify specific conditions of approval in order to avoid or to reduce potential impacts to adjacent the MHPA.

Specific requirements shall include:

- Prior to the issuance of occupancy permits, development areas shall be permanently fenced where development is adjacent to the MHPA to deter the intrusion of people and/or pets into the MHPA open space areas. Signage may be installed as an additional deterrent to human intrusion as required by the City.
- The use of structural and nonstructural BMPs, including sediment catchment devices, shall be required to reduce the potential indirect impacts associated with construction to drainage and water quality. Drainage shall be directed away from the MHPA or, if not possible, must not drain directly into the MHPA. Instead, runoff shall flow into sedimentation basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA. Drainage shall be shown on the site plan and reviewed satisfactory to the City Engineer.
- All outdoor lighting adjacent to open space areas shall be shielded to prevent light overspill off-site. Shielding shall consist of the installation of fixtures that physically direct light away from the outer edges of the road or landscaping, berms, or other barriers at the edge of development that prevent light overspill.
- The landscape plan for the project shall contain no exotic plant/invasive species and shall include an appropriate mix of native species which shall be used adjacent to the MHPA.
- All manufactured slopes must be included within the Development Footprint and outside the MHPA.
- All brush management areas shall be shown on the site plan and reviewed and approved by the Environmental Designee. Zone 1 brush management areas shall be included within the Development Footprint and outside the MHPA. BMZ 2 may be permitted within the MHPA (considered impact neutral) but cannot be used as mitigation. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the BMZ 2 area shall be the responsibility of a homeowners association or other private party.
- Access to the MHPA, if any, shall be directed to minimize impacts and shall be shown on the site plan and reviewed and approved by the Environmental Designee.
- Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures shall include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement shall be incorporated into leases on publicly owned property as leases come up for renewal.



## OMCP Mitigation Framework BIO-1 – Sensitive Plants and Wildlife

To reduce potentially significant impacts that would cause a reduction in the number of unique, rare, endangered, sensitive, or fully protected species of plants or animals, if present within the CPU area, all subsequent projects implemented in accordance with the CPU shall be analyzed in accordance with the California Environmental Quality Act (CEQA) Significance Thresholds, which require that site-specific biological resources surveys be conducted in accordance with City's Biology Guidelines (2018a). The locations of any sensitive plant species, including listed, rare, and narrow endemic species, as well as the potential for occurrence of any listed or rare wildlife species shall be recorded and presented in a biological resources report. Based on available habitat within CPU area, focused presence/absence surveys shall be conducted in accordance with the City's Biology Guidelines and applicable resource agency survey protocols to determine the potential for impacts resulting from the future projects on these species. Engineering design specifications based on project-level grading and site plans shall be incorporated into the design of future projects to minimize or eliminate direct impacts on sensitive plant and wildlife species consistent with the FESA, MBTA, Bald and Golden Eagle Protection Act, CESA, MSCP Subarea Plan, and ESL Regulations.

In addition to the requirements detailed above, specific measures shall be implemented when the biological survey results in the identification of burrowing owls on the project site. Future projects shall be required to conduct a habitat assessment to determine whether or not protocol surveys are needed. Should burrowing owl habitat or sign be encountered on or within 150 meters of the project site, breeding season surveys shall be conducted. If occupancy is determined, site-specific avoidance and mitigation measures shall be developed in accordance with the protocol established in the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Measures to avoid and minimize impacts to burrowing owl shall be included in a Conceptual Burrowing Owl Mitigation Plan which includes take avoidance (preconstruction) surveys, site surveillance, and the use of buffers, screens, or other measures to minimize construction-related impacts.

### Mitigation for Impacts to Sensitive Upland Habitats

Future projects implemented in accordance with the CPU resulting in impacts to sensitive upland Tier I, II, IIIA, or IIIB habitats shall implement avoidance and minimization measures consistent with the City's Biology Guidelines and MSCP Subarea Plan and provide suitable mitigation in accordance with the City's Biology Guidelines (see Table 5.4-7, below) MSCP Subarea Plan. Future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive vegetation communities including but not limited to riparian habitats, wetlands, oak woodlands, and coastal sage scrub consistent with federal, state, and City guidelines. Any required mitigation for impacts on sensitive vegetation communities shall be outlined in a conceptual mitigation plan following the outline provided in the City's Biology Guidelines.

Mitigation for impacts to sensitive vegetation communities shall be implemented at the time future development projects are proposed. Project-level analysis shall determine whether the impacts are within or outside of the MHPA. Any MHPA boundary adjustments shall be processed by the individual project applicants through the City and Wildlife Agencies during the early project planning stage.



Mitigation for impacts to sensitive upland habitats shall occur in accordance with the MSCP mitigation ratios as specified within the City's Biology Guidelines (City of San Diego 2018a). These mitigation ratios are based on Tier level of the vegetation community, the location of the impact and the location of the mitigation site(s). For example, impacts to lands inside of the MHPA and mitigated outside the MHPA would have the highest mitigation ratio whereas impacts to lands outside the MHPA and mitigated inside the MHPA would have the lowest mitigation ratio.

If mobility element roads (i.e., Beyer Boulevard, Airway Road, and Del Sol Boulevard) impact existing conserved lands, an additional 1:1 ratio consistent with the OMCP FEIR shall be added to the City required mitigation ratio in order to replace the lands that were previously preserved as open space. Mitigation lands purchased to compensate for impacts to areas within conserved lands shall be located in the Otay Mesa area if feasible.

Table 5.4-7 from the City's Biology Guidelines Mitigation Ratios for Impacts to Upland Vegetation Communities and Land Cover Types						
Tier	Habitat Type	Mitigation Ratios				
TIER 1 (rare uplands)	Southern Foredunes Torrey Pines Forest Coastal Bluff Scrub Maritime Succulent Scrub Maritime Chaparral Scrub Oak Chaparral Native Grassland Oak Woodlands	Location of Preservation				
				Inside	Outside	
		Location of Impact	Inside*	2:1	3:1	
			Outside	1:1	2:1	
		TIER II (uncommon uplands)	Coastal Sage Scrub Coastal Sage Scrub/ Chaparral	Location of Preservation		
						Inside
Location of Impact	Inside*			1:1	2:1	
	Outside			1:1	1.5:1	
TIER IIIA (common uplands)	Mixed Chaparral Chamise Chaparral	Location of Preservation				
				Inside	Outside	
		Location of Impact	Inside*	2:1	3:1	
			Outside	1:1	2:1	
TIER IIIB (common uplands)	Non-Native Grasslands	Location of Preservation				
				Inside	Outside	
		Location of Impact	Inside*	1:1	1.5:1	
Outside	0.5:1		1:1			

Notes:  
For all Tier I impacts, the mitigation could (1) occur within the MHPA portion of Tier I (in Tier) or (2) occur outside of the MHPA within the affected habitat type (in-kind).  
For impacts on Tier II, IIIA, and IIIB habitats, the mitigation could (1) occur within the MHPA portion of Tiers I – III (out-of-kind) or (2) occur outside of the MHPA within the affected habitat type (in-kind). Project specific mitigation would be subject to applicable mitigation ratios at the time of project submittal.

However, as future development proceeds in the Specific Plan area, impacts to migratory wildlife could occur associated with construction activities. Implementation of OMCP FEIR BIO-2 would ensure that impacts related to migratory wildlife are reduced to less than significant.



## OMCP Mitigation Framework BIO-2 – Migratory Wildlife

Mitigation for future projects to reduce potentially significant impacts that would interfere with the nesting, foraging, or movement of wildlife species within the CPU area, shall be identified in site-specific biological resources surveys prepared in accordance with City's Biology Guidelines as further detailed in BIO-1 during the subsequent development review process. The biological resources report shall include results of protocol surveys and recommendations for additional measures to be implemented during construction related activities; shall identify the limits of any identified local-scale wildlife corridors or habitat linkages and analyze potential impacts in relation to local fauna, and the effects of conversion of vegetation communities (e.g., non-native grassland to riparian or agricultural to developed land) to minimize direct impacts on sensitive wildlife species and to provide for continued wildlife movement through the corridor. Measures that shall be incorporated into project-level construction documents to minimize direct impacts on wildlife movement, nesting, or foraging activities shall be addressed in the biological resources report and shall include recommendations for preconstruction protocol surveys to be conducted during established breeding seasons, construction noise monitoring and implementation of any species-specific mitigation plans (such as a Burrowing Owl Mitigation Plan) in order to comply with the FESA, MBTA, Bald and Golden Eagle Protection Act, California Fish and Game Code, and/or the ESL Regulations.

## OMCP Mitigation Framework BIO-3

This measure is a reference back to OMCP FEIR Mitigation Framework BIO-1.

## OMCP Mitigation Framework BIO-4 – Wetlands

To reduce potential direct impacts to City, state, and federally regulated wetlands, all subsequent projects developed in accordance with the Specific Plan shall be required to comply with USACE Clean Water Act Section 404 requirements and special conditions, RWQCB Clean Water Act Section 401 requirements and special conditions, CDFW Section 1602 Streambed Alteration Agreement requirements and special conditions, and the City of San Diego ESL Regulations for avoiding and minimizing impacts to wetlands or compliance with City guidelines for the wetland deviation. Achieving consistency with these regulations for impacts on wetlands and special aquatic sites would reduce potential impacts to regulated wetlands and provide compensatory mitigation (as required) to ensure no net-loss of wetland habitats.

Prior to obtaining discretionary permits for future actions implemented in accordance with the Specific Plan, a site-specific biological resources survey shall be completed in accordance with the City's Biology Guidelines. In addition, a preliminary or final jurisdictional resource delineation of the program-level areas shall be completed following the methods outlined in the USACE's 1987 Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Delineation Manual for the Arid West Region. A determination of the presence/absence and boundaries of any waters of the United States and waters of the state shall also be completed following the appropriate USACE guidance documents for determining the OHWM boundaries. The limits of any riparian habitats within the program-level analysis areas under the sole jurisdiction of CDFW shall also be delineated, as well as any special aquatic sites (excluding vernal pools) that may not meet federal criteria but are regulated by the RWQCB. Engineering design specifications based on project-level



grading and site plans shall be incorporated into the project design to minimize direct impacts to potential wetlands/waters, riparian habitats, vernal pools, etc. consistent with federal, state, and City guidelines. Any required mitigation for impacts shall be outlined in a conceptual wetland plan prepared in accordance with the City's Biology Guidelines (2018a).

Additionally, any impacts to wetlands in the City would require a deviation from the ESL wetland regulations. Under the wetland deviation process, development proposals that have wetland impacts shall be considered only pursuant to one of three options: Essential Public Projects, Economic Viability Option, or Biologically Superior Option (BSO). ESL Regulations require that impacts to wetland be avoided. Unavoidable impacts to wetlands shall be minimized to the maximum extent practicable and mitigated consistent with the City's Biology Guidelines including a no-net loss of wetland resources.

As part of any future project-specific environmental review pursuant to CEQA, all unavoidable wetlands impacts (both temporary and permanent) shall be analyzed and mitigation required in accordance with the City's Biology Guidelines; mitigation shall be based on the impacted type of wetland habitat. For the purposes of mitigation, all impacts are considered permanent to address temporal loss of wetlands functions and values. The following provides operational definitions of the four types of activities that constitute wetland mitigation under the ESL Regulations:

1. Wetland creation is an activity that results in the formation of new wetlands in an upland area. An example is excavation of uplands adjacent to existing wetlands and the establishment of native wetland vegetation.
2. Wetland restoration is an activity that re-establishes the habitat functions of a former wetland. An example is the excavation of agricultural fill from historic wetlands and the re-establishment of native wetland vegetation.
3. Wetland enhancement is an activity that improves the self-sustaining habitat functions of an existing wetland. An example is removal of exotic species from existing riparian habitat.
4. Wetland acquisition may be considered in combination with any of the three mitigation activities above.

Wetland enhancement and wetland acquisition focus on the preservation or the improvement of existing wetland habitat and function and do not result in an increase in wetland area; therefore, a net loss of wetland may result. As such, acquisition and/or enhancement of existing wetlands shall be considered as partial mitigation only for any balance of the remaining mitigation requirement after restoration or creation if wetland acreage is provided at a minimum of a 1:1 ratio.

For permanent wetland impacts that are unavoidable and minimized to the maximum extent feasible, mitigation shall consist of creation of new in-kind habitat to the fullest extent possible and at the appropriate ratios. If on-site mitigation is not feasible, then at least a portion of the mitigation must occur within the same watershed. The City's Biology Guidelines and MSCP Subarea Plan require that impacts on wetlands, including vernal pools, shall be avoided, and that a sufficient wetland buffer shall be maintained, as appropriate, to protect resource functions/values.



The project-specific biology report shall include an analysis of on-site wetlands (including City, state, and federal jurisdiction analysis) and, if present, include project alternatives that fully/substantially avoid wetland impacts. Detailed evidence supporting why there is no feasible less environmentally damaging location or alternative to avoid any impacts must be provided for City staff review, as well as a mitigation plan that specifically identifies how the project is to compensate for any unavoidable impacts.

A conceptual wetland mitigation plan (which includes identification of the mitigation site) shall be approved by City staff prior to the release of the draft environmental document. Avoidance shall be the first requirement; mitigation shall only be used for impacts clearly demonstrated to be unavoidable.

Prior to the commencement of any construction-related activities for projects impacting wetland habitat (including earthwork and fencing) the applicant shall provide evidence of the following to the Assistant Deputy Director/Environmental Designee prior to any construction activity:

1. Compliance with USACE Section 404 nationwide permit;
2. Compliance with the RWQCB Section 401 Water Quality Certification; and
3. Compliance with the CDFW Sections 1601-1603 Streambed Alteration Agreement.

### **Vernal Pools and Vernal Pool Species**

Impacts to vernal pools shall be addressed through project compliance with the VPHCP. This includes required assessments of vernal pool flora and fauna, hydrology, habitat function, and restoration potential and protocol fairy shrimp surveys, in addition to the requirements listed above. Mitigation for projects impacting vernal pools shall be consistent with the VPHCP and City of San Diego Biology Guidelines as determined by completion of a Compensatory Mitigation Plan approved by the City and Wildlife Agencies. Mitigation may include salvage of sensitive species from vernal pools to be impacted, introduction of salvaged material into restored vernal pool habitat where appropriate (e.g., same pool series) and maintenance of vernal pool habitat consistent with the VPHCP.



## 4.0 Existing Conditions

### 4.1 Program-level Area - Biological Resources

#### 4.1.1 Physical Characteristics/Setting

The 131-acre program-level area is north of the United States/Mexico international border and south of the southern terminus of Caliente Avenue, and within the OMCP area. Elevations within the program-level areas range from 100 feet above mean sea level to 510 feet above mean sea level. The program-level area is characterized mostly by mesa top and includes isolated tips of narrow finger canyons.

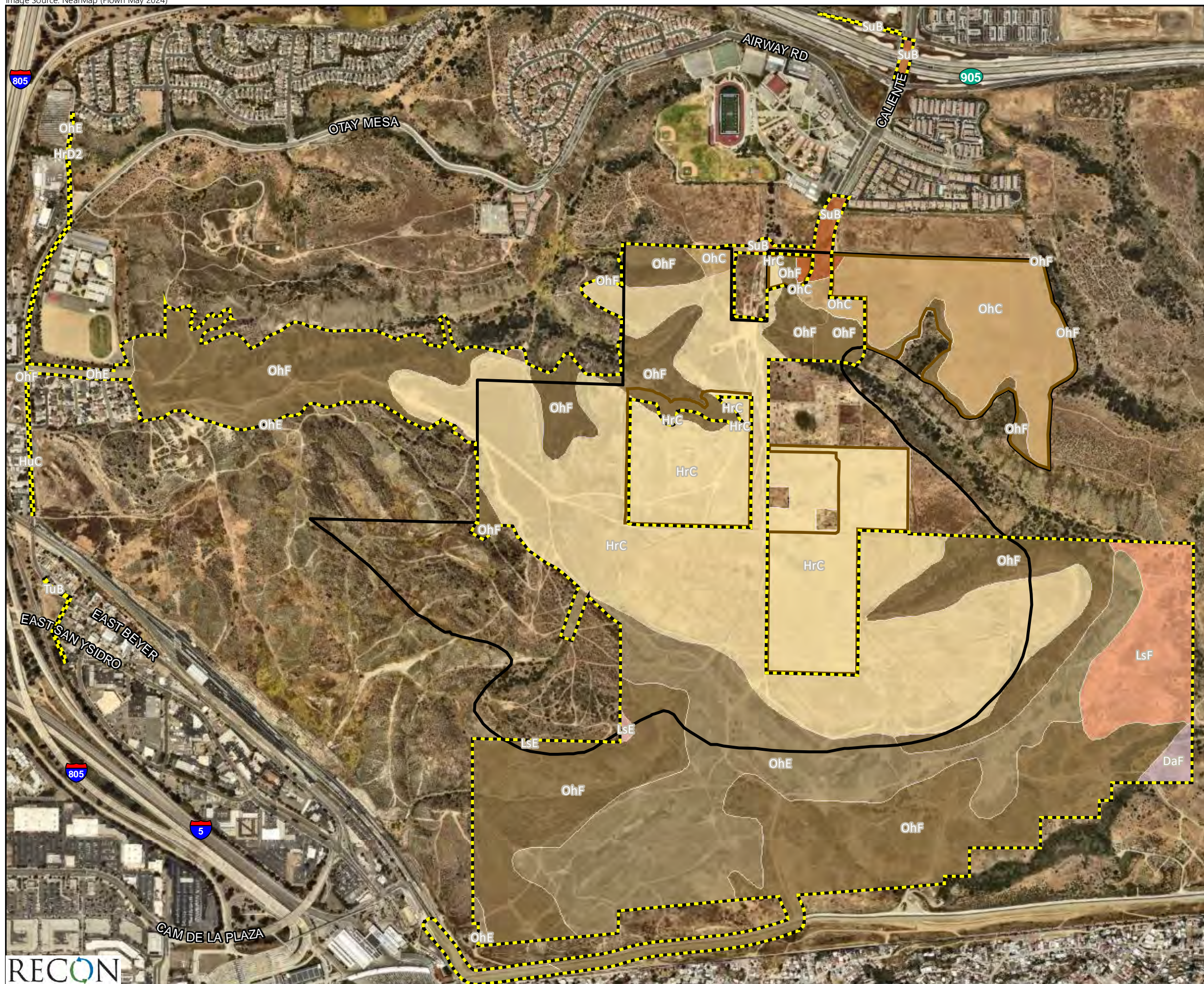
Four soil types within three series are mapped within the program-level analysis area (Figure 23), which include Huerhuero loam, 2 to 9 percent slopes; Olivenhain cobbly loam, 2 to 9 percent slopes; Olivenhain cobbly loam, 30 to 50 percent slopes; and Stockpen gravelly clay loam, 2 to 5 percent slopes. Information on the soil types is summarized from the Soil Survey for San Diego County (U.S. Department of Agriculture [USDA] 1973), the San Diego Association of Governments' 1995 geographic information system data, and the Hydric Soils of San Diego County list obtained from the Natural Resource Conservation Service (NRCS; 2020).

Huerhuero loam – This soil series consists of moderately well drained loams that have clay subsoil and were derived from sandy marine sediments. Permeability is very slow and the runoff is slow to medium. The erosion hazard is slight to moderate. The vegetation supported on these soils is primarily non-native grassland habitat. The Huerhuero loam soil type is found within the southern portions of the program-level analysis areas. This soil type is classified as a hydric soil when occurring in depressions that hold water for extended periods of time (NRCS 2020).

Olivenhain cobbly loam – This soil series consists of well drained, moderately deep to deep cobbly loams that have a very cobbly clay subsoil. This soil type formed in gravelly and cobbly alluvium. Permeability is very slow and the runoff is slow to medium. The erosion hazard is slight to moderate. This soil type can support vegetation found within Diegan coastal sage scrub habitat including California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and also support maritime succulent scrub habitat which includes species such as jojoba (*Simmondsia chinensis*), San Diego County viguiera, and laurel sumac. The Olivenhain cobbly loam soil type is found within the northern portion of the program-level analysis areas. The Olivenhain cobbly loam soil type is classified as a hydric soil when occurring in depressions that hold water for extended periods of time (NRCS 2020).

Stockpen gravelly clay loam – This soil series consists of moderately well drained, moderately deep gravelly clay loams and is mapped on marine terraces. Runoff is slow and the erosion hazard is slight. Within the soil mapping are small inclusions of Diablo soils, Huerhuero soils, and Salinas soils. The stockpen gravelly clay loam soil type is mapped within the northwestern corner of the program-level analysis areas and classified as a hydric soil when occurring in depressions that hold water for extended periods of time (NRCS 2020).





- Project-level Survey Area  
Program-level Analysis Area  
Specific Plan Boundary
- Soil Type**
- DaF | Diablo clay, 30 to 50 percent slopes
  - HrC | Huerhuero loam, 2 to 9 percent slopes
  - HrD2 | Huerhuero loam, 9 to 15 percent slopes, eroded
  - HuC | Huerhuero-Urban land complex, 2 to 9 percent slopes
  - LsE | Linne clay loam, 9 to 30 percent slopes
  - LsF | Linne clay loam, 30 to 50 percent slopes
  - OhC | Olivenhain cobbly loam, 2 to 9 percent slopes
  - OhE | Olivenhain cobbly loam, 9 to 30 percent slopes
  - OhF | Olivenhain cobbly loam, 30 to 50 percent slopes
  - SuB | Stockpen gravelly clay loam, 2 to 5 percent slopes
  - TuB | Tujunga sand, 0 to 5 percent slopes

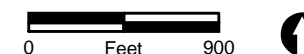


FIGURE 23  
Soil Types



## 4.1.2 Vegetation Communities

The descriptions below document the vegetation communities and land cover types anticipated within the program-level area based on vegetation mapping available through SanGIS. Vegetation communities and land cover types include Diegan coastal sage scrub, valley and foothill grassland, extensive agriculture—field/pasture, row crops, and disturbed habitat (Figure 24.1). Based on site specific mapping within the project-level areas and familiarity with the area, other native upland and wetland vegetation communities are present and much of the areas mapped as disturbed and valley and foothill grassland would be remapped as non-native grassland. However, future Specific Plan development areas would require focused site-specific biological resources surveys.

The ESL Regulations define sensitive upland vegetation communities into four tiers of sensitivity. Upland vegetation communities that are classified as Tier I (rare uplands), Tier II (uncommon uplands), or Tier III (common uplands) are considered sensitive by the City. Tier IV (other uplands) vegetation communities are not considered sensitive (City of San Diego 2018a). Table 2a provides a general summary of anticipated vegetation communities and land cover types located within the program-level areas.

Table 2a Vegetation Communities/Land Cover Types within the Program-level Areas		
Vegetation Community or Land Cover Type <sup>1</sup>	City of San Diego Tier	Approximate Acres
<b>Upland Vegetation Communities</b>		
Diegan Coastal Sage Scrub	II	15
Valley and Foothill Grassland	I or IIIB <sup>2</sup>	24
<i>Subtotal</i>		39
<b>Disturbed/Developed Vegetation Communities</b>		
Disturbed Habitat	IV	34
Extensive Agriculture- Field/pasture, Row Crops	IV	58
<i>Subtotal</i>		92
<b>Program-level Total</b>	-	<b>131</b>
<sup>1</sup> Data based on SANGIS generalized vegetation, with vegetation communities following Holland Code as modified by Oberbauer et al. 2008.		
<sup>2</sup> Project-level surveys would be required to differentiate native and non-native grasslands in accordance with City mapping guidelines.		

### 4.1.2.1 Diegan Coastal Sage Scrub

Diegan coastal sage scrub is the southern form of coastal sage scrub comprised of low-growing, aromatic, drought-deciduous soft-woody shrubs that have an average height of approximately three to four feet. Diegan coastal sage scrub is typically dominated by facultatively drought deciduous species such as California sagebrush, California buckwheat, laurel sumac, and black sage (*Salvia mellifera*). This community is typically found on low moisture-availability sites with steep, xeric slopes or clay rich soils that are slow to release stored water. These sites often include drier south- and west-facing slopes and occasionally north-facing slopes, where the community can act



as a successional phase of chaparral. Diegan coastal sage scrub is found in coastal areas from Los Angeles County south into Baja California (Oberbauer et al. 2008).

#### **4.1.2.2 Valley and Foothill Grassland**

Valley and foothill grassland is a plant community comprised of annual and/or perennial grasses and can be characterized as either native or non-native. Native and introduced annuals occur between native perennial bunch grasses, e.g., purple needlegrass, and often actually exceeding the bunch grasses in cover. Valley and foothill grassland often has a large component of non-native grasses but can be distinguished as native grasslands if the percent cover by native grass species is 10 percent or greater. Usually occurs on fine-textured (often clay) soils, moist or even waterlogged during winter, but very dry in summer. In most regions, this plant community has been mainly converted to non-native annual grasslands due to the invasion of exotic annual grasses (Oberbauer et al. 2008). Future project-level surveys would be required to differentiate native and non-native grasslands in accordance with the City's Biology Guidelines (2018a).

#### **4.1.2.3 Disturbed Habitat**

Disturbed habitats are areas that have been physically disturbed and are no longer recognizable as a native or naturalized vegetation (Oberbauer et al. 2008). These areas may continue to retain soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species. According to Oberbauer et al. (2008), disturbed habitat refers to areas that are not developed yet lack vegetation and that generally are the result of severe or repeated mechanical perturbation.

#### **4.1.2.4 Extensive Agriculture – Field/Pasture, Row Crops**

Extensive agriculture is usually a dense habitat with nearly 100 percent cover. It consists of planted fields of annual and perennial crops grown in rows that are irrigated and usually artificially seeded and maintained. Species composition may change by season and year. Due to the time that has passed since it was in agricultural use and the typical vegetation changes over time for fallow agricultural lands, these areas are conservatively expected to have converted to non-native grassland. Future biological surveys would be required to verify the vegetation community of these areas to determine whether they would remain mapped as agriculture or need to be reclassified based on site conditions at the time of future development applications.

### **4.1.3 Wildlife**

Wildlife use around the Specific Plan area through Spring Canyon is extensive, with high use areas centered around canyons and drainage courses off the mesa. To document wildlife movement patterns, a Wildlife Tracking Study was completed in 2020. Wildlife tracking surveys occurred between the boundaries of Otay Mesa Road to the west, SR-905/Otay Mesa Road to the north, Cactus Road to the east, and the U.S./Mexico border to the south (see Attachment 2; Wildlife Tracking Company 2020). As detailed in the Wildlife Tracking Study, the study area included the



entire Specific Plan area in addition to all undeveloped land east, west and south of the Specific Plan area (Figure 25.1).

As described in Section 2.1.2, the Wildlife Tracking Study evaluated wildlife movement through the entire study area with a focus on the western portion (Area A, Figure 25.2) traversed by the proposed Beyer Boulevard alignment. Within Area A, movement from Moody Canyon and associated finger canyons to the south was observed in three swale routes (see Figure 25.2).

Large mammal species identified within the study area include coyote and bobcat (Figure 25.3). Additionally, small mammal and reptile species such as California ground squirrel, shrew (*Soricidae* sp.), Bryant's (San Diego) woodrat (*Neotoma bryanti*), southern alligator lizard (*Elgaria multicarinata*), and southern pacific rattlesnake (*Crotalus helleri*); as well as medium-sized mammals including desert cottontail, and northern raccoon were also recorded within the study area (Wildlife Tracking Company 2020). Coyote and bobcat hotspots were identified west, south, and east of the program-level areas (see Figure 25).

## 4.2 Project-level Survey Area - Biological Resources

### 4.2.1 Physical Characteristics/Setting

The project-level survey area is immediately north of the United States/Mexico international border; east of I-805; south of SR-905 within the Otay Mesa community plan area. Elevations range from 200 feet above mean sea level within areas along the western end of Beyer Boulevard to 520 feet above mean sea level at mesa top locations. The project-level survey area is characterized by mesa top bounded by open space and extensive canyon systems that support sensitive biological resources and habitat areas. Drainages (natural flood channels), which are mostly unvegetated, are scattered throughout the project-level survey areas. Some wetland habitat occurs along the drainages within the west end of Beyer Boulevard and within Phase 4.

Eight soil types within five series are mapped within the project-level survey area (see Figure 23), which include Linne clay loam, 30 to 50 percent slopes; Linne clay loam, 9 to 30 percent slopes; Huerhuero loam, 2 to 9 percent slopes; Diablo clay, 30 to 50 percent, Olivenhain cobbly loam, 2 to 9 percent slopes; Olivenhain cobbly loam, 9 to 30 percent slopes; Olivenhain cobbly loam, 30 to 50 percent slopes; and Stockpen gravelly clay loam, 2 to 5 percent slopes. Information on the soil types is summarized from the Soil Survey for San Diego County (USDA 1973), the San Diego Association of Governments' 1995 geographic information system data, and the Hydric Soils of San Diego County list obtained from the NRCS (2020).

Linne clay loam – This soil series consists of well-drained, moderately deep clay loams derived from soft calcareous sandstone and shale. These soils have slopes of 30 to 50 percent. Linne soils are mainly used for range and some farm crops.

Huerhuero loam – This soil series consists of moderately well drained loams that have clay subsoil and were derived from sandy marine sediments. Permeability is very slow and the runoff is slow to medium. The erosion hazard is slight to moderate. The vegetation supported on these soils is primarily non-native grassland habitat. The Huerhuero loam soil type is found within a majority of



the mesa-top areas. This soil type is classified as a hydric soil when occurring in depressions that hold water for extended periods of time (NRCS 2020).

Diablo clay – This soil series is an upland soil comprising well-drained, moderately deep to deep clays. Derived from soft sandstone and shale. Diablo clay, 30 to 50 percent is found on steep slopes with rapid run-off and high erosion potential.

Olivenhain cobbly loam – This soil series consists of well drained, moderately deep to deep cobbly loams that have a very cobbly clay subsoil. This soil type formed in gravelly and cobbly alluvium. Permeability is very slow and the runoff is slow to medium. The erosion hazard is slight to moderate. This soil type can support vegetation found within Diegan coastal sage scrub habitat including California sagebrush, California buckwheat, and also support maritime succulent scrub habitat which includes species such as jojoba, San Diego County viguiera, and laurel sumac. The Olivenhain cobbly loam soil type is found along Beyer Boulevard and within canyon areas within and surrounding the Specific Plan area. The Olivenhain cobbly loam soil type is classified as a hydric soil when occurring in depressions that hold water for extended periods of time (NRCS 2020).

Stockpen gravelly clay loam – This soil series consists of moderately well drained, moderately deep gravelly clay loams and is mapped on marine terraces. Runoff is slow and the erosion hazard is slight. Within the soil mapping are small inclusions of Diablo soils, Huerhuero soils, and Salinas soils. The vegetation supported on these soils is primarily non-native grassland habitat and is found within the northern portion of the project-level survey area. The stockpen gravelly clay loam soil type is classified as a hydric soil when occurring in depressions that hold water for extended periods of time (NRCS 2020).

## 4.2.2 Vegetation Communities

Seventeen vegetation communities and land cover types were identified within the project-level survey area including: maritime succulent scrub, disturbed maritime succulent scrub, Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, native grassland, non-native grassland, natural flood channel, mule fat scrub, southern willow scrub, tamarisk scrub, disturbed riparian, disturbed wetland, vernal pool, vernal pool with fairy shrimp, eucalyptus woodland, disturbed land, and urban/developed land. Descriptions of each vegetation community and land cover type are provided below. Vegetation communities are shown in Figures 24.2 through 24.15 and summarized in Table 2b.

Overall vegetation community acreages associated with the project-level survey areas are reported in Table 2b including the acreage by grading phase (see Figure 10.1) and survey area acreages outside of the project-level areas. Tables 2c through 2h report the vegetation community acreages by grading phase, with acreages reported separately for land within the Furby North Preserve, the West Otay Mesa A and West Otay Mesa B conserved parcels, the Beyer Park parcel, the Candlelight and Southwind projects. Acreages are also reported separately for land within and outside of the MHPA and VPHCP/MHPA lands.



**Table 2b**  
**Vegetation Communities/Land Cover Types within the Project level Survey Areas**  
**(acres)**

Vegetation Communities/ Land Cover Types	City of San Diego Tier	Phase 1 Development	Phase 2 Development	Beyer Boulevard	Phase 4 Development	Emergency Vehicle Access Road	Off-site Improve- ments	Remaining Project-Level Survey Area <sup>1</sup>	Total Acres
<b>Upland Vegetation Communities</b>									
Maritime Succulent Scrub	I	4.72	6.51	13.88	2.38	0.87	-	178.54	206.89
Disturbed Maritime Succulent Scrub	I	5.15	1.58	1.85	0.53	-	-	55.00	64.12
Native Grassland	I	-	-	-	0.12	-	-	-	0.12
Diegan Coastal Sage Scrub	II	24.19	1.62	3.17	4.25	0.01	-	47.16	80.40
Disturbed Coastal Sage Scrub	II	8.19	-	0.62	1.29	0.83	-	5.60	16.53
Non-native Grassland	IIIB	42.14	57.26	2.48	3.81	0.16	-	66.91	172.76
<i>Subtotal Upland Vegetation Communities</i>		<i>84.38</i>	<i>66.97</i>	<i>21.99</i>	<i>12.38</i>	<i>1.87</i>	-		<i>353.22</i>
<b>Wetland Vegetation Communities</b>									
Natural Flood Channel <sup>2</sup>	-	0.14	0.08	0.05	0.18	-	-	1.51	1.97
Mule Fat Scrub	-	0.02	-	0.30	0.01	-	-	1.93	2.26
Southern Willow Scrub	-	0.32	-	-	<0.01	-	-	0.21	0.53
Tamarisk Scrub	-	-	0.01	-	-	-	-	1.72	1.73
Disturbed Riparian	-	0.12	-	-	-	-	-	-	0.12
Disturbed Wetland	-	0.30	0.04	<0.01	-	-	-	0.91	1.26
Vernal Pool	-	0.15	0.07	0.03	-	0.01	-	0.10	0.35
Vernal Pool with Fairy Shrimp	-	0.56	0.05	0.01	<0.01	-	-	1.06	1.67
<i>Subtotal Wetland Vegetation Communities</i>		<i>1.62</i>	<i>0.23</i>	<i>0.41</i>	<i>0.20</i>	<i>0.01</i>	-		<i>7.43</i>
<b>Disturbed/Developed Vegetation Communities</b>									
Eucalyptus Woodland	IV	0.13	-	-	-	-	-	1.01	1.14
Disturbed Land	IV	8.48	5.61	5.48	1.90	1.23	0.51	24.45	47.67
Urban/Developed Land	-	0.30	-	0.12	-	0.05	4.73	7.27	12.47
<i>Subtotal Disturbed/Developed Vegetation Communities</i>		<i>8.92</i>	<i>5.61</i>	<i>5.60</i>	<i>1.90</i>	<i>1.28</i>	<i>5.23</i>		<i>32.73</i>
<b>Total</b>		<b>94.92</b>	<b>72.80</b>	<b>28.01</b>	<b>14.48</b>	<b>3.16</b>	<b>5.23</b>	<b>393.38</b>	<b>611.99</b>

NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.

<sup>1</sup>Remaining project-level survey areas includes potential mitigation lands in addition to other surveyed areas associated with prior versions of the project.

<sup>2</sup>Although ephemeral drainages are not considered a vegetation community, they are captured within the City of San Diego's designation of "natural flood channel."



Table 2c  
Vegetation Communities/Land Cover Types within the Phase 1 Project level Areas<sup>1</sup>  
(acres)

Vegetation Community/ Land Cover Type	City of San Diego Tier	(acres) Outside MHPA			Inside MHPA	VPHCP 100% Conserved	Total
		Phase 1 Candlelight	Phase 1 Southwind	Phase 1 Development	Phase 1	Phase 1	
<b>Upland Vegetation Communities</b>							
Maritime Succulent Scrub	I	-	0.05	2.15	2.52	-	4.72
Disturbed Maritime Succulent Scrub	I	-	-	5.15	-	-	5.15
Native Grassland	I	-	-	-	-	-	-
Diegan Coastal Sage Scrub	II	-	-	20.57	3.62	-	24.19
Disturbed Coastal Sage Scrub	II	-	0.12	8.07	-	-	8.19
Non-native Grassland	IIIB	1.81	0.34	39.98	-	-	42.14
<i>Subtotal Upland Vegetation Communities</i>		<i>1.81</i>	<i>0.50</i>	<i>75.92</i>	<i>6.14</i>	<i>-</i>	<i>84.38</i>
<b>Wetland Vegetation Communities</b>							
Natural Flood Channel	-	0.02	-	0.06	0.06	-	0.14
Mule Fat Scrub	-	0.02	-	-	-	-	0.02
Southern Willow Scrub	-	0.32	-	-	-	-	0.32
Disturbed Riparian	-	0.12	-	-	-	-	0.12
Disturbed Wetland	-	0.23	-	0.07	-	<0.01	0.30
Vernal Pool	-	-	0.03	0.13	-	-	0.15
Vernal Pool with Fairy Shrimp	-	0.04	0.01	0.51	-	-	0.56
<i>Subtotal Wetland Vegetation Communities</i>		<i>0.76</i>	<i>0.04</i>	<i>0.76</i>	<i>0.06</i>	<i>&lt;0.01</i>	<i>1.62</i>
<b>Disturbed/Developed Vegetation Communities</b>							
Eucalyptus Woodland	IV	0.03	-	0.10	-	-	0.13
Disturbed Land	IV	0.77	0.26	7.46	-	-	8.48
Urban/Developed	IV	0.30	-	-	-	-	0.30
<i>Subtotal Disturbed/Developed Vegetation Communities</i>		<i>1.10</i>	<i>0.26</i>	<i>7.56</i>	<i>-</i>	<i>-</i>	<i>8.92</i>
<b>Phase 1 Total</b>		<b>3.68</b>	<b>0.80</b>	<b>84.24</b>	<b>6.20</b>	<b>&lt;0.01</b>	<b>94.92</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.							



Table 2d  
Vegetation Communities/Land Cover Types within the Phase 2 Project level Areas<sup>1</sup>  
(acres)

[illegible]



**Table 2e**  
**Vegetation Communities/Land Cover Types within the Beyer Boulevard Extension Project level Areas<sup>1</sup>**  
**(acres)**

Vegetation Community/ Land Cover Type	City of San Diego Tier	Outside MHPA			Inside MHPA/VPHCP	VPHCP 100% Conservation			Total
		Beyer Boulevard	Beyer Park	Project Development	Beyer Park	Furby North	West Otay Mesa A	West Otay Mesa B	
Upland Vegetation Communities									
Maritime Succulent Scrub	I	0.03	1.85	<0.01	0.85	3.12	8.03	<0.01	13.38
Disturbed Maritime Succulent Scrub	I	0.01	0.78	-	0.41	0.04	0.61		1.85
Diegan Coastal Sage Scrub	II	-	0.08	-	-	-	0.91	2.18	3.17
Disturbed Coastal Sage Scrub	II	-	0.50	-	-	-	-	0.12	0.62
Non-native Grassland	IIIB	-	-	-	-	-	1.38	1.09	2.48
Subtotal Upland Vegetation Communities		0.05	3.21	<0.01	1.25	3.16	10.92	3.40	21.99
Wetland Vegetation Communities									
Natural Flood Channel	-	-	0.05	-	-	-	0.01	0.02	0.08
Mule Fat Scrub	-	-	0.30	-	-	-	-	-	0.30
Tamarisk Scrub	-	-	-	-	-	-	-	-	0.01
Disturbed Wetland		-	-	-	-	<0.01	<0.01	-	<0.01
Vernal Pool	-	-	-	-	-	0.01	0.02	-	0.03
Vernal Pool w/fairy shrimp	-	-	-	-	-	0.01	-	-	0.01
Subtotal Wetland Vegetation Communities			0.35			0.01	0.03	0.02	0.41
Disturbed/Developed Vegetation Communities									
Disturbed Land	IV	0.09	2.59	<0.01	0.98	0.55	1.16	0.11	5.48
Urban/Developed	IV	0.07	0.05	0.01	-	-	-	-	0.12
Subtotal Disturbed/Developed Vegetation Communities		0.15	2.64	0.01	0.98	0.55	1.16	0.11	5.60
Beyer Boulevard Total	-	0.20	6.20	0.01	2.24	3.72	12.11	3.53	28.01

NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.

<sup>1</sup>This area includes only the portions of Beyer Boulevard located outside of the Specific Plan. Other portions of Beyer Boulevard are located within the Specific Plan are addressed as part of the overall development footprint.



Table 2f  
Vegetation Communities/Land Cover Types within the Phase 4 Project Survey Areas  
(acres)

Vegetation Community/Land Cover Type	City of San Diego Tier	Outside MHPA	In MHPA	In VPHCP	Total
<b>Upland Vegetation Communities</b>					
Maritime Succulent Scrub	I	1.98	0.40	-	2.38
Disturbed Maritime Succulent Scrub	I	0.53	-	-	0.53
Native Grassland	I	0.11	<0.01	-	0.12
Diegan Coastal Sage Scrub	II	4.19	0.06	0.01	4.25
Disturbed Diegan Coastal Sage Scrub	II	1.29	-	-	1.29
Non-native Grassland	IIIB	3.76	0.05	-	3.81
<i>Subtotal Upland Vegetation Communities</i>		<i>11.86</i>	<i>0.52</i>	<i>0.01</i>	<i>12.38</i>
<b>Wetland Vegetation Communities</b>					
Natural Flood Channel	-	0.17	0.01	-	0.18
Mule Fat Scrub	-	0.01	-	-	0.01
Southern Willow Scrub	-	<0.01	-	-	<0.01
Disturbed Wetland	-	-	-	-	-
Vernal Pool	-	-	-	-	-
Vernal Pool with Fairy Shrimp	-	<0.01	-	-	<0.01
<i>Subtotal Wetland Vegetation Communities</i>		<i>0.18</i>	<i>0.01</i>	<i>-</i>	<i>0.20</i>
<b>Disturbed/Developed Vegetation Communities</b>					
Disturbed Land	IV	1.88	0.02	-	1.90
<b>Caliente/Phase 4 Total</b>		<b>13.92</b>	<b>0.54</b>	<b>0.01</b>	<b>14.48</b>
NOTE: Phasing corresponds to grading phasing depicted in Figure 10.1. Totals may not add due to rounding.					



Table 2g  
Vegetation Communities/Land Cover Types within the Emergency Vehicle Access Road Project Survey Areas  
(acres)

Vegetation Community/Land Cover Type	City of San Diego Tier	Outside MHPA	In MHPA	Total
		EVA Road	EVA Road	
Upland Vegetation Communities				
Maritime Succulent Scrub	I	0.14	0.73	0.87
Diegan Coastal Sage Scrub	II	-	0.01	0.01
Disturbed Diegan Coastal Sage Scrub	II	-	0.83	0.83
Non-native Grassland	IIIB	0.05	0.11	0.16
Subtotal Upland Vegetation Communities		0.18	1.69	1.87
Wetland Vegetation Communities				
Vernal Pool	-	-	0.01	0.01
Disturbed/Developed Vegetation Communities				
Disturbed Land	IV	0.38	0.85	1.23
Urban/Developed	IV	-	0.05	0.05
Subtotal Disturbed/Developed Vegetation Communities		-	-	-
EVA Road Total		0.56	2.59	3.16
NOTE: Phasing corresponds to grading phasing depicted in Figure 10.1. Totals may not add due to rounding.				

Table 2h  
Vegetation Communities/Land Cover Types within the Off Site Improvements Project Survey Areas  
(acres)

Vegetation Community/ Land Cover Type	City of San Diego Tier	Outside MHPA				Total
		SR-905 Westbound On-ramp	Caliente Avenue over SR-905	Water/Sewer Improvements	West Beyer Boulevard	
<b>Disturbed/Developed Vegetation Communities</b>						
Disturbed Land	IV	0.04	-	0.05	0.42	0.51
Urban/Developed	IV	0.19	0.93	2.15	1.45	4.73
<b>Off-site Improvements Total</b>		<b>0.23</b>	<b>0.93</b>	<b>2.20</b>	<b>1.87</b>	<b>5.23</b>
NOTE: Phasing corresponds to grading phasing depicted in Figure 10.1. Totals may not add due to rounding.						



#### 4.2.2.1 Maritime Succulent Scrub

Maritime succulent scrub is a low (two to three feet high), open (25–75 percent cover) vegetation community dominated by drought deciduous, somewhat woody, soft-leaved shrubs with a rich mixture of stem and leaf succulents (e.g., cacti). The proportion of cacti in this community is typically highest in inland areas. Ground cover is more or less devoid of vegetation between shrubs. Growth and flowering are concentrated in the spring. Maritime succulent scrub occurs on thin, rocky, or sandy soils, often on steep slopes of coastal headlands and bluffs. This type of succulent scrub transitions to southern coastal bluff scrub on more exposed headlands and bluffs and with coastal sage scrub on better developed, moist soils away from the immediate coast (Oberbauer et al. 2008).

The maritime succulent scrub within the project-level survey area is dominated by California sagebrush, jojoba and San Diego bur-sage. Photograph 1 shows mature maritime succulent scrub within the Beyer Boulevard portion of project-level analysis area. Other species found within this habitat type include San Diego barrel cactus, cliff spurge, San Diego viguiera, Otay tarplant, and fish-hook cactus (*Mammillaria dioica*). Maritime succulent scrub occurs within Beyer Boulevard, Phases 1, 2, and 4, and within the south and southeastern survey areas (see Figures 24.2 through 24.14).

#### 4.2.2.2 Disturbed Maritime Succulent Scrub

Disturbed maritime succulent scrub habitat is also considered a Tier I (rare uplands) vegetation community by the City (2018a). It occurs throughout the project-level analysis area and within the mitigation lands, and the dominant shrub species is similar to what occurs in maritime succulent scrub, including California sagebrush and jojoba (see Figures 24.2, 24.4 through 24.5, and Figures 24.7 through 24.14). However, the density of native shrub and herbaceous species is much less in the disturbed community and there are much wider interspaces between the native shrubs. The understory in disturbed maritime succulent scrub consists of brome grasses including ripgut grass (*Bromus diandrus*) and red brome (*Bromus madritensis* ssp. *rubens*), and native species fascicled tarplant (*Deinandra fasciculata*), and ashy spike-moss (*Selaginella cinerascens*). Additionally, there is evidence of trash dumping within this vegetation community.

#### 4.2.2.3 Native Grassland

Native grassland is considered a Tier I habitat under the City's Biology Guidelines. A grassland habitat is distinguished as native grassland if it supports at least 5 percent cover by native grass species (Sawyer et al. 2009). Therefore, many native grasslands often have a large component of non-native grasses. This vegetation community usually occurs on fine-textured (often clay) soils that are moist or even waterlogged during winter, but very dry in summer.

Native grassland within the project area occurs in two small patches within the Phase 4 portion of the survey area interspersed within patches of Diegan coastal sage scrub (see Figure 24.4). The habitat is considered moderate to high quality and is dominated by purple needle grass (*Stipa* [= *Nassella*] *pulchra*) and woody melic (*Melica frutescens*). Non-native grasses were present as well, mostly *Bromus* sp., and other common plants included southern checkerbloom (*Sidalcea sparsifolia*) and padre's shooting star (*Primula clevelandii* var. *clevelandii*).





PHOTOGRAPH 1

Maritime Succulent Scrub along the Beyer Boulevard Extension,  
Facing South. Photo Date: February 18, 2020



#### 4.2.2.4 Diegan Coastal Sage Scrub

Diegan coastal sage scrub is a vegetation community considered sensitive by federal and state resource agencies, and a Tier II (uncommon uplands) by the City's Biology Guidelines (City of San Diego 2018a). Detailed descriptions of this habitat type can be found in Section 4.1.2.1.

The Diegan coastal sage scrub within the project-level survey area is dominated by California sagebrush, California buckwheat, California encelia, and laurel sumac. The vegetation height ranges from two inches to eight feet in height (Photograph 2). There is also evidence of trash dumping within this vegetation community. Diegan coastal sage scrub occurs within Phases 1, 2, and 4, and in the south and southeastern project-level survey areas (see Figures 24.2 through 24.14).

#### 4.2.2.5 Disturbed Diegan Coastal Sage Scrub

Disturbed Diegan coastal sage scrub is also considered a Tier II (uncommon uplands) vegetation community by the City's Biology Guidelines (City of San Diego 2018a). This vegetation community occurs within small patches within the project-level survey area (see Figures 24.2 through 24.8, 24.13, and 24.14). The species composition is similar to that of the undisturbed stands of Diegan coastal sage scrub. However, the overall vegetation density and height are lower, and/or there is a greater occurrence of non-native plant species including tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), and non-native grasses. Dumping of trash has also occurred within this vegetation community (Photograph 3).

#### 4.2.2.6 Non-native Grassland

Non-native grassland is considered a Tier IIIB (common uplands) by the City's Biology Guidelines (City of San Diego 2018a). Non-native grassland is a vegetation community characterized by a dense to sparse cover of annual grasses reaching to three feet high, which may include numerous native wildflowers, particularly in years of high rainfall. Typically, non-native grassland includes at least 50 percent cover of the entire herbaceous layer attributable to annual non-native grass species, although other plant species (native and non-native) may be intermixed (City of San Diego 2018a).

Non-native grassland contains species including, but not limited to, bromes (*Bromus* spp.), wild oat (*Avena* spp.), ryegrass (*Lolium* spp.), and fescues (*Vulpia* spp.). These annuals germinate with the onset of the rainy season and set seeds in the late winter or spring. With a few exceptions, the plants are dead through the summer-fall dry season, persisting as seeds.

Non-native grassland is usually found on fine-textured, usually clay soils, that range from being moist or waterlogged in the winter to being very dry during the summer and fall. Typically, the plant community is found in valleys and foothills throughout most of California (except for the north coastal and desert regions) at elevations below 3,000 to 4,000 feet (Holland 1986).





PHOTOGRAPH 2

Diegan Coastal Sage Scrub Near Vernal Pool Restoration Area,  
Facing Northeast. Photo Date: April 16, 2018



PHOTOGRAPH 3

Disturbed Diegan Coastal Sage Scrub, Facing Northeast.  
Photo Date: September 11, 2019



The non-native grassland within the project-level survey area is dominated by ripgut grass, red brome, and fascicled tarplant. Photograph 4 shows non-native grassland within Phase 1, ranging from six inches to two feet in height. This vegetation community dominates the mesa-tops within the project-level survey area and occurs within both Phases 1, 2, and 4 (see Figures 24.2 through 24.12).

#### 4.2.2.7 Natural Flood Channel

Twenty-one ephemeral drainage courses occur within the project-level survey area and are characterized as natural flood channels (see Figures 24.2 through 24.14). These resources are generally unvegetated. Where vegetation does occur, it is comprised of primarily upland non-native grasses rather than wetland vegetation (Photograph 5).

#### 4.2.2.8 Mule Fat Scrub

Mule fat scrub is considered a sensitive wetland habitat by USACE, CDFW, RWQCB, and the City. Mule fat scrub is a tall, herbaceous riparian scrub strongly dominated by mule fat (*Baccharis salicifolia*). This plant community is an early seral plant community that occurs along drainages with a fairly coarse substrate and a moderate depth to the water table. Mule fat scrub is developed and maintained from flooding or other disturbance but may change through successional processes, to willow-cottonwood or sycamore-dominated riparian forest/woodland, in the absence of disturbance. The community can also occur where dominant riparian scrubs and woodlands are disturbed or open and integrates with the willow scrub. Mule fat scrub typically occurs at elevations below 2,000 feet (Oberbauer et al. 2008).

Mule fat scrub occurs along a few drainages within the project-level survey area. This vegetation community occurs within and adjacent to natural flood channels within the Beyer Boulevard grading phase (Photograph 6 and Figure 24.2), and within the northern block of Phase 4 within the Candlelight property (see Figure 24.4). The mule fat scrub within Candlelight is noted to be man-made (City of San Diego 2018b). Mule fat scrub is also located within the eastern edge of the survey area within the Spring Canyon drainage (see Figures 24.9, 24.12, and 24.14).

#### 4.2.2.9 Southern Willow Scrub

Southern willow scrub is considered a sensitive wetland habitat by USACE, CDFW, RWQCB, and the City. Southern willow scrub is a dense riparian community dominated by broad-leafed, winter-deciduous trees such as willows (*Salix* spp.), and is often scattered with Fremont cottonwoods (*Populus fremontii*), and sycamores (*Platanus racemosa*). This plant community is typically found along major drainages but also occurs in smaller drainages. The density of the willows typically prevents a dense understory of smaller plants from growing. The representative species typically grow in loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. This community requires repeated flooding to prevent succession to community dominated by sycamores and cottonwoods (Oberbauer et al. 2008).





PHOTOGRAPH 4  
Non-Native Grassland, Facing North. Photo Date: March 15, 2019





PHOTOGRAPH 5

View of Non-wetland Water (Natural Flood Channel)  
within the Northern Portion of Phase 1, Facing East;  
Photo Date: March 15, 2018





PHOTOGRAPH 6

View of Mule Fat Scrub within the Far Western End of the Beyer Park Parcel,  
Facing South. Photo Date: February 18, 2020



PHOTOGRAPH 7

View of Southern Willow Scrub within Phase 4 (on left hand side of photo),  
Looking East. Photo Date: February 13, 2020



Southern willow scrub occurs within the Candlelight property near the existing terminus of Caliente Avenue within Phase 4 as small patches of habitat (Photograph 7 and Figure 24.4) and within the southeastern portion of the survey area within Spring Canyon (see Figure 24.12). This vegetation community is dominated by arroyo willow (*Salix lasiolepis*).

#### 4.2.2.10 Tamarisk Scrub

Tamarisk scrub occurs within the southern portion of the project-level survey area adjacent to large disturbed wetlands (see Figures 24.10 and 24.11). This vegetation community is dominated by salt cedar.

#### 4.2.2.11 Disturbed Riparian

Disturbed riparian is also considered a sensitive wetland habitat by USACE, CDFW, RWQCB, and the City. This vegetation community is dominated by salt cedar and includes very few native species, including arroyo willow and salt cedar. Two patches of disturbed riparian occur within the Candlelight property as wetlands within Caliente Avenue in Phase 1 (see Figure 24.4).

#### 4.2.2.12 Disturbed Wetlands

Fifty-five disturbed wetlands were mapped throughout the project-level survey area (see Figures 24.2 through 24.12). These disturbed wetlands are isolated. While eighteen of these ponding depressions meet the 3-parameter criteria for USACE wetlands and appear similar to vernal pools, they do not support vernal pool flora indicator species and therefore, were characterized as disturbed wetlands (Photographs 8-11). Even though they are not considered City of San Diego vernal pools, they would be considered City of San Diego wetlands.

The other 37 basins support wetland hydrology (seasonal ponding) evidenced by soil surface cracks and biotic crusts and therefore would be considered City wetlands. These ponding depressions do not, however, meet the 3-parameter USACE wetland as they either are not dominated with hydrophytic vegetation or are completely unvegetated (Photographs 12 and 13). No vernal pool flora indicator species were observed in these disturbed wetlands, including during field verification surveys conducted in spring 2023. Similar to vernal pools, these disturbed wetlands may contain San Diego fairy shrimp. San Diego fairy shrimp were detected in all but eight of the disturbed wetland basins.

#### 4.2.2.13 Vernal Pools and Vernal Pools with Fairy Shrimp

San Diego mesa claypan vernal pools are shallow, isolated, seasonal wetlands distinguished from other ephemeral wetlands in the region by characteristic plant and animal species. San Diego mesa claypan vernal pools typically support a characteristic suite of plant and animal species. Plants in vernal pools may be aquatic or may germinate following the drying of the pool. Pool sizes range from very small to moderate (up to 700 square meters).





PHOTOGRAPH 8

View of Disturbed Wetland #234 within Phase 2,  
Looking West. Photo Date: March 30, 2020





PHOTOGRAPH 9

View of Disturbed Wetland #278 within the Southeastern Portion of Phase 1,  
Looking West. Photo Date: February 27, 2020





PHOTOGRAPH 10  
View of Disturbed Wetland #314 Adjacent to a  
Project-level Trail, Looking Northwest;  
Photo Date: March 26, 2020





PHOTOGRAPH 11  
View of Disturbed Wetland #324 within Phase 2,  
Looking East. Photo Date: March 30, 2020





PHOTOGRAPH 12

View of Disturbed Wetland #VPHCP 3153 within  
Phase 1a, Looking South. Photo Date: March 26, 2020





PHOTOGRAPH 13  
View of Disturbed Wetland #60 within Phase 1  
Looking East. Photo Date: March 26, 2018



Vernal pools occur throughout the project-level survey area, most prominently on mesa tops. All 263 depressions identified within the project-level survey area as vernal pools support one or more vernal pool plant indicator species and range from high- to low-quality (Photographs 14-21; see Figures 24.2 through 24.11). High-quality pools are those characterized with plentiful amounts of wetland and vernal pool indicator plants, and these types of pools are found on the mesa top away from the access roads. A majority of the pools are located along roadsides and are regularly disturbed by off-road and passenger vehicles and, therefore, are considered to be low-quality. As a product of the vehicular traffic within the project-level survey area, many of these vernal pools also support the federally listed San Diego fairy shrimp, and three pools support the federally listed Riverside fairy shrimp (two within the project-level analysis area and one within lands proposed to be conserved for mitigation), both of which are vernal pool fauna indicator species. Additionally, some pools contained immature fairy shrimp species that could be identified to the genus of *Branchinecta*, but could not be identified to the species level. Based on these factors, all mapped vernal pools are assumed to be occupied by San Diego fairy shrimp.

#### 4.2.2.14 Eucalyptus Woodland

Eucalyptus trees are not native to the area and are considered invasive species because of their rapid growth rate, broad cover, and the allelopathic chemicals contained in their leaf litter that prevents understory species from growing. Once established, eucalyptus groves often form dense canopies that displace native habitats over time.

The eucalyptus woodland within the project-level survey area is located in patches within Phase 1. It is dominated by blue gum eucalyptus trees (*Eucalyptus globulus*) with an understory of non-native grasses, crown daisy (*Glebionis coronaria*), and tree tobacco (Photograph 22; see Figures 24.3 through 24.6).

#### 4.2.2.15 Disturbed Land

Disturbed land is composed of areas that have been previously disturbed and no longer function as a native or naturalized vegetation community. Vegetation, if present, is dominated by opportunistic non-native species. Disturbed land can also include previously graded lands such as fire breaks, off-road vehicle trails, and construction staging sites (Oberbauer et al. 2008).

The disturbed land occurs throughout the project-level survey areas and is comprised mainly of dirt access roads, roads created by off-road vehicles, and artificial earthen berms. These roads traverse primarily through the non-native grassland vegetation, but also travel through maritime succulent scrub and Diegan coastal sage scrub habitats. For the most part, these disturbed lands are unvegetated or have minimal vegetation comprised of non-native species (see Figures 24.2 through 24.14).





PHOTOGRAPH 14

View of High-Quality Vernal Pool #34 Supporting Dwarf Woollyheads (*Psilocarphus brevissimus*), a Vernal Pool Plant Indicator Species, within Phase 1, Facing Southeast. Photo Date: April 6, 2018



PHOTOGRAPH 15

View of High-Quality Vernal Pool #VPHCP 3139 within Phase 1, Looking West. Photo Date: March 30, 2020





PHOTOGRAPH 16

Close-Up View of Adobe Popcorn-flower (*Plagiobothrys acanthocarpus*), Prairie Plantain (*Plantago elongata*), and Dwarf Woollyheads (*Psilocarphus brevissimus*) within High-Quality Vernal Pool #VPHCP 3139;  
Photo Date: March 30, 2020



PHOTOGRAPH 17

View of Low-Quality Vernal Pool with San Diego Fairy Shrimp #68 within the Southern Portion of Phase 1, Looking East. Photo Date: March 26, 2018





PHOTOGRAPH 18  
View of Low-Quality Vernal Pool #239 within the  
Southern Portion of Phase 2, Looking Northwest;  
Photo Date: March 30, 2020





PHOTOGRAPH 19

View of Low-Quality Vernal Pool with San Diego Fairy Shrimp #260 within  
the Southeastern Portion of Phase 1, Looking South;  
Photo Date: February 27, 2020





PHOTOGRAPH 20

View of Low-Quality Vernal Pool with San Diego Fairy  
Shrimp #235 within Phase 2, Looking East;  
Photo Date: March 30, 2020





PHOTOGRAPH 21  
View of Low-Quality Vernal Pool within Phase 1,  
Facing South. Photo Date: April 14, 2020





PHOTOGRAPH 22  
Eucalyptus Woodland within Phase 1, Facing Southwest;  
Photo Date: September 11, 2019



#### 4.2.2.16 Urban/Developed Land

There are a few small areas mapped as urban/developed land within the very western end of Phase 1b associated with the current terminus of Beyer Boulevard (see Figure 24.2), the terminus of Caliente Avenue (see Figure 24.4), the portion of Beyer Boulevard between Otay Mesa Road and Enright Drive (see Figure 24.13), and water/sewer lines north and south of the existing Beyer Boulevard (see Figure 24.14). These areas primarily include paved streets adjacent to residential development, although there are a few patches of landscaped ornamental plants associated with the adjacent development. There are additional urban/developed land areas mapped along the SR-905 on-ramp and Caliente intersection improvement areas (see Figure 24.15).

### 4.2.3 General and Sensitive Plant Species

A total of 206 plant species were identified on the site during the general and rare plant surveys (see Attachment 4). Of these 206 species, 130 (63 percent) are considered native to California and 76 (37 percent) are considered non-native species. Of the native species identified, the following 19 species are considered sensitive: California adolphia, California box-thorn (*Lycium californicum*), San Diego bur-sage (*Ambrosia chenopodiifolia*), south coast saltscale (*Atriplex pacifica*), San Diego County viguiera, seaside cistanthe (*Cistanthe maritima*), western dichondra (*Dichondra occidentalis*), Otay tarplant, variegated dudleya (*Dudleya variegata*), San Diego button-celery, cliff spurge, snake cholla, San Diego barrel cactus, Palmer's grappleshook (*Harpagonella palmeri*), bobtail barley (*Hordeum intercedens*), decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), golden-ray pentachaeta (*Pentachaeta aurea* ssp. *aurea*), ashy spike-moss, and San Diego needlegrass (*Stipa diegoensis*) (Figures 26.1 through 26.13). Sensitive species observed or potentially occurring within the project-level survey area are discussed in Section 5.3, Sensitive Plants, of this report.

### 4.2.4 Wildlife

The wildlife species observed within the project-level survey area are typical of species found in Diegan coastal sage scrub, maritime succulent scrub, and non-native grassland vegetation communities and urban/disturbed areas in San Diego County as noted below in each subsection. A list of the wildlife species detected within the project-level survey area is included in Attachment 6. Sensitive species observed or potentially occurring within the project-level survey area are discussed in Section 5.4, Sensitive Wildlife, of this report.

As discussed in Section 4.1.3 above, the wildlife tracking study (Wildlife Tracking Institute 2020 and 2022) was a regional study to address wildlife movement and characterizes the wildlife conditions within both the program-level and project-level survey areas. Wildlife movement patterns were identified to inform the best location for a wildlife crossing (see Figures 25.1 through 25.3).

#### 4.2.4.1 Invertebrates

Three main types of invertebrates were observed within the project-level survey area: butterflies, aquatic crustacean (fairy shrimp), and bees. The distribution of butterflies is generally defined by the distribution of their larval food plants. Species common in coastal sage scrub and non-native

grassland areas are expected to be the most common butterfly species detected. The ridges within the project-level survey area provide hill-topping areas, which some butterfly species use to search for mates. Fairy shrimp are limited to the basins that pond water where they live out their lifecycle, which is approximately three weeks to four months long, depending on the species. Bees were detected throughout the site wherever flowering plants were present.

Common butterfly species observed during the surveys include cabbage white (*Pieris rappae*), Pacific Sara orangetip (*Anthocharis sara sara*), painted lady (*Vanessa cardui*), Behr's metalmark (*Apodemia mormo virgulti*), and funereal duskywing (*Erynnis funeralis*). A single Quino checkerspot butterfly was also observed within the southeastern project-level survey area in 2019. Two fairy shrimp species, San Diego fairy shrimp and Riverside fairy shrimp, were observed within the project-level survey area (Figures 27.1 through 27.10). The Riverside fairy shrimp was located within one pool during the 2019/2020 dry season sampling as well as within one seasonal basin on the Candlelight property (Alden 2013; see Figure 27.3). Honey bees (*Apis mellifera*) were commonly detected. Several Crotch's bumble bees were incidentally observed within south and southeastern survey areas conducted in 2024 (Figures 27.6, 27.9, and 27.11).

#### 4.2.4.2 Amphibians

Most amphibians require moisture for at least a portion of their lifecycle, with many requiring a permanent water source for habitat and reproduction. Terrestrial amphibians have adapted to more arid conditions and are not completely dependent on a perennial or standing source of water. These species avoid desiccation by burrowing beneath the soil or leaf litter during the day and during the dry season.

Three amphibian species were detected during spring field surveys near vernal pools and other wetland features and include western spadefoot (*Spea hammondi*), southern California toad (*Anaxyrus boreas halophilus*), and Baja California treefrog (*Pseudacris hypochondriaca*). Locations of sensitive western spadefoot are shown on Figure 27.1 through 27.11.

#### 4.2.4.3 Reptiles

The diversity and abundance of reptile species vary with habitat type. Many reptiles are restricted to certain plant communities and soil types, although some of these species would also forage in adjacent communities. Other species are more ubiquitous, using a variety of vegetation types for foraging and shelter.

Twelve reptile species were observed, including six lizards: coast horned lizard (*Phrynosoma blainvillii*), western fence lizard (*Sceloporus occidentalis*), granite spiny lizard (*Sceloporus orcutti*), common side-blotched lizard (*Uta stansburiana*), orange-throated whiptail (*Aspidoscelis hyperythra*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*); and six snake species: southern Pacific rattlesnake (*Crotalus oreganus helleri*), red diamond rattlesnake (*Crotalus ruber*), California nightsnake (*Hypsiglena ochrorhyncha nuchalata*), California kingsnake (*Lampropeltis getula californiae*), San Diego gopher snake (*Pituophis catenifer annectens*), and two-striped gartersnake. Locations of sensitive reptiles consisting of coast horned lizard, orange-throated whiptail, red



diamond rattlesnake, and two-striped gartersnake are shown on Figures 27.1 through Figure 27.7 and Figure 27.10.

#### 4.2.4.4 Birds

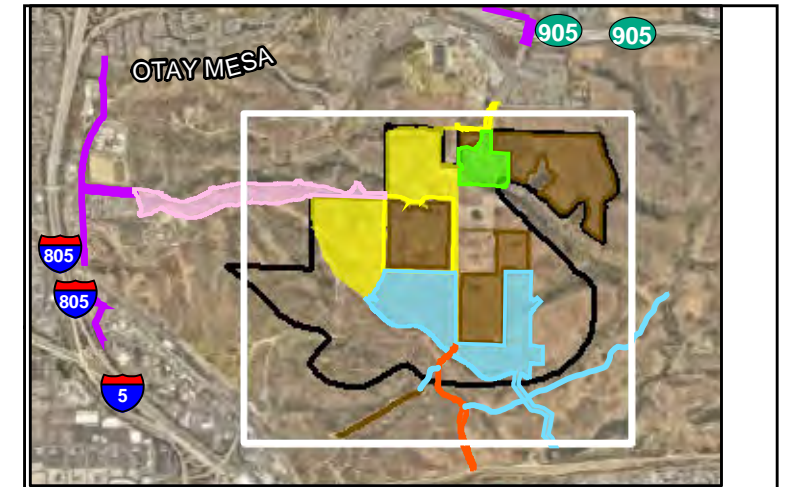
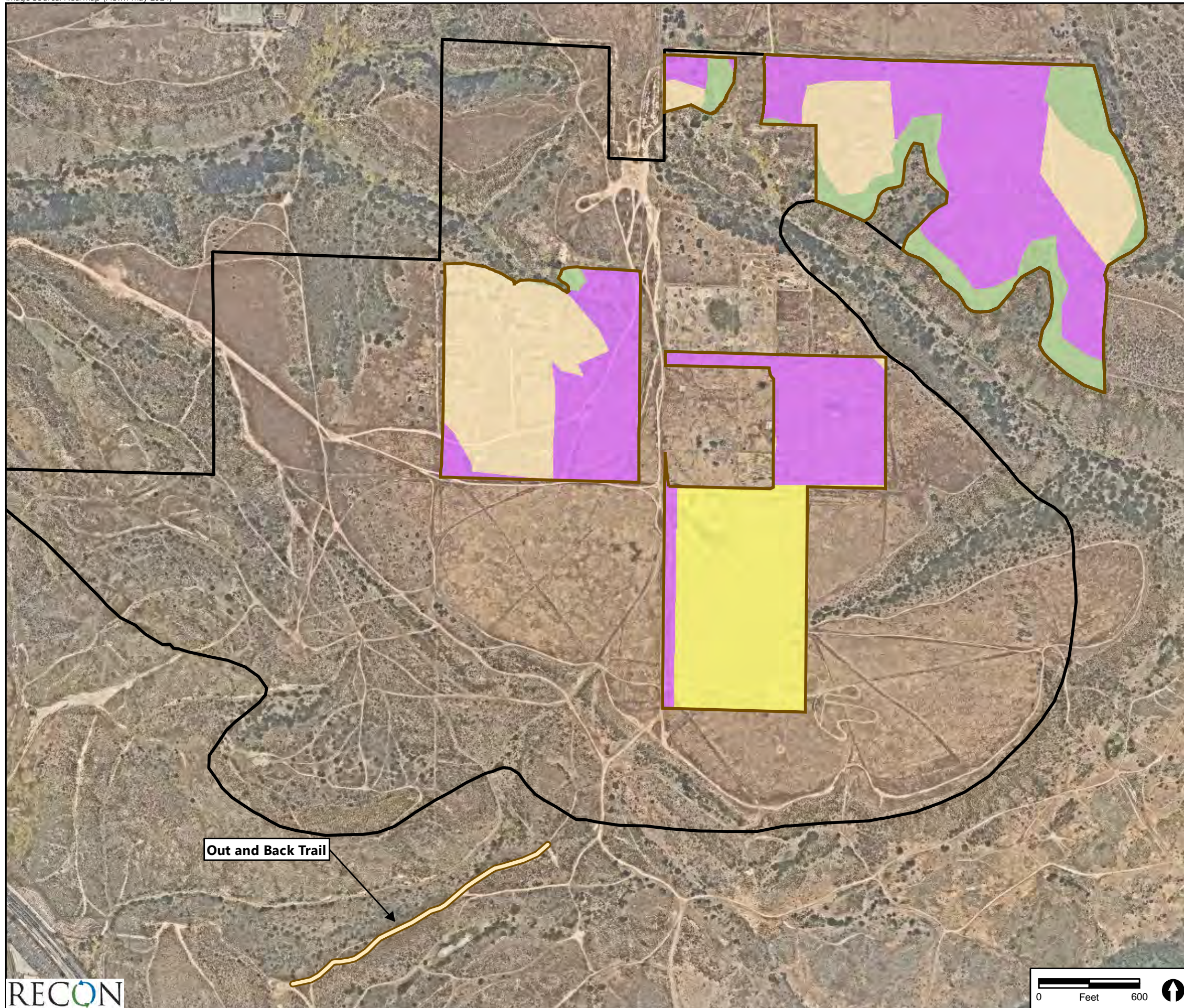
The diversity of bird species varies with respect to the character, quality, and diversity of vegetation communities present on a site. High-quality vegetation communities typically support a moderate to high variety of bird species. The scrub and woodland habitats provide foraging and shelter opportunities for a wide variety of bird species. Disturbed and developed lands are used by bird species adapted to urban settings.

Seventy-two species of bird were observed including Anna's hummingbird (*Calypte anna*), California towhee (*Melospiza crissalis*), spotted towhee (*Pipilo maculatus*), northern mockingbird (*Mimus polyglottos polyglottos*), Bewick's wren (*Thyromanes bewickii*), bushtit (*Psaltirparus minimus melanurus*), lesser goldfinch (*Spinus psaltria hesperophilus*), and western meadowlark (*Sturnella neglecta*). Sensitive bird species observed on-site are shown on Figures 27.1 through 27.13.

#### 4.2.4.5 Mammals

Twenty-one species of mammal were observed including desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), northern raccoon (*Procyon lotor*), common gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), and coyote (*Canis latrans*). Less common, but also detected mammal species included the San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) and San Diego desert woodrat (*Neotoma lepida intermedia*). Sensitive mammals observed on-site are shown in Figure 27.2 through 27.6 and Figure 27.8.





Project-level Phasing		Beyer Boulevard
Phase 1		Off-site Improvements
Phase 2		Emergency Vehicle Access Road
Phase 4		Program-level Phases 3-7

Specific Plan Boundary

Program-level Analysis Phasing

Phases 3-7

Vegetation Communities\*

- Disturbed Habitat
- Extensive Agriculture - Field/Pasture, Row Crops
- Diegan Coastal Sage Scrub
- Valley and Foothill Grassland

\*Vegetation types based on SanGIS vegetation data, site specific surveys required to verify resources

FIGURE 24.1  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types -  
Program-level



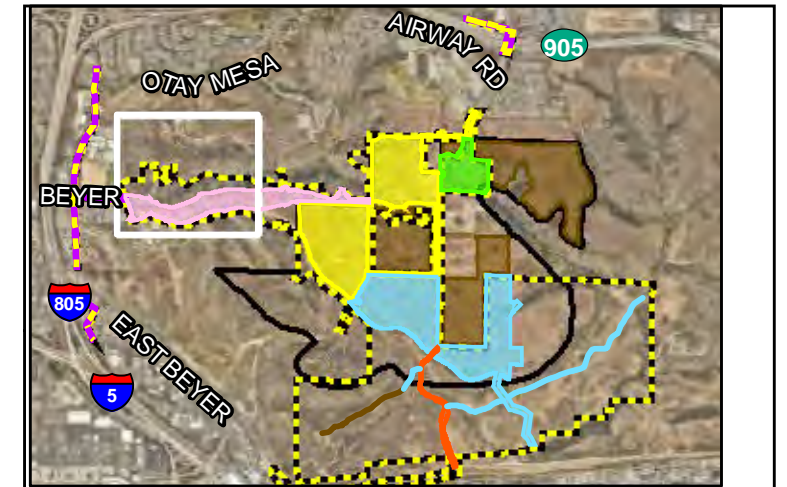
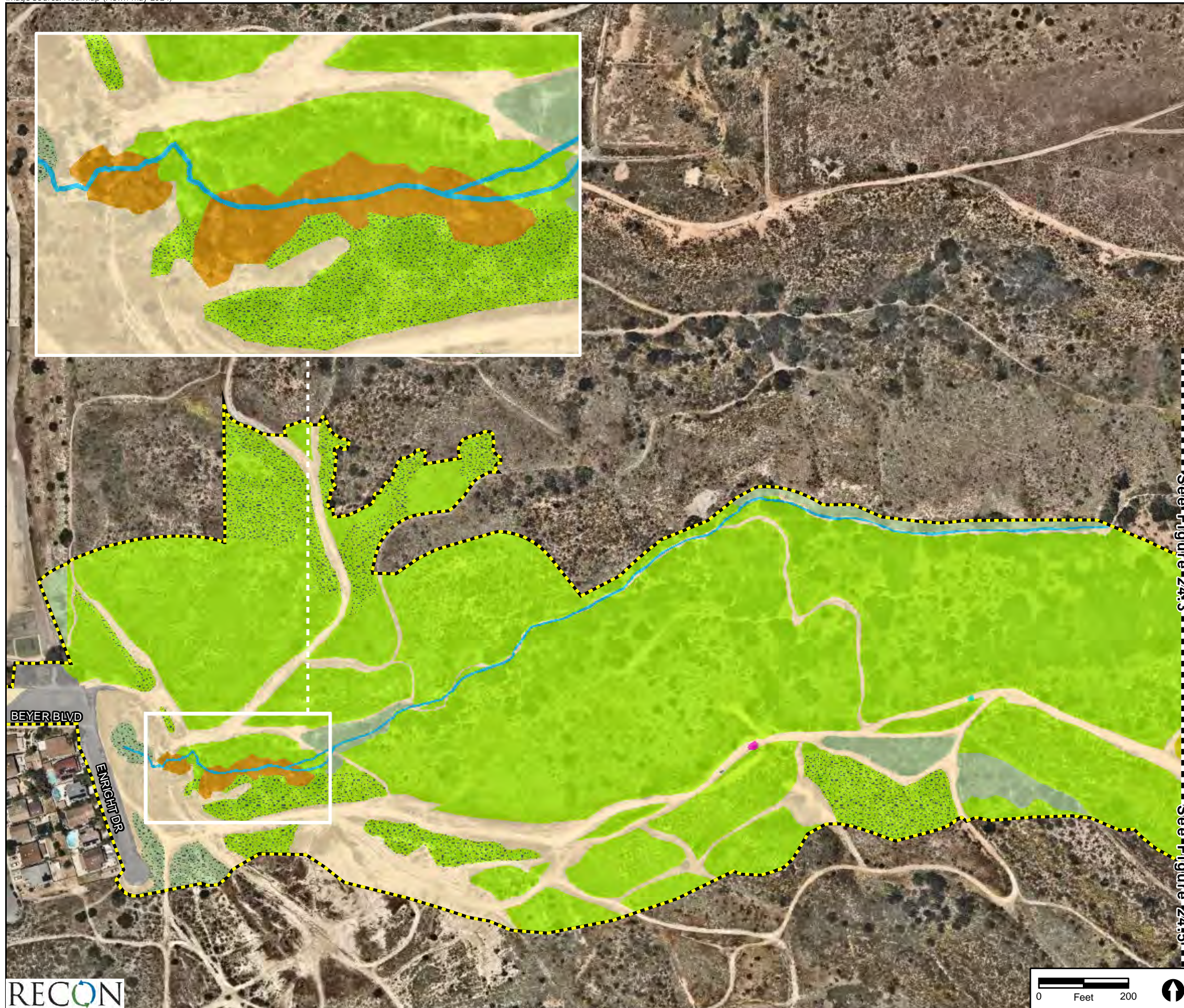
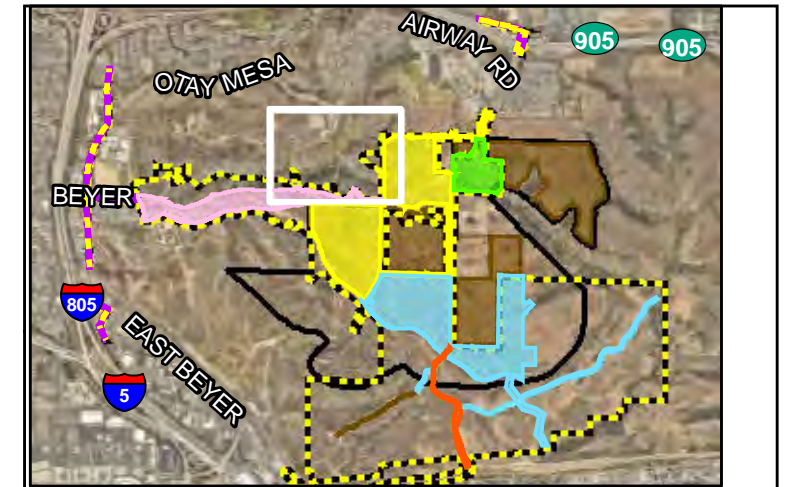
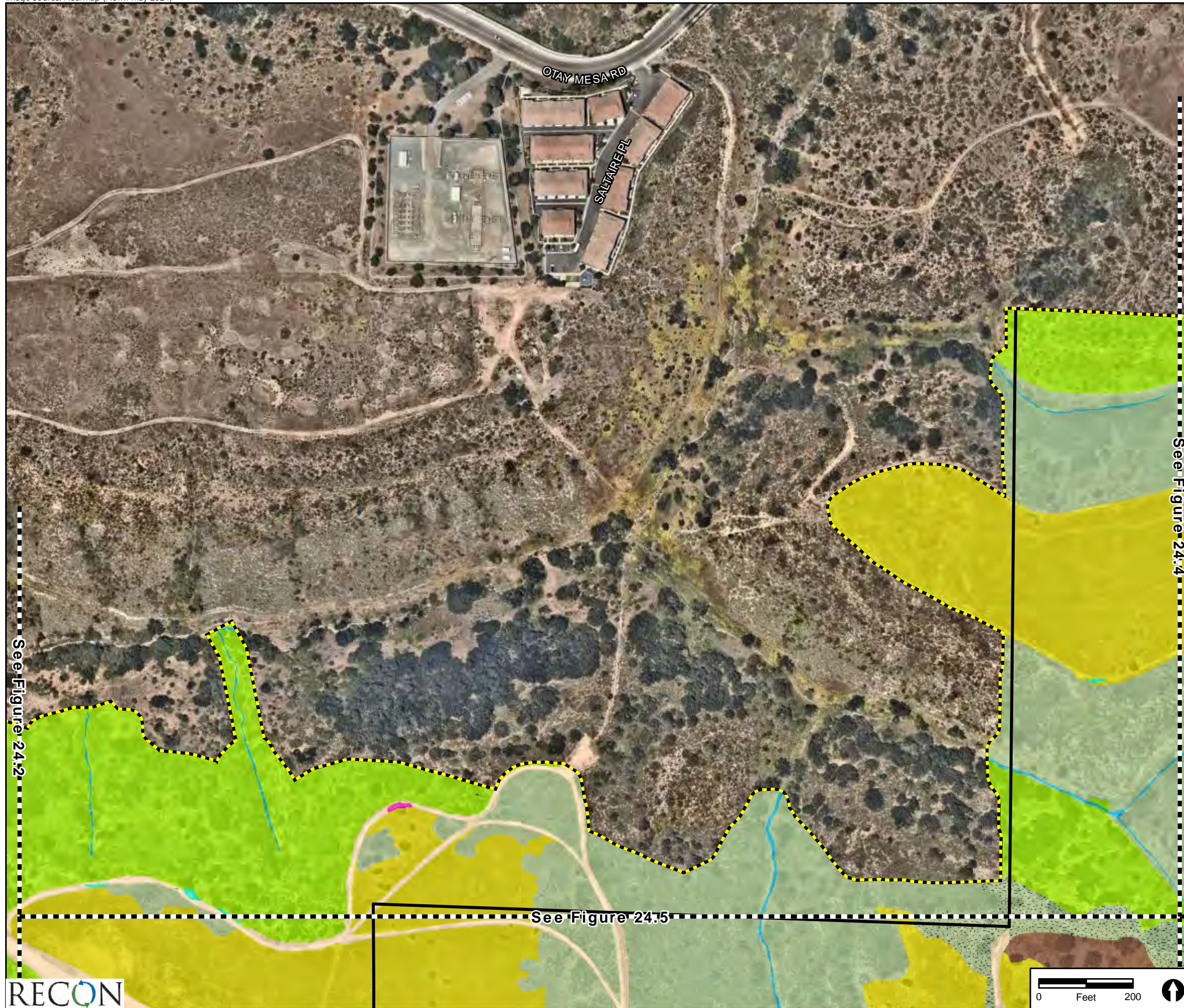


FIGURE 24.2  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types





Project-level Phasing	
Phase 1	Beyer Boulevard
Phase 2	Off-site Improvements
Phase 4	Emergency Vehicle Access Road
	Program-level Phases 3-7

 Specific Plan Boundary

 Project-level Survey Area

### Southwest Village Vegetation

 Diegan Coastal Sage Scrub

 Disturbed Diegan Coastal Sage Scrub

 Eucalyptus Woodland

 Maritime Succulent Scrub

 Non-native Grassland

 Vernal Pool

 Vernal Pool with Fairy Shrimp

 Disturbed Wetland

 Natural Flood Channel

 Disturbed Land

FIGURE 24.3  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types



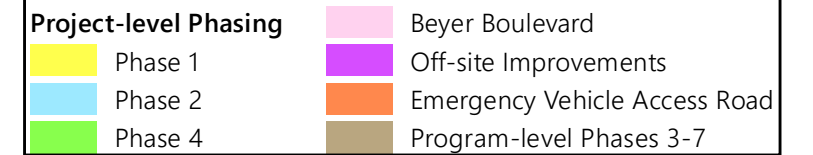
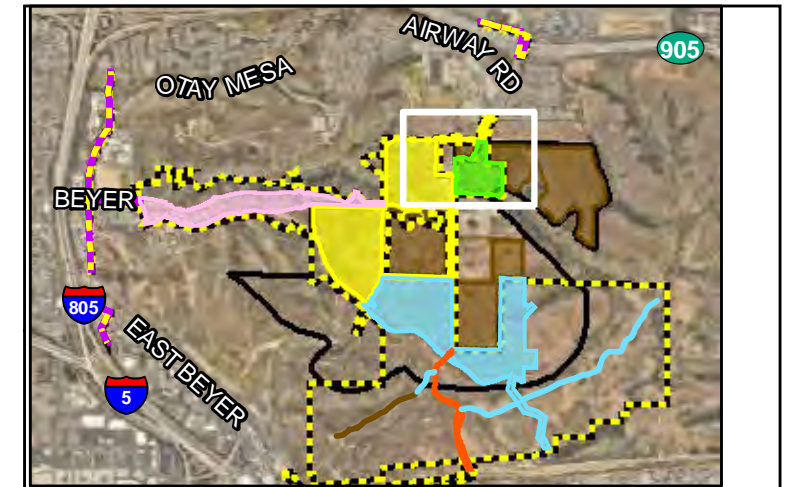
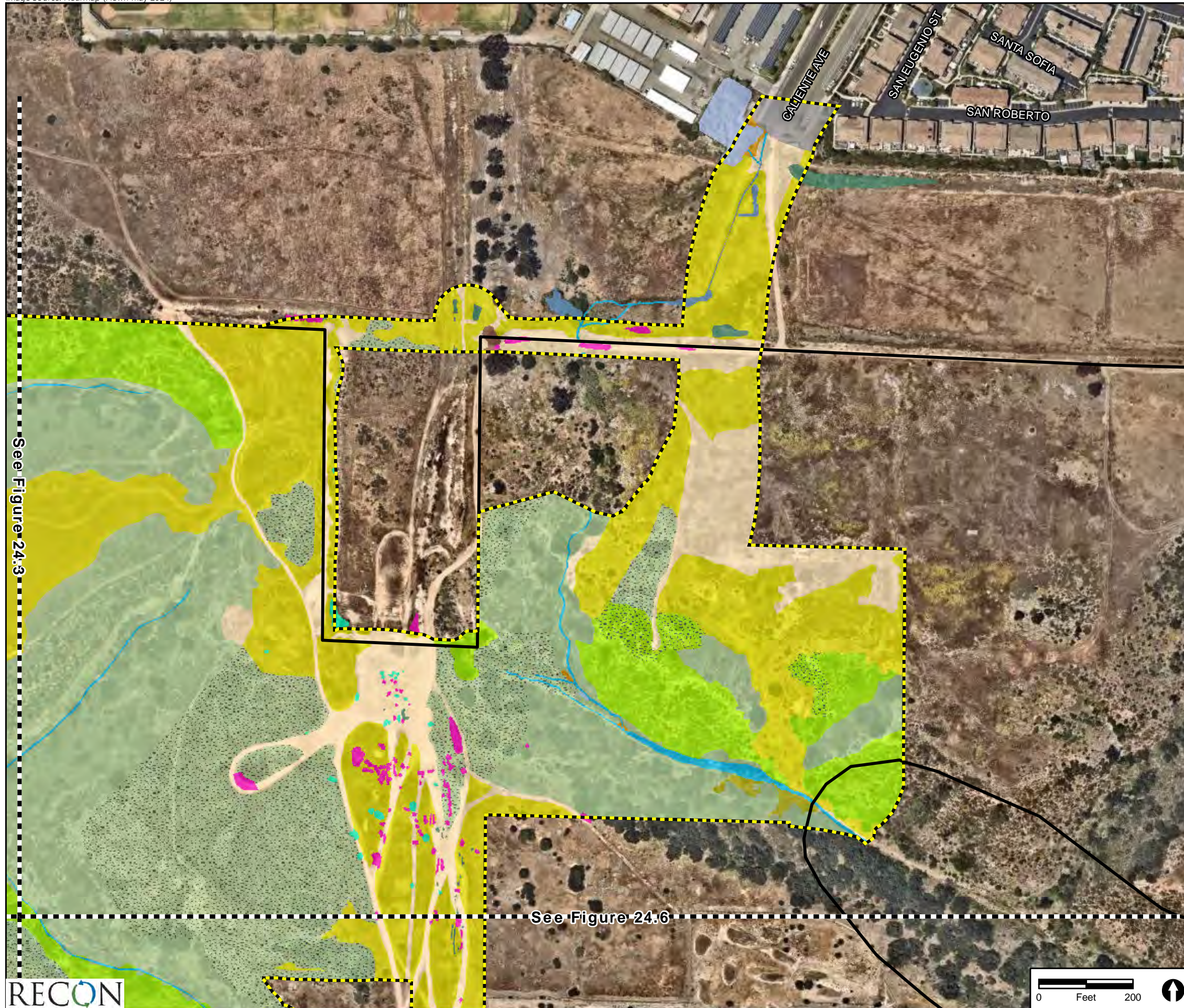


FIGURE 24.4  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types



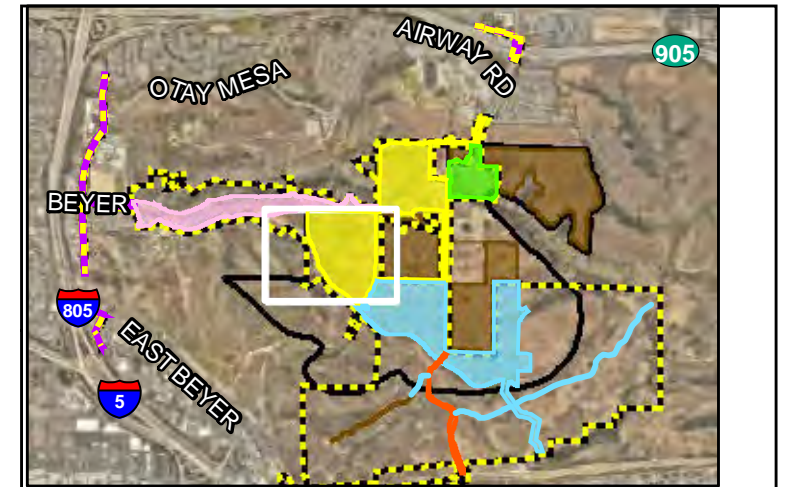
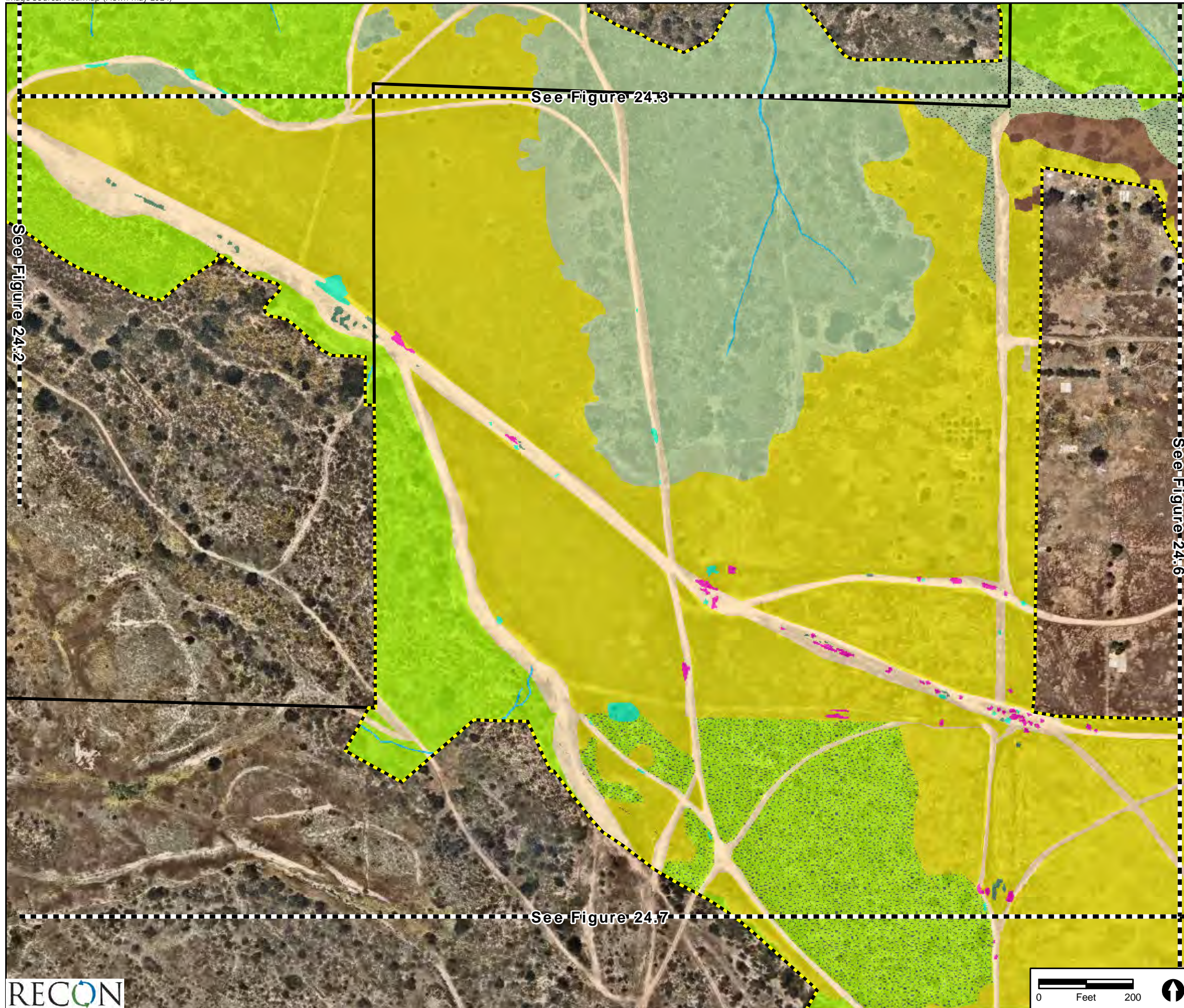


FIGURE 24.5  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types



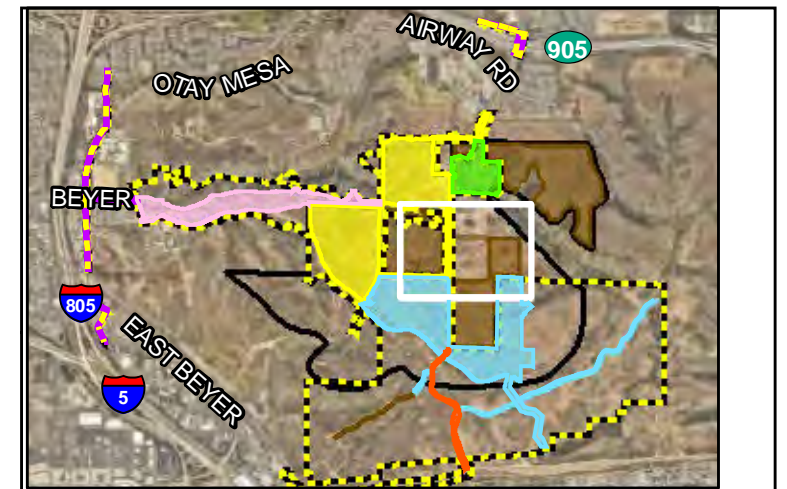
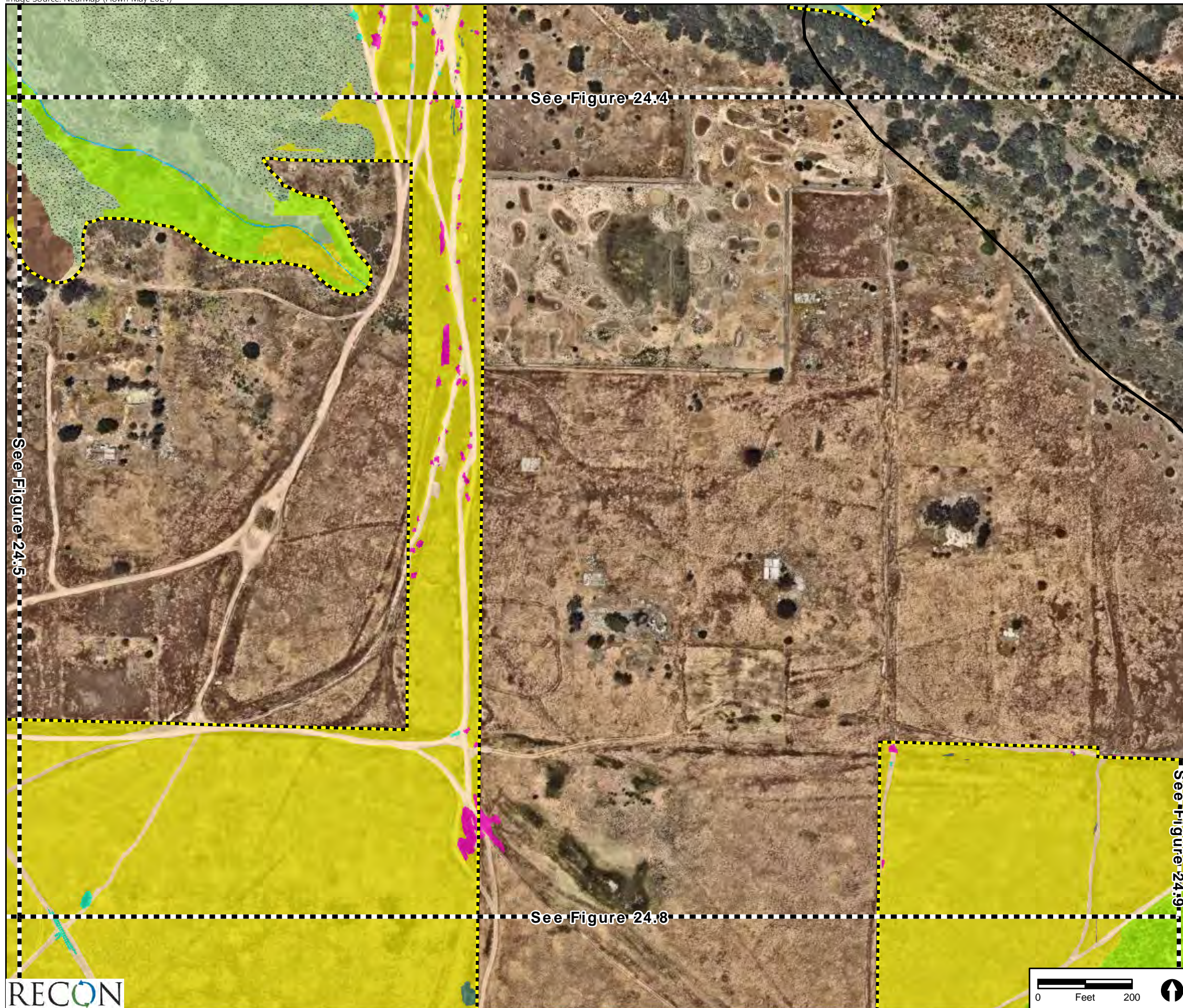
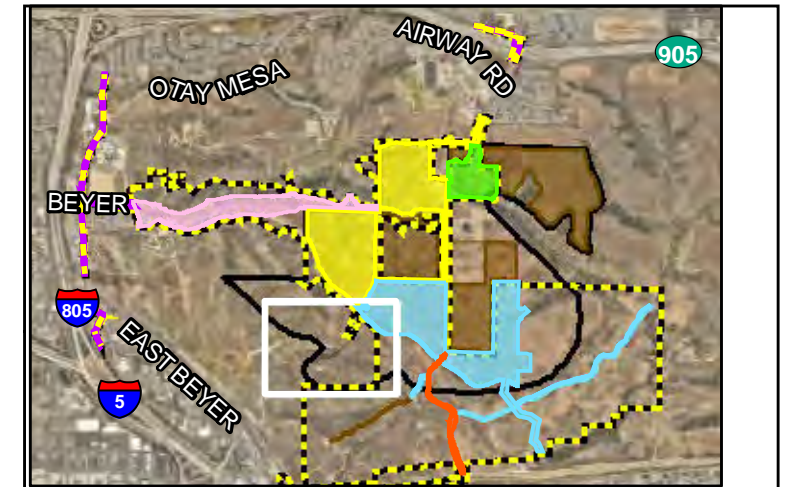
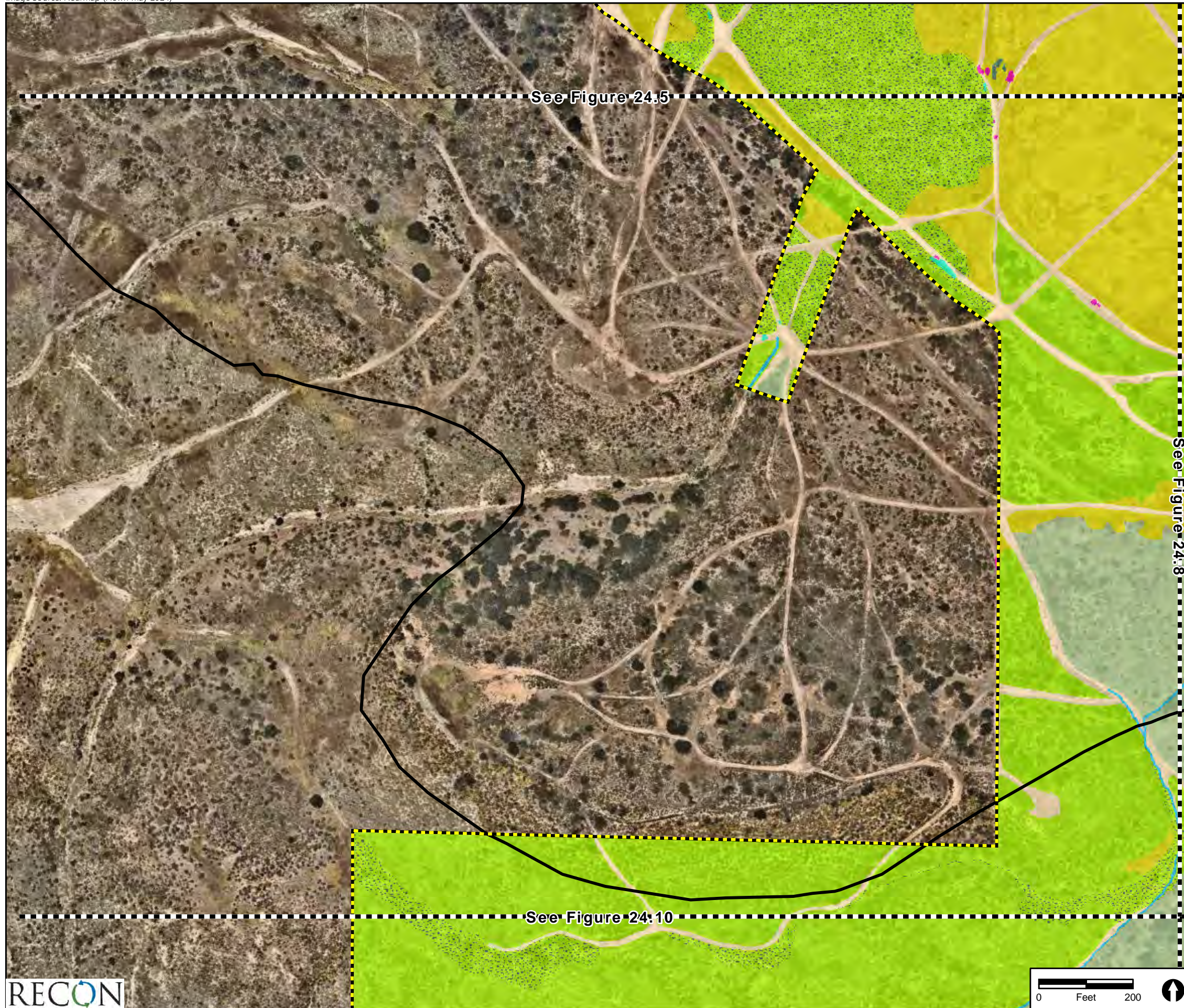


FIGURE 24.6  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types





Project-level Phasing	
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<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> Phase 4	<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> Emergency Vehicle Access Road
	<span style="display:inline-block; width:15px; height:15px; background-color:brown; border:1px solid black;"></span> Program-level Phases 3-7

<span style="display:inline-block; width:15px; height:15px; border:1px solid black;"></span>	Specific Plan Boundary
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Southwest Village Vegetation	
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<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span>	Maritime Succulent Scrub
<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black; background-image: radial-gradient(black 1px, transparent 0); background-size: 4px 4px;"></span>	Disturbed Maritime Succulent Scrub
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<span style="display:inline-block; width:15px; height:15px; background-color:teal; border:1px solid black;"></span>	Disturbed Wetland
<span style="display:inline-block; width:15px; height:15px; background-color:blue; border:1px solid black;"></span>	Natural Flood Channel
<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span>	Disturbed Land

FIGURE 24.7  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types



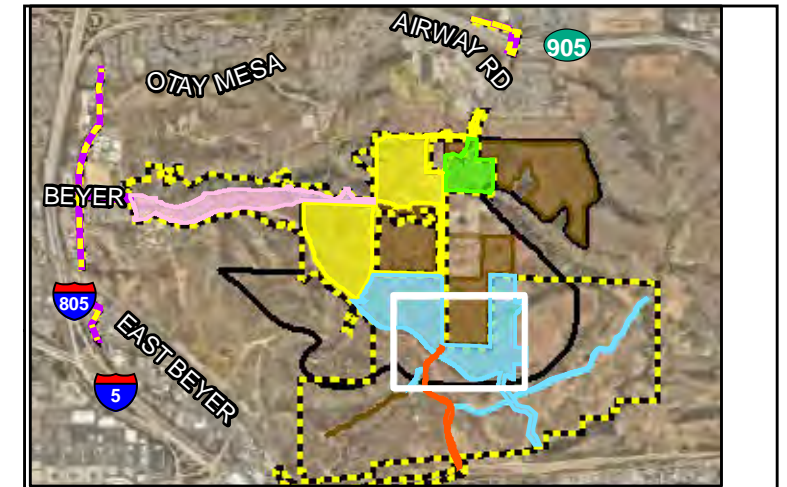
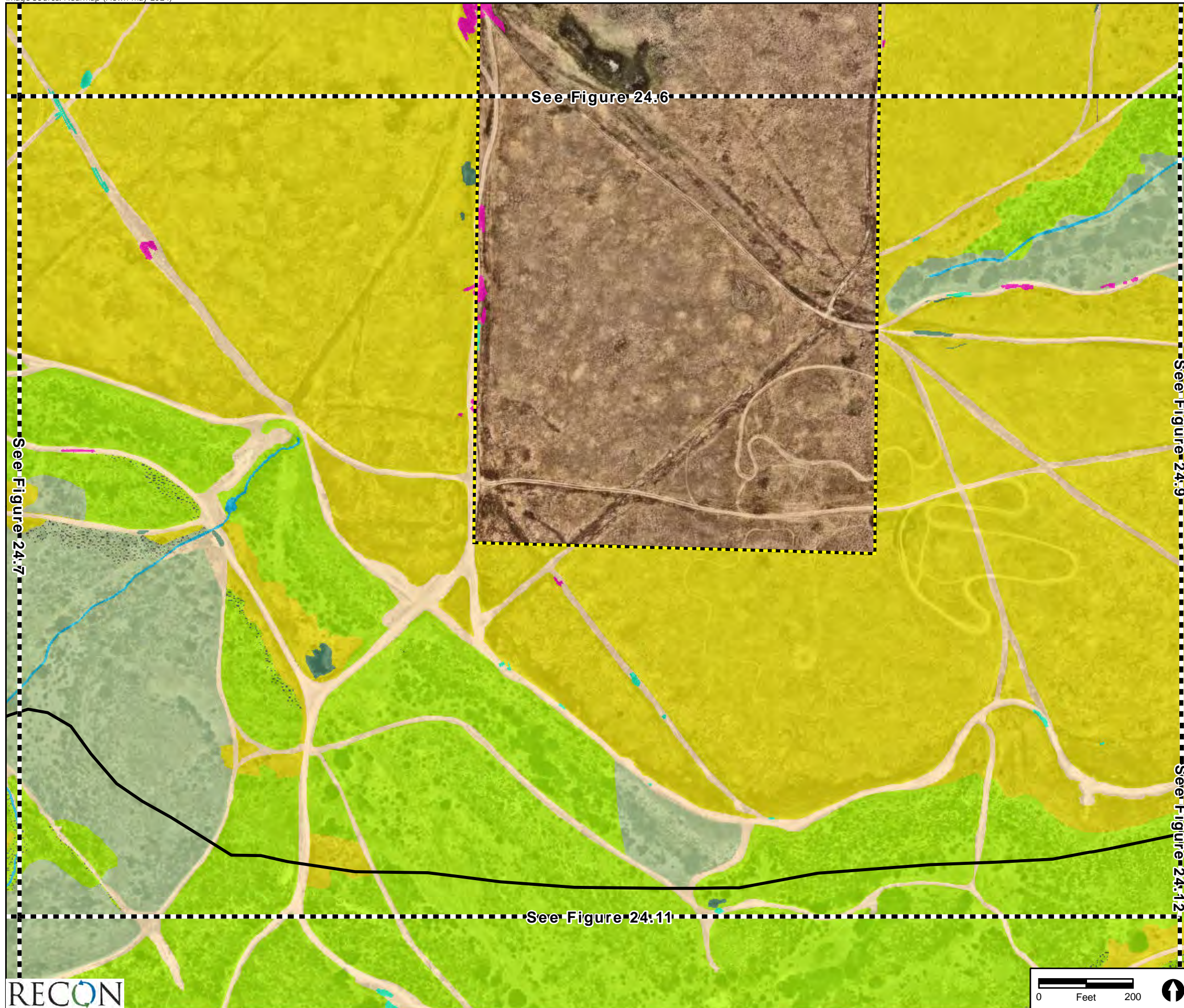
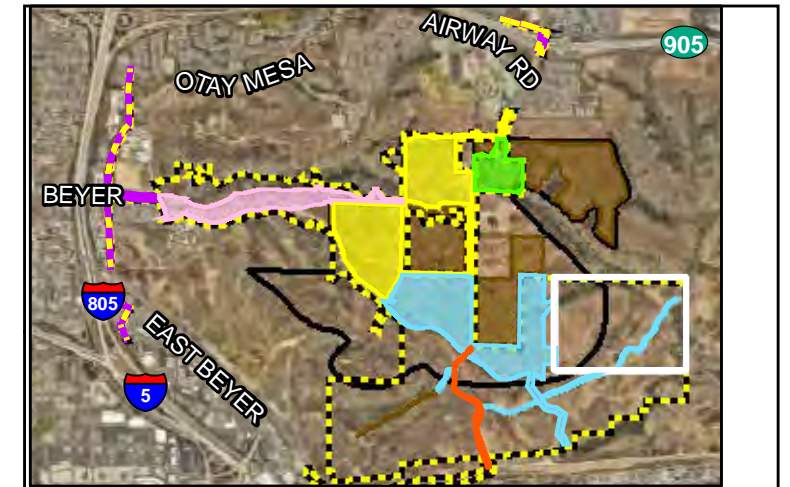
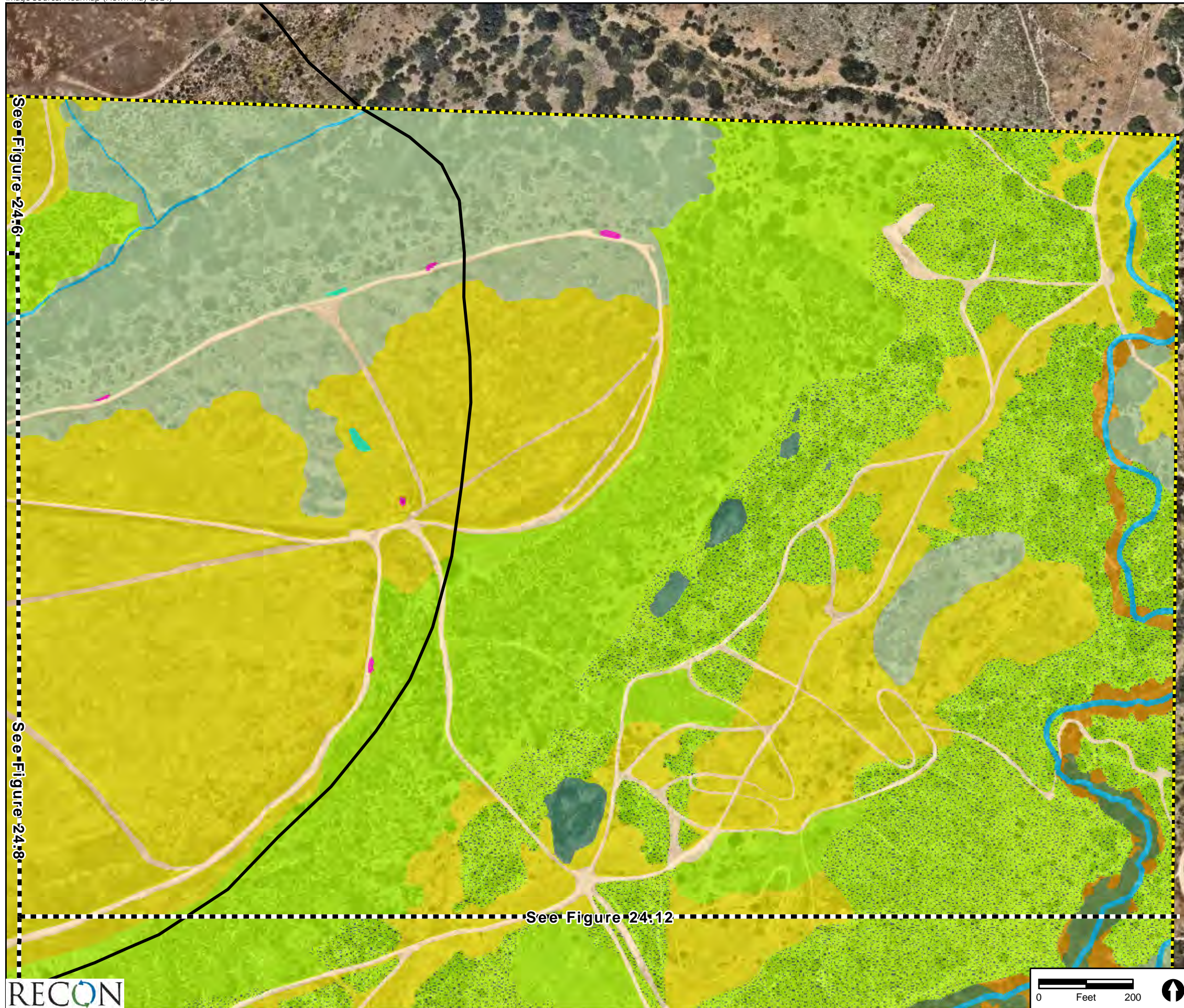


FIGURE 24.8  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types





Project-level Phasing	
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	<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Survey Area
- Southwest Village Vegetation**
- Diegan Coastal Sage Scrub
- Maritime Succulent Scrub
- Disturbed Maritime Succulent Scrub
- Mule Fat Scrub
- Tamarisk Scrub
- Non-native Grassland
- Vernal Pool
- Vernal Pool with Fairy Shrimp
- Disturbed Wetland
- Natural Flood Channel
- Disturbed Land

FIGURE 24.9  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types



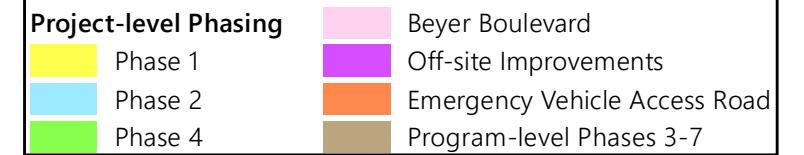
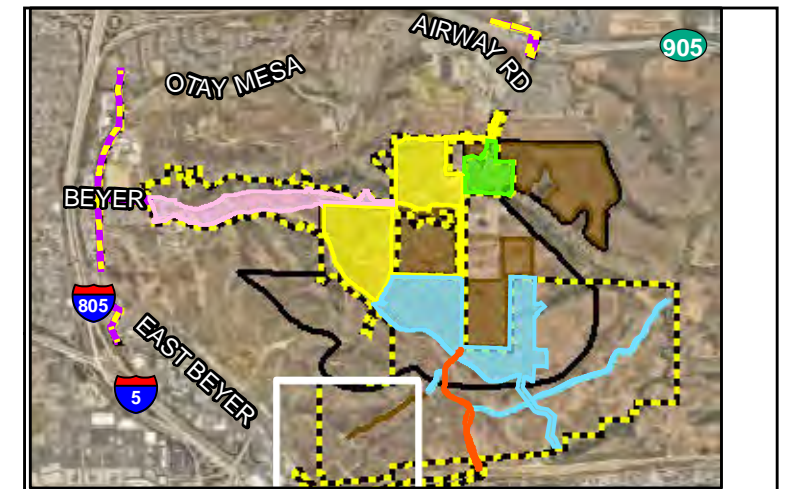
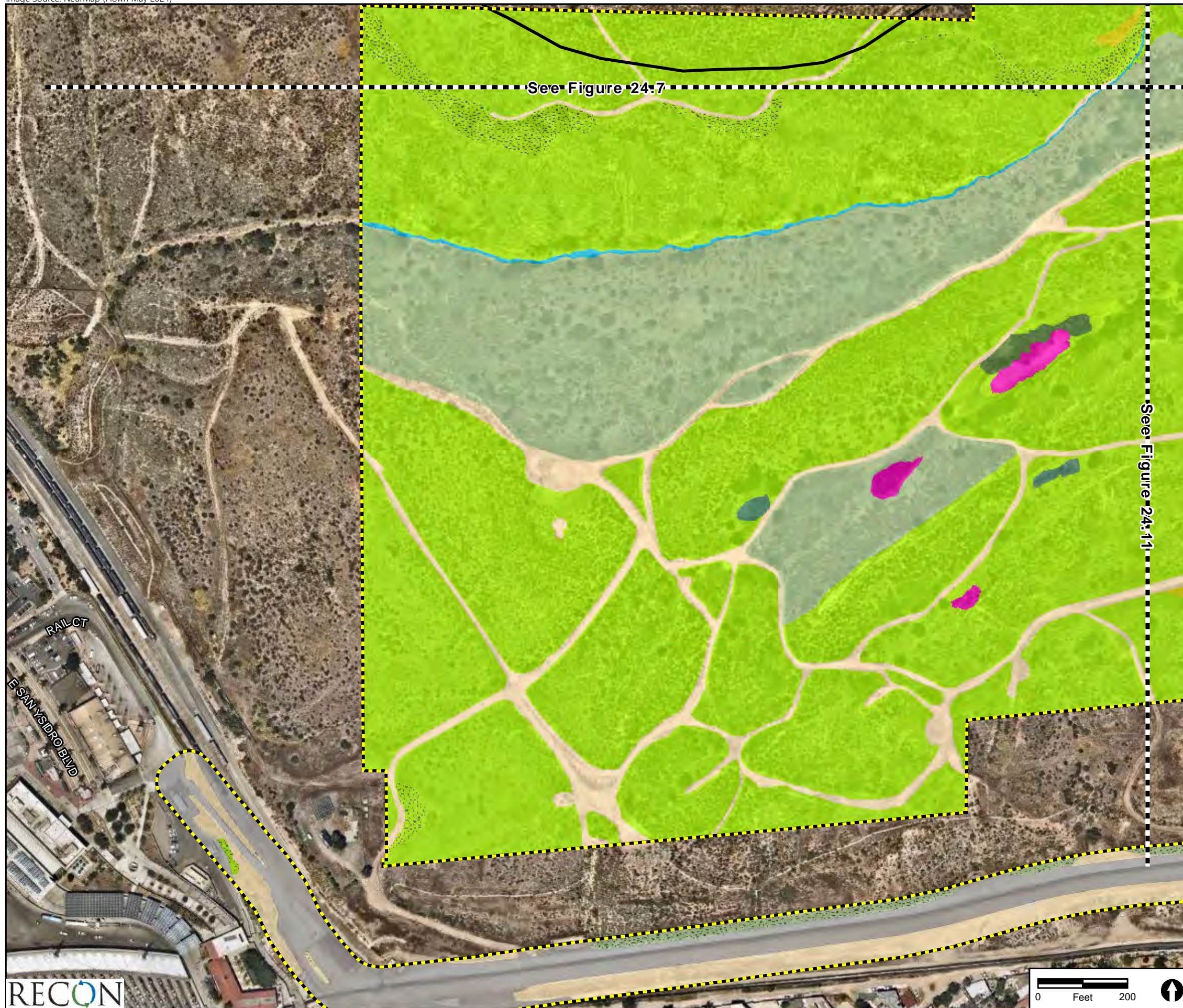
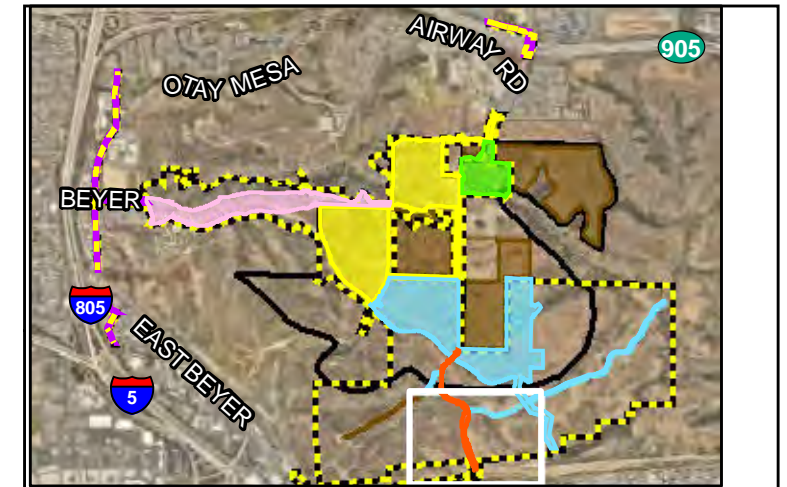
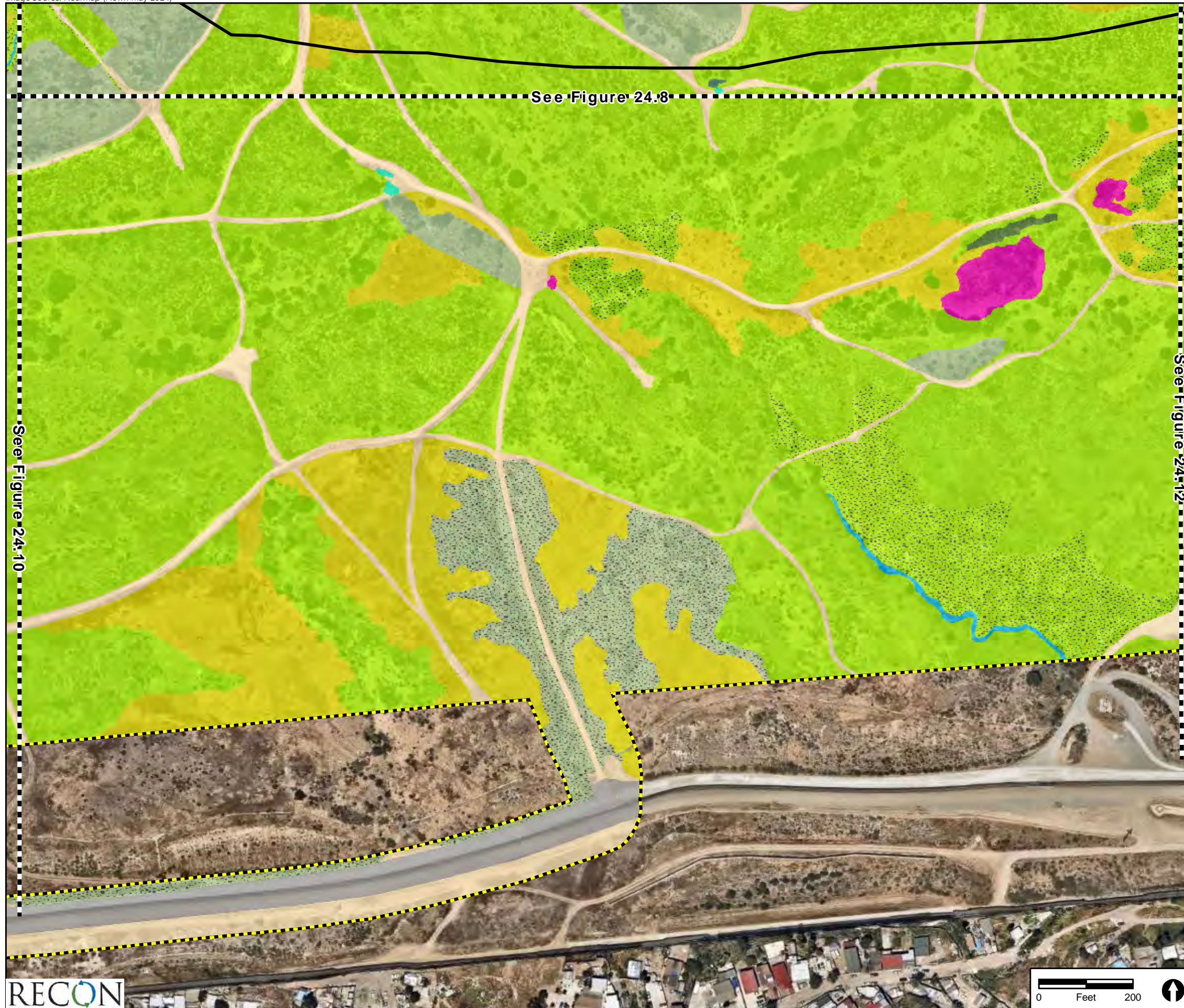


FIGURE 24.10  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types



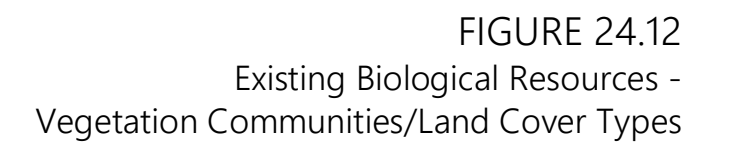


Project-level Phasing		Beyer Boulevard
Phase 1		
Phase 2		
Phase 4		
	Off-site Improvements	
	Emergency Vehicle Access Road	
	Program-level Phases 3-7	

- Specific Plan Boundary
- Project-level Survey Area
- Southwest Village Vegetation**
- Diegan Coastal Sage Scrub
- Disturbed Diegan Coastal Sage Scrub
- Maritime Succulent Scrub
- Disturbed Maritime Succulent Scrub
- Tamarisk Scrub
- Non-native Grassland
- Vernal Pool
- Vernal Pool with Fairy Shrimp
- Disturbed Wetland
- Natural Flood Channel
- Disturbed Land
- Urban/Developed Land

FIGURE 24.11  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types







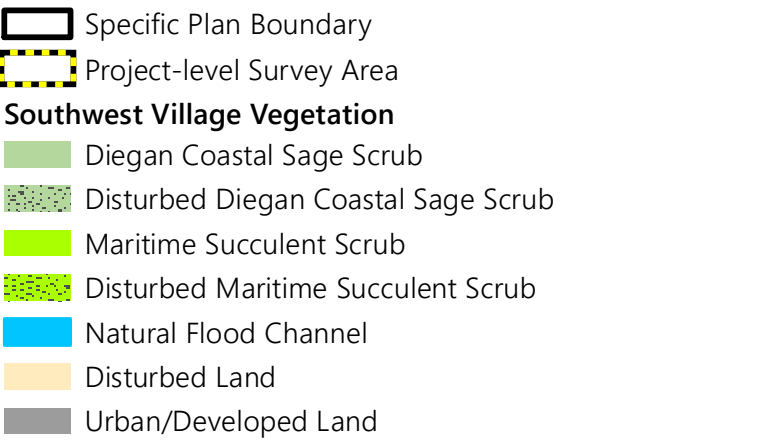
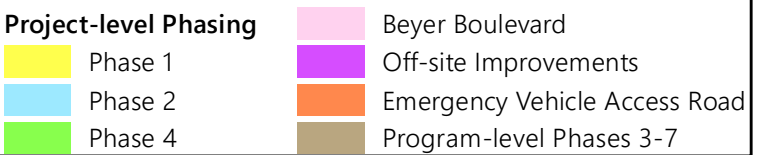
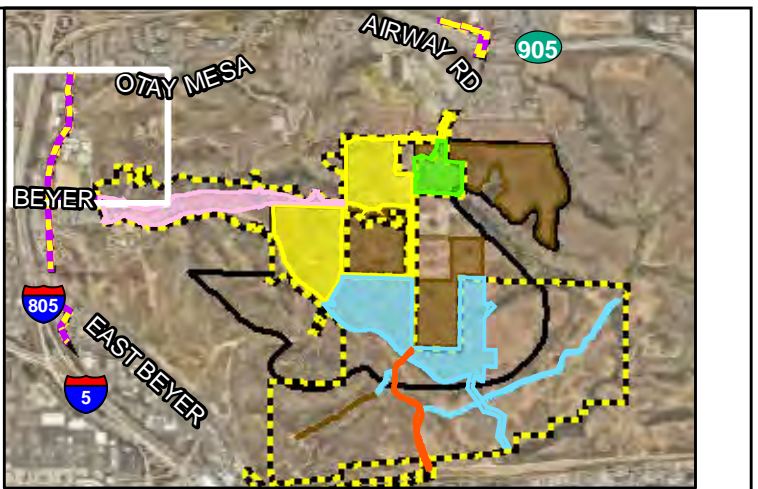
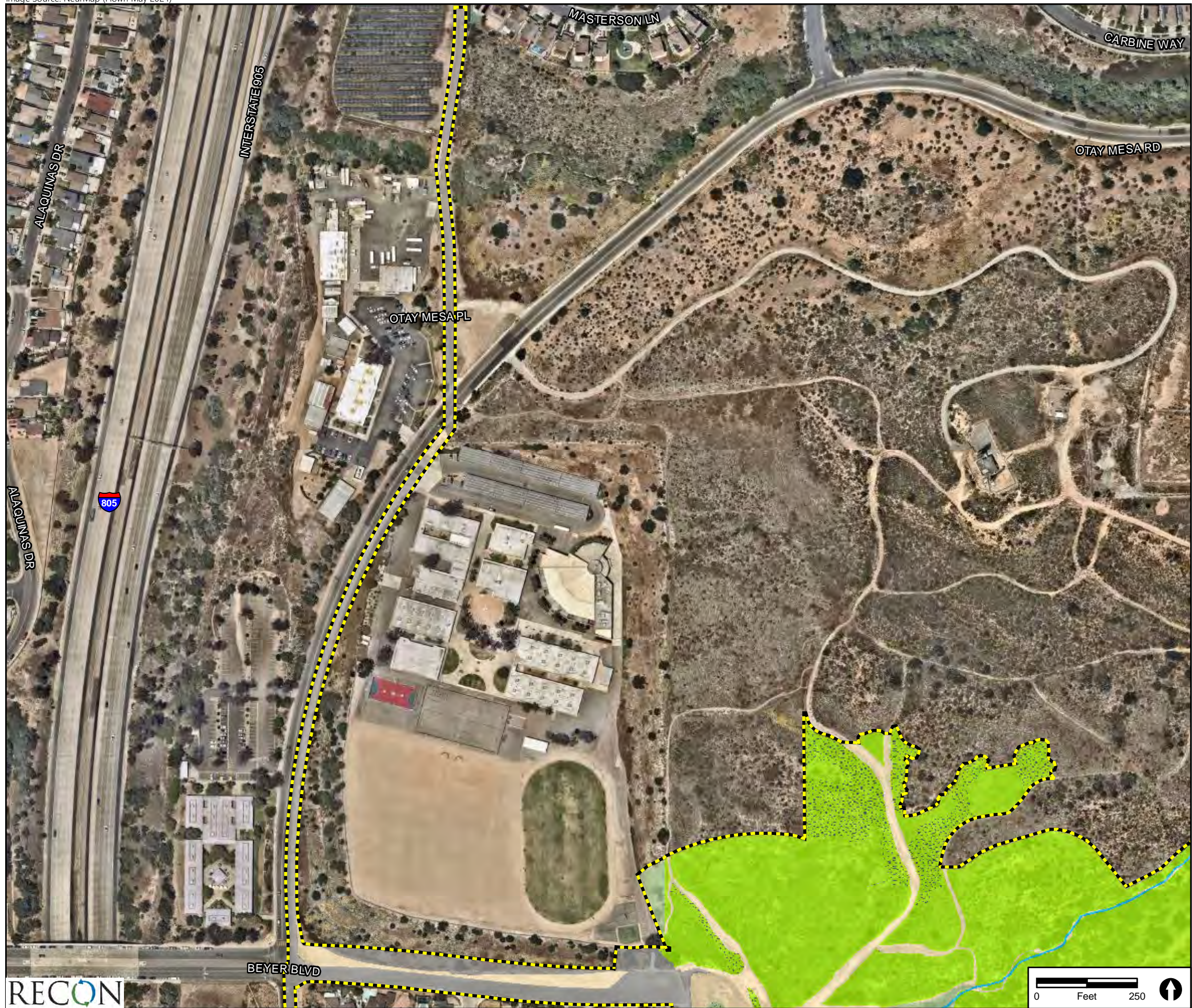


FIGURE 24.13  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types



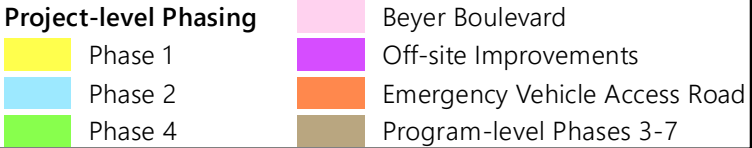
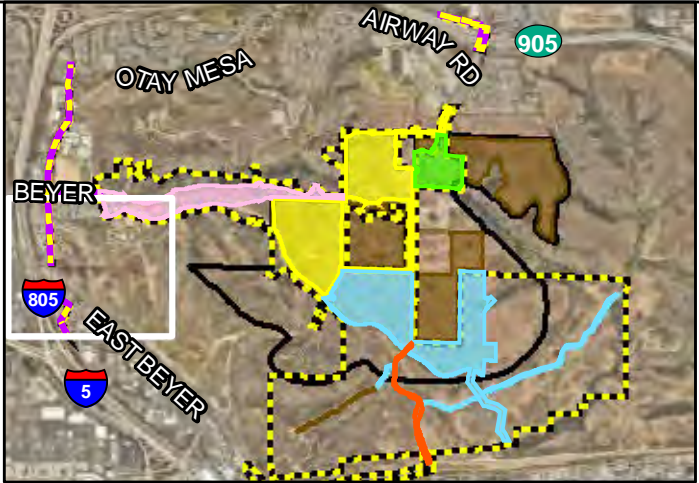
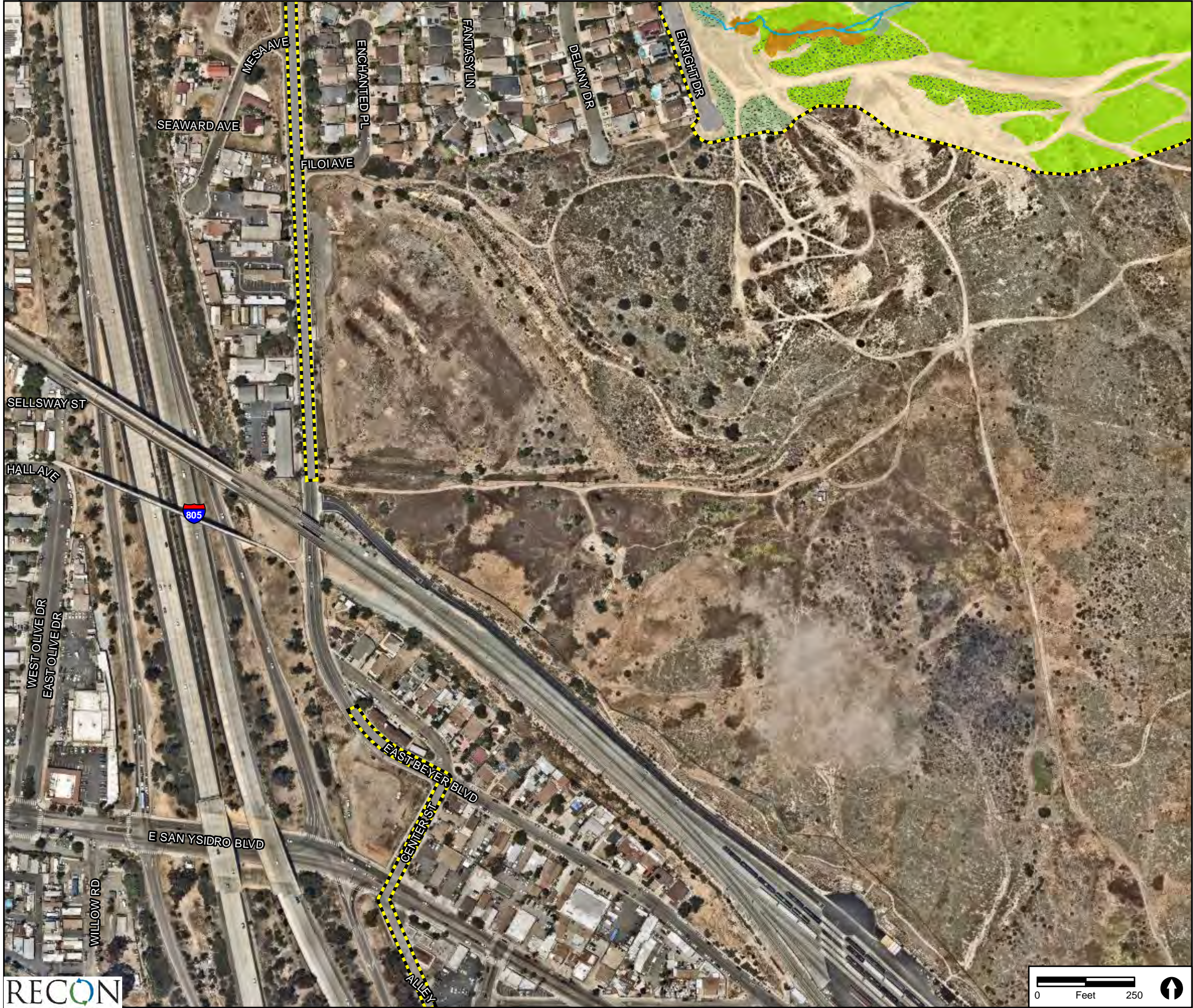


FIGURE 24.14  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types



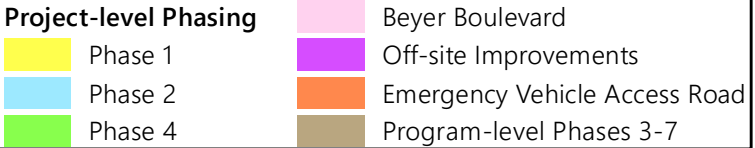
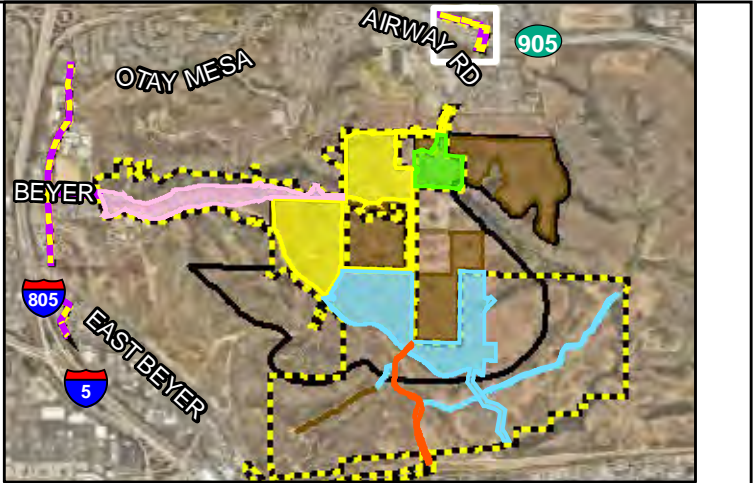
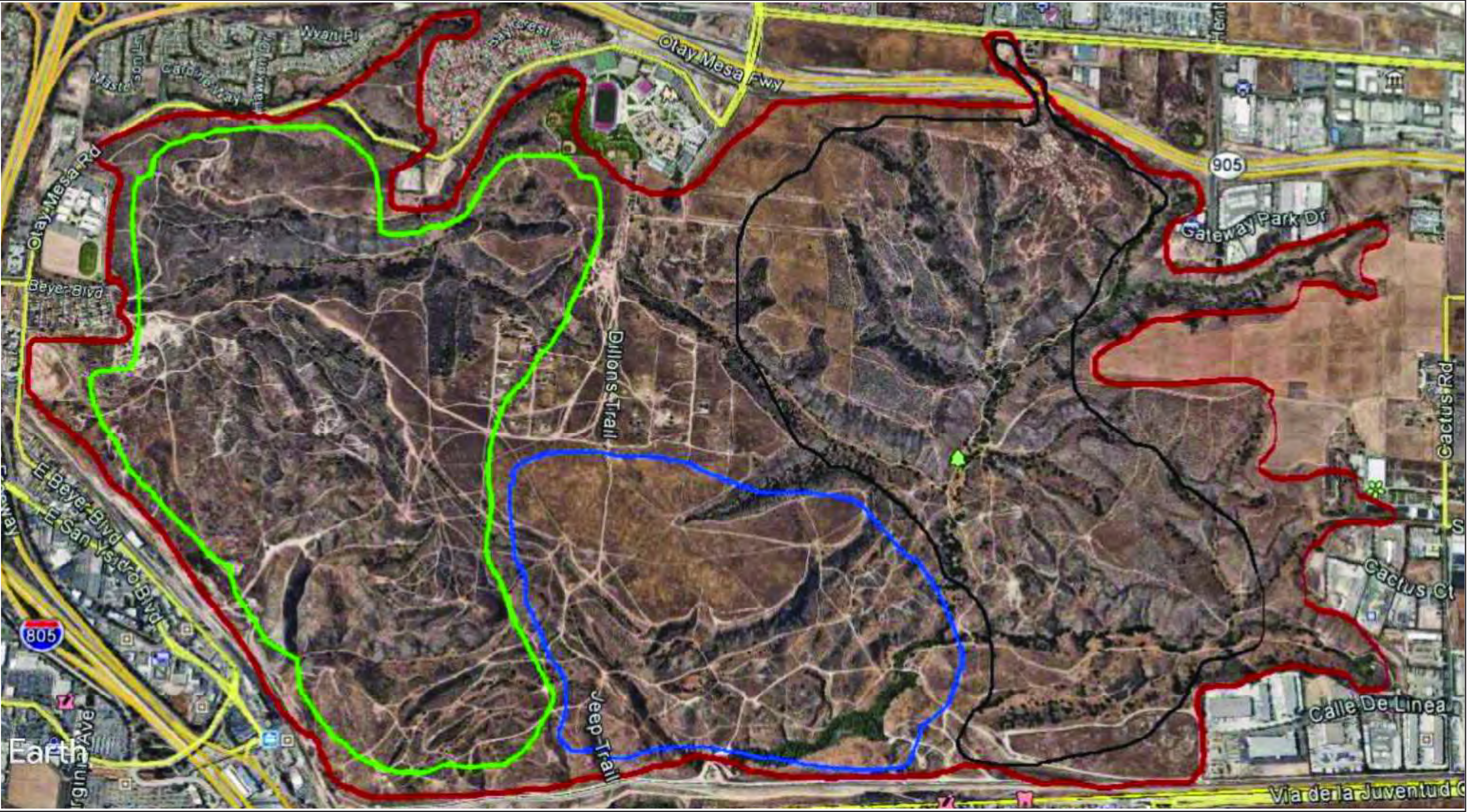


FIGURE 24.15  
Existing Biological Resources -  
Vegetation Communities/Land Cover Types





- Study Area
- Area A
- Area B
- Area C

FIGURE 25.1  
Wildlife Tracking Study Area



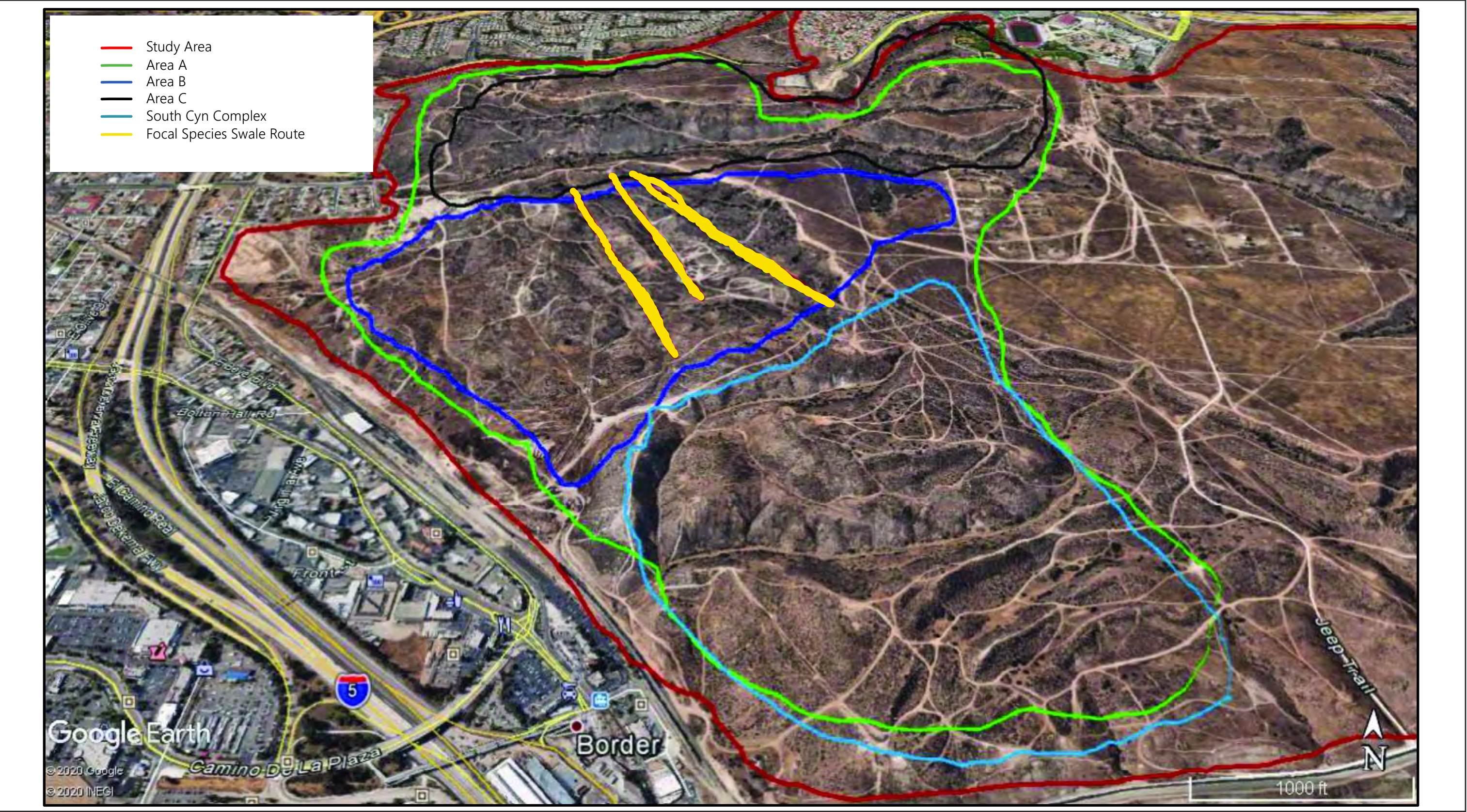


FIGURE 25.2  
Focal Species Swale Routes



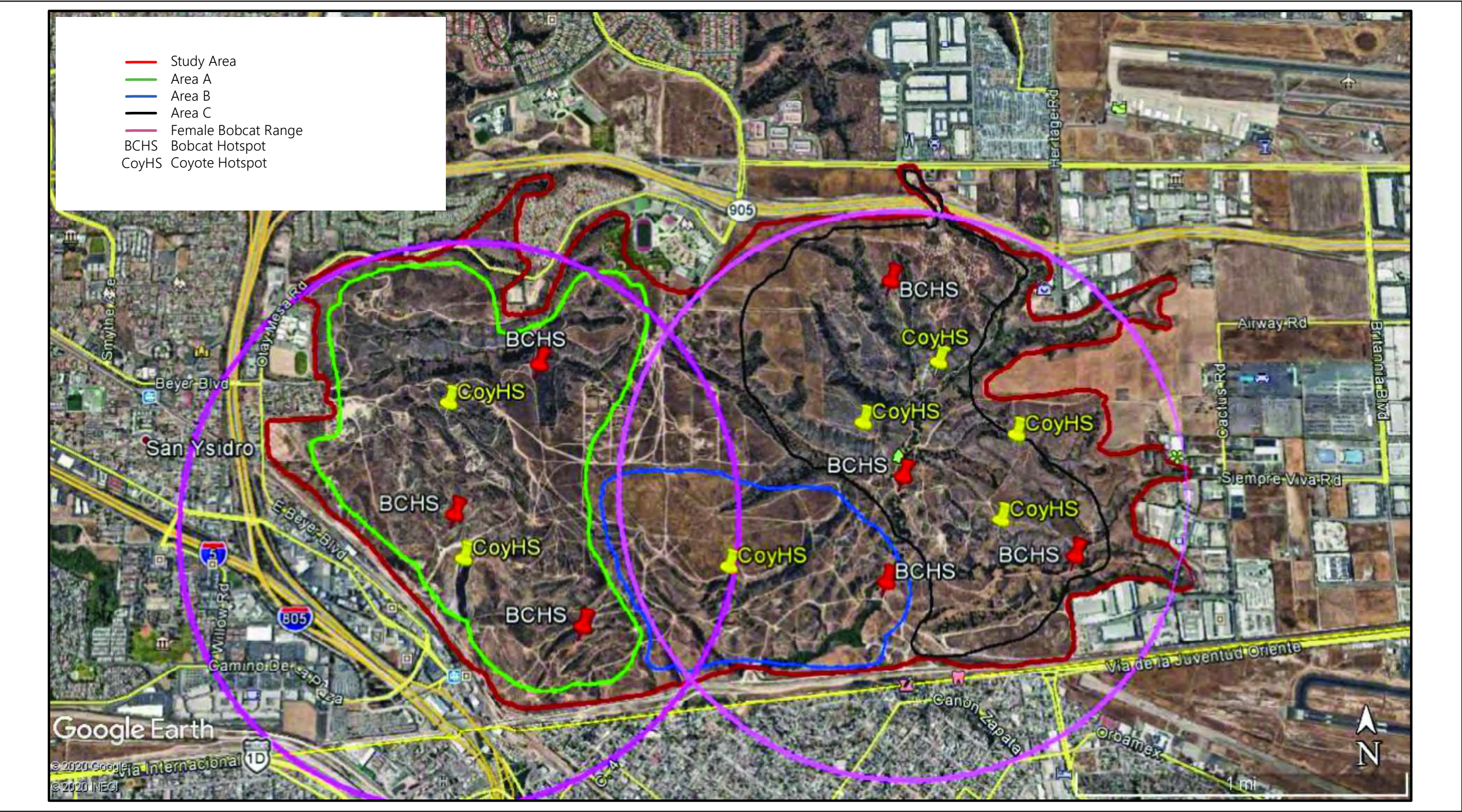
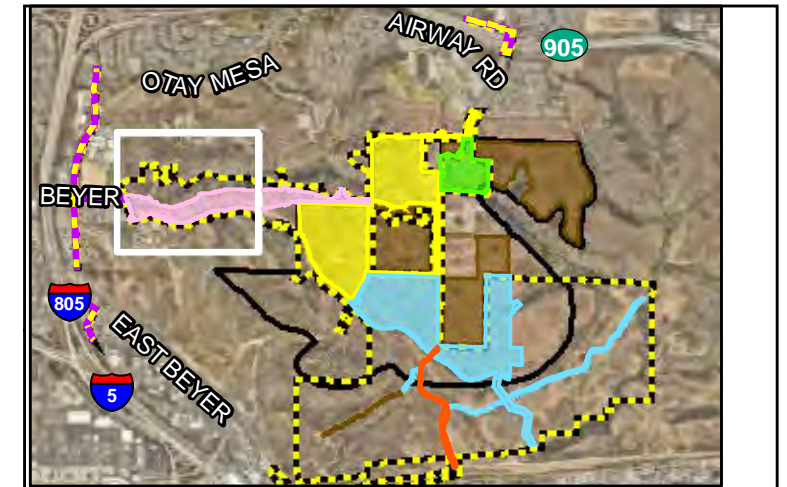
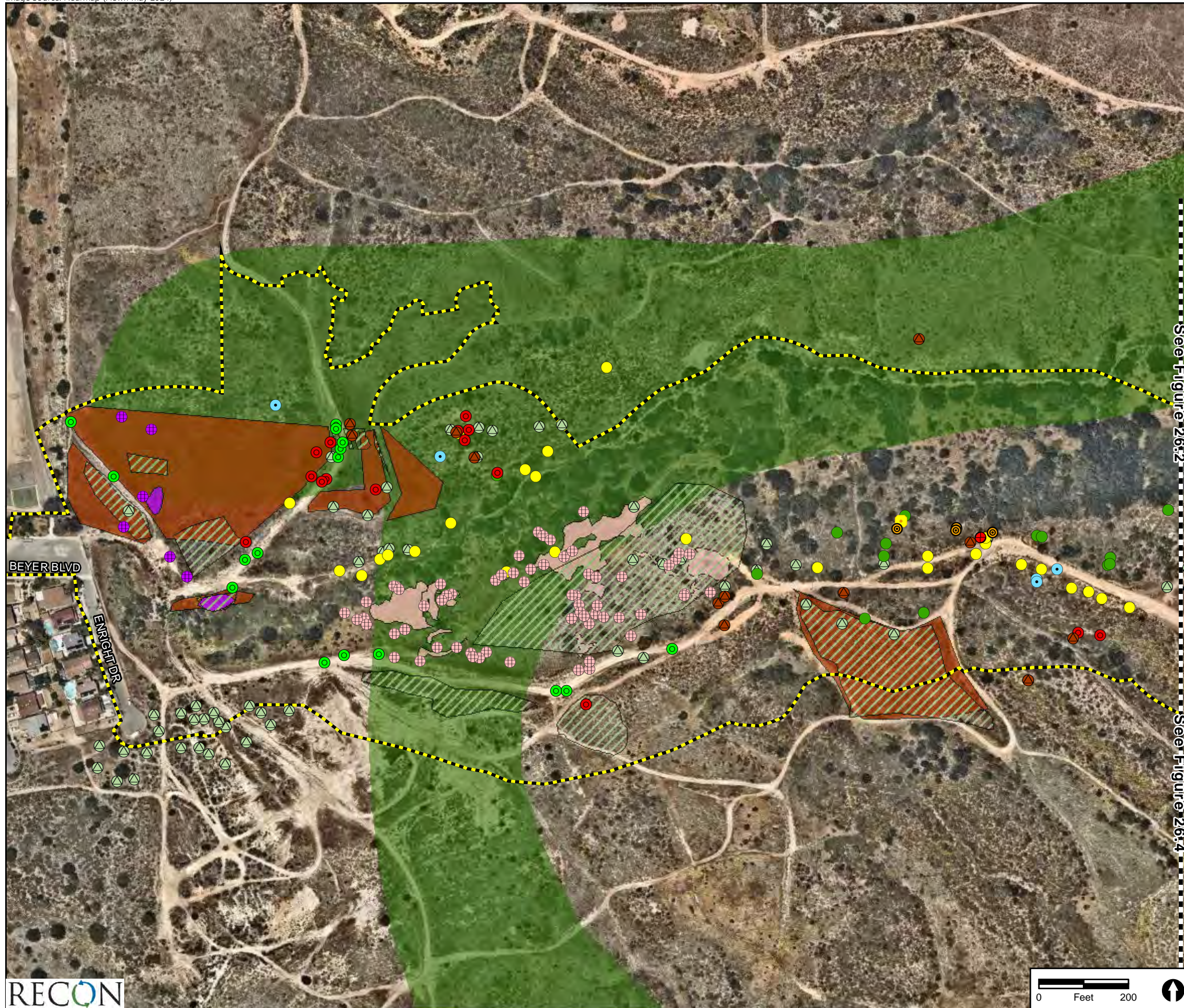


FIGURE 25.3  
Coyote and Bobcat Hotspots





Project-level Phasing		Beyer Boulevard
Phase 1		Off-site Improvements
Phase 2		Emergency Vehicle Access Road
Phase 4		Program-level Phases 3-7

- Project-level Survey Area
- City of SD MHPA

#### Sensitive Plants

- San Diego Bur-sage (*Ambrosia chenopodiifolia*)
- Ashy Spike-moss (*Selaginella cinerascens*)
- California Boxthorn (*Lycium californicum*)
- Cliff Spurge (*Euphorbia misera*)
- Otay Tarplant (*Deinandra conjugens*)
- San Diego Barrel Cactus (*Ferocactus viridescens*)
- San Diego County Viguiera (*Bahiopsis laciniata*)
- Decumbent Goldenbush (*Isocoma menziesii* var. *decumbens*)
- Western Dichondra (*Dichondra occidentalis*)
- San Diego County Needle Grass (*Stipa diegoensis*)
- Snake Cholla (*Cylindropuntia californica* var. *californica*)
- South Coast Saltscale (*Atriplex pacifica*)

FIGURE 26.1  
Existing Biological Resources -  
Sensitive Plant Species



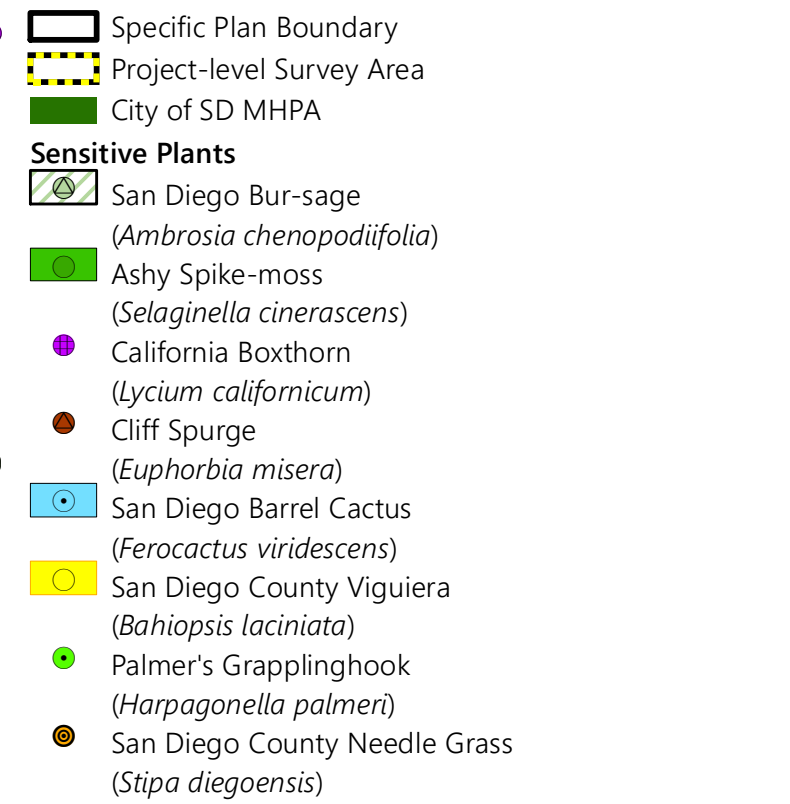
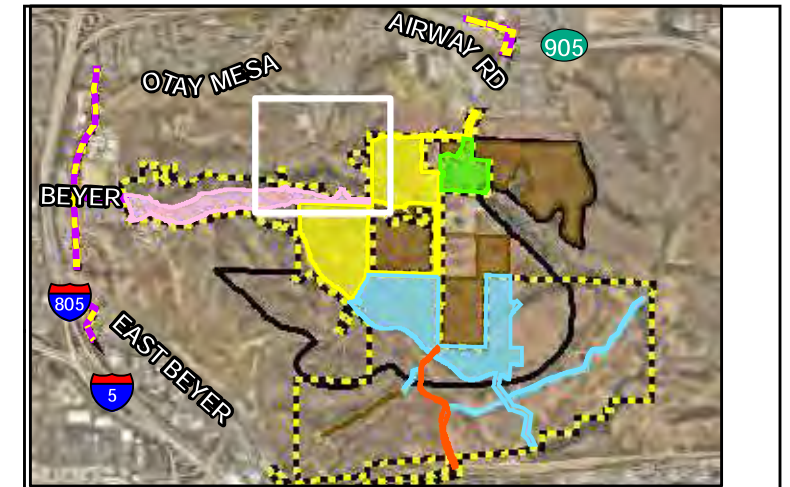
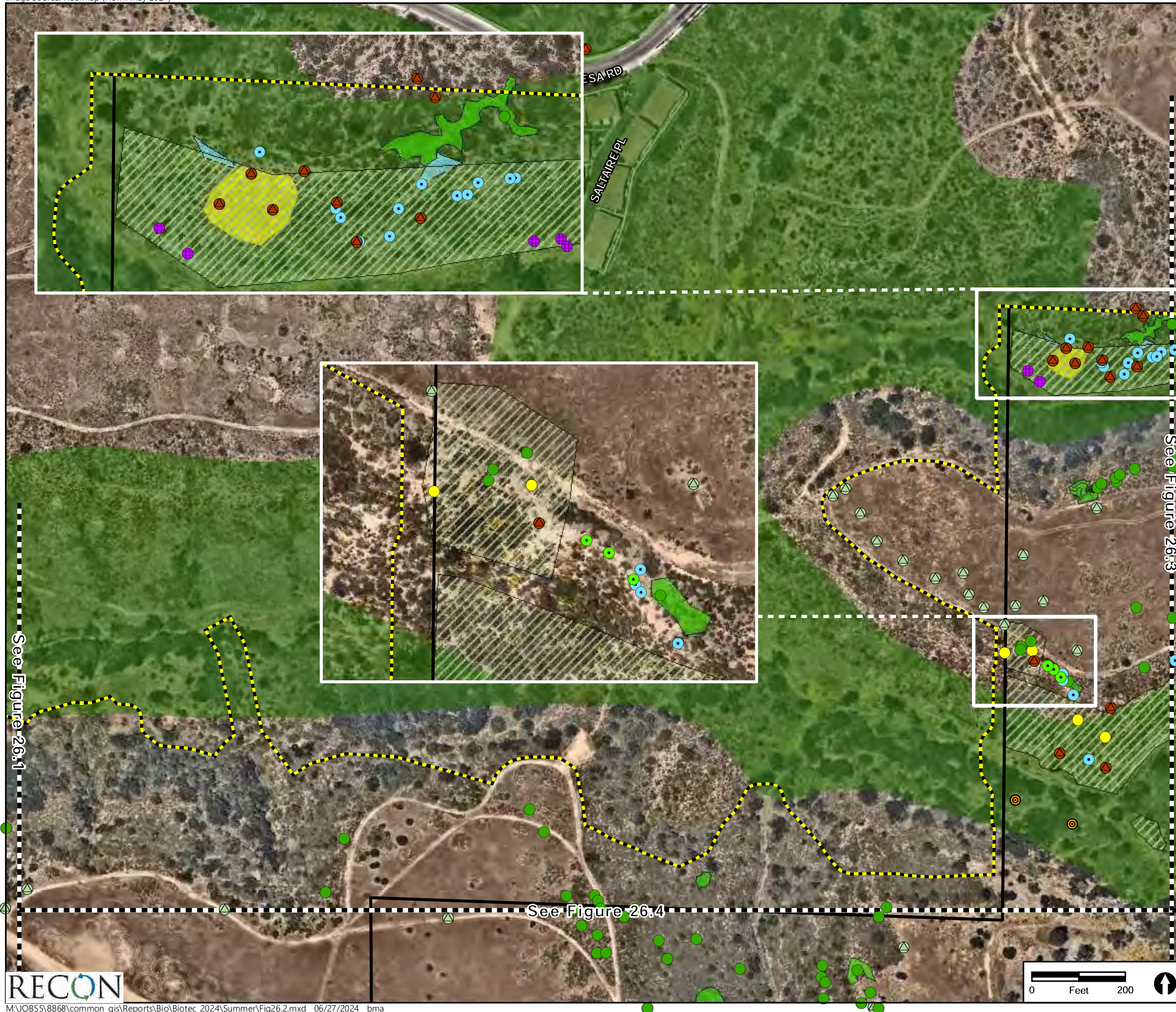


FIGURE 26.2  
Existing Biological Resources -  
Sensitive Plant Species



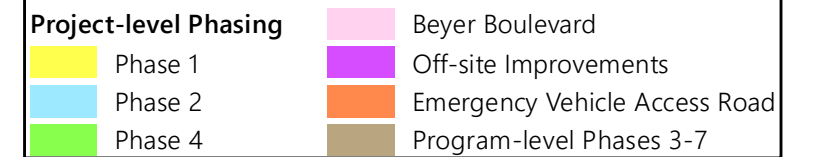
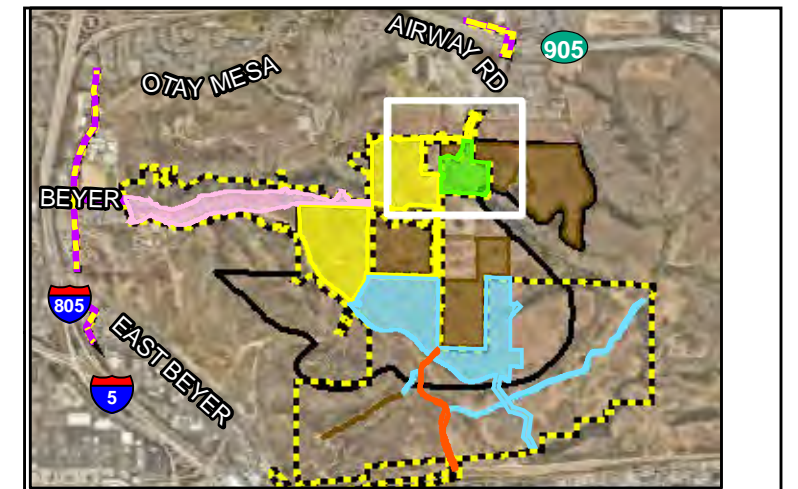
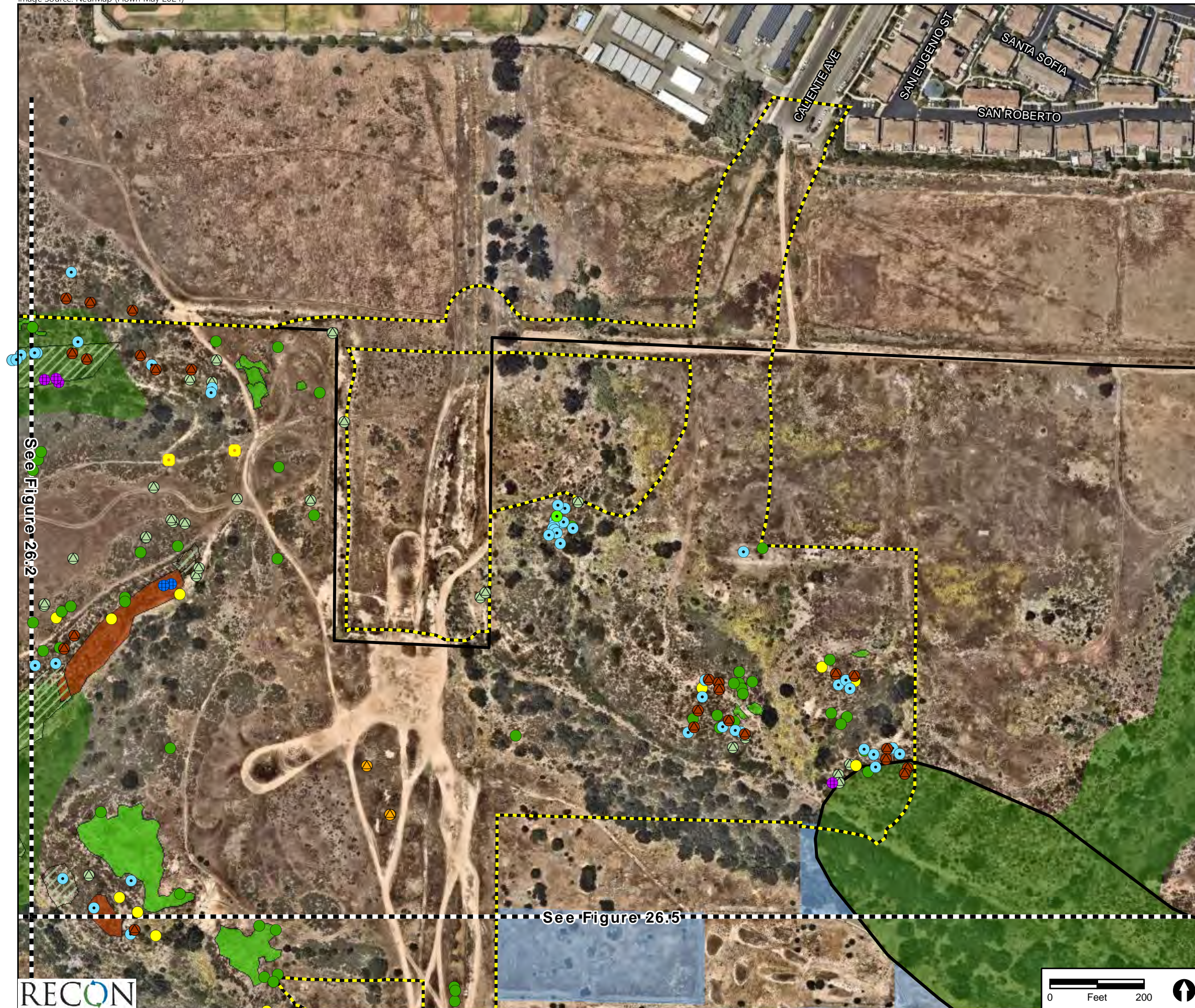


FIGURE 26.3  
Existing Biological Resources -  
Sensitive Plant Species



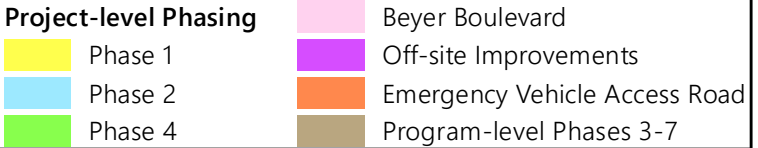
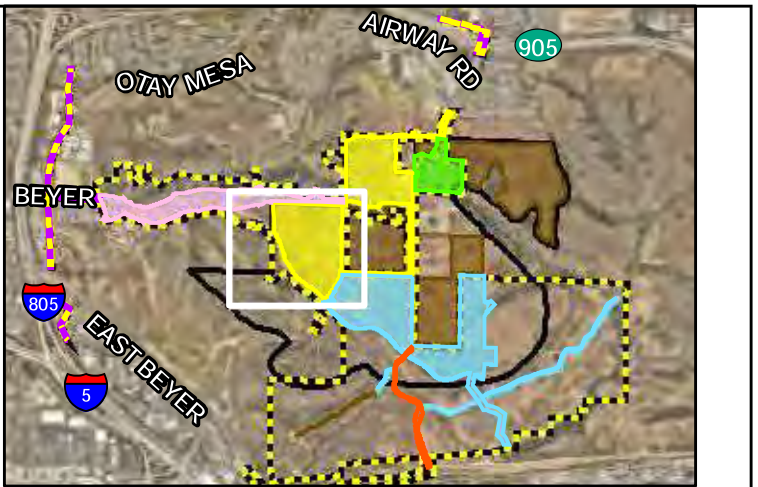
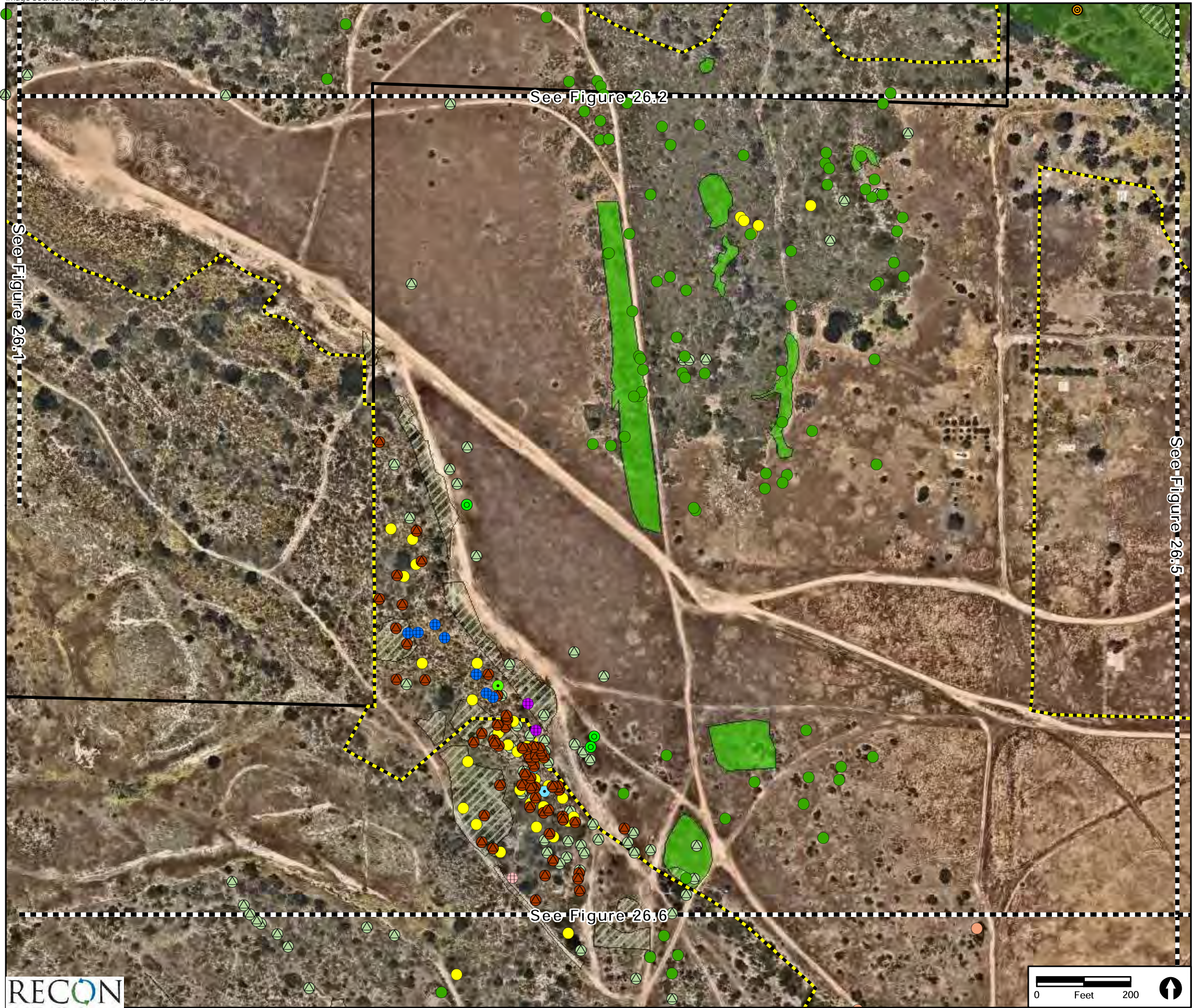


FIGURE 26.4  
Existing Biological Resources -  
Sensitive Plant Species



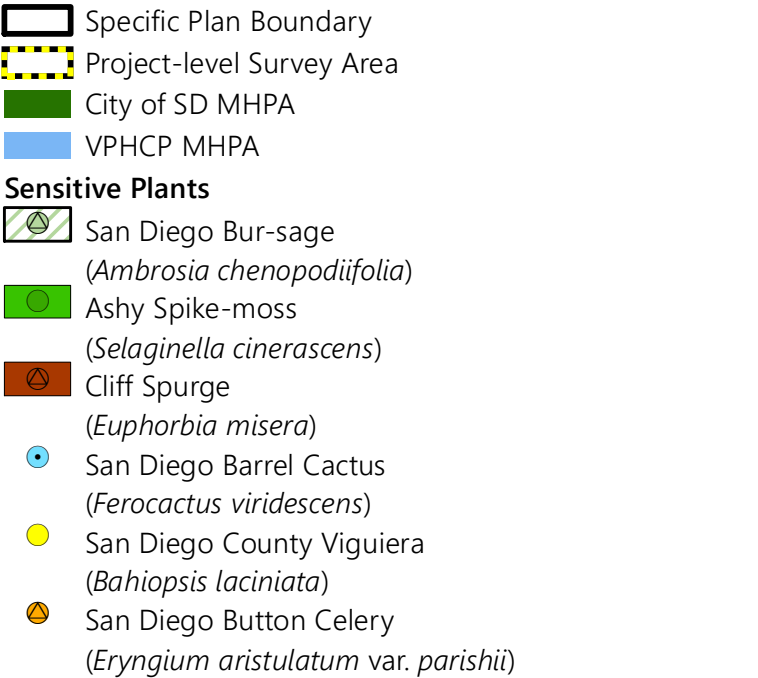
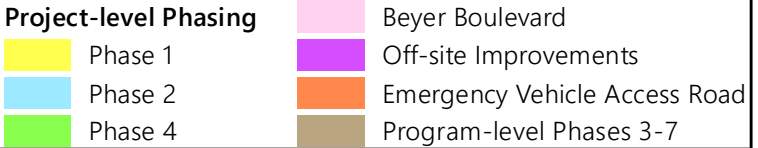
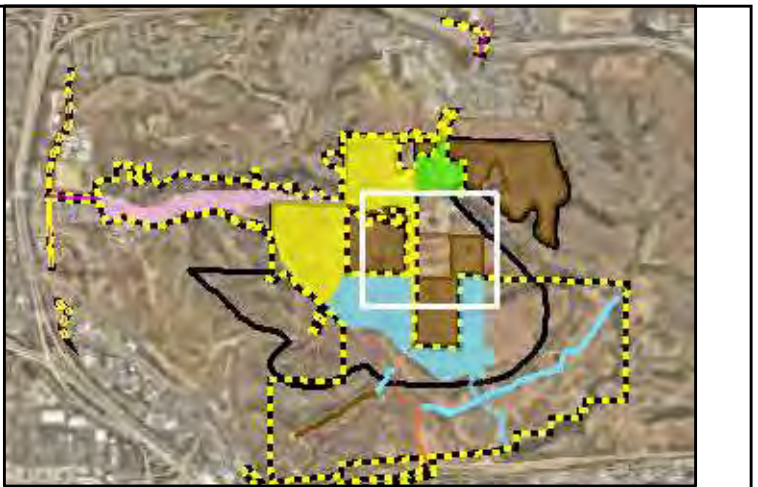
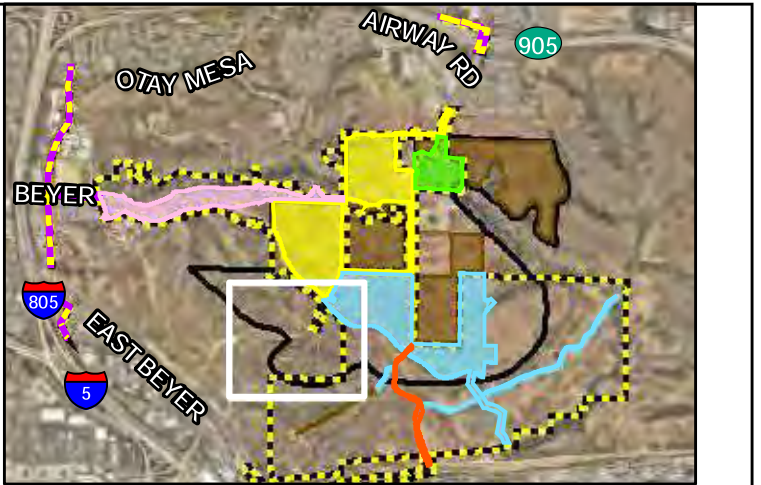
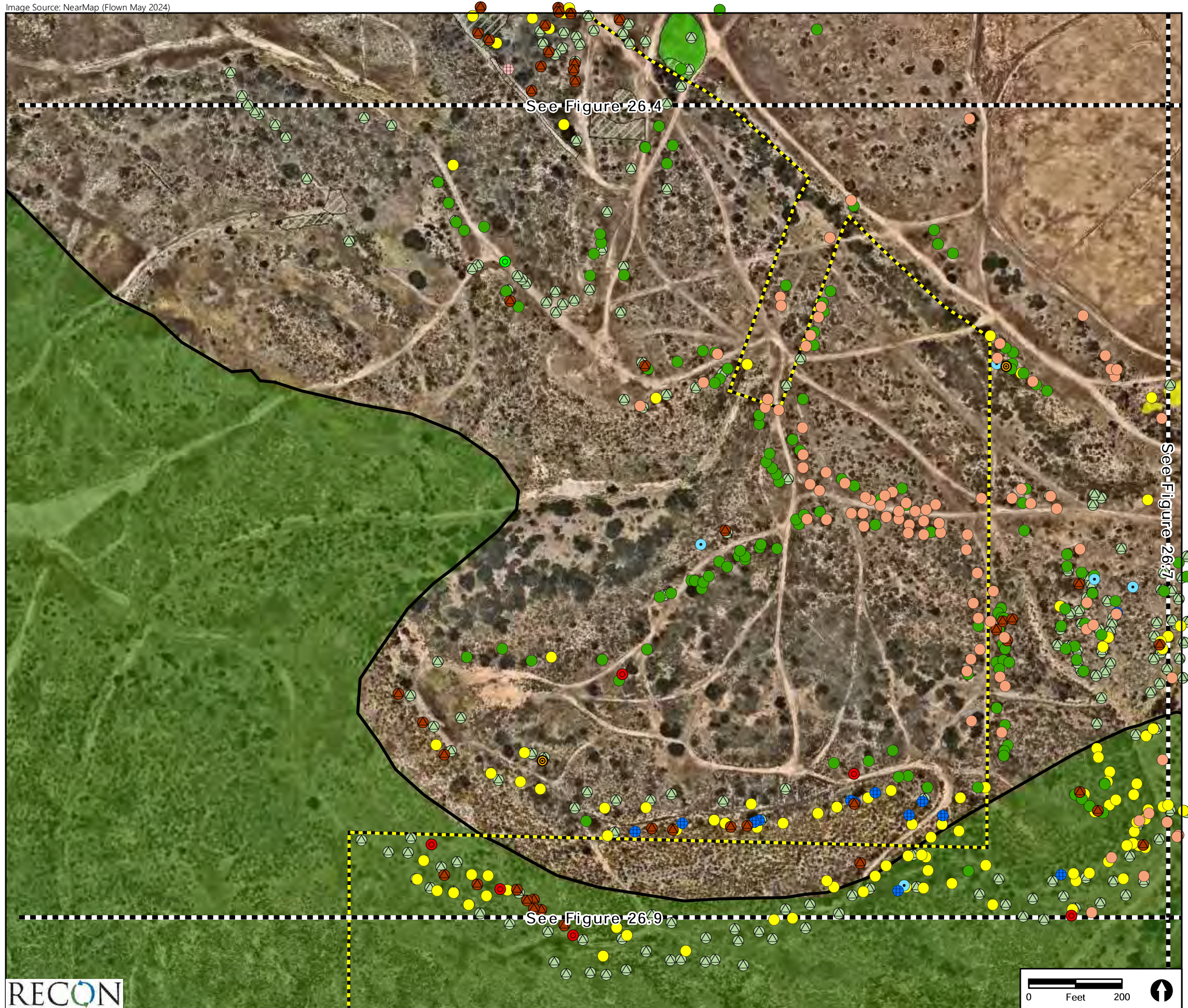


FIGURE 26.5  
Existing Biological Resources -  
Sensitive Plant Species



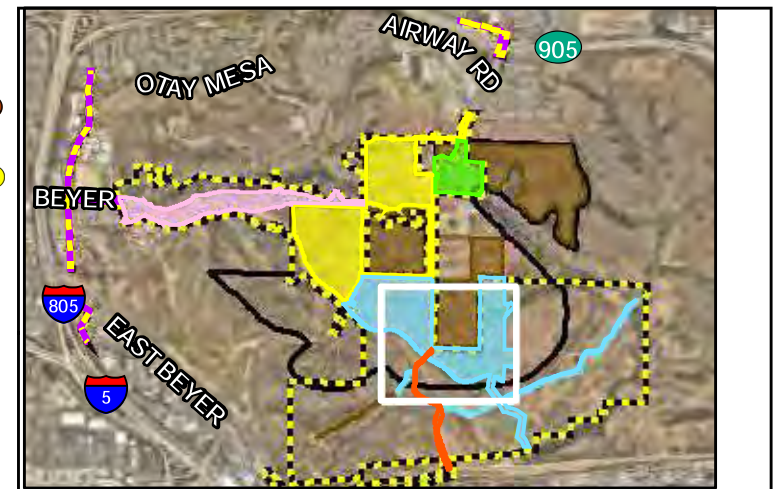
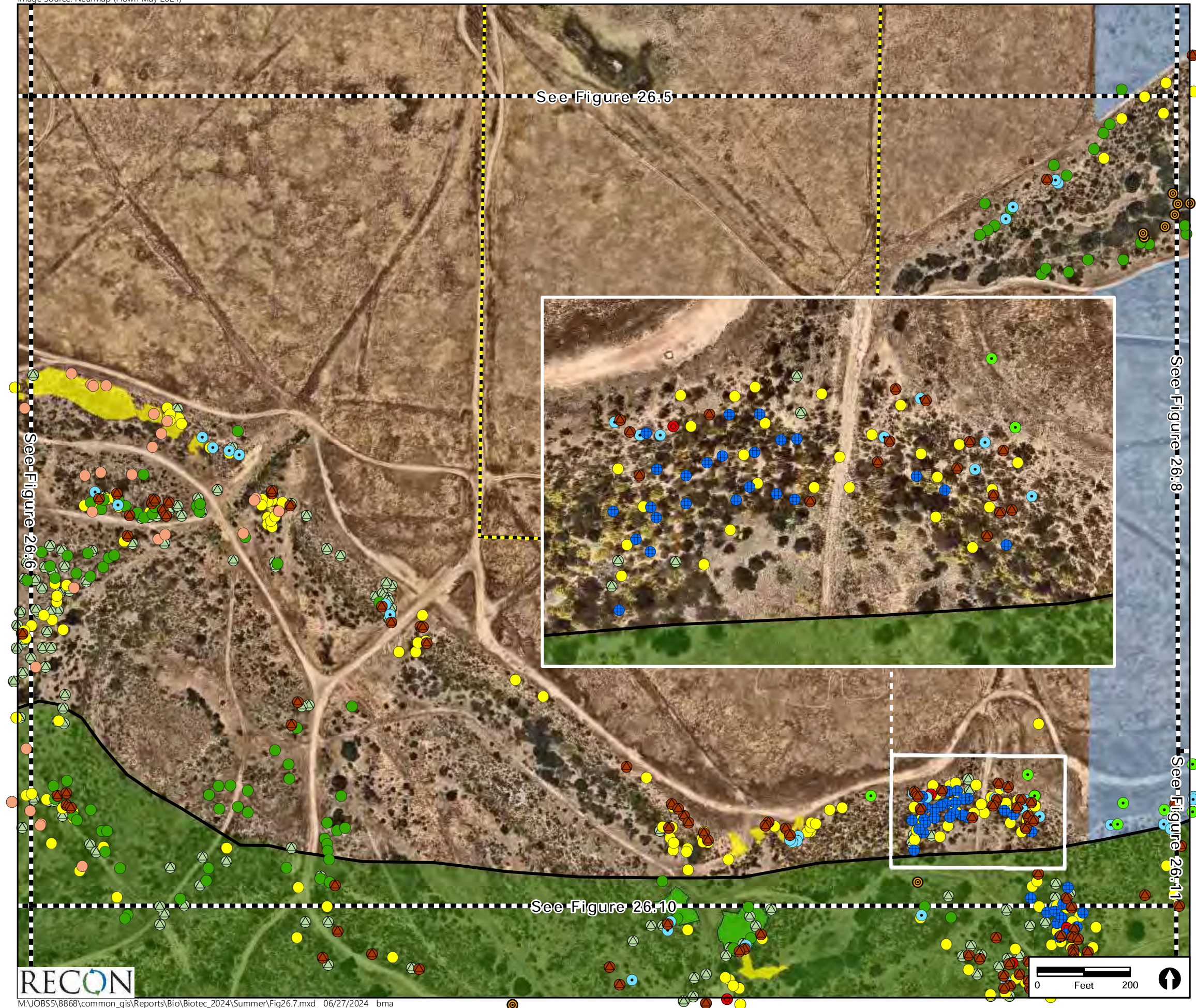


Project-level Phasing	
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<span style="background-color: lightblue; border: 1px solid black;"> </span> Phase 2	<span style="background-color: purple; border: 1px solid black;"> </span> Off-site Improvements
<span style="background-color: lightgreen; border: 1px solid black;"> </span> Phase 4	<span style="background-color: orange; border: 1px solid black;"> </span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black;"> </span> Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Survey Area
- City of SD MHPA
- Sensitive Plants**
- San Diego Bur-sage (*Ambrosia chenopodiifolia*)
- Ashy Spike-moss (*Selaginella cinerascens*)
- Cliff Spurge (*Euphorbia misera*)
- Otay Tarplant (*Deinandra conjugens*)
- San Diego Barrel Cactus (*Ferocactus viridescens*)
- San Diego County Vigiera (*Bahiopsis laciniata*)
- California Adolphia (*Adolphia californica*)
- San Diego County Needle Grass (*Stipa diegoensis*)
- Seaside Cistanthe (*Cistanthe maritima*)
- Snake Cholla (*Cylindropuntia californica* var. *californica*)
- South Coast Saltscale (*Atriplex pacifica*)

FIGURE 26.6  
Existing Biological Resources -  
Sensitive Plant Species





Project-level Phasing	
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<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Phase 2	<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Off-site Improvements
<span style="background-color: lightgreen; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Phase 4	<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Survey Area
- City of SD MHPA
- VPHCP MHPA

#### Sensitive Plants

- San Diego Bur-sage  
(*Ambrosia chenopodiifolia*)
- Ashy Spike-moss  
(*Selaginella cinerascens*)
- Cliff Spurge  
(*Euphorbia misera*)
- San Diego Barrel Cactus  
(*Ferocactus viridescens*)
- San Diego County Vigiera  
(*Bahiopsis laciniata*)
- California Adolphia  
(*Adolphia californica*)
- Palmer's Grapplinghook  
(*Harpagonella palmeri*)
- San Diego County Needle Grass  
(*Stipa diegoensis*)
- Seaside Cistanthe  
(*Cistanthe maritima*)
- Snake Cholla  
(*Cylindropuntia californica* var. *californica*)

FIGURE 26.7  
Existing Biological Resources -  
Sensitive Plant Species



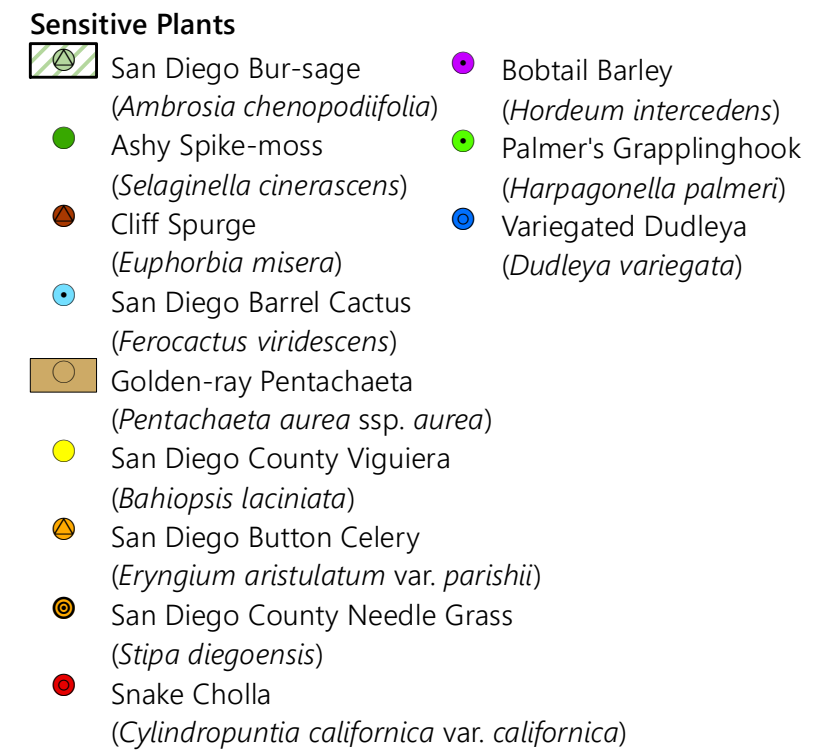
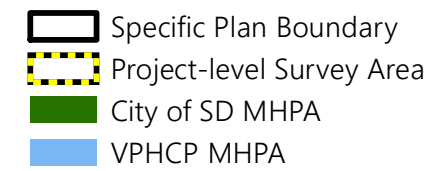
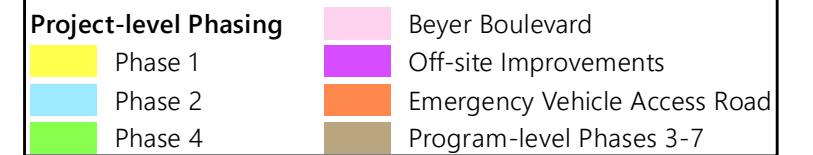
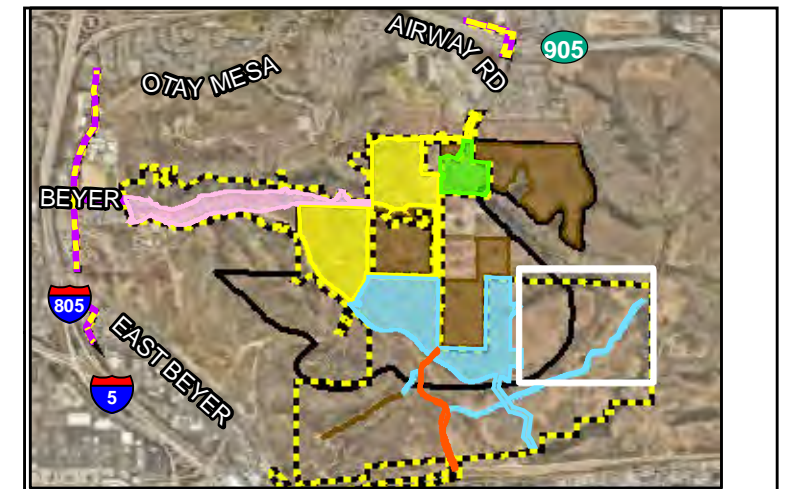
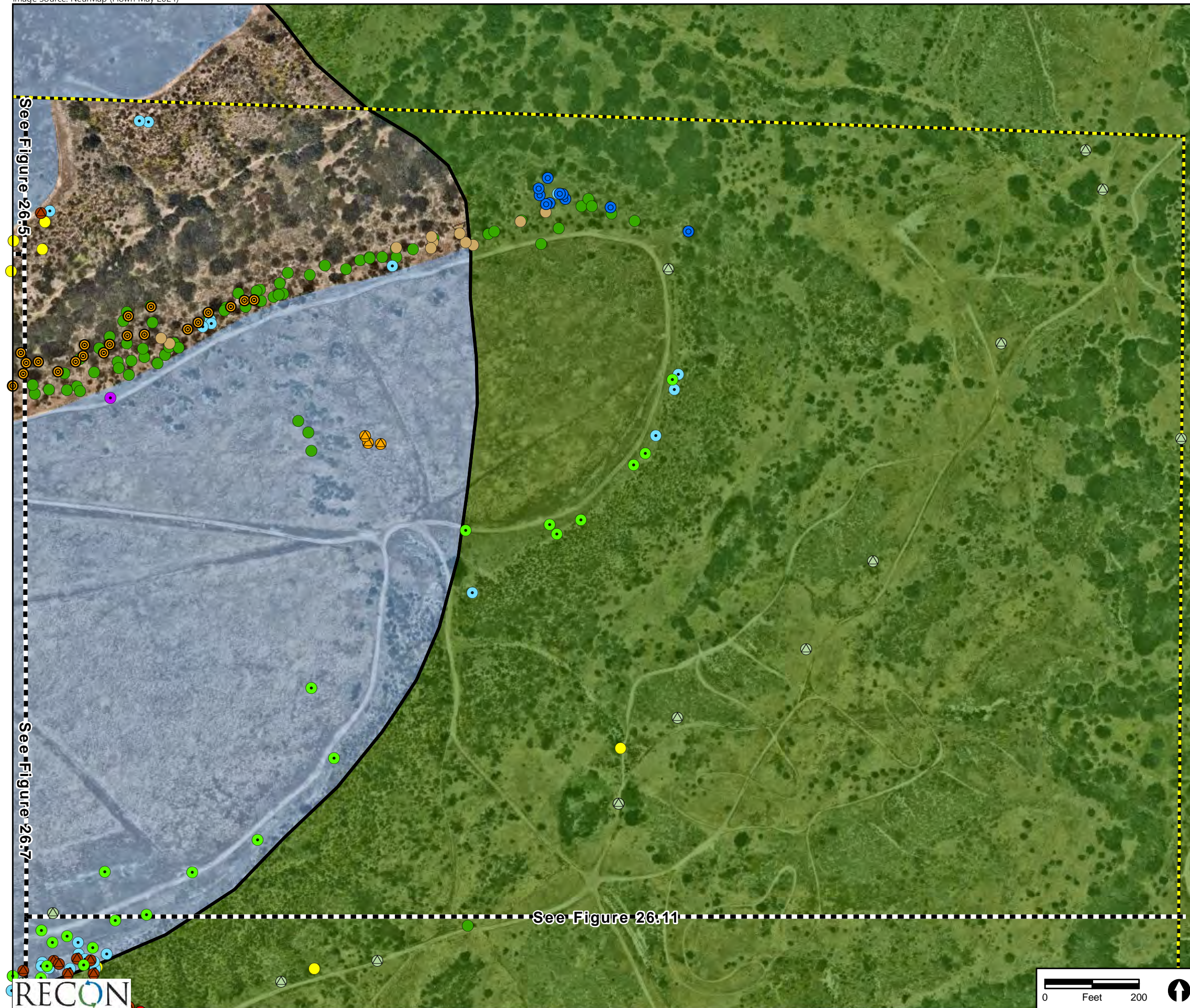
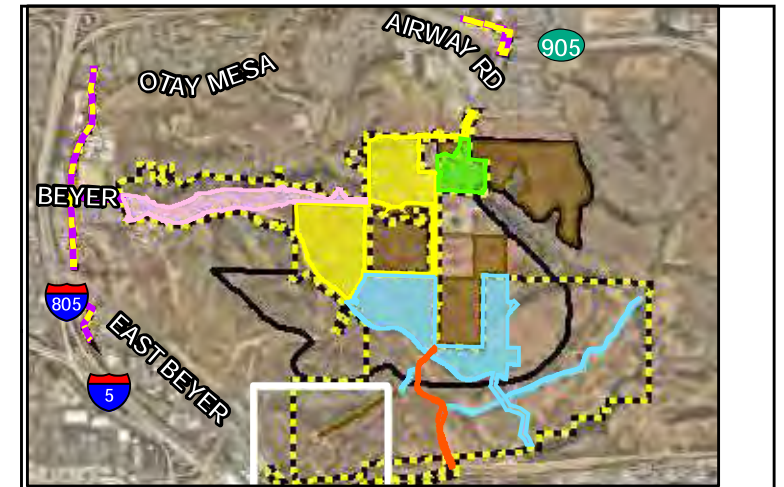


FIGURE 26.8  
Existing Biological Resources -  
Sensitive Plant Species





Project-level Phasing		Beyer Boulevard
Phase 1		Off-site Improvements
Phase 2		Emergency Vehicle Access Road
Phase 4		Program-level Phases 3-7

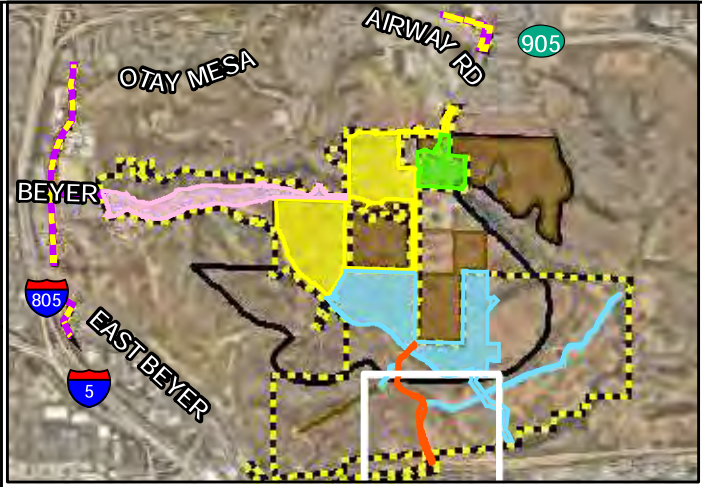
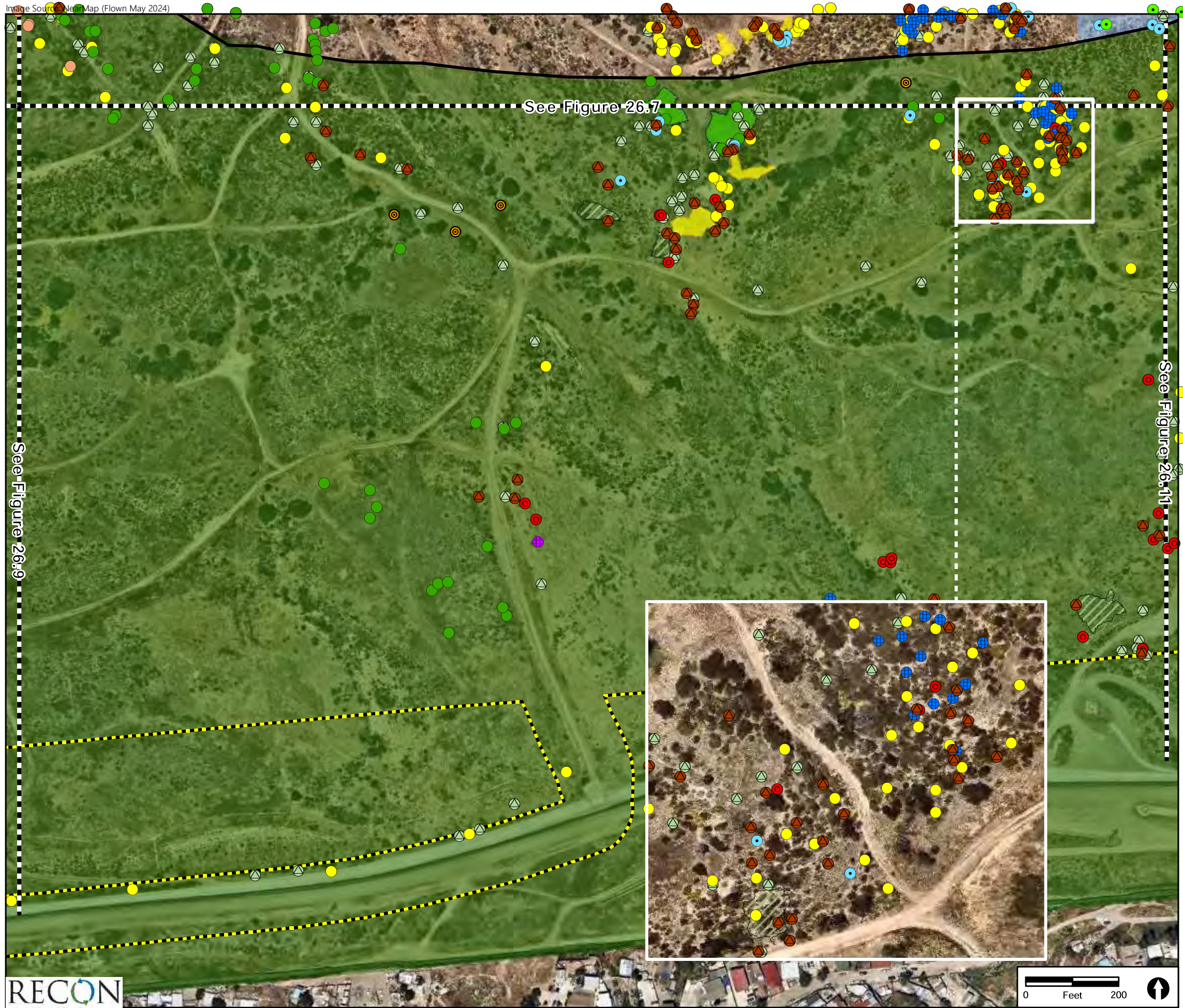
- Specific Plan Boundary
- Project-level Survey Area
- City of SD MHPA

#### Sensitive Plants

- San Diego Bur-sage (*Ambrosia chenopodiifolia*)
- Cliff Spurge (*Euphorbia misera*)
- San Diego County Vigiera (*Bahiopsis laciniata*)
- California Adolphia (*Adolphia californica*)
- Seaside Cistanthe (*Cistanthe maritima*)
- Snake Cholla (*Cylindropuntia californica* var. *californica*)

FIGURE 26.9  
Existing Biological Resources -  
Sensitive Plant Species





Project-level Phasing		
Phase 1		Beyer Boulevard
Phase 2		Off-site Improvements
Phase 4		Emergency Vehicle Access Road
		Program-level Phases 3-7

- Specific Plan Boundary
  - Project-Level Survey Area
  - City of SD MHPA
  - VPHCP MHPA
- Sensitive Plants**
- San Diego Bur-sage (*Ambrosia chenopodiifolia*)
  - Ashy Spike-moss (*Selaginella cinerascens*)
  - California Boxthorn (*Lycium californicum*)
  - Cliff Spurge (*Euphorbia misera*)
  - San Diego Barrel Cactus (*Ferocactus viridescens*)
  - San Diego County Viguiera (*Bahiopsis laciniata*)
  - California Adolphia (*Adolphia californica*)
  - Palmer's Grapplinghook (*Harpagonella palmeri*)
  - San Diego County Needle Grass (*Stipa diegoensis*)
  - Seaside Cistanthe (*Cistanthe maritima*)
  - Snake Cholla (*Cylindropuntia californica* var. *californica*)

FIGURE 26.10  
Existing Biological Resources -  
Sensitive Plant Species



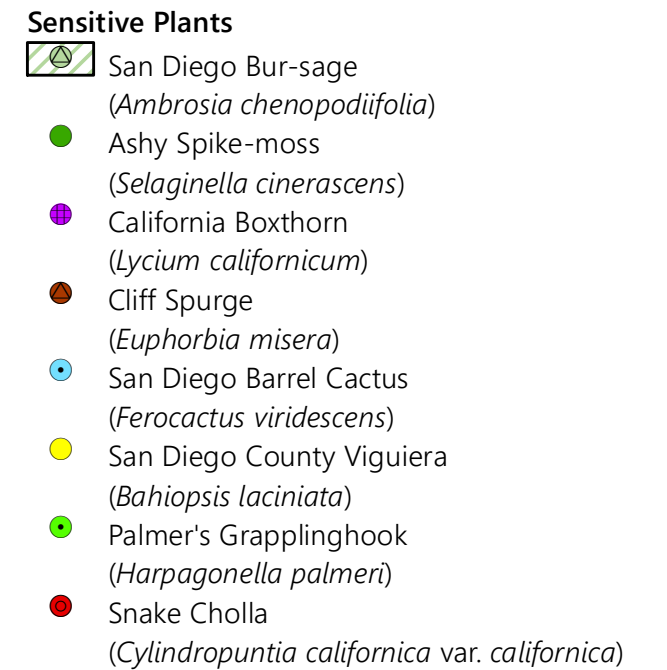
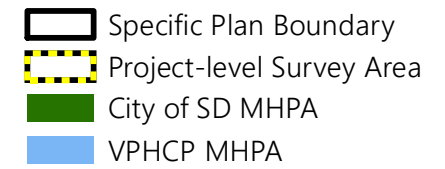
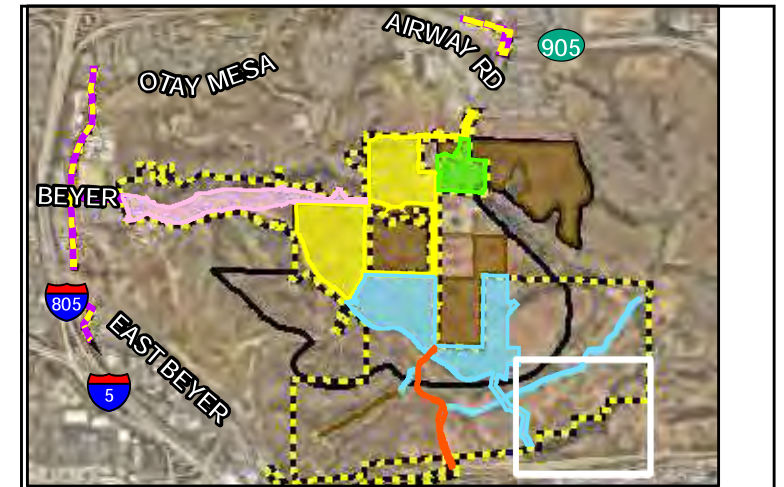
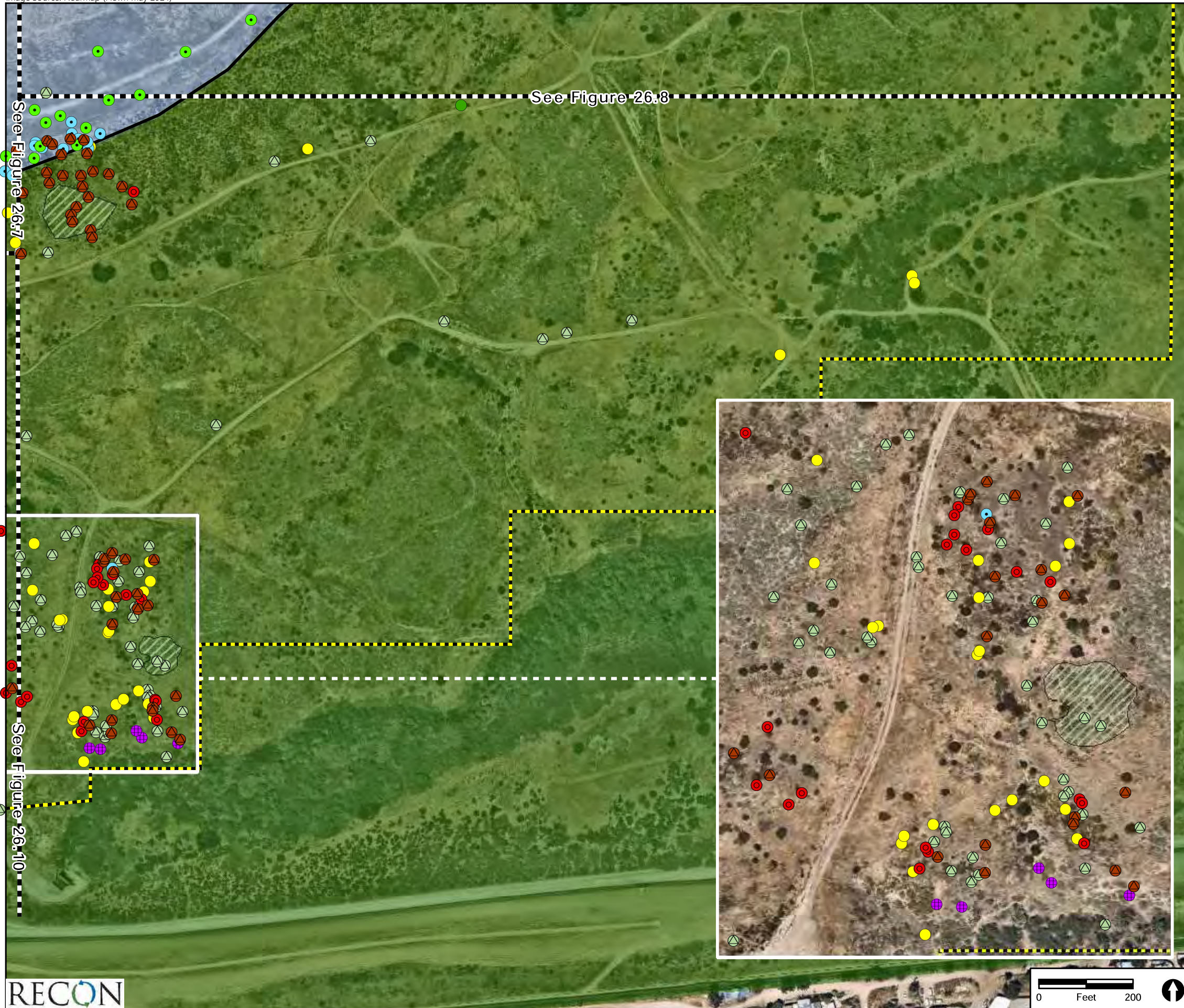


FIGURE 26.11  
Existing Biological Resources -  
Sensitive Plant Species



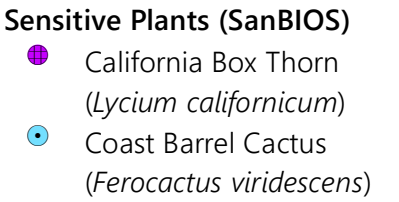
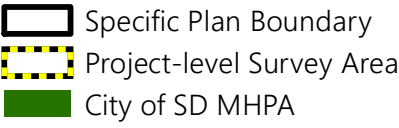
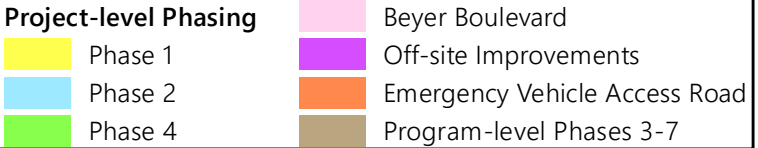
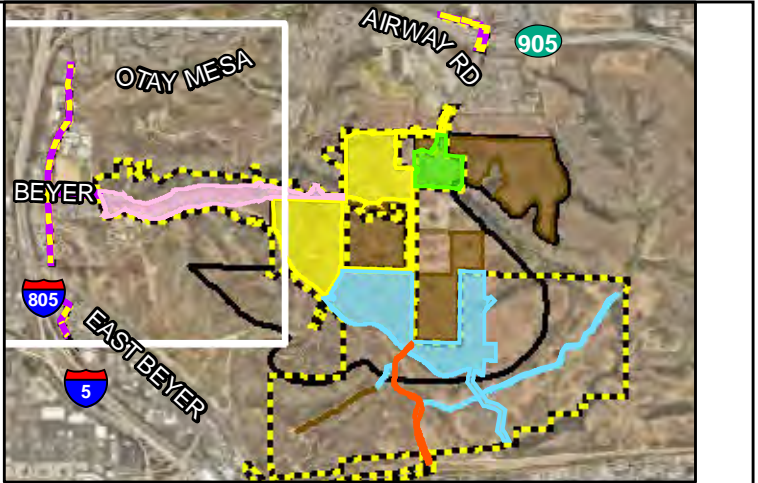


FIGURE 26.12  
Existing Biological Resources -  
Sensitive Plant Species



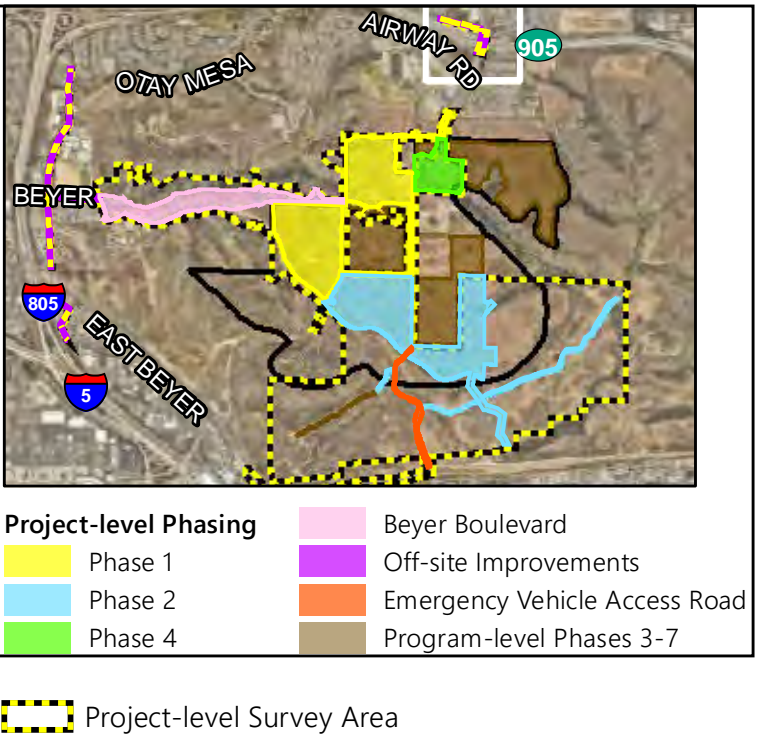
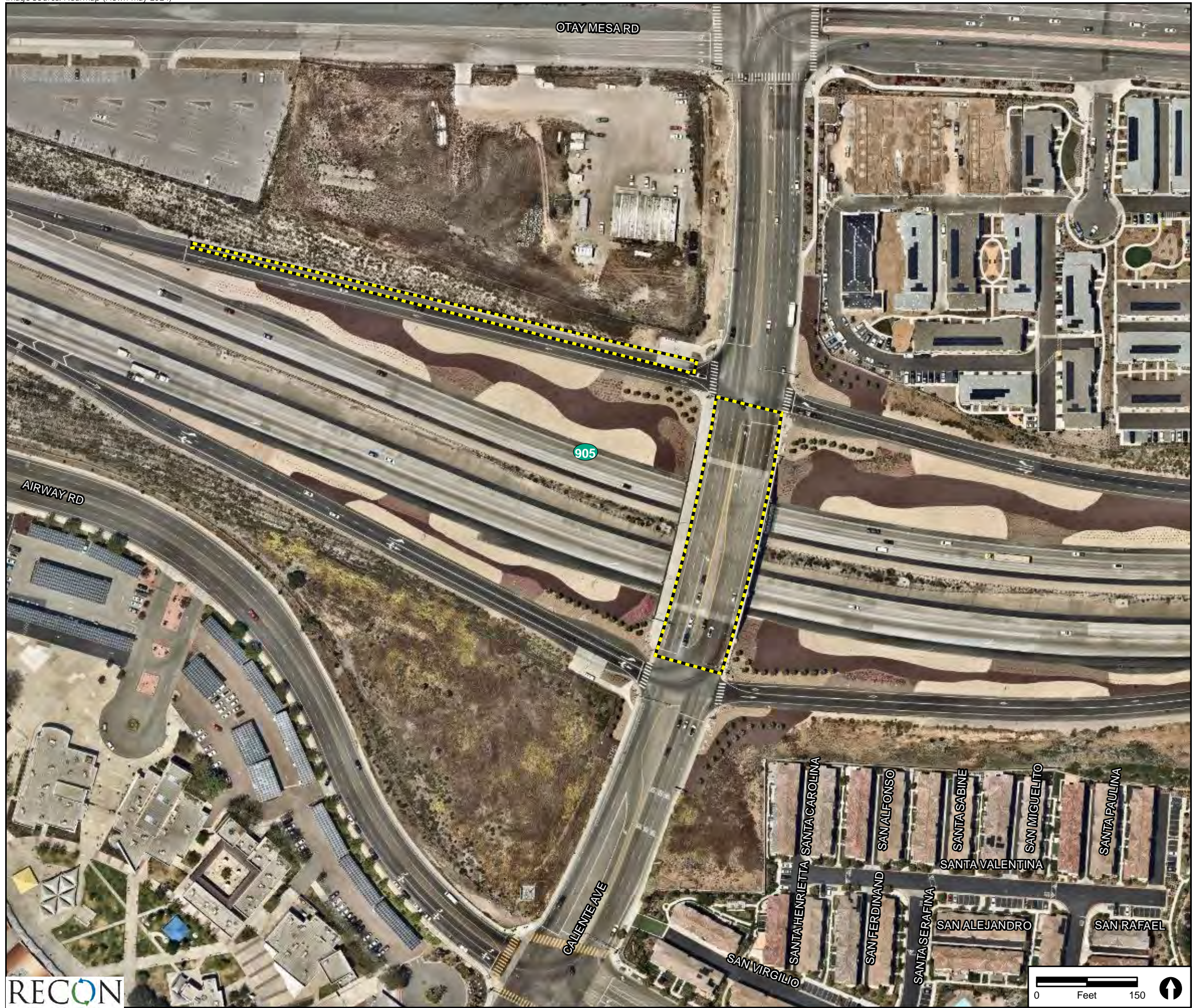
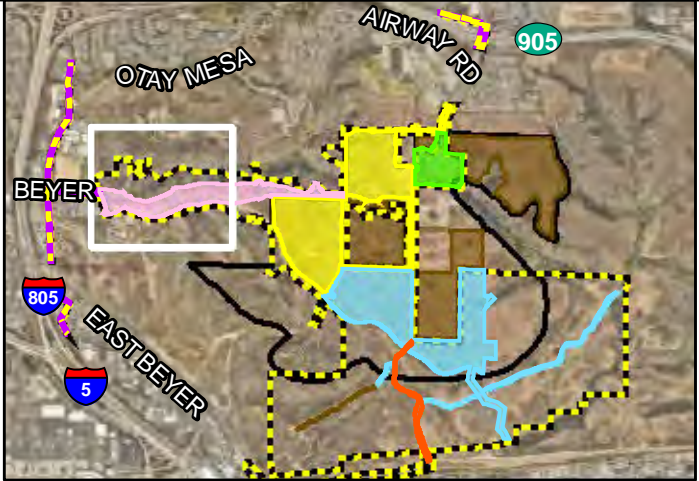
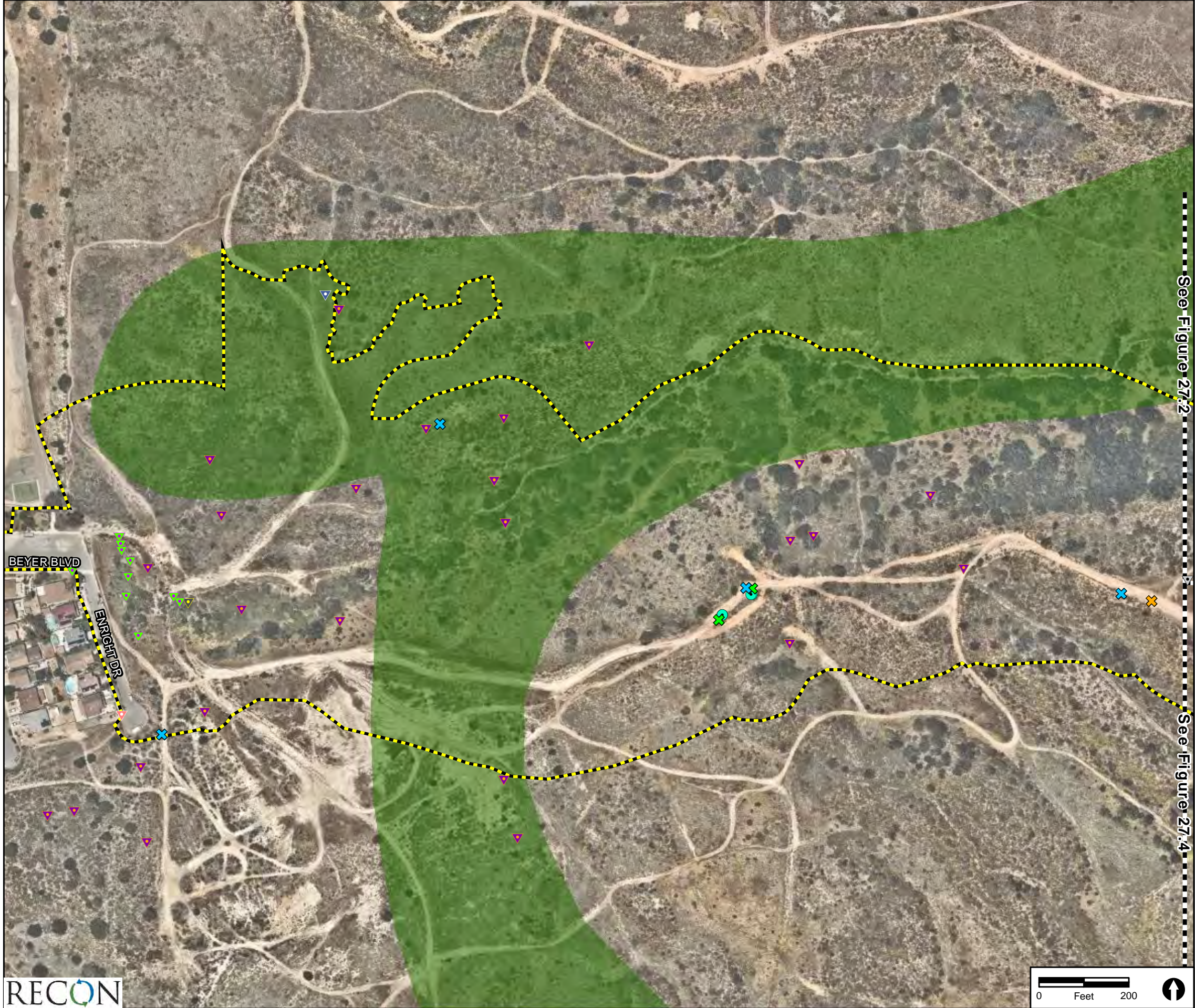


FIGURE 26.13  
Existing Biological Resources -  
Sensitive Plant Species





Project-level Phasing		Beyer Boulevard
Phase 1		Off-site Improvements
Phase 2		Emergency Vehicle Access Road
Phase 4		Program-level Phases 3-7

- Project-level Survey Area
- City of SD MHPA

**Sensitive Animals**

**Birds**

- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- Coastal California Gnatcatcher (*Poliophtila californica californica*)
- Cooper's Hawk (*Accipiter cooperii*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Northern Harrier (*Circus hudsonius*)
- Yellow-breasted Chat (*Icteria virens*)

**Reptiles and Amphibians**

- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Western Spadefoot (*Spea hammondi*)

**Crustaceans**

- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 27.1  
Existing Biological Resources -  
Sensitive Animal Species



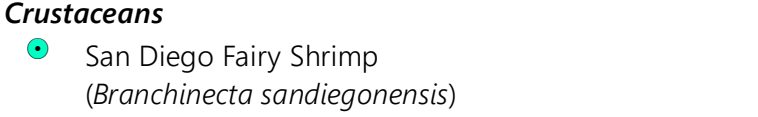
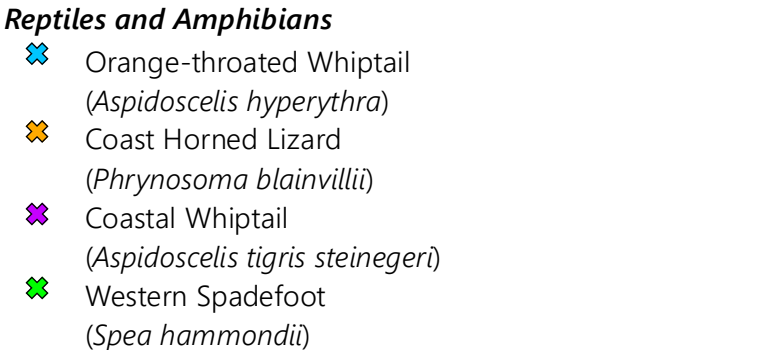
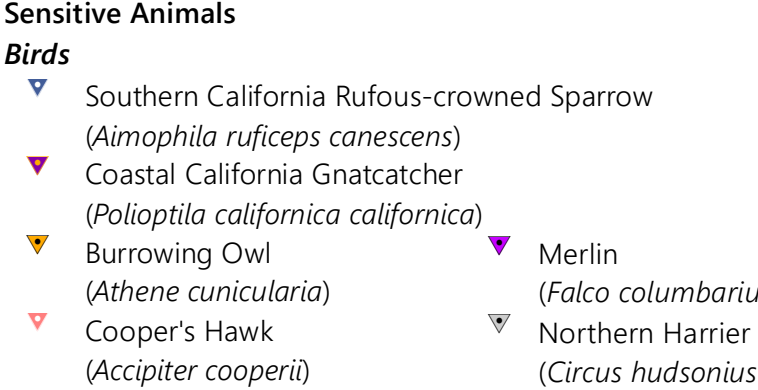
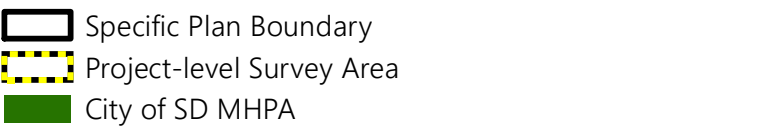
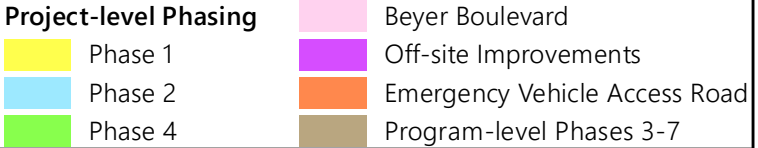
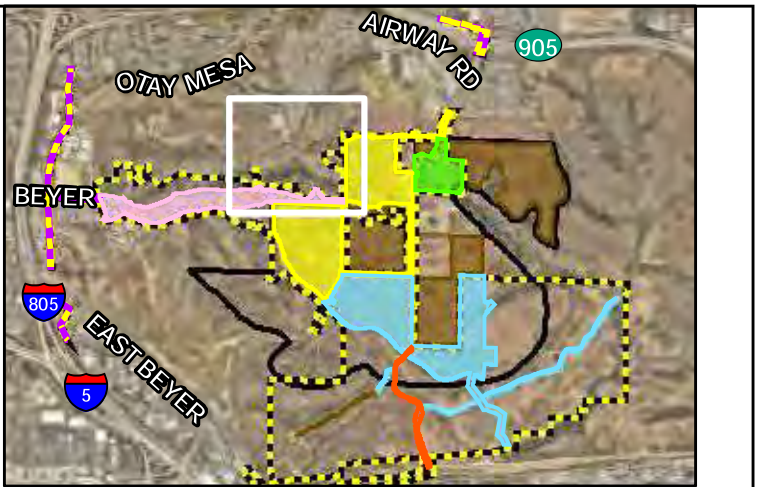
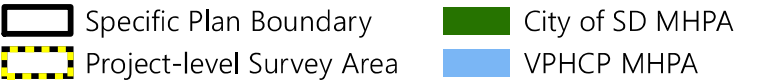
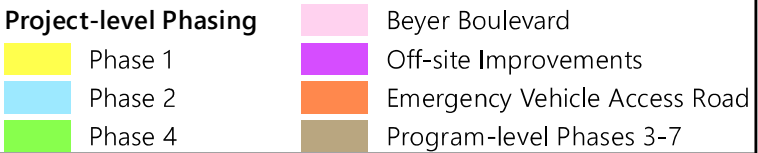
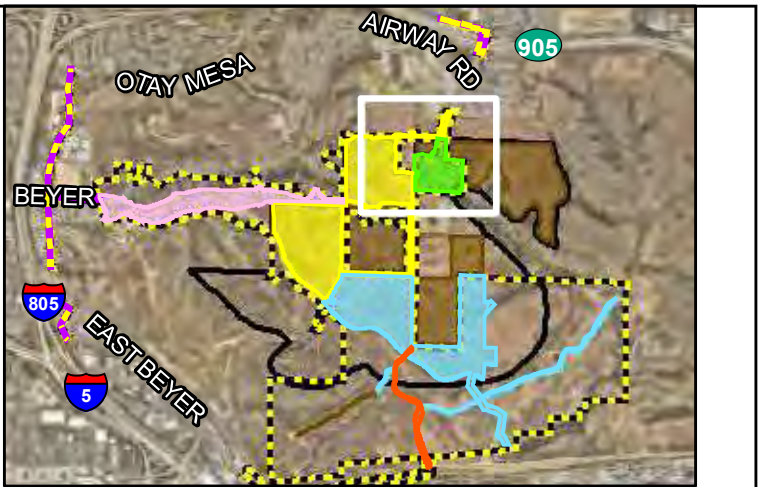
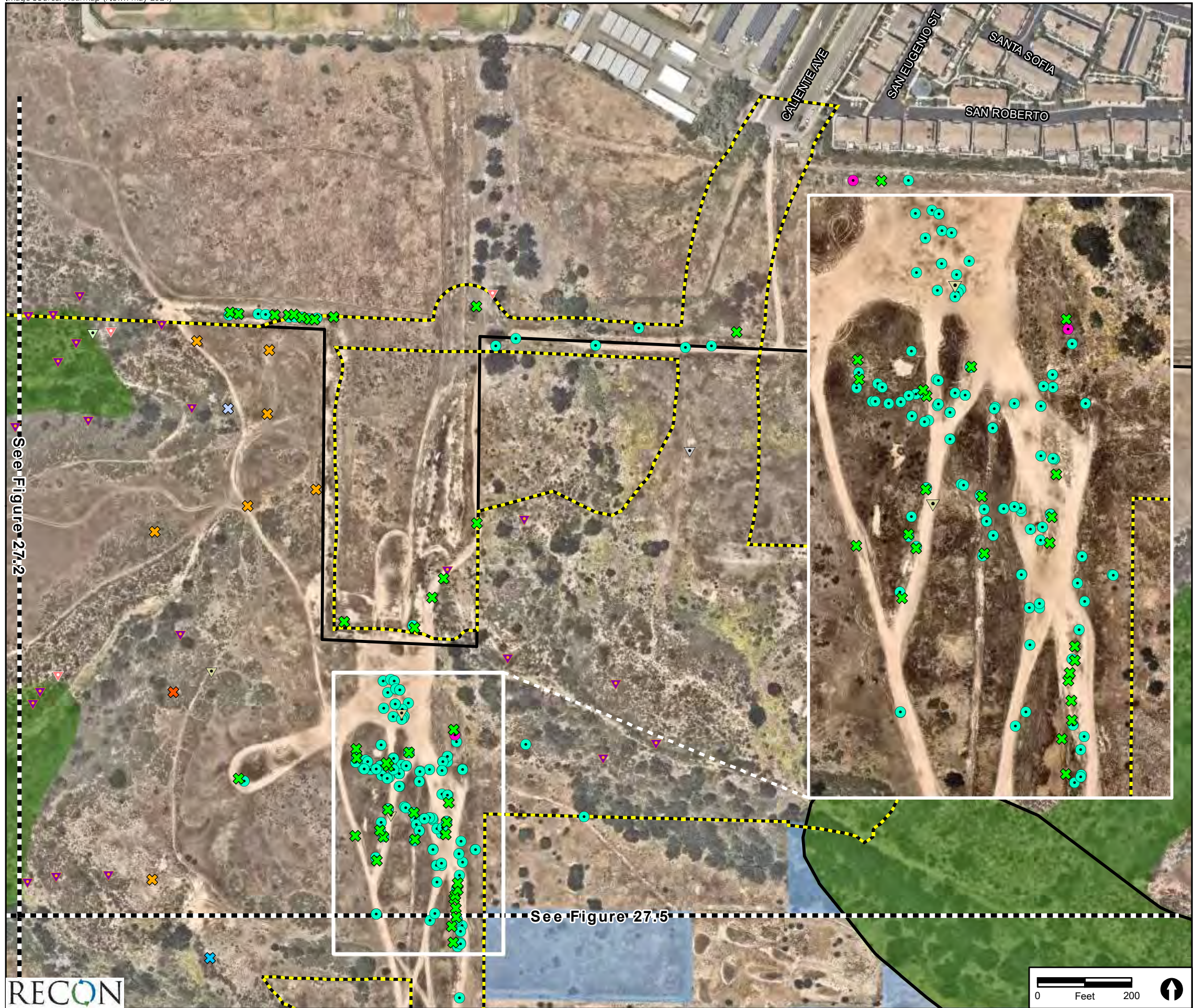


FIGURE 27.2  
Existing Biological Resources -  
Sensitive Animal Species





**Sensitive Animals**

**Birds**

- Coastal California Gnatcatcher (*Poliophtila californica californica*)
- Grasshopper Sparrow (*Ammodramus savannarum*)
- California Horned Lark (*Eremophila alpestris actia*)
- Cooper's Hawk (*Accipiter cooperii*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Northern Harrier (*Circus hudsonius*)

**Reptiles and Amphibians**

- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Red Diamond Rattlesnake (*Crotalus ruber*)
- Coronado Skink (*Plestiodon skiltonianus interparietalis*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Western Spadefoot (*Spea hammondi*)

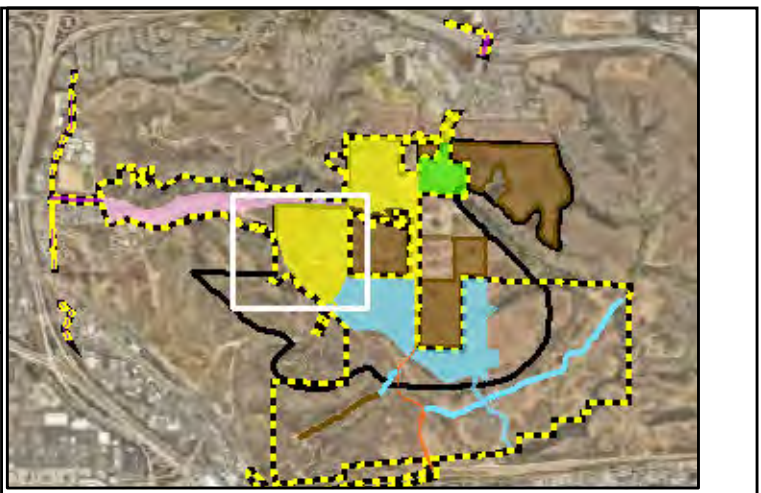
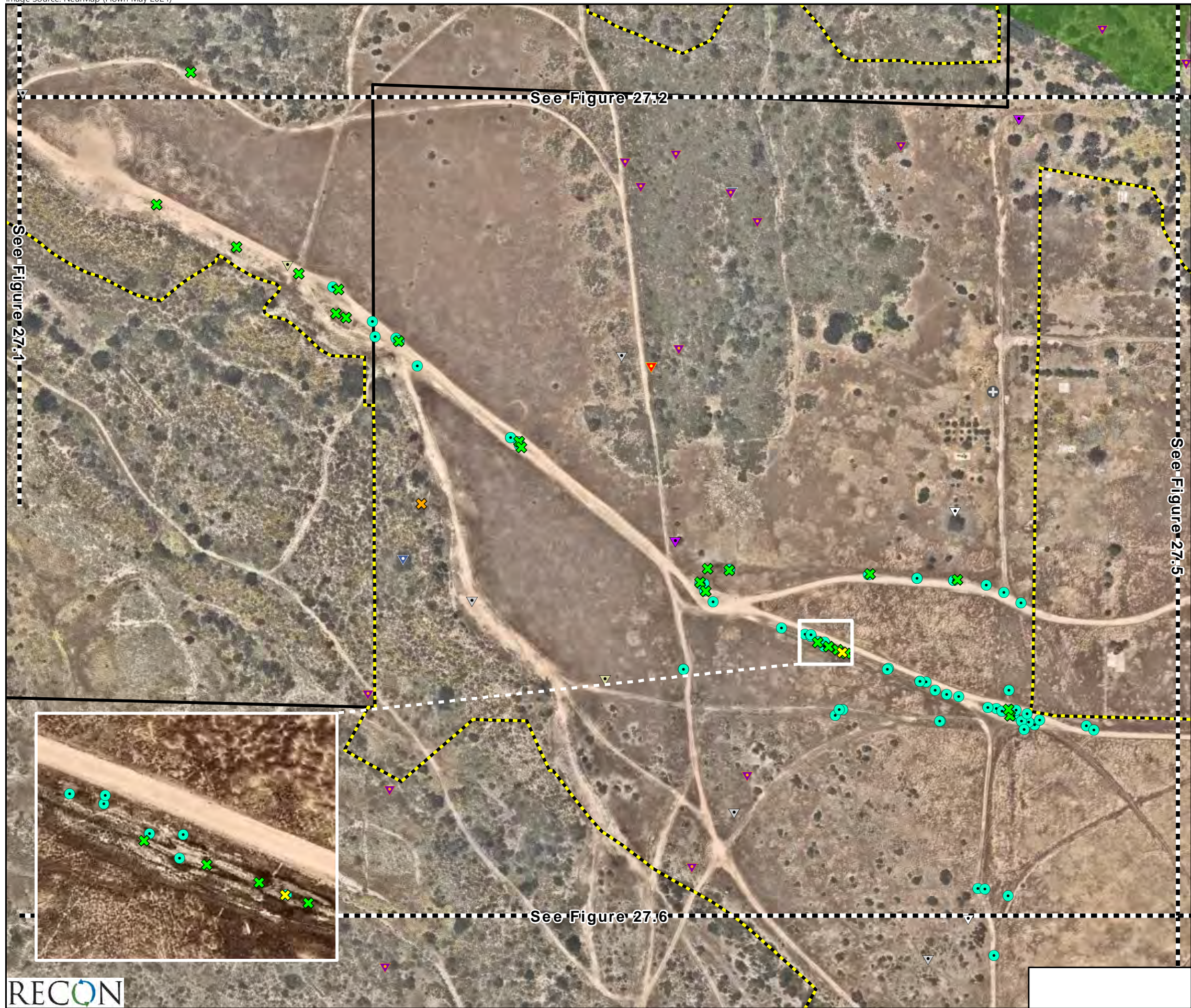
**Crustaceans**

- Riverside Fairy Shrimp (*Streptocephalus woottoni*)
- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 27.3

Existing Biological Resources -  
Sensitive Animal Species





Project-level Phasing	
Phase 1	Phase 2
Phase 4	Phase 3
Beyer Boulevard	
Off-site Improvements	
Emergency Vehicle Access Road	
Program-level Phases 3-7	

Specific Plan Boundary	City of SD MHPA
Project-level Survey Area	

**Sensitive Animals**

**Birds**

- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- Coastal California Gnatcatcher (*Poliophtila californica californica*)
- California Horned Lark (*Eremophila alpestris actia*)
- Bald Eagle (*Haliaeetus leucocephalus*)
- Merlin (*Falco columbarius*)
- Northern Harrier (*Circus hudsonius*)
- White-tailed Kite (*Elanus leucurus*)

**Mammals**

- San Diego Desert Woodrat (*Neotoma lepida intermedia*)

**Reptiles and Amphibians**

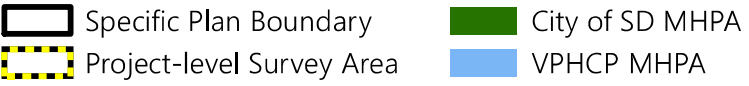
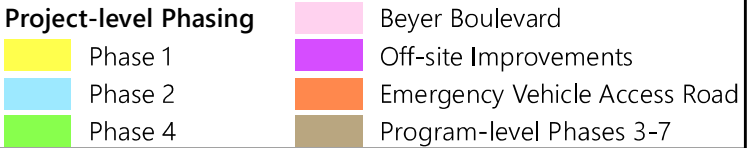
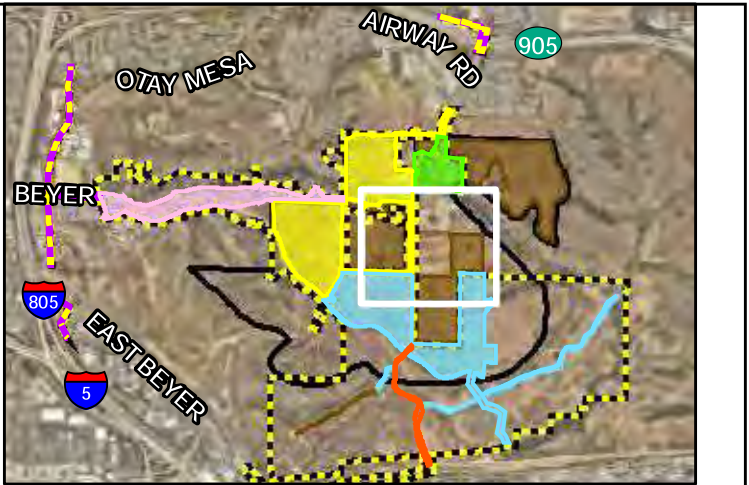
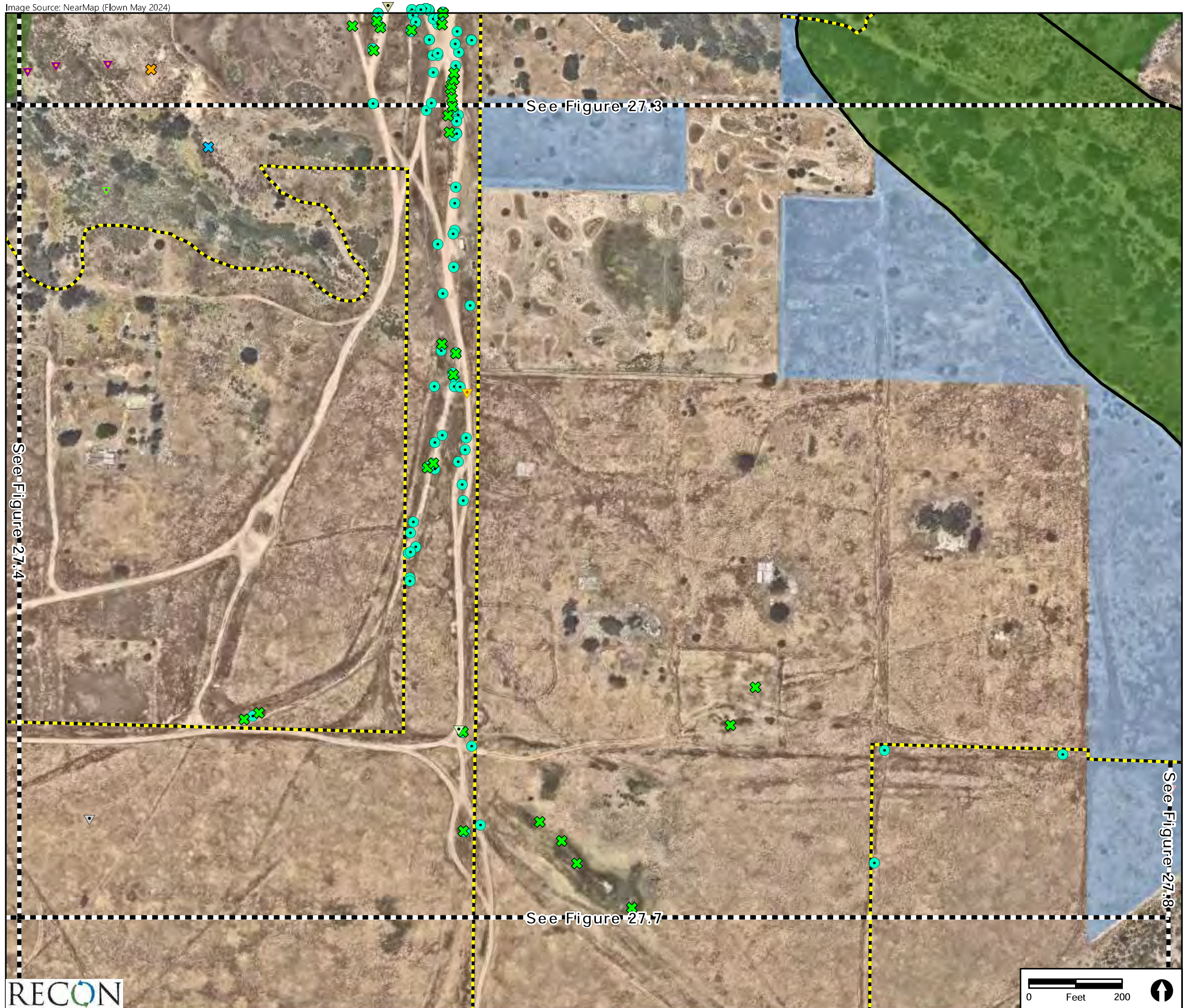
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Two-striped Garter Snake (*Thamnophis hammondi*)
- Western Spadefoot (*Spea hammondi*)

**Crustaceans**

- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 27.4  
Existing Biological Resources -  
Sensitive Animal Species





**Sensitive Animals**

**Birds**

- Coastal California Gnatcatcher (*Poliophtila californica californica*)
- Grasshopper Sparrow (*Ammodramus savannarum*)
- Golden Eagle (*Aquila chrysaetos*)
- Cooper's Hawk (*Accipiter cooperii*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Northern Harrier (*Circus hudsonius*)

**Reptiles and Amphibians**

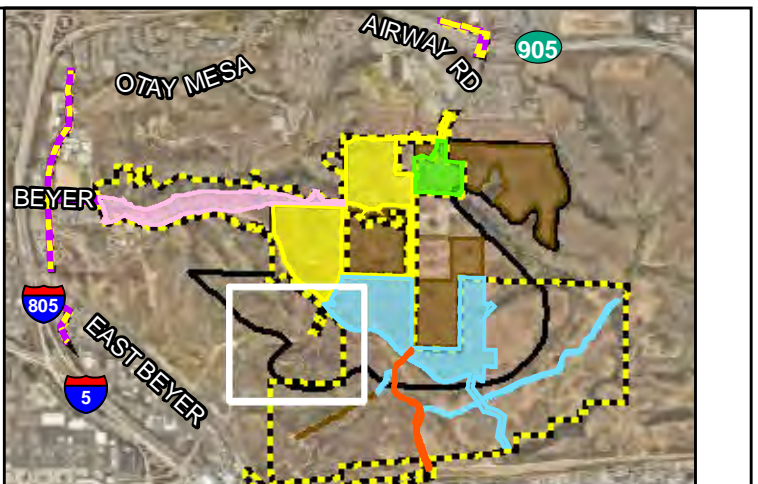
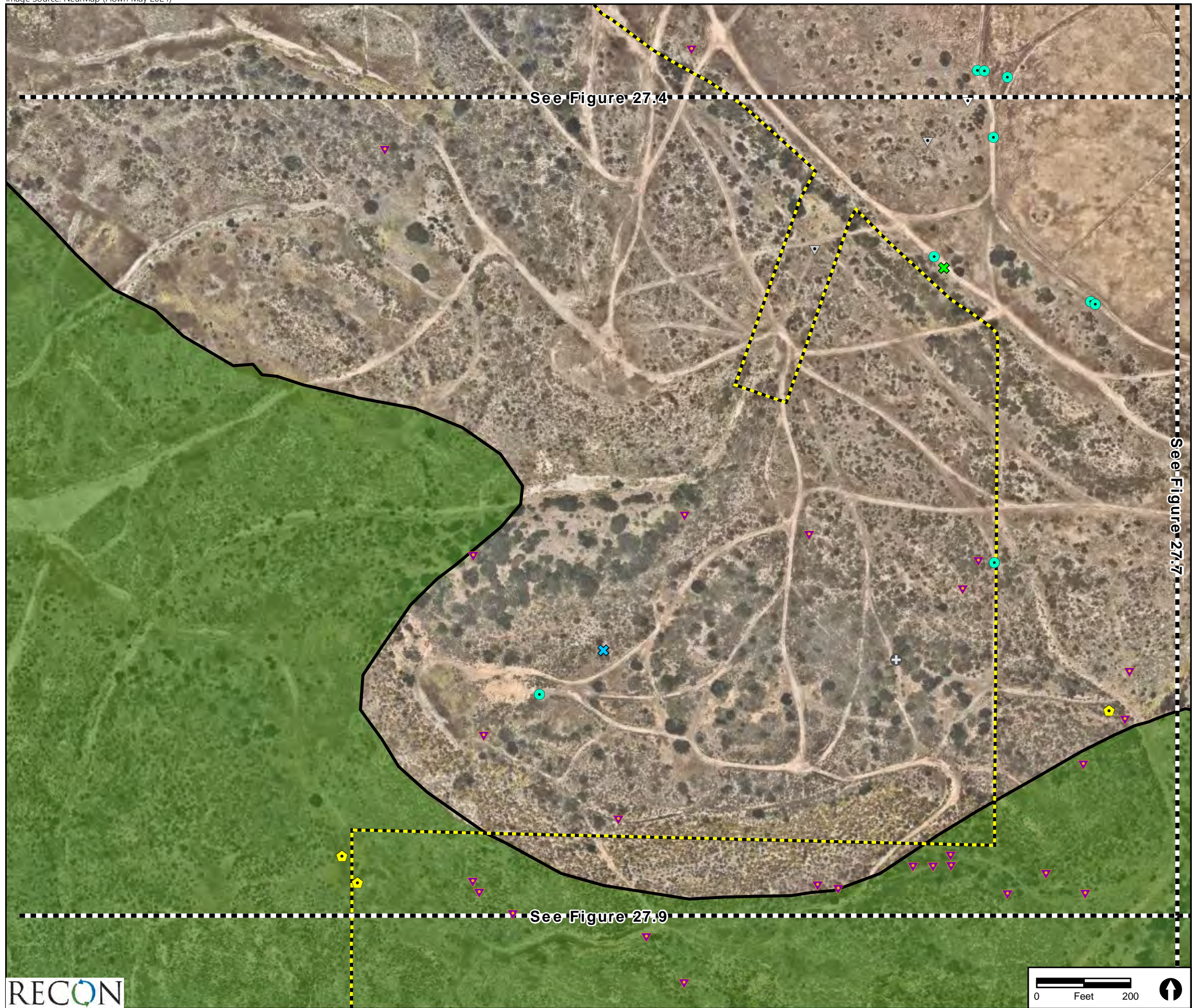
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Western Spadefoot (*Spea hammondi*)

**Crustaceans**

- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

**FIGURE 27.5**  
Existing Biological Resources -  
Sensitive Animal Species





Project-level Phasing		Beyer Boulevard
Phase 1		Off-site Improvements
Phase 2		Emergency Vehicle Access Road
Phase 4		Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Survey Area
- City of SD MHPA

#### Sensitive Animals

##### Birds

- Coastal California Gnatcatcher (*Poliophtila californica californica*)
- Northern Harrier (*Circus hudsonius*)
- White-tailed Kite (*Elanus leucurus*)

##### Mammals

- San Diego Desert Woodrat (*Neotoma lepida intermedia*)

##### Reptiles and Amphibians

- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Western Spadefoot (*Spea hammondi*)

##### Insects

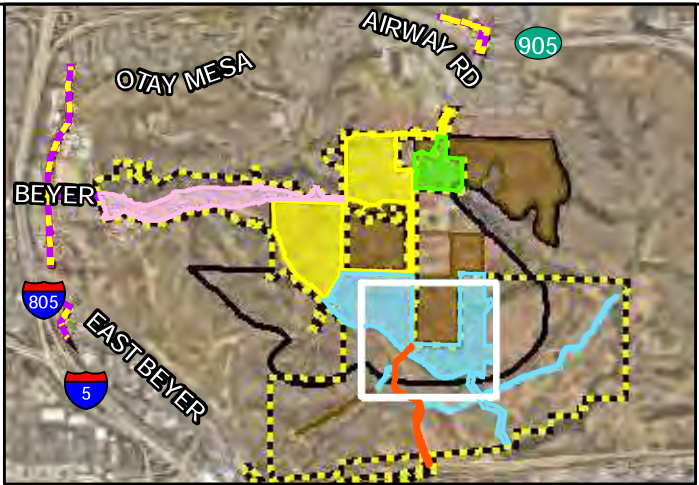
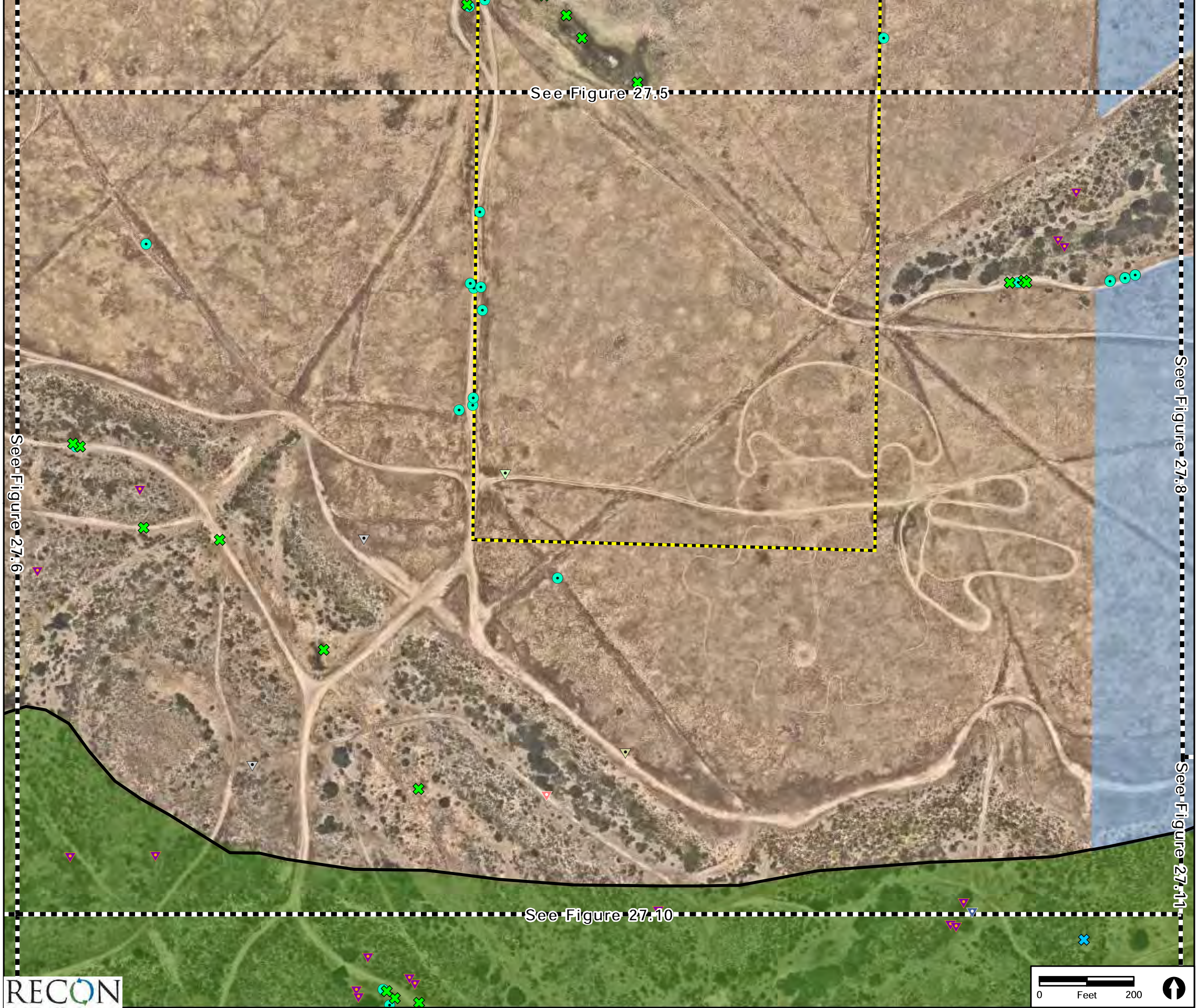
- Crotch's Bumble Bee (*Bombus crotchii*)

##### Crustaceans

- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 27.6  
Existing Biological Resources -  
Sensitive Animal Species





Project-level Phasing		Beyer Boulevard
Phase 1		Off-site Improvements
Phase 2		Emergency Vehicle Access Road
Phase 4		Program-level Phases 3-7

Specific Plan Boundary	City of SD MHPA
Project-level Survey Area	VPHCP MHPA

**Sensitive Animals**

**Birds**

- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- Coastal California Gnatcatcher (*Poliophtila californica californica*)
- Grasshopper Sparrow (*Ammodramus savannarum*)
- California Horned Lark (*Eremophila alpestris actia*)
- Cooper's Hawk (*Accipiter cooperii*)
- Northern Harrier (*Circus hudsonius*)

**Reptiles and Amphibians**

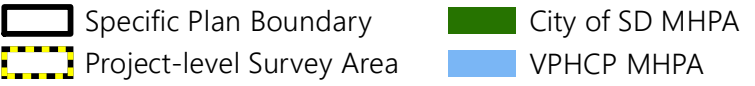
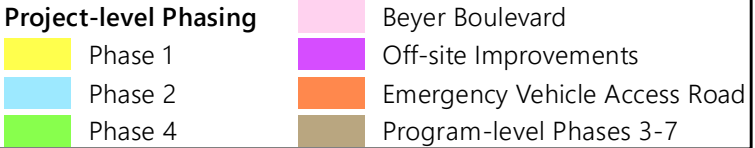
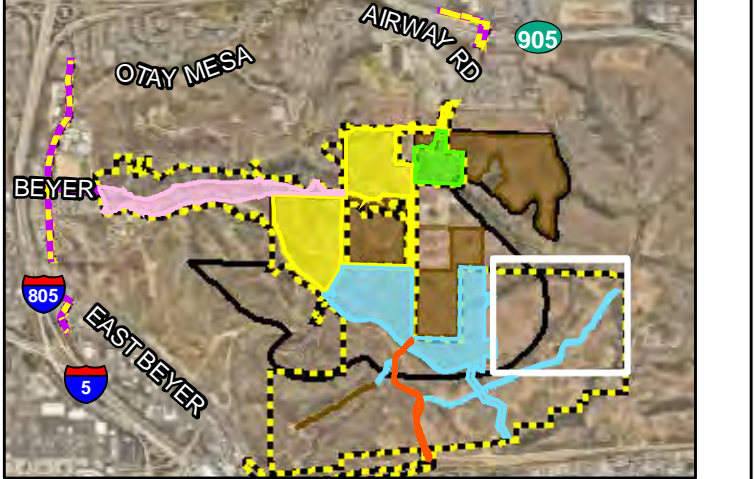
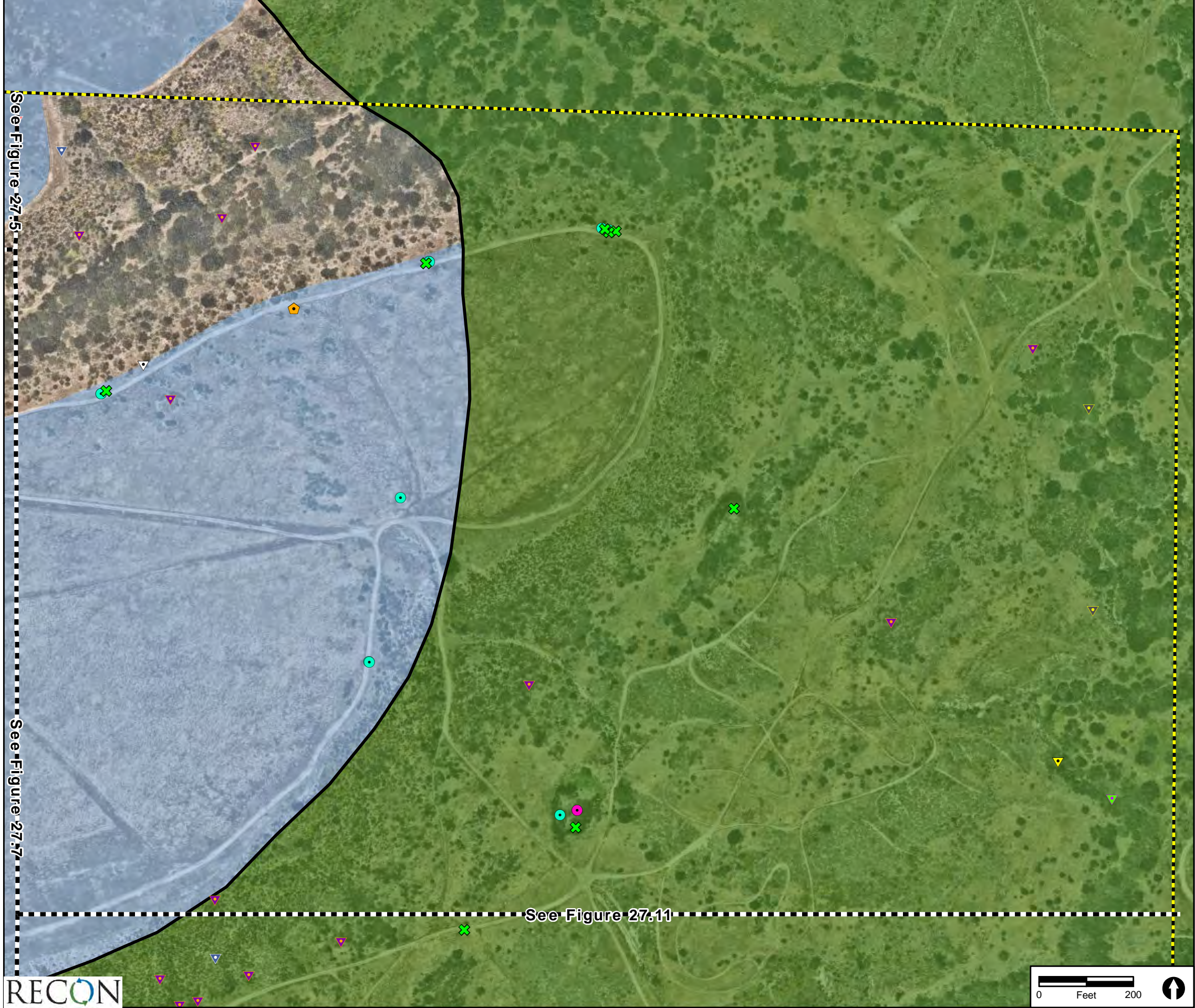
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Western Spadefoot (*Spea hammondi*)

**Crustaceans**

- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 27.7  
Existing Biological Resources -  
Sensitive Animal Species

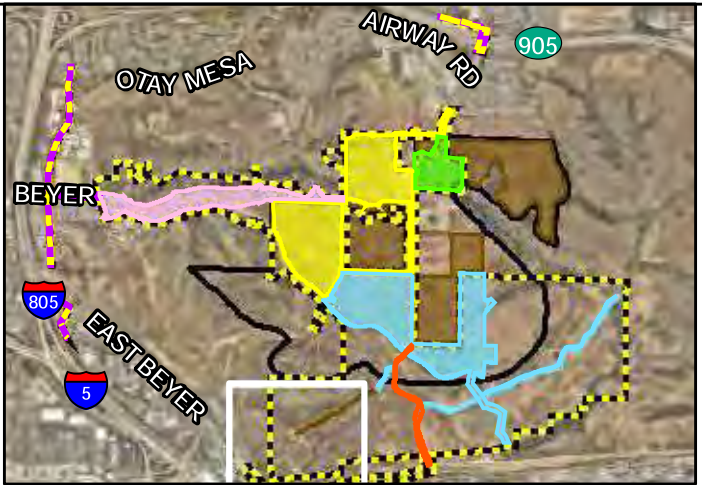




- Sensitive Animals**
- Birds**
- ▼ Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
  - ▼ Coastal California Gnatcatcher (*Polioptila californica californica*)
  - ▼ Cooper's Hawk (*Accipiter cooperii*)
  - ▼ Least Bell's Vireo (*Vireo bellii pusillus*)
  - ▼ Yellow-breasted Chat (*Icteria virens*)
  - ▼ White-tailed Kite (*Elanus leucurus*)
  - ▼ Yellow Warbler (*Setophaga petechia*)
- Reptiles and Amphibians**
- ✕ Western Spadefoot (*Spea hammondi*)
- Insects**
- ✧ Quino Checkerspot Butterfly (*Euphydryas editha quino*)
- Crustaceans**
- Riverside Fairy Shrimp (*Streptocephalus woottoni*)
  - San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 27.8  
Existing Biological Resources -  
Sensitive Animal Species





Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black;"> </span> Phase 1	<span style="background-color: pink; border: 1px solid black;"> </span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black;"> </span> Phase 2	<span style="background-color: purple; border: 1px solid black;"> </span> Off-site Improvements
<span style="background-color: lightgreen; border: 1px solid black;"> </span> Phase 4	<span style="background-color: orange; border: 1px solid black;"> </span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black;"> </span> Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Survey Area
- City of SD MHPA

#### Sensitive Animals

##### Birds

- ▼ Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- ▼ Coastal California Gnatcatcher (*Polioptila californica californica*)
- ▼ Least Bell's Vireo (*Vireo bellii pusillus*)

##### Reptiles and Amphibians

- ✕ Western Spadefoot (*Spea hammondi*)

##### Insects

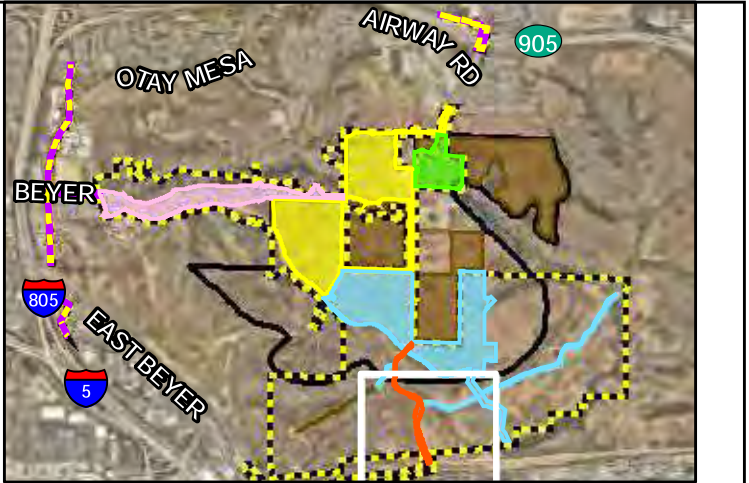
- ♦ Crotch's Bumble Bee (*Bombus crotchii*)

##### Crustaceans

- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 27.9  
Existing Biological Resources -  
Sensitive Animal Species





Project-level Phasing		Beyer Boulevard
Phase 1		Off-site Improvements
Phase 2		Emergency Vehicle Access Road
Phase 4		Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Survey Area
- City of SD MHPA
- VPHCP MHPA

**Sensitive Animals**

**Birds**

- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- Coastal California Gnatcatcher (*Polioptila californica californica*)
- Least Bell's Vireo (*Vireo bellii pusillus*)

**Reptiles and Amphibians**

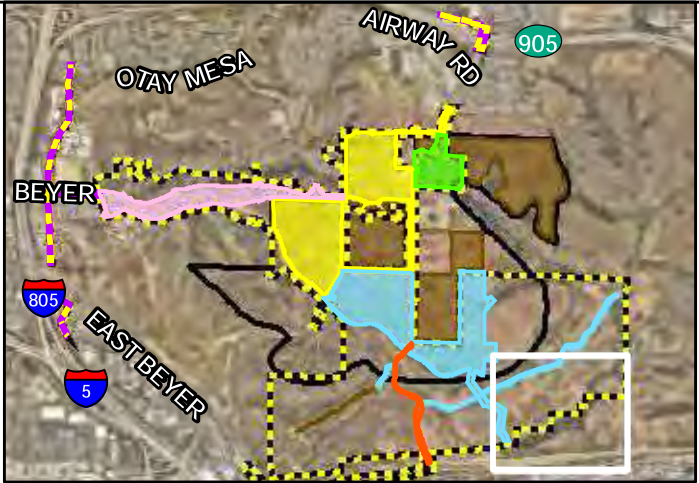
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Western Spadefoot (*Spea hammondi*)

**Crustaceans**

- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 27.10  
Existing Biological Resources -  
Sensitive Animal Species





Project-level Phasing	
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<span style="display:inline-block; width:15px; height:15px; background-color:lightblue;"></span> Phase 2	<span style="display:inline-block; width:15px; height:15px; background-color:purple;"></span> Off-site Improvements
<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen;"></span> Phase 4	<span style="display:inline-block; width:15px; height:15px; background-color:orange;"></span> Emergency Vehicle Access Road
	<span style="display:inline-block; width:15px; height:15px; background-color:brown;"></span> Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Survey Area
- City of SD MHPA
- VPHCP MHPA

**Sensitive Animals**

**Birds**

- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- Coastal California Gnatcatcher (*Poliophtila californica californica*)
- Grasshopper Sparrow (*Ammodramus savannarum*)
- California Horned Lark (*Eremophila alpestris actia*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Yellow Warbler (*Setophaga petechia*)

**Reptiles and Amphibians**

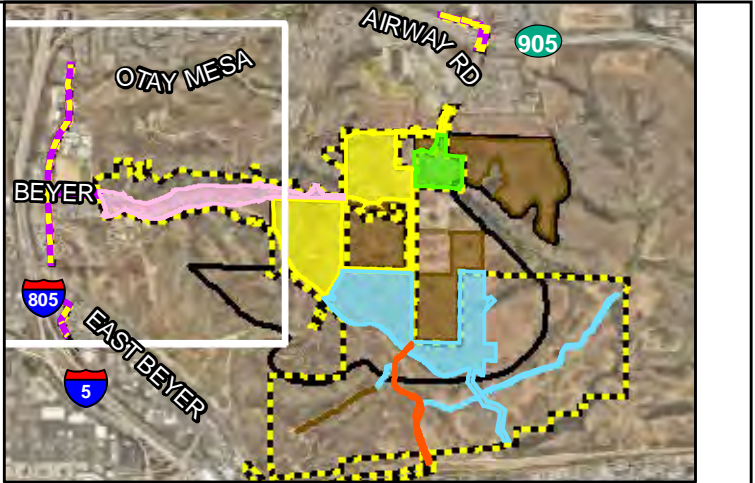
- Western Spadefoot (*Spea hammondi*)

**Insects**

- Crotch's Bumble Bee (*Bombus crotchii*)

FIGURE 27.11  
Existing Biological Resources -  
Sensitive Animal Species





Project-level Phasing		Beyer Boulevard
Phase 1		Off-site Improvements
Phase 2		Emergency Vehicle Access Road
Phase 4		Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Survey Area
- City of SD MHPA
- Sensitive Animals (SanBIOS)**
- California Gnatcatcher (*Poliopitila californica*)
  - San Diego Cactus Wren (*Campylorhynchus brunneicapillus sandiegensis*)
  - White Tailed Kite (*Elanus leucurus majusculus*)
  - Yellow-breasted Chat (*Icteria virens*)

FIGURE 27.12  
Existing Biological Resources -  
Sensitive Animal Species



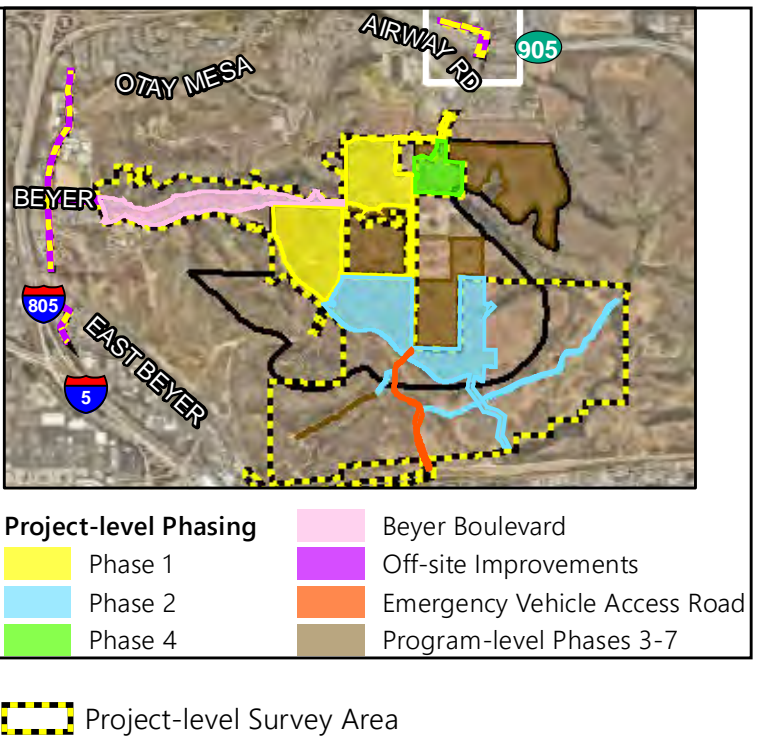
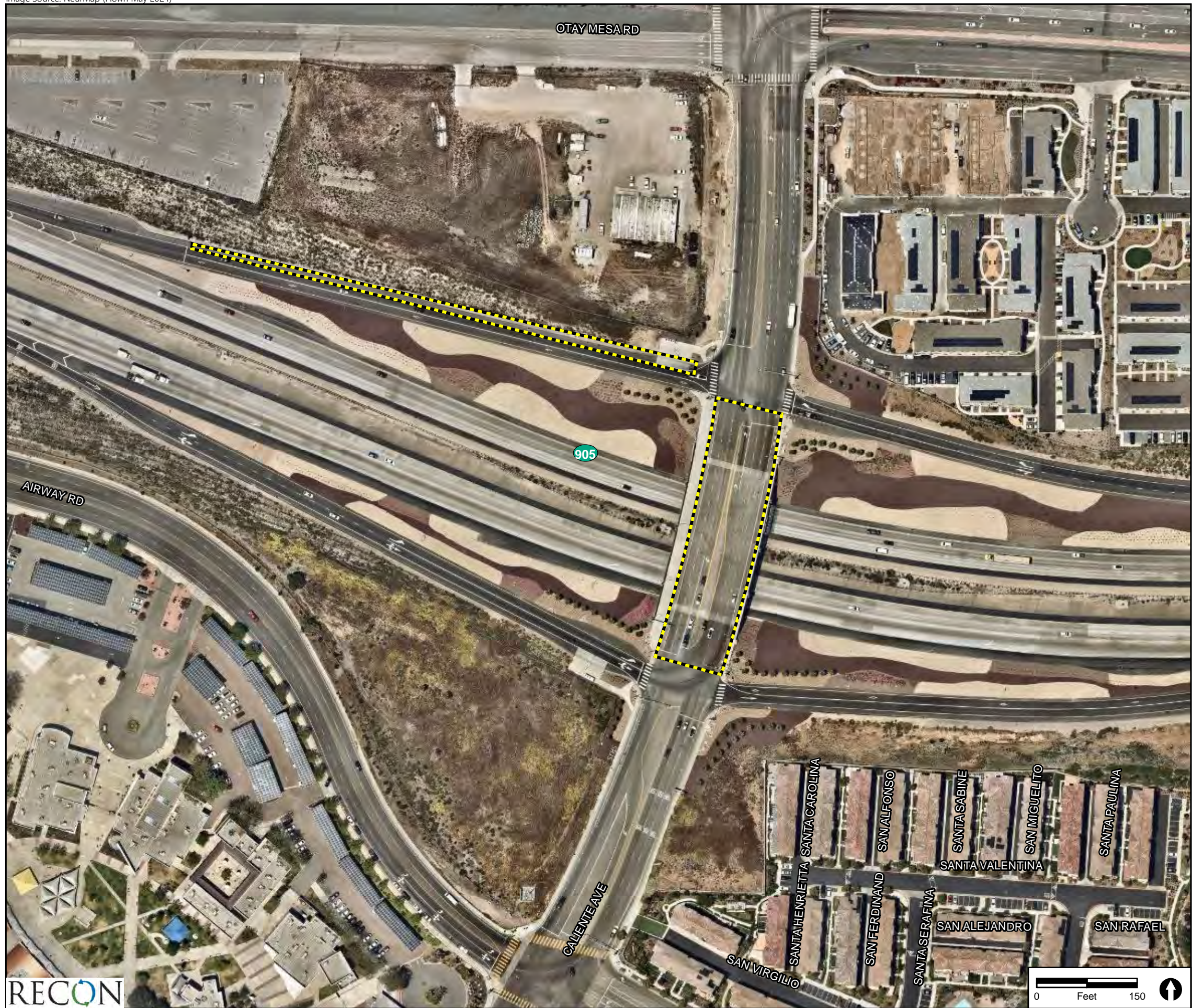


FIGURE 27.13  
Existing Biological Resources -  
Sensitive Animal Species



## 5.0 Sensitive Resources

### 5.1 Sensitivity Criteria

For purposes of this report, species would be considered sensitive if they are: (1) covered species or narrow endemic species under the City of San Diego MSCP or the City's VPHCP; (2) listed by state or federal agencies as threatened or endangered or are proposed for listing; (3) on California Rare Plant Rank (CRPR) 1B (considered endangered throughout its range), CRPR 2 (considered endangered in California but more common elsewhere) of the CNPS Inventory of Rare and Endangered Vascular Plants of California, CRPR 3 (more information about the plant's distribution and rarity needed), and CRPR 4 (plants of limited distribution) of the CNPS Inventory (2022); or (4) considered rare, endangered, or threatened by the CNDDDB (CDFW 2022a, 2022b, 2022c, 2022d, 2022e), the City's Biology Guidelines (City of San Diego 2018a), or local conservation organizations or specialists. Sensitive vegetation communities are those identified by the CNDDDB (CDFW 2022a) or identified by the City (2018a).

**City of San Diego Regulations:** As stated in the City's Biology Guidelines (City of San Diego 2018a), a project site is considered to contain sensitive biological resources if:

1. Portions of the site occur within the MHPA as shown in the City's MSCP Subarea Plan or the VPHCP.
2. The site supports or could support (e.g., in different seasons/rainfall conditions, etc.) Tier I, II, or IIIA and IIIB vegetation communities (such as grassland, chaparral, coastal sage scrub, etc.). The CEQA determination of significant impacts may be based on what was on the site (e.g., if illegal grading or vegetation removal occurred, etc.), as appropriate.
3. The site contains or comes within 100 feet of a natural or manufactured drainage (determine whether it is vegetated with wetland vegetation). The site occurs within the 100-year flood plain established by the Federal Emergency Management Agency (FEMA) or the floodplain/floodway zones.
4. The site does not support a vegetation community identified in Tables 2a, 2b or 3 (Tier I, II, IIIA or IIIB) of the Biology Guidelines; however, wildlife species listed as threatened or endangered or other protected species may use the site (e.g., California least terns [*Sterna antillarum browni*] on dredge spoil, wildlife using agricultural land as a wildlife corridor, etc.).

**Jurisdictional Resources:** All wetland areas, including vernal pools, and non-wetland waters of the U.S. are considered sensitive. Wetlands and non-wetland waters are under the jurisdiction of the USACE. Streambeds and associated wetland vegetation are under the jurisdiction of the CDFW. RWQCB typically takes jurisdiction over all the same areas as USACE and most surface waters. The City defines wetlands as:

Wetlands are areas which are characterized by any of the following conditions: (1) all areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation; (2) areas that have hydric soils or wetland hydrology and lack naturally occurring wetland



vegetation communities because human activities have removed the historic wetland vegetation; (3) areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands (City of San Diego 2018a).

## 5.2 Sensitive Vegetation Communities

### 5.2.1 Program-level Area

Sensitive vegetation communities are those communities that are of highly limited distribution. These communities may also support concentrations of sensitive plant or wildlife species. Two sensitive upland vegetation communities, Diegan coastal sage scrub (Tier II habitat) and Valley and Foothill Grassland (Tier I or IIIB, to be determined during subsequent project-level surveys) are mapped by SANGIS within the program-level analysis areas (see Figure 24.1). Additionally, it is anticipated that additional sensitive upland and wetland communities and vernal pools would be present in the program-level areas. The upland vegetation communities are considered sensitive to the City (City of San Diego 2018a) and the wetland vegetation communities are considered sensitive by the City, USACE, CDFW, and RWQCB. The presence and extent of sensitive vegetation communities would need verification through future site-specific surveys as development is proposed.

### 5.2.2 Project-level Area

Fourteen sensitive vegetation communities, maritime succulent scrub (Tier I), disturbed maritime succulent scrub (Tier I), Diegan coastal sage scrub (Tier II habitat), disturbed Diegan coastal sage scrub (Tier II habitat), native grassland (Tier I), non-native grassland (Tier IIIB habitat), mule fat scrub, southern willow scrub, disturbed riparian, disturbed wetlands, tamarisk scrub, vernal pools (with and without fairy shrimp), and natural flood channel occur within the project-level survey area (see Figures 24.2 through 24.14). These habitats are considered sensitive under the City's Biology Guidelines (2018a), and mule fat scrub, southern willow scrub, disturbed riparian, disturbed southern willow scrub, disturbed wetlands, tamarisk scrub, vernal pools (with and without fairy shrimp), and non-wetland waters/streambeds (natural flood channels), are also considered sensitive by the USACE, CDFW, RWQCB, and the City of San Diego.

## 5.3 Sensitive Plants

### 5.3.1 Program-level Area

Sensitive plant species either documented on-site or within one mile of the program-level area based on information obtained from the literature review including, but limited to, CNDDb, (CDFW 2022a), the All Species Occurrences Database (USFWS 2022), and SanBIOS (County of San Diego 2022) were evaluated for potential to occur. In addition to those plants appearing in database searches as occurring on-site or within the project vicinity, a number of sensitive species were observed within the project-level areas during surveys, indicating they also have a potential to occur



in the program-level areas. Sensitive plant species with a moderate to high potential to occur based on database searches, in addition to those species observed during project-level surveys are listed in Table 3. While these species have been documented in the project vicinity, their presence within the program-level areas is not confirmed, with the exception of San Diego button-celery which is present within one of the City's one-acre conserved parcels located within the program-level area (see Figure 26.5). The presence or potential for sensitive plant species to occur within the program-level areas would need to be evaluated after site-specific surveys are conducted analysis in conjunction with proposed future development. However, based on known occurrences and site conditions, Attachment 7 identifies plant species that are federally listed threatened or endangered, considered City of San Diego narrow endemic, or have a CNPS ranking that have potential to occur based on species range. All sensitive species with a moderate or high potential to occur are described below.

**Ashy spike-moss (*Selaginella cinerascens*).** Ashy spike-moss is a CRPR 4.1 species (CNPS 2023). This plant is a perennial, rhizomatous herb composed of a loose tangle of prostrate runners pale green in color and aging tan to white. This species is distributed mostly in San Diego County and northern Baja California below 1,800 feet in elevation (Baldwin et al. 2012). It is found at many sites in San Diego County, primarily south of State Route 78, on the periphery of the city of San Diego, and in MCAS Miramar, where it can be the dominant ground cover (Reiser 2001). It occurs in sunny spots or under shrubs within chaparral and coastal sage scrub (Baldwin et al. 2012; CNPS 2023), and on many soil types (Reiser 2001). This species is a good indicator of site degradation, as it rarely inhabits disturbed soils. Within the program-level study area, ashy spike moss has a high potential to occur.

**Bobtail barley (*Hordeum intercedens*).** Bobtail barley is a CRPR 3.2 species (CNPS 2023). It is an annual grass (Poaceae family) that grows up to 16 inches high and blooms from March to June (Hickman 1993, CNPS 2023). It is relatively widespread in California, being documented from Glenn County to Baja California; in southern California it occurs in the Channel Islands, Santa Barbara, Ventura, Los Angeles, Orange, Riverside, and San Diego counties (CNPS 2023). Bobtail barley grows in vernal pools, dry saline streambeds, and alkaline flats and depressions in coastal dune, coastal scrub, and grassland plant communities below 3,300 feet (CNPS 2023, Hickman 1993). This species was observed growing in a single vernal pool within the northern limits of the southern existing VPHCP/MPHA area within the southern project-level survey area. Within the program-level study area, bobtail barley has a moderate potential to occur.

**California adolphia (*Adolphia californica*).** California adolphia has a CNPS CRPR of 2B.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California) (CNPS 2023). This small shrub in the buckthorn family (Rhamnaceae) flowers from December to April and loses its leaves in late summer and fall. Its spiny stems are identifiable at close range year-round. This species generally occurs in Diegan coastal sage scrub, near the edge of chaparral, particularly in dry canyons or washes. It is associated with San Miguel and Friant soils (Reiser 2001). Its range is limited to San Diego County and northern Baja California, Mexico at elevations below 1,000 feet. In San Diego County, it is found from the Carlsbad area south into the Proctor Valley and the Otay area (Beauchamp 1986).



Table 3

Sensitive Plant Species Observed within the Project level Analysis Area or with a Moderate Potential to Occur in the Program or Project level Analysis Areas

Common Name	Scientific Name	Federal/ State Listing	CRPR/ Threat Ranking	City of San Diego Listing	Potential or Observed During Project- Level Surveys
ashy spike-moss	<i>Selaginella cinerascens</i>	–/–	4.1	–	Observed
bobtail barley	<i>Hordeum intercedens</i>	–/–	3.2	–	Observed
California adolphia	<i>Adolphia californica</i>	–/–	2B.1	–	Observed
California box-thorn	<i>Lycium californicum</i>	–/–	4.2	–	Observed
cliff spurge	<i>Euphorbia misera</i>	–/–	2B.2	–	Observed
decumbent goldenbush	<i>Isocoma menziesii</i> var. <i>decumbens</i>	–/–	1B.2	–	Observed
golden-ray pentachaeta	<i>Pentachaeta aurea</i> ssp. <i>aurea</i>	–/–	4.2	–	Observed
graceful tarplant	<i>Holocarpha virgata</i> ssp. <i>elongata</i>	–/–	4.2	–	Moderate
Orcutt's bird's-beak	<i>Dicranostegia orcuttiana</i> [= <i>Cordylanthus orcuttianus</i> ]	–/–	2B.1	MSCP	Moderate
Otay tarplant	<i>Deinandra conjugens</i>	FT/CE	1B.1	MSCP, NE	Observed
Palmer's grapplinghook	<i>Harpagonella palmeri</i>	–/–	4.2	–	Observed
San Diego barrel cactus	<i>Ferocactus viridescens</i>	–/–	2B.1	MSCP	Observed
San Diego bur-sage	<i>Ambrosia chenopodiifolia</i>	–/–	2B.1	–	Observed
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	FT/CE	1B.1	VPHCP, NE	Observed
San Diego County viguiera	<i>Bahiopsis laciniata</i>	–/–	4.3	–	Observed
San Diego goldenstar	<i>Bloomeria</i> [= <i>Muilla</i> ] <i>clevelandii</i>	–/–	1B.1	MSCP	Moderate
San Diego needlegrass	<i>Stipa diegoensis</i>	–/–	4.2	–	Observed
seaside cistanthe	<i>Cistanthe maritima</i>	–/–	4.2	–	Observed
small-flowered microseris	<i>Microseris douglasii</i> ssp. <i>platycarpha</i>	–/–	4.2	–	Moderate
snake cholla	<i>Cylindropuntia californica</i> var. <i>californica</i>	–/–	1B.1	MSCP, NE	Observed
south coast saltscale / south coast saltbush	<i>Atriplex pacifica</i>	–/–	1B.2	–	Observed
thread-leaved brodiaea	<i>Brodiaea filifolia</i>	FT/CE	1B.1	MSCP, NE	Moderate
variegated dudleya	<i>Dudleya variegata</i>	–/–	1B.2	MSCP, NE	Observed
western dichondra	<i>Dichondra occidentalis</i>	–/–	4.2	–	Observed



Table 3

Sensitive Plant Species Observed within the Project level Analysis Area or with a Moderate Potential to Occur in the Program or Project level Analysis Areas

**FEDERAL CANDIDATES AND LISTED PLANTS**

- FE = Federally listed endangered
- FT = Federally listed threatened
- FC = Federal candidate for listing as endangered or threatened

**STATE LISTED PLANTS**

- CE = State listed endangered
- CR = State listed rare
- CT = State listed threatened

**CALIFORNIA NATIVE PLANT SOCIETY (CNPS): CALIFORNIA RARE PLANT RANKS (CRPR)**

- 1A = Species presumed extinct.
- 1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
- 2A = Plants presumed extirpated in California, but more common elsewhere.
- 2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
- 3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.
- 4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.
- .1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).
- .2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).
- .3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known).
- CBR = Considered but rejected

**CITY OF SAN DIEGO**

- NE = Narrow endemic
- MSCP = Multiple Species Conservation Program covered species
- VPHCP = Vernal Pool Habitat Conservation Plan covered species



California adolphia was observed growing in clusters, primarily along the southern boundary of Beyer Boulevard and in the southern project-level survey areas. This species was observed within Diegan coastal sage scrub and maritime succulent scrub habitats. Within the program-level study area, California adolphia has a high potential to occur.

**California box-thorn (*Lycium californicum*).** California box-thorn is a CRPR 4.2 species (CNPS 2023). This shrub in the nightshade family (Solanaceae) has stiff, spiny branches, small fleshy leaves, and white, purple-tinged flowers that bloom from March to July (Munz 1974). California box-thorn is distributed coastally, on the Channel Islands and from Los Angeles County south to Baja California, Mexico (Munz 1974, Hickman 1993). The general habitat for this species is coastal bluff scrub and coastal sage scrub below 500 feet elevation; in San Diego County it occupies a band in upper coastal salt marshes and on sandstone steppes (Reiser 2001). California box-thorn differs from all other plants in its genus because it has leaves that are more or less round in cross section and produces only two seeds per fruit (Hickman 1993).

This species was observed in clusters within the maritime succulent scrub and Diegan coastal sage scrub within the Phases 1, 2, Beyer Boulevard, and the southern project-level survey areas. Within the program-level study area, California box-thorn has a moderate potential to occur.

**California Orcutt grass (*Orcuttia californica*).** California Orcutt grass is a state and federally endangered species (CDFW 2022b). It is a CRPR 1B.1 species (rare, threatened, or endangered in California and elsewhere; seriously endangered in California) (CNPS 2023). This prostrate, sticky, bright green annual grass (Poaceae family) grows about four inches tall and flowers in May and June (USFWS 1993). Populations are known from Ventura, Los Angeles, Riverside, and San Diego Counties, and Baja California. This species is known to occur within eight pool complexes in Otay Mesa. (AECOM 2012). California Orcutt grass grows in vernal pools below 2,100 feet elevation, preferring deeper pools (USFWS 1993). Within the program-level study area, California Orcutt grass has a low to moderate potential to occur.

**Cliff spurge (*Euphorbia misera*).** Cliff spurge is a CRPR 2B.2 species (CNPS 2023). Cliff spurge is a shrub in the spurge family (Euphorbiaceae) that grows to about three feet tall and may flower from December to August. It is found coastally from Orange County south to Baja California and in the Channel Islands, with a disjunct population in the Sonoran Desert near Whitewater, Riverside County. It typically occurs in coastal bluff scrub or maritime succulent scrub below 1,700 feet (CNPS 2023). The largest populations in San Diego County are found on Point Loma and Otay Mesa, with occurrences as far north as Carlsbad (Reiser 2001). Soil series associated with this species include Olivenhain cobbly loam and Gaviota fine sandy loam (Reiser 2001). This spiny, low-growing shrub with brittle branches is readily recognizable year-round. This species was observed in the project-level area, especially on south-facing undisturbed slopes. Within the program-level study area, cliff spurge has a moderate potential to occur.

**Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*).** Decumbent goldenbush is a CRPR 1B.2 species (CNPS 2023). This is a low, spreading shrub in the sunflower family (Asteraceae) with stems up to 20 inches long that blooms between April and November (Munz 1974). This variety is found in the Channel Islands, Orange and San Diego counties, and in Baja California (CNPS 2023a). Decumbent goldenbush grows in dry sandy mesas in coastal sage scrub (Munz 1974) intermixed with grassland. In San Diego County, this variety is concentrated in the vicinity of Bonita northward



to the MCAS Miramar, but has been reported as far south as Otay Mesa and as far north as Carlsbad (Reiser 2001). Decumbent goldenbush can be distinguished by being a relatively short shrub, with grayish leaves with cobwebby hairs that typically have a few (but variable in number) shallow teeth on the tip (Nesom 1991, cited in Reiser 2001). This species was observed in the project-level area of the Specific Plan. Within the program-level study area, decumbent goldenbush has a high potential to occur.

**Golden-ray pentachaeta (*Pentachaeta aurea* ssp. *aurea*).** Golden-rayed pentachaeta is a CRPR 4.2 species (CNPS 2023). This slender annual herb in the sunflower family (Asteraceae) grows three to twelve inches high and is topped with small flowers with yellow to brownish-orange centers and yellow rays that bloom from April to July (Hickman 1993, Munz 1974). This species is found in open, grassy areas below 6,000 feet in coastal sage scrub, cismontane woodland, and lower montane coniferous forest (Munz 1974, CNPS 2023). Its range is throughout southern California and Baja California, but it is rarer north of San Diego County (Reiser 2001). It was once a common plant on the mesas around the city of San Diego, and now can be found at MCAS Miramar, Torrey Pines State Park, on Del Mar Mesa, and around Cuyamaca Lake and the Laguna Lakes (Reiser 2001). This species was observed in the project-level area of the Specific Plan. Within the program-level study area, golden-rayed pentachaeta has a high potential to occur.

**Graceful tarplant (*Holocarpha virgata* ssp. *elongata*).** Graceful tarplant is a CRPR 4.2 species (CNPS 2023). This strongly aromatic, sticky, annual herb in the sunflower family (Asteraceae) has a slender stem that may grow four feet tall and flowers between July and November. It occurs in Orange, Riverside and San Diego counties. It may occur in coastal sage scrub, chaparral, grasslands, and cismontane woodland (CNPS 2023), but it is most commonly found in grasslands below 2,500 feet (Hickman 1993). Usually there is little shrub cover where graceful tarplant is found, but non-native grasses and herbs may dominate the area (Reiser 2001). This species is threatened by urban development (CNPS 2023). This species has been known to occur within one mile of the program-level analysis area (CDFW 2022b). Within the program-level study area, graceful tarplant has a moderate potential to occur.

**Orcutt's bird's-beak (*Dicranostegia orcuttianus*).** Orcutt's bird's-beak is covered under the MSCP and is a CRPR 2B.1 species (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California) (City of San Diego 1997, CNPS 2023). This semi-parasitic annual in the broomrape family (Orobanchaceae) flowers from March to July. Its range extends from southern San Diego County into Baja California. Its habitat is coastal scrub below 1,000 feet elevation (Hickman 1993, CNPS 2023), although Reiser (2001) considers seasonally dry drainages and upland adjacent to riparian habitat as its preferred habitat. The largest United States population is located in the Otay River drainage. Within the program-level study area, Orcutt's bird's-beak has a moderate potential to occur.

**Otay tarplant (*Deinandra conjugens*).** Otay tarplant is listed as a California endangered species and a federally threatened species (CDFW 2022c). It is a CRPR 1B.1 species (CNPS 2023) and is a covered species and narrow endemic species under the City's MCSP Subarea Plan (City of San Diego 1997). This small, aromatic annual herb in the sunflower family (Asteraceae) produces mostly solitary yellow flower heads in May and June (Munz 1974). It ranges from southwestern San Diego County into Baja California, in open coastal sage scrub and grassland habitats below 1,000 feet elevation (CNPS 2023).



It typically occurs in herbaceous plant communities on slopes and mesas with expansive clay soils, and may occur in non-native grasslands and fallow agricultural fields where clay soils are present (Reiser 2001). Otay tarplant is considered to be declining. Residential and commercial development and highway construction have led to this decline (Reiser 2001). Populations of Otay tarplant are substantially declining throughout San Diego County. Extant populations are threatened by pressures from urban development, habitat disturbance, and invasion of non-native species. There is no designated critical habitat for Otay tarplant within the program-level area. This species was observed in the project-level area of the Specific Plan. Within the program-level study area, Otay tarplant has a high potential to occur.

**Palmer's grapplinghook (*Harpagonella palmeri*).** Palmer's grapplinghook is a CRPR 4.2 species (CNPS 2023). This small herbaceous annual in the borage family (Boraginaceae) flowers from March to May, then produces spiny nutlets that look like tiny grapplinghooks. Palmer's grapplinghook is found in Los Angeles, Orange, Riverside, and San Diego counties, Arizona, Baja California, and Sonora, Mexico (CNPS 2023). It may be found in grasslands, coastal sage scrub, and chaparral habitats below 2,700 feet (CNPS 2023), but in San Diego is typically found in open grassy slopes or open coastal sage scrub habitat on clay soils. This inconspicuous plant can most reliably be identified in late spring or early summer, when its distinctive fruit can be observed. This species was observed in the project-level area of the Specific Plan. Within the program-level study area, Palmer's grapplinghook has a high potential to occur.

**San Diego barrel cactus (*Ferocactus viridescens*).** San Diego barrel cactus is a CRPR 2B.1 species and is a covered species under the MSCP (CNPS 2023; City of San Diego 1997). This globular succulent in the cactus family (Cactaceae) grows up to eight inches tall and flowers in May and June (Baldwin et al. 2012). It is found only in coastal San Diego County and Baja California, Mexico. Although found as far north as Oceanside coastally and Poway inland, the largest populations of San Diego barrel cactus occur in Otay Mesa and Otay Valley, Point Loma, and Marine Corps Air Station (MCAS) Miramar (Reiser 2001). This species generally occurs in sandy, rocky or dry hills of coastal sage scrub, grassland, chaparral, and vernal pool habitats below 500 feet elevation (University of California 2018, Munz 1974). It is typically found in soil types such as San Miguel-Exchequer rocky silt loams and Redding gravelly loams and is associated with species such as variegated dudleya, foothill needle grass (*Stipa lepida*), and California sagebrush (Reiser 2001). It is the only barrel cactus found in coastal areas. San Diego cactus is threatened by urbanization, off-road vehicles, and collecting (Baldwin et al. 2012). This species was observed in the project-level area of the Specific Plan. Within the program-level study area, San Diego barrel cactus has a high potential to occur.

**San Diego bur-sage (*Ambrosia chenopodiifolia*).** San Diego bur-sage is a CRPR 2B.1 species (CNPS 2023). This perennial shrub is in the sunflower family (Asteraceae), has hairy grayish leaves, and flowers from April to June. Its range is restricted to extreme southern San Diego County, near Otay Mesa, and northern Baja California, Mexico. It is generally found in dry, fairly open, Diegan coastal sage scrub below 600 feet in elevation, where it often grows in association with low-growing California sagebrush (*Artemisia californica*) and black sage (*Salvia mellifera*). It has also been known to occur on Olivenhain cobbly loam soil (Reiser 2001). This species was observed in the project-level area of the Specific Plan. Within the program-level study area, San Diego bur-sage has a high potential to occur.



**San Diego button-celery (*Eryngium aristulatum* var. *parishii*).** San Diego button-celery is federally and state listed as endangered, is a MSCP-covered species under the VPHCP, and is a CRPR 1B.1 species (CDFW 2022e; City of San Diego 2019; CNPS 2023). San Diego button-celery is a low-growing emergent aquatic plant in the carrot family (Apiaceae) that can be either an annual or perennial plant, with heads of greenish flowers, observed between March and July. San Diego button-celery is limited to vernal pools in coastal sage scrub and grassland habitats. Its current range extends from Marine Corps Base Camp Pendleton in northern San Diego County through San Diego County into Baja California. The appearance of the plant can differ from an erect plant with bright green leaves emerging from shallow pools in the spring, to a spiny, prostrate, gray-green plant during flowering and fruiting. San Diego button-celery is considered to be declining due to loss or conversion of habitat. More than half of the 80 known occurrences of this species have been extirpated (CNPS 2023). Within the program-level study area, San Diego button-celery was observed on one of the City-owned 1-acre parcels

**Small-flowered microseris (*Microseris douglasii* ssp. *platycarpa*).** Small-flowered microseris is a CRPR 4.2 species (CNPS 2023). This annual herb in the sunflower family (Asteraceae) grows from one to ten inches tall and produces yellow or white flowers in March and May. The range of this subspecies of the widespread *M. douglasii* includes Los Angeles, Orange, Riverside, and San Diego counties and the southern Channel Islands (CNPS 2023). Small-flowered microseris occur in grasslands, cismontane woodland, coastal scrub, and vernal pool habitats (CNPS 2023); more specifically, in San Diego it typically occurs on clay lenses among native bunchgrasses, on the edge of vernal pools, or in openings in sage scrub (Reiser 2001). This plant dries up quickly after setting seed, so directed surveys must be conducted during its short flowering season (Reiser 2001). In order to distinguish this plant from the other subspecies that grow along the south coast, it is necessary to examine the bristles below the flower (Hickman 1993). This species is severely threatened by urbanization and non-native plant invasions into native habitats (CNPS 2023). This species has been known to occur within one mile of the program-level analysis area (CDFW 2022b.) Within the program-level study area, small-flowered microseris has a high potential to occur.

**Snake cholla (*Cylindropuntia californica* var. *californica*).** is CRPR 1B.1 species (CNPS 2023) and is a narrow endemic species under the MSCP. It is a generally prostrate cactus (Cactaceae family) that may grow up to 9 feet and blooms with yellow or green-yellow flowers in April and May. This variety grows only in southern San Diego County and Baja California, with the many known populations within the Otay Mesa area of San Diego, Chula Vista, and Bonita (Reiser 2001). Snake cholla occurs in coastal sage scrub and chaparral habitats between 100 and 500 feet elevation (CNPS 2023), most often on dry hillsides. It is associated with Huerfuerlo loam, Gaviota fine sandy loam, and Redding cobbly loam soils (Reiser 2001). Snake cholla was observed within the maritime succulent scrub within the southern project-level survey areas and within portions of Moody Canyon. Within the program-level study area, snake cholla has a high potential to occur.

**San Diego County viguiera (*Bahiopsis laciniata*).** San Diego County viguiera is a CRPR 4.2 species (CNPS 2023). This shrub in the sunflower family (Asteraceae) has shiny, resinous leaves and showy yellow flowers that bloom from February to August (University of California 2018, Munz 1974). Its range extends from Sonora and Baja California, Mexico northward into San Diego and Orange County (CNPS 2023), although the population in Orange County may not be native (Reiser 2001). In San Diego County it is rare north of State Route 78, becoming increasingly common to the south,



until it is the dominant coastal sage shrub in non-coastal southern San Diego County (Reiser 2001). San Diego County viguiera occurs on dry, shrubby slopes in Diegan coastal sage scrub and chaparral habitats between 200 and 2,500 feet in elevation. This species was observed in the project-level area of the Specific Plan. Within the program-level study area, San Diego County viguiera has a high potential to occur.

**San Diego goldenstar (*Bloomeria* [= *Muilla*] *clevelandii*).** San Diego goldenstar is a CRPR 1B.1 species (CNPS 2023). This herbaceous perennial in the lily family (Liliaceae) grows one foot tall and has bright yellow flowers in May (Munz 1974). San Diego goldenstar is found below 1500 feet in southwestern San Diego County and northern Baja California, Mexico. It grows in grasslands and vernal pool habitats, and on the edges of coastal sage scrub and chaparral (CNPS 2023). San Diego goldenstar looks somewhat like common goldenstar (*Bloomeria crocea*), but the filaments of San Diego goldenstar sit on a conspicuously raised base (Reiser 2001). This species is threatened by urbanization, road construction, invasion of non-native plants, and illegal dumping (CNPS 2023). This species has been known to occur within one mile of the program-level analysis area (CDFW 2022b). Within the program-level study area, San Diego goldenstar has a high potential to occur.

**San Diego County needle grass (*Stipa* [= *Achnatherum*] *diegoensis*).** San Diego County needle grass is a CRPR 4.2 species (CNPS 2023). This species is a tufted perennial grass (Poaceae family) that grows up to four feet tall, blooming from February to June. It occurs in the Channel Islands, San Diego County, and Baja California (CNPS 2023). San Diego County needle grass grows in rocky areas of coastal sage scrub and chaparral at elevations below 1,200 feet; mainland populations often occur near streams (Hickman 1993). In San Diego County, this grass is found between 1,000 and 2,400 feet elevation along vernal streams and on clay slopes (Reiser 2001). Known San Diego County locations for this species include Proctor Valley, Jamul Mountain, McGinty Mountain, near Lee Valley, Otay Mesa, and Otay Mountain (Beauchamp 1986). This species was observed in the project-level area of the Specific Plan. Within the program-level study area, San Diego County needle grass has a high potential to occur.

**Seaside cistanthe (*Cistanthe maritima*).** Seaside cistanthe is a CRPR 4.2 species (CNPS 2023). This low, spreading, succulent annual herb in the purslane family (Portulacaceae) flowers from March through May (Munz 1974). Its range extends along the coast from Santa Barbara County southward into Baja California and on the Channel Islands (CNPS 2023). It is typically found on sandy bluffs and openings in coastal sage scrub flats near the beach. It has been mapped on Gaviota fine sandy loam and Terrace Escarpment soils (Reiser 2001). This species was observed in the project-level area of the Specific Plan on undisturbed south-facing slopes. Within the program-level study area, seaside cistanthe has a high potential to occur.

**South coast saltscale (*Atriplex pacifica*).** South coast saltscale, also known as South coast saltbush, is a CRPR 1B.2 species (CNPS 2023). It is a prostrate annual herb in the goosefoot family (Chenopodiaceae) that forms tangled masses up to three feet in diameter and produces inconspicuous flowers between March and October. This species is distributed coastally from Los Angeles south to Baja California and on the Channel Islands, with disjunct populations in Arizona and Sonora, Mexico (CNPS 2023). It is found below 300 feet in elevation, in coastal bluff scrub, coastal dunes, and coastal scrub; it can also occur in alkaline playas in the desert (CNPS 2023). In San Diego County, it typically grows in dry, often mildly disturbed sites in open Diegan coastal sage



scrub; host soils include Linne clay loam and Huerhuero-urban land (Reiser 2001). This species was observed in the project-level area of the Specific Plan. Within the program-level study area, south coast saltscale has a high potential to occur.

**Spreading navarretia (*Navarretia fossalis*).** Spreading navarretia is federally listed as threatened (CDFW 2022b). It is a CRPR 1B.1 species (rare, threatened, or endangered in California and elsewhere; seriously endangered in California) (CNPS 2023). This low-growing annual herb in the phlox family (Polemoniaceae) grows about five inches tall and flowers from April to June. Its range includes northwestern Los Angeles County, western Riverside County, coastal San Diego County, and northwestern Baja California (USFWS 1998a); it is presumed extirpated from San Luis Obispo County (CNPS 2023). This species occurs in vernal pools and ditches below 4,300 feet (Hickman 1993). Numbers of prostrate navarretia increase during wet years, and this species is seldom noted in shallow vernal pools. Two other species of navarretia occur in similar habitats: *N. intertexta* has ovate, rather than linear, corolla lobes and *N. prostrata* is prostrate, with its bluish flowers almost buried in its basal leaves. USFWS-designated critical habitat is present for this species within the program-level areas (Figure 28.1). Within the program-level study area, spreading navarretia has a low to moderate potential to occur.

**Thread-leaved brodiaea (*Brodiaea filifolia*).** This species was listed by California as endangered in 1982 and by the U.S. as a threatened species in 1998 (USFWS 1998a). Thread-leaved brodiaea is a narrow endemic species covered under the MSCP and is a CRPR 1B.1 species (CNPS 2023). This perennial bulbiferous herb in the lily family (Liliaceae) has several linear leaves that may reach 16 inches in height, its leafless flowering stalk bears blue to red-purple flowers in May and June. This plant may occur in coastal sage scrub, chaparral, cismontane woodland, alkali scrub and floodplains (CNPS 2023), but is most commonly found in heavy clay soils in native grasslands or in association with vernal pools (USFWS 1998a). Its range extends from the foothills of the San Gabriel and San Bernardino Mountains, through Orange County and western Riverside County, to Carlsbad in northwestern San Diego County. Nearly half of known existing populations are clustered around the cities of Vista, San Marcos, and Carlsbad. Thread-leaved brodiaea is restricted to clay, loamy sand, or alkaline silty-clay soils, and is typically found on gentle hillsides, in valleys, or in floodplains (USFWS 1998a). This species is difficult to distinguish from grasses, unless surveyed during its flowering season. Thread-leaved brodiaea is considered to be declining, with many of its occurrences threatened by residential and agricultural development (CNPS 2023). This species has been known to occur within one mile of the program-level analysis area (CDFW 2022b). Within the program-level study area, thread-leaved brodiaea has a moderate potential to occur.

**Variegated dudleya (*Dudleya variegata*).** Variegated dudleya is a CRPR 1B.2 species (CNPS 2023) and is a narrow endemic species covered by the MSCP. This small succulent perennial in the stonecrop family (Crassulaceae) emerges from a corm in spring and produces yellow flowers in May and June. Its range extends from southwestern San Diego County to Baja California. It occurs in coastal sage scrub, grassland, and chaparral habitats below 500 feet. It usually grows in stony places lacking shrub cover, on isolated rocky substrate in grasslands, and on mima mounds near vernal pools. It often occurs on gravelly loam soils (Reiser 2001). Although the largest populations are known to occur in Otay Mesa, it has been reported as far north as Black Mountain Road (CDFW 2022b). This species is difficult to detect given the small size, cryptic form, and short season of detectability between spring and early summer.



Urban growth threatens the continued existence of variegated dudleya in San Diego County (Reiser 2001). Major populations within Otay Mesa have been removed due to the widespread development that has occurred in this region during the past few decades. This species was observed in the project-level area of the Specific Plan. Within the program-level study area, variegated dudleya has a moderate potential to occur.

**Western dichondra (*Dichondra occidentalis*).** Western dichondra is a CRPR 4.2 species (CNPS 2023). This small perennial herb in the morning-glory family (Convolvulaceae) can form a ground cover and flowers from March to May. It occurs below 1,500 feet in coastal southern California south of Santa Barbara County, in the Channel Islands, and in Baja California. Western dichondra is found in chaparral, cismontane woodland, coastal sage scrub, where it often grows hidden beneath shrubs. It also may occur after fire in these habitats as well as in rocky outcrops in grasslands. This species was observed in the project-level area of the Specific Plan. Within the program-level study area, western dichondra has a moderate potential to occur.

### 5.3.2 Project-level Area

A total of 19 sensitive plant species were observed during the focused rare plant surveys and other biological surveys conducted in project-level areas. Sensitive plant species observed include: ashy spike-moss, bobtail barley, California adolphia, California box-thorn, cliff spurge, decumbent goldenbush, golden-ray pentachaeta, Otay tarplant, Palmer's grapplinghook, San Diego barrel cactus, San Diego bur-sage, San Diego button-celery, San Diego County viguiera, San Diego County needle grass, seaside cistanthe, snake cholla, south coast saltscale, variegated dudleya, and western dichondra (see Figures 26.1 through 26.11). These species are described in Section 5.3.1 and their occurrences within the project-level area is described below.

**Ashy spike-moss (*Selaginella cinerascens*).** Ashy spike-moss is a CRPR 4.1 species (CNPS 2023). This species was found in clustered mats throughout Phases 1, 2, Beyer Boulevard, and the southern and southeastern project-level survey areas, primarily on undisturbed portions of mesa tops in maritime succulent scrub habitat.

**Bobtail barley (*Hordeum intercedens*).** Bobtail barley is a CRPR 3.2 species (CNPS 2023). This species was observed growing in a single vernal pool within the northern limits of the southern existing VPHCP/MPHA area within the southern project-level survey area.

**California adolphia (*Adolphia californica*).** California adolphia has a CNPS CRPR of 2B.1 (rare, threatened, or endangered in California, but more common elsewhere; seriously endangered in California) (CNPS 2023). California adolphia was observed growing in clusters, primarily along the southern boundary of Phase 1 and in the southern project-level survey areas. This species was observed within Diegan coastal sage scrub and maritime succulent scrub habitats.

**California box-thorn (*Lycium californicum*).** California box-thorn is a CRPR 4.2 species (CNPS 2023). This species was observed in clusters within the maritime succulent scrub and Diegan coastal sage scrub within the Phase 1, Beyer Boulevard, and the southern project-level survey areas.



**Cliff spurge (*Euphorbia misera*).** Cliff spurge is a CRPR 2B.2 species (CNPS 2023). Cliff spurge occurs in the project-level Phases 1, 2, and Beyer Boulevard areas on the south- and west-facing slopes within maritime succulent scrub in the southern project-level survey areas. It was observed occurring in the highest numbers on south-facing slopes and areas with little disturbance.

**Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*).** Decumbent goldenbush is a CRPR 1B.2 species (CNPS 2023). This species was observed within the project-level survey area for Beyer Boulevard within Diegan coastal sage scrub (Photograph 23). The habitat had other native shrubs, non-native grass, and loamy or clay textured soil. Only individuals were observed but others could occur hidden within the Diegan coastal sage scrub.

**Golden-ray pentachaeta (*Pentachaeta aurea* ssp. *aurea*).** Golden-rayed pentachaeta is a CRPR 4.2 species (CNPS 2023). Golden-ray pentachaeta was only observed growing within the non-native grassland habitat immediately north of the southern existing VPHCP/MHPA area within the southern project-level survey area but outside of Phases 1 and 2 areas (Photograph 24). Given the level of survey effort conducted, it is expected that this plant would have been detected within the impact area if present.

**Otay tarplant (*Deinandra conjugens*).** Otay tarplant is listed as a California endangered species and a federally threatened species (CDFW 2022c). It is a CRPR 1B.1 species (CNPS 2023) and is a covered species and narrow endemic species under the City's MCSP Subarea Plan (City of San Diego 1997). Otay tarplant occurs within the western portion of the project-level survey area along the north-facing slope of Moody Canyon in areas mapped as maritime succulent scrub and disturbed land (Photograph 25). This species appears to be more concentrated in areas that have previously been disturbed, such as lightly used trails and a previously graded road and are also scattered within the slope.

**Palmer's grapplinghook (*Harpagonella palmeri*).** Palmer's grapplinghook is a CRPR 4.2 species (CNPS 2023). This species was observed within the southern and southeastern project-level survey areas in the non-native grassland and disturbed areas and on a south-facing slope within the Beyer Boulevard survey area. Palmer's grapplinghook was frequently scattered within the large patches of low-growing annual flowers and along the roadsides.

**San Diego barrel cactus (*Ferocactus viridescens*).** San Diego barrel cactus is a CRPR 2B.1 species and is a covered species under the MSCP (CNPS 2023; City of San Diego 1997). San Diego barrel cactus was observed in the project-level Phases 1, 4, Beyer Boulevard, and south- and west-facing slopes within Phase 2 within maritime succulent scrub and within Diegan coastal sage scrub along the rims of mesas. It was observed to occur in the highest numbers on south-facing slopes and areas with little disturbance (Photograph 26). This species also occurs around the edges of the southern existing VPHCP/MHPA area within the southern project-level survey area.

**San Diego bur-sage (*Ambrosia chenopodiifolia*).** San Diego bur-sage is a CRPR 2B.1 species (CNPS 2023). San Diego bur-sage occurs throughout the project-level survey area within the maritime succulent scrub, disturbed maritime succulent scrub, and Diegan coastal sage scrub. It occurs as the dominant plant species within some of the maritime succulent scrub; and also occurs within some disturbed areas, such as roads and project-level trails (Photograph 27).





PHOTOGRAPH 23

Decumbent Goldenbush (*Isocoma menziesii* var. *decumbens*) Observed along Edge of Diegan Coastal Sage Scrub in Phase 1. Photo Date: March 26, 2019



PHOTOGRAPH 24

Golden-ray Pentachaeta (*Pentachaeta aurea* ssp. *aurea*) Observed in Non-native Grassland within Mitigation Lands. Photo Date: May 8, 2019





PHOTOGRAPH 25

Otoy Tarplant (*Deinandra conjugens*) Observed in Disturbed Land within the Western Portion of Phase 1b. Photo Date: June 8, 2020





PHOTOGRAPH 26

Flowering San Diego Barrel Cactus (*Ferocactus viridescens*) in Maritime Succulent Scrub, within the Northern Portion of Phase 1;  
Photo Date: April 1, 2019



PHOTOGRAPH 27

San Diego Bur-sage (*Ambrosia chenopodiifolia*)  
Growing in Maritime Succulent Scrub within the  
Southern Portion of Phase 1;  
Photo Date: February 26, 2018



**San Diego button-celery (*Eryngium aristulatum* var. *parishii*).** San Diego button-celery is federally and state listed as endangered, is a MSCP-covered species under the VPHCP, and is a CRPR 1B.1 species (CDFW 2022e; City of San Diego 2019; CNPS 2023). San Diego button-celery was observed in one vernal pool located within Phase 1 (Photograph 28).

**San Diego County needle grass (*Stipa* [= *Achnatherum*] *diegoensis*).** San Diego County needle grass is a CRPR 4.2 species (CNPS 2023). This species was observed in Phase 1, 2, Beyer Boulevard, and southern survey areas on north-facing slopes within openings of maritime succulent scrub. The habitat had other native bunch grasses, bulbs, and a rocky surface. Additionally, this species occurs within a canyon in the easternmost project-level survey areas.

**San Diego County viguiera (*Bahiopsis laciniata*).** San Diego County viguiera is a CRPR 4.2 species (CNPS 2023). San Diego viguiera occurs throughout Phases 1, 2, 4, Beyer Boulevard, and the southern project-level survey areas. Individuals occur both scattered and in groups within maritime succulent scrub and Diegan coastal sage scrub. Areas of the site that appear to undergo a high amount of disturbance were not found to contain this species.

**Seaside cistanthe (*Cistanthe maritima*).** Seaside cistanthe is a CRPR 4.2 species (CNPS 2023). Seaside cistanthe was observed within the coastal sage scrub habitat within the project-level Phase 1 and within maritime succulent scrub habitat within the southern project-level survey areas. Typically, groups of this species generally occur on undisturbed south-facing slopes (Photograph 29).

**Snake cholla (*Cylindropuntia californica* var. *californica*).** Snake cholla is CRPR 1B.1 species (CNPS 2023) and is a narrow endemic species under the MSCP. Snake cholla was observed within the maritime succulent scrub within the project-level Phase 2 and Beyer Boulevard and southern project-level survey areas and within portions of Moody Canyon outside of the project-level impact area.

**South coast saltscale (*Atriplex pacifica*).** South coast saltscale, also known as South coast saltbush, is a CRPR 1B.2 species (CNPS 2023). South coast saltscale was observed within both disturbed maritime succulent scrub and non-native grassland habitats within the project-level areas, along the southwestern edge of the mesa top within Phases 1 and 2 and within the Beyer Boulevard survey area.

**Variegated dudleya (*Dudleya variegata*).** Variegated dudleya is a CRPR 1B.2 species (CNPS 2023) and is a narrow endemic species covered by the MSCP. Variegated dudleya was observed immediately to the north of the southern existing VPHCP/MHPA area, within the southeastern project-level survey area. It was found in two separate clumps within Diegan coastal sage scrub habitat. Given the level of survey effort conducted, it is expected that this plant would have been detected within the impact area if present.

**Western dichondra (*Dichondra occidentalis*).** Western dichondra is a CRPR 4.2 species (CNPS 2023). This species was observed within the maritime succulent scrub within the western portion of the Beyer Boulevard survey area. A small clump of five individuals occurs just off the existing disturbed road in the native habitat.





PHOTOGRAPH 28

San Diego Button-celery (*Eryngium aristulatum* var. *parishii*) Observed in Vernal Pool #3145 in Phase 1.

Photo Date: April 23, 2019



PHOTOGRAPH 29

Flowering Seaside Cistanthe (*Cistanthe maritima*) (Foreground) Observed Just Outside of the

Southwestern Corner of Phase 1;

Photo Date: April 1, 2019



Two of these observed species, Otay tarplant and San Diego button-celery, are federally and state listed endangered and covered under the MSCP and VPHCP, respectively. Otay tarplant, variegated dudleya, San Diego button-celery, and snake cholla are narrow endemic, MSCP-covered species. San Diego barrel cactus is a MSCP-covered species. The remaining sensitive plant species are considered locally sensitive and have a rare plant ranking as assigned by CNPS. All sensitive plant species observed in the project-level survey area and their corresponding listing status are included in Table 3.

Sensitive plant species known to occur in the project vicinity (within one mile of the project-level survey area), based on CNDDDB records, were evaluated for their potential to occur as detailed in Attachment 7. Sensitive plant species that are federally listed threatened or endangered, considered City narrow endemic, or that have potential to occur based on species range were evaluated. After rare plant surveys and many years of work within the project-level survey area, plants were either noted as high potential to occur, a moderate potential to occur, or a low potential to occur. Additionally, the following species were identified as having a moderate potential to occur: graceful tarplant (*Holocarpha virgata* ssp. *elongate*), Orcutt's bird's-beak (*Dicranostegia orcuttiana* [= *Cordylanthus orcuttianus*]), San Diego goldenstar (*Bloomeria* [= *Muilla*] *clevelandii*), small-flowered microseris (*Microseris douglasii* ssp. *platycarpha*), and thread-leaved brodiaea (*Brodiaea filifolia*). Refer to Attachment 7 for a summary of all plant species evaluated and their potential to occur.

In addition, there is USFWS-designated critical habitat for spreading navarretia present within the project-level areas (see Figure 28.1); however, this species was not observed during any of the rare plant and fairy shrimp surveys conducted and the potential to occur has been identified as low.

## 5.4 Sensitive Wildlife

### 5.4.1 Program-level Area

Three sensitive wildlife species are known to occur within the program-level analysis area based on information obtained from the literature review including, but are not limited to, CNDDDB (CDFW 2022a), the All Species Occurrences Database (USFWS 2022), and SanBIOS (County of San Diego 2022): San Diego fairy shrimp, western spadefoot, and coastal cactus wren. Their corresponding listing status are listed in Table 4a and are discussed further below.

Additional species observed within the project-level survey areas (Section 5.4.2) were determined to have high potential to occur and several other species have a moderate potential to occur based on habitat characteristics present in the program-level analysis area. Precise locations and presence of sensitive wildlife species within the program-level areas would be identified through on-site reconnaissance and project-level analysis in conjunction with proposed future development. An expanded description of species identified with a moderate to high potential to occur is included in Section 5.4.2. Sensitive wildlife species known to occur in the project vicinity (within one mile of the program-level areas) that are federally listed threatened or endangered, or that have potential to occur based on species range are also addressed in Attachment 8.



Table 4a			
Sensitive Wildlife Species Observed and with a Moderate to High Potential to Occur within the Program-level Analysis Area			
Scientific Name	Common Name	Listing Status	Potential to Occur <sup>1</sup>
<b>Invertebrates</b>			
<i>Bombus crotchii</i>	Crotch's bumble bee	SC	Moderate
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE, VPHCP	Observed
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE	Moderate
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE, VPHCP	Moderate
<b>Amphibians</b>			
<i>Spea hammondi</i>	western spadefoot	FPT, CSC	Observed
<b>Reptiles</b>			
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	CSC, MSCP	High
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	CSC	High
<i>Crotalus ruber</i>	red diamond rattlesnake	CSC	High
<i>Phrynosoma blainvillii</i>	coast horned lizard	CSC, MSCP	High
<i>Plestiodon skiltonianus interparietalis</i>	Coronado skink	CSC	Moderate
<i>Thamnophis hammondi</i>	two-striped gartersnake	CSC	High
<b>Birds</b>			
<i>Accipiter cooperii</i>	Cooper's hawk	WL, MSCP	High
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	WL	Moderate
<i>Athene cunicularia</i>	burrowing owl	SC, MSCP	High
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	WL, MSCP	High
<i>Ammodramus savannarum</i>	grasshopper sparrow	CSC	High
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	CSC, MSCP	Observed
<i>Circus hudsonius</i>	northern harrier	CSC, MSCP	High
<i>Elanus leucurus</i>	white-tailed kite	CFP	High
<i>Eremophila alpestris actia</i>	California horned lark	WL	High
<i>Falco columbarius</i>	merlin	WL	High
<i>Aquila chrysaetos</i>	golden eagle	WL, CFP, BGEPA, MSCP	High
<i>Haliaeetus leucocephalus</i>	bald eagle	CE, CFP, BGEPA, MSCP	High
<i>Icteria virens</i>	yellow-breasted chat	CSC	High
<i>Lanius ludovicianus</i>	loggerhead shrike	CSC	Moderate
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT, CSC, MSCP	High
<i>Setophaga petechia</i>	yellow warbler	CSC	High
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, CE, MSCP	High
<b>Mammals</b>			
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	CSC	High
<i>Odocoileus hemionus fuliginata</i>	southern mule deer	MSCP	Moderate
<sup>1</sup> Additional detail regarding the potential to occur is provided in Attachment 8. <u>Listed/Proposed</u> CE = Listed as endangered by the state of California FE = Listed as endangered by the federal government FPT = Proposed to be listed as threatened by the federal government FT = Listed as threatened by the federal government SC = State of California candidate for listing as threatened or endangered <u>Other</u> BGEPA = Bald and Golden Eagle Protection Act CFP = California fully protected species CSC = California Department of Fish and Wildlife species of special concern WL = California Department of Fish and Wildlife watch list species MSCP = City and County of San Diego Multiple Species Conservation Program covered species VPHCP = City of San Diego Vernal Pool Habitat Conservation Plan			



**San Diego fairy shrimp (*Branchinecta sandiegonensis*)** is federally listed as endangered and is a covered species under the VPHCP (CDFW 2022e, City of San Diego 2019). USFWS designated revised final critical habitat for this species in December 2007 (see Figure 28.3). This fairy shrimp occurs in limited populations in Santa Barbara and Orange counties, and in San Diego County from San Marcos and Ramona south to Otay Mesa and into northwestern Baja California, Mexico, at Valle de Las Palmas (USFWS 1997a). The majority of San Diego fairy shrimp populations are located in San Diego County. San Diego fairy shrimp are found in vernal pools and prefer cool water temperatures. This species can also be found in ditches and road ruts that are located in degraded vernal pool habitat. Fairy shrimp remain dormant in cysts until pools fill during the rainy season. Nauplii emerge from cysts and develop into adults sometime between mid-December and early May (Eriksen and Belk 1999). Development takes from 10 to 20 days and is dependent on water temperature. Primary threats to this species are habitat destruction and fragmentation, alterations of wetland hydrology, off-road vehicle activity, and grazing (USFWS 1997a). This species was observed within the program-level study area.

**Western spadefoot (*Spea hammondi*)**. The western spadefoot is proposed to be federally listed as threatened and a CDFW species of special concern. This species ranges from central northern California through the Coast Ranges from San Francisco south into Baja California, Mexico, at elevations from sea level to 4,500 feet (Stebbins 2003; Zeiner et al. 1988-1990a). Habitat for the western spadefoot includes lowlands, washes, floodplains of rivers, alluvial fans, alkali flats, temporary ponds, and vernal pools. Although this species is generally found in areas of open vegetation with sandy or gravelly soil (Stebbins 2003), it has been observed in vernal pools containing clay soils on Otay Mesa. Surface activity can occur from October through April depending on rainfall, and oviposition occurs between late February and May (Jennings and Hayes 1994). The western spadefoot diet consists of crickets, butterflies, ants, flies, and earthworms (Morey and Gullin, as cited in Jennings and Hayes 1994). Decline in western spadefoot populations is primarily due to habitat loss and fragmentation, and possibly pesticide use. This species was observed within the program-level study area.

**Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)**. The coastal cactus wren is a CDFW species of concern and a City of San Diego MSCP-covered species (CDFW 2022e; City of San Diego 1997). This subspecies ranges from southern Orange County through San Diego County into extreme northwestern Baja California (Proudfoot and Sherry 2000). Year-round residents, coastal cactus wrens inhabit coastal sage and maritime succulent scrub containing thickets of coastal cholla (*Cylindropuntia prolifera*) and two species of prickly pear, shore cactus (*Opuntia littoralis*) and chaparral prickly pear (*Opuntia oricola*) (Rea and Weaver 1990). Coastal cactus wrens build their nests in the cacti approximately 3 feet in height (Solek and Szijj 2004), and egg laying occurs from mid-March through early June. Males often build multiple nests throughout the year, which are used for roosting by adults and fledglings, and nesting for subsequent broods (Unitt 2004). This species is considered a shrubby skulker, foraging primarily on open areas on the ground or low in the vegetation for insects. In high temperatures, the coastal cactus wren prefers to forage under the canopy of shrubs (Solek and Szijj 2004).

Shuford and Gardali (2008) summarize that in San Diego County the coastal cactus wren is concentrated in four core regions: southern Camp Pendleton/Fallbrook Naval Weapons Station, Lake Hodges/San Pasqual, Lake Jennings, and Sweetwater/Otay Mesa. The primary cause for the



decline of this species is degradation and loss of breeding habitat to urbanization. Human-caused disturbance, such as increased fire frequency and intensity, is also problematic for this species, as cactus recovery after a fire can be slow (Solek and Szijj 2004). This species was observed within the program-level study area.

## 5.4.2 Project-level Area

A total of 25 sensitive wildlife species were observed or assumed present within the project-level survey area during the general and focused surveys conducted for this project: Quino checkerspot butterfly, San Diego fairy shrimp, Riverside fairy shrimp, Crotch's bumble bee, western spadefoot, coastal California gnatcatcher, orange-throated whiptail, coastal whiptail, coast horned lizard, red diamond rattlesnake, two-striped gartersnake, Cooper's hawk, burrowing owl, northern harrier, white-tailed kite, merlin, bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), California horned lark, yellow warbler (*Setophaga petechia*), yellow-breasted chat (*Icteria virens*), least Bell's vireo, southern California rufous-crowned sparrow, grasshopper sparrow, and San Diego desert woodrat (see Figure 27.1 through 27.11).

Five additional wildlife species were not observed but have a moderate to high potential to occur within the project-level analysis area, including Coronado skink (*Plestiodon skiltonianus interparietalis*), Bell's sage sparrow (*Artemisiospiza belli belli*), loggerhead shrike (*Lanius ludovicianus*), southern mule deer (*Odocoileus hemionus fuliginata*), and coastal cactus wren. All sensitive wildlife species with a moderate or high potential to occur including all sensitive wildlife species observed in the project-level survey area and their corresponding listing status are included in Table 4b and described in Section 5.4.2.1. All sensitive wildlife species that are federally listed threatened or endangered, or that have potential to occur based on species range are addressed in Attachment 8. Species not observed but with a moderate or high potential to occur within the project-level areas are described in Section 5.4.2.2



Table 4b Sensitive Wildlife Species Observed and with a Moderate to High Potential to Occur within the Project-level Survey Area			
Scientific Name	Common Name	Listing Status	Potential to Occur <sup>1</sup>
<b>Invertebrates</b>			
<i>Bombus crotchii</i>	Crotch's bumble bee	SC	Observed
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE, VPHCP	Observed
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE	Observed
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE, VPHCP	Observed
<b>Amphibians</b>			
<i>Spea hammondi</i>	western spadefoot	FPT, CSC	Observed
<b>Reptiles</b>			
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	CSC, MSCP	Observed
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	CSC	Observed
<i>Crotalus ruber</i>	red diamond rattlesnake	CSC	Observed
<i>Phrynosoma blainvillii</i>	coast horned lizard	CSC, MSCP	Observed
<i>Plestiodon skiltonianus interparietalis</i>	Coronado skink	CSC	Moderate
<i>Thamnophis hammondi</i>	two-striped gartersnake	CSC	Observed
<b>Birds</b>			
<i>Accipiter cooperii</i>	Cooper's hawk	WL, MSCP	Observed
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	WL	Moderate
<i>Athene cunicularia</i>	burrowing owl	SC, MSCP	Observed
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	WL, MSCP	Observed
<i>Ammodramus savannarum</i>	grasshopper sparrow	CSC	Observed
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	CSC, MSCP	High
<i>Circus hudsonius</i>	northern harrier	CSC, MSCP	Observed
<i>Elanus leucurus</i>	white-tailed kite	CFP	Observed
<i>Eremophila alpestris actia</i>	California horned lark	WL	Observed
<i>Falco columbarius</i>	merlin	WL	Observed
<i>Aquila chrysaetos</i>	golden eagle	WL, CFP, BGEPA, MSCP	Observed
<i>Haliaeetus leucocephalus</i>	bald eagle	CE, CFP, BGEPA, MSCP	Observed
<i>Icteria virens</i>	yellow-breasted chat	CSC	Observed
<i>Lanius ludovicianus</i>	loggerhead shrike	CSC	Moderate
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT, CSC, MSCP	Observed
<i>Setophaga petechia</i>	yellow warbler	CSC	Observed
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, CE, MSCP	Observed
<b>Mammals</b>			
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	CSC	Observed
<i>Odocoileus hemionus fuliginata</i>	southern mule deer	MSCP	Moderate
<sup>1</sup> Additional detail regarding the potential to occur is provided in Attachment 8. <u>Listed/Proposed</u> CE = Listed as endangered by the state of California FE = Listed as endangered by the federal government FPT = Proposed to be listed as threatened by the federal government FT = Listed as threatened by the federal government SC = State of California candidate for listing as threatened or endangered <u>Other</u> BGEPA = Bald and Golden Eagle Protection Act CFP = California fully protected species CSC = California Department of Fish and Wildlife species of special concern WL = California Department of Fish and Wildlife watch list species MSCP = City and County of San Diego Multiple Species Conservation Program covered species VPHCP = City of San Diego Vernal Pool Habitat Conservation Plan			



### 5.4.2.1 Observed

#### a. Invertebrates

A general description of **San Diego fairy shrimp** (*Branchinecta sandiegonensis*) is provided in Section 5.4.1 above. Within the project-level survey area, qualified biologists conducted wet season surveys during the 2017–2018 wet season, at which time San Diego fairy shrimp were detected within 24 of 113 mapped depressions (RECON 2018b). No common or other listed fairy shrimp species, i.e., versatile fairy shrimp (*Branchinecta lindahlī*) or Riverside fairy shrimp, respectively, were detected in any of the depressions during the 2017–2018 wet season.

Wet season surveys during the 2018–2019 rainy season were conducted in 96 depressions mapped within new areas added to impact boundary, and within 74 depressions that did not inundate sufficiently during the 2017–2018 wet season survey effort, for a total of 170 depressions surveyed. San Diego fairy shrimp was present in 52 depressions.

Dry season sampling was conducted on 113 depressions and two new depressions for a total of 115 depressions in 2018 (RECON 2019a). An additional 125 depressions that were not sampled during the 2018 dry season surveys were sampled during the 2019 season and San Diego fairy shrimp cysts were detected in 15 basins of the 125 basins (ECORP 2020).

Wet season surveys for the 2019–2020 rainy season were conducted in 188 depressions, within areas not previously surveyed. San Diego fairy shrimp were detected in 51 pools, and dry season sampling occurred within 126 basins that have not yet been sampled.

Combined over the three seasons, permitted biologists surveyed a total of 336 basins and 67 disturbed wetlands. The federally endangered San Diego fairy shrimp was detected in approximately 75 percent of those basins.

**Quino checkerspot butterfly** (*Euphydryas editha quino*) is federally listed as endangered (CDFW 2022e). The Quino checkerspot butterfly's historic range includes the coastal plain and inland valleys of southern California from the Santa Monica Mountains south to northern Baja California. Currently, the species is known from southern San Diego County and southwestern Riverside County. The distribution of Quino checkerspot butterfly is primarily defined by the distribution of its principal host plant, dot-seed plantain (*Plantago erecta*). Female Quino checkerspot butterfly have also been observed depositing eggs on woolly plantain (*Plantago patagonia*), white snapdragon (*Antirrhinum coulterianum*), and thread-leaved bird's beak (*Cordylanthus rigidus*) (USFWS 2009a). It is possible that members of the figwort family (Scrophulariaceae), including purple owl's clover (*Castilleja exserta*), are also used (Brown 1991; Mattoni et al. 1997). Threats to this species include habitat loss, fragmentation, and habitat type conversion. In April 2002, the USFWS designated critical habitat for the Quino checkerspot butterfly in portions of San Diego and Riverside counties (USFWS 2002). The project-level survey area does not contain any USFWS designated critical habitat for the Quino checkerspot butterfly.

Of all the protocol surveys conducted for this species, only a single Quino checkerspot butterfly was observed during the 2019 survey effort in an open area with abundant popcornflower (*Plagiobothrys* sp.) within the southern project-level survey area in the VPHCP MHPA area (RECON 2019b; Photograph 30; Figure 27.8). Other nectar plant species, such as farinose ground-pink and goldfields, were also observed within the area. In general, the areas surveyed in 2019, especially the



areas located within and adjacent to the proposed vernal pool restoration areas, support much higher quality habitat than the areas within Phases 1 and 2 given the abundance of host and nectar species. These higher quality areas also have lower shrub cover and more open non-native grassland which are more favorable for this species, especially where dot-seed plantain occurs (RECON 2019b).

In early consultation efforts, USFWS stated that any land with contiguous suitable habitat within one kilometer of a Quino checkerspot butterfly observation would be considered to be occupied. The areas within the one-kilometer buffer were evaluated for suitable habitat for this species in 2020 and 2023. Suitable habitat identified along canyon edges and roadsides within the one-kilometer buffer was characterized by the presence of host and nectar plants such as common goldfields, farinose ground pink and adobe popcornflower (Figure 29.1). A majority of the remaining lands within the one-kilometer buffer were dominated with dense and tall non-native grasses. These non-native grasses include rye grass (*Festuca perennis*), ripgut grass (*Bromus diandrus*), wall barley (*Hordeum murinum*), and slender wild oat (*Avena barbata*), considered poor-quality habitat for Quino checkerspot butterfly.

Updated mapping of suitable habitat within the project-level analysis areas was conducted in spring 2023, including updated mapping of host and nectar plant patches as detailed in the 2023 Quino checkerspot butterfly post-survey report and a total of 0.93 acre of host plant and nectar resources was identified (see Figure 29.1, RECON 2023; Attachment 9). No Quino checkerspot butterfly was observed in 2023. Mapping of suitable habitat within the mitigation lands was conducted during the spring of 2024 to characterize the extent of potential habitat present (see Figure 29.1).

**Riverside fairy shrimp (*Streptocephalus woottoni*)** is federally listed as endangered and is a covered species under the VPHCP (CDFW 2022e, City of San Diego 2019), and is an MSCP narrow endemic species (City of San Diego 2018a). USFWS has designated revised final critical habitat for this species in December 2012 (see Figure 28.3). This species occurs in vernal pools, pool-like ephemeral ponds, and human-modified depressions from Orange, San Diego, and western Riverside counties south to into Baja California, Mexico, and has the most restricted range of any fairy shrimp found in California. Riverside fairy shrimp are typically found in pools that are greater than 30 centimeters deep. Riverside fairy shrimp can require over 21 days of inundation to emerge. The species hatches in 7 to 12 days and develops to the adult stage in 48 to 56 days, depending on water temperature. The primary threats to this species are habitat destruction and fragmentation, alterations of wetland hydrology, off-road activity, and grazing. Information regarding the occurrence of this species is from the CNDDDB (CDFW 2022c, 2022e).

The wet season fairy shrimp survey report (Busby Biological Services 2019) for the 2018/2019 wet season documented that the federally endangered Riverside fairy shrimp was detected in one vernal pool in Phase 1 (Photograph 31; see Figure 27.3). A seasonal basin within the Candlelight project area was also identified as supporting this species (see Figure 27.3; Alden 2013). This vernal pool also held San Diego fairy shrimp. This species was not identified within the 2017/2018 wet season focused surveys, 2018 and 2019 dry season samplings, or in the additional pools covered during the 2019/2020 wet season focused surveys. However, during the 2019/2020 dry season sampling, one pool within the southeastern portion of the project-level survey area within lands proposed to be conserved as a part of project mitigation was found to support *Streptocephalus* cysts (see Figure 27.8), which indicates that this basin also supports Riverside fairy shrimp.





PHOTOGRAPH 30

Quino Checkerspot Butterfly (*Euphydryas editha quino*) Observed within the Vernal Pool Restoration Area. Photo Date: April 1, 2019



PHOTOGRAPH 31

Riverside Fairy Shrimp (*Streptocephalus woottoni*) Observed in Vernal Pool #150 during Protocol Surveys. Photo Date: March 19, 2019



**Crotch's bumble bee (*Bombus crotchii*).** Crotch's bumble bee is a Candidate Species for listing under CESA (California Fish and Game Commission 2019). This species prefers open grassland and shrub habitats and can also be found in desert areas including Joshua tree and creosote scrub and may occur in urban settings. In California, its distribution is exclusive to coastal areas from San Diego to Redding. This species is less common in Nevada and Mexico. Crotch's bumble bee feeds on snapdragon, phacelia (*Phacelia* spp.), clarkia (*Clarkia* spp.), bush poppy (*Dendromecon* spp.), California poppy (*Eschscholzia californica*), and buckwheat (*Eriogonum* spp.).

Crotch's bumble bee was incidentally observed within four locations within the mitigation lands during the habitat assessment conducted for the species (see Figure 27.6, 27.9, and 27.11). This species has potential to occur within all habitats and land cover types, outside of the disturbed trails and roads, developed lands, vernal pools and natural flood channels based on the species range and available nectar sources on-site. The habitat assessment survey area (project-level survey area and mitigation lands) covered 510.73 acres. The majority of the survey area, approximately 430 acres, supports low (0-5 percent cover by nectar resources) or low-to-moderate (6-15 percent cover) foraging habitat suitability based on presence, cover, and density of nectar resources (see Figure 29.2). Areas with moderate (16-25 percent cover), moderate-to-high (25-50 percent cover), and high (>50 percent cover) foraging habitat suitability are scattered across the project-level survey area and mitigation lands and total approximately 80 acres. The entire survey area is considered suitable for nesting.

## b. Amphibians

**Western spadefoot (*Spea hammondi*).** A general description of this species is provided in Section 5.4.1 above. Within the project-level survey area, this species was observed as eggs and tadpoles during fairy shrimp protocol surveys and general biological surveys. Based on the 2024 focused surveys, currently occupied breeding habitat within the project-level impact area comprises 66 basins, which represents approximately 43 percent of all ponded basins in 2024 for a total area of 0.62 acre. If a similar level of occupancy is extrapolated across all mapped basins, there is a potential of 172 basins for a total of 1.82 acres of occupied habitat. Western spadefoot were observed within vernal pools in Phases 1, 2, 4, Beyer Boulevard, and southern survey areas including the existing VPHCP/MHPA areas (see Figures 27.1 through 27.10). Western spadefoot was detected in 23 basins covering 1.96 acres within other parts of the survey area, including lands proposed to be conserved as a part of project mitigation (see Figures 27.5 and 27.7 through 27.10). An additional 14 basins in these areas were negative for spadefoot and 14 basins did not pond during the 2024 survey.

## c. Reptiles

**Orange-throated whiptail (*Aspidoscelis hyperythra*).** The orange-throated whiptail is a CDFW species of special concern and an MSCP-covered species. This species ranges from the coast to the Peninsular Mountain ranges from Orange and southwestern San Bernardino counties to the tip of Baja California, Mexico (Stebbins 2003). It occurs in a variety of habitats and is most common in sandy areas of low, open sage scrub or chaparral, particularly where there is California buckwheat, sage (*Salvia* spp.), or chamise (*Adenostoma fasciculatum*; Lemm 2006). This species feeds primarily on the western subterranean termite (*Reticulitermes hesperus*), which comprises 86 percent or more



of the lizard's diet (Bostic 1966). It is active during spring and summer, but is largely dormant during the fall and winter, when temperatures drop (Jennings and Hayes 1994). Breeding occurs from May through July. The decline of this species is attributed to habitat loss and fragmentation (McGurty 1980).

The orange-throated whiptail was observed during focused Quino checkerspot butterfly surveys within disturbed Diegan coastal sage scrub and maritime succulent scrub habitats within Phase 1 and Beyer Boulevard survey area and southern survey areas (see Figures 27.1 through 27.3, 27.5 through 27.7 and 27.10).

**Coastal whiptail (*Aspidoscelis tigris stejnegeri*).** The coastal whiptail is a CDFW species of special concern. The coastal whiptail ranges predominantly on the coastal slope from Santa Barbara County south into northwestern Baja California, Mexico (Stebbins 2003). In San Diego County, the whiptail occurs in coastal sage scrub and chaparral, as well as in woodlands and streamsides. Its diet consists of a wide variety of insects, spiders, scorpions, and other lizards. The decline of populations of coastal western whiptail is attributed to habitat loss and fragmentation. This species was observed basking within the maritime succulent scrub within Phase 1 (see Figure 27.2).

**Red diamond rattlesnake (*Crotalus ruber*).** The red diamond rattlesnake is a CDFW species of special concern. This species occurs from sea level to about 4,000 to 5,000 feet on both sides of the Peninsular Ranges from southern San Bernardino County south through western Riverside and San Diego counties to Baja California, Mexico (Jennings and Hayes 1994). It inhabits coastal sage scrub, chaparral, and pinyon-juniper woodland particularly where there are abundant rock outcrops (Jennings and Hayes 1994; Lemm 2006). This species is active year-round with peak activity occurring in April and May, and breeding from February through September (Jennings and Hayes 1994). Its diet consists principally of small mammals, lizards, birds, and other snakes. Population declines of the red diamond rattlesnake are generally attributable to a reduction of habitat in the snake's restricted range due to urbanization and agriculture.

A red diamond rattlesnake was observed in Diegan coastal sage scrub habitat within Phase 1 during general surveys for the project (see Figure 27.3).

**Coast horned lizard (*Phrynosoma blainvillii*).** The coast horned lizard is a CDFW species of special concern and an MSCP-covered species (CDFW 2022d; City of San Diego 1997). This lizard ranges from coastal southern California to the desert foothills and into Baja California. In San Diego County, it has a wide range but spotty distribution. It is often associated with coastal sage scrub, especially in areas of level to gently sloping ground and with well-drained loose or sandy soil, but can also be found in annual grasslands, chaparral, oak woodland, riparian woodland, and coniferous forest between 30 and 7,030 feet (Mills 1991; Jennings and Hayes 1994). This animal usually avoids dense vegetation, preferring 20 to 40 percent bare ground in its habitat. Adults are active from late March to late August; young are active from August to November or December. They are largely dependent upon native harvester ants (*Pogonomyrmex* sp.) for food. Populations along the coast and inland have been severely reduced by loss of habitat.

Coast horned lizard have been detected during surveys in the disturbed Diegan coastal sage scrub habitat and disturbed lands within Phases 1, Beyer Boulevard survey area, and the southern project-level survey areas (Photograph 32 and see Figures 27.1 through 27.5).



**Two-striped garter snake (*Thamnophis hammondi*).** The two-striped garter snake is a CDFW species of special concern (CDFW 2022d). The two-striped garter snake ranges from San Luis Obispo County south to El Rosario in Baja California, Mexico, from sea level to 8,000 feet (Jennings and Hayes 1994). They are normally found in or near permanent fresh water, inhabiting streams, ponds, and lakes throughout their range (Stebbins 2003) and can even be found in temporary bodies of water such as vernal pools. The two-striped garter snake inhabits riparian areas during summer months and occupies adjacent coastal sage scrub and grasslands during the winter (Jennings and Hayes 1994). The two-striped garter begins breeding in April and continues throughout the summer months. Adults feed on tadpoles, toads, insect larvae, fish, fish eggs, and earthworms. Population declines in the two-striped garter snake are generally attributable to impacts related to the loss of natural wetlands and increased development near and in suitable habitat.

A two-striped garter snake was observed swimming within a vernal pool basin within Phase 1 during fairy shrimp surveys (Photograph 33 and see Figure 27.4).

#### d. Birds

**Cooper's hawk (*Accipiter cooperii*).** The Cooper's hawk is a CDFW watch list species and is an MSCP-covered species (CDFW 2022d and City of San Diego 1997). The Cooper's hawk ranges year-round throughout most of the United States; its wintering range extends south to Central America and its breeding range extends north to southern Canada (Rosenfeld and Bielefeldt 1993). Breeding birds are widespread over San Diego County's coastal slope and most abundant in lowland and foothill canyons and in urban areas. It is a common breeder in both oak and willow riparian woodlands and urban environments, with eucalyptus trees used nearly as often as oaks (Unitt 2004). Additionally, this species has been known to nest within planted trees including pine, redwood, and avocado (Unitt 2004). Breeding occurs from March to June and nests are typically located high in the tree, but under the canopy. This hawk forages primarily on medium-sized birds but is also known to eat small mammals such as chipmunks and other rodents (Rosenfeld and Bielefeldt 1993). Although urbanization and loss of habitat have contributed to the decline of this species, the Cooper's hawk's adaptation to city living over the last 20 years has generously increased their numbers (Unitt 2004).

Cooper's hawk was observed flying overhead in Phase 1 and Beyer Boulevard survey areas. This species was additionally observed foraging within the southern and southeastern project-level survey areas during vegetation surveys (see Figures 27.1, 27.2, 27.3, 27.5, 27.7, and 27.8).





PHOTOGRAPH 32

Coast Horned Lizard (*Phrynosoma blainvillii*) in Non-native Grassland within Phase 1a;

Photo Date: April 16, 2018





PHOTOGRAPH 33

Two-Striped Garter Snake (*Thamnophis hammondi*)  
Observed within a Vernal Pool in VTM South;  
Photo Date: December 17, 2018



**Western burrowing owl (*Athene cunicularia*, burrowing owl).** The burrowing owl is a Candidate Species for listing under CESA and a City of San Diego MSCP-covered species (California Fish and Game Commission 2024; City of San Diego 1997). Burrowing owl is primarily restricted to the western United States and Mexico. A year-round resident in San Diego County, breeding burrowing owls remain in only five primary areas in San Diego County including Otay Mesa, Imperial Beach, North Island Naval Air Station, Warner Valley, and Borrego Valley (Unitt 2004). Habitat for the burrowing owl includes dry, open, short-grass areas with level to gentle topography and well-drained soils (CDFW 2012). These areas are also often associated with burrowing mammals (Haug et al. 1993). The burrowing owl is diurnal and perches during daylight at the entrance to its burrow or on low posts. Nesting occurs from March through August. Burrowing owls form a pair-bond for more than one year and exhibit high site fidelity, reusing the same burrow year after year (Haug et al. 1993). The female remains inside the burrow during most of the egg laying and incubation period and is fed by the male throughout brooding. Burrowing owls are opportunistic feeders, consuming a diet that includes arthropods, small mammals, and birds, and occasionally amphibians and reptiles (Haug et al. 1993). Urbanization has greatly reduced the amount of suitable habitat for this species, thereby leading to the decline in the San Diego population (Lincher and Bloom 2007). Other contributions to the decline of this species include the poisoning of squirrels and prairie dogs, road and ditch maintenance, and collisions with automobiles (CDFW 2012).

Breeding season focused surveys were conducted in 2018 and 2020 within suitable habitat in Phases 1, 2, and southern project-level survey areas; all surveys had negative results for this species (RECON 2018c, 2018d, and 2020a). However, one burrowing owl was incidentally observed during a Quino checkerspot butterfly survey within a south-facing slope, dominated by maritime succulent scrub in Phase 1 (see Figure 27.2). No active burrows were detected in the vicinity of the sighting and the bird was not observed again during the remainder of the Quino checkerspot butterfly focused surveys (RECON 2021a). Additional breeding season surveys were conducted in 2021 within suitable habitat that was not previously surveyed due to shifts in the project boundary. These 2021 surveys were also negative for burrowing owl (RECON 2021b).

**Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*).** The southern California rufous-crowned sparrow is a CDFW watch list species and a MSCP-covered species (City of San Diego 1997). This subspecies of rufous-crowned sparrow is a resident and ranges throughout southern California from Los Angeles County to Baja California, Mexico (Collins 1999). Southern California rufous-crowned sparrows are found in chaparral and coastal sage scrub habitats and occasionally in grasslands adjacent to these habitats. The species exhibits a strong preference for moderate to steep, dry, rocky slopes interspersed with grasses and rock outcrops (Unitt 2004; Collins 1999). Breeding occurs from March through June and pair bonds are formed that may last year-round (Collins 1999). Urbanization, range restrictions, and loss of habitat have decreased the amount of suitable habitat for southern California rufous-crowned sparrows.

Southern California rufous-crowned sparrow was observed in Diegan coastal sage scrub habitat within Phase 1, the Beyer Boulevard survey area, and southern project-level survey areas. This species was also detected within the non-native grassland within the southern project-level survey areas during field surveys (see Figures 27.1, 27.2, 27.4, 27.7, 27.8, 27.10, and 27.11).



**Grasshopper sparrow (*Ammodramus savannarum*).** The grasshopper sparrow is a CDFW species of special concern. Grasshopper sparrows are migratory and in San Diego County seldom seen away from their breeding habitat (Unitt 2004). This species' ideal habitat is native grassland, but it also uses non-native grasslands and other habitats, such as salt marshes and alkaline meadows dominated by saltgrass (*Distichlis* sp.). It prefers larger tracts of habitat composed of short to middle-high moderately open grasslands (Shuford and Gardali 2008). Additionally, its habitat typically includes shrubs, common in coastal sage scrub, and may be shrubby enough to be classified as coastal sage scrub (Unitt 2004). This sparrow's range within San Diego County is represented by five main locations: Camp Pendleton, Los Peñasquitos Canyon Preserve, MCAS Miramar/Mission Trails Regional Park, areas between McGinty and Otay mountains, and Rancho Jamul (Unitt 2004). Nests are built on the ground and are screened by overhanging grasses, which make them very difficult to detect (Vickery 1996). Population declines are caused by the loss of grassland habitats due to development and agriculture, and by the destruction of nests caused by mowing of cultivated grasslands (Vickery 1996).

This species was detected by vocalizations during field surveys in Diegan coastal sage scrub habitat within Phase 1 during focused surveys. Additionally, this species was detected by vocalizations within the southern project-level survey areas (see Figures 27.3, 27.5, and 27.7).

**Northern harrier (*Circus hudsonius*).** The northern harrier is a CDFW species of special concern and an MSCP-covered species (City of San Diego 1997, CDFW 2022e). In addition, their nesting sites are considered sensitive by CDFW. Northern harriers winter throughout most of North America from southern Canada to Central America and the Caribbean Islands (MacWhirter and Bildstein 1996). Their breeding range extends from Canada and Alaska to the northwestern United States, with some year-round residents in coastal California and northern Baja California. In San Diego County, the northern harrier is a fairly common migrant in the winter and a rare summer breeder (Unitt 2004). The northern harrier most commonly nests on the ground at the edge of marshes but would also nest on grasslands, in fields, or in areas of sparse shrubs (MacWhirter and Bildstein 1996). The northern harrier hovers close to the ground while foraging in grasslands, agricultural fields, and coastal marshes. Their diet consists of small- and medium-sized rodents, birds, reptiles, and frogs. The range of this species has been reduced due to urbanization and agricultural development.

Northern harrier was observed during surveys performed in Phases 1, Beyer Boulevard survey area, and the southern project-level survey areas. This species was observed flying overhead near the non-native grassland habitat (see Figures 27.1, 27.2, 27.4, 27.6, and 27.7).

**White-tailed kite (*Elanus leucurus*).** The white-tailed kite is a California fully protected species (CDFW 2022c). This raptor is widespread within the coastal region of San Diego County, and its preferred nesting habitat includes riparian woodlands, oaks, or sycamore groves that border grassland or open fields. It also uses non-native trees freely, including citrus orchards (Unitt 2004). The white-tailed kite forages over open areas and grasslands feeding primarily on small rodents and insects. This species is known to roost in large communal groups (Unitt 2004). Lightly grazed or ungrazed fields also provide suitable hunting grounds for the kite, as they support larger prey populations. Areas with extensive winter freezes are generally avoided by this species (Dunk 1995). White-tailed kite populations in southern California have declined due to the loss of nesting and foraging habitat.



A juvenile white-tailed kite was observed within the southern project-level survey areas perched on a dead snag. Also, this species was detected flying overhead within Phase 1 (see Figures 27.4 and 27.8).

**California horned lark (*Eremophila alpestris actia*).** The California horned lark is a CDFW watch list species (CDFW 2022c). This coastal subspecies' year-round range is fragmented in San Diego County and includes the coastal strand, arid grasslands, and sandy desert floors in Anza-Borrego Desert (Unitt 2004). Plowed fields, graded lands, and other disturbed areas attract the California horned lark. One of these habitats is the coastal strand that encompasses salt flats around lagoons and fills in Mission and San Diego bays. The coastal mesas and inland valleys, such as Warner Valley, also provide pockets of sparsely vegetated habitats suitable for this species. Substantial numbers are also found in the upper basin of Lake Cuyamaca and Santa Maria Valley (Ramona grasslands). California horned larks are typically not found in chaparral (Unitt 2004; Zeiner et al. 1988-1990b). Breeding occurs during the months of March through July with peak activity occurring in May, and nests are made on the ground. The decline of this species is attributed to the general loss of habitat, urbanization, and habitat fragmentation (Unitt 2004).

This species was observed in the disturbed Diegan coastal sage scrub and non-native grassland areas in Phase 1, the Beyer Boulevard survey area, and southern project-level survey areas (see Figures 27.3, 27.4, 27.5, 27.7, and 27.11).

**Merlin (*Falco columbarius*).** The merlin (wintering) is a CDFW watch list species (CDFW 2022d). Merlins breed in boreal forests from Oregon and Washington north to Alaska and all of Canada (Warkentin et al. 2005). In San Diego County, merlins are rare winter visitors to areas with grasslands, agricultural fields, and mudflats (Unitt 2004). Wintering birds may be found throughout San Diego County but are more abundant in the coastal lowlands and less frequent in the Anza-Borrego Desert. Its primary prey consists of small birds; therefore, this species tends to hunt in places where small birds flock (Unitt 2004). Merlin populations suffered from Dichloro-diphenyl-trichloroethane, commonly known as DDT, contamination in the 1960s and have modestly increased in number since the 1990s (Warkentin et al. 2005). Loss of foraging habitat is the main threat to this species in San Diego County.

During field surveys, two merlins were observed within Phase 1 (see Figures 27.2 and 27.4).

**Golden eagle (*Aquila chrysaetos*).** The golden eagle is listed as a CDFW watch list species and State of California fully protected species and is protected under the federal Bald and Golden Eagle Protection Act (CDFW 2022d). It is also a City of San Diego MSCP-covered species (City of San Diego 1997).

Golden eagles nest on cliffs of all heights and in large trees in open areas, most frequently using rugged open habitats with canyons and escarpments (Zeiner et al. 1988-1990). Alternative nest sites are maintained, and old nests are reused. Golden eagles build large platform nests, often 10 feet across and 3 feet high of sticks, twigs, and greenery. Breeding season is considered to be early January to early June (Unitt 2004). This species forages over large areas of grassland, desert, and open chaparral or sage scrub where it primarily preys upon rabbits and ground squirrels. Golden eagles forage close to and far from their nests (i.e., within 3-4 miles from the center of their territories), but have been observed traveling between 5-6 miles from the center of their territories



in favorable habitat (USFWS 2010). These distances may be greater in xeric habitats (USFWS 2010). Urbanization, agricultural development, and other human disturbances have eliminated several golden eagle territories and continue to threaten this species' population in San Diego County (Unitt 2004; Zeiner et al. 1988-1990).

One golden eagle juvenile was observed incidentally during a Quino checkerspot butterfly survey in April 2022. This lone bird was observed flying over the disturbed land and non-native grassland within Phase 1 and has not been observed in subsequent surveys (see Figure 27.4).

**Bald eagle (*Haliaeetus leucocephalus*).** The bald eagle (nesting and wintering) is listed as state endangered and a State of California fully protected species. It is also protected under the federal Bald and Golden Eagle Protection Act, is a City of San Diego MSCP-covered species (CDFW 2022e; and City of San Diego 1997). The bald eagle was federally listed as endangered in 1967 due to a decline in population from shooting and DDT poisoning, but has since recovered. This species was delisted by the federal government on July 9, 2007 (USFWS 2007a).

Bald eagles migrate to San Diego County in October and depart as early as March and as late as May. Large inland bodies of water within San Diego County where they are known to overwinter in low numbers include Lake Henshaw, Lake Cuyamaca, and Lake Morena (Unitt 2004). Prior to 2004 the bald eagle was considered to be a rare but annual winter visitor in San Diego County until an active nest was detected in 2006 near Lake Henshaw, which marked the first reported nest in San Diego County since 1934 (Zieralski 2006). Nesting has also been confirmed near Lake Henshaw within the subsequent years. Nests are enormous and consist of large sticks built in mature old-growth forest. Typically, nests are built relatively close (approximately two kilometers) to water, but distance may vary depending on the quality of foraging habitat available. Quality of habitat is defined by several parameters including structure of aquatic habitat such as the presence of shallow water; the diversity, abundance, and vulnerability of the prey base such as rabbits and other birds; and the absence of human development and disturbance. In areas with substantial shoreline development, nests would be located farther from the shoreline (Buehler 2000). The successful management of the habitat and reduction in the use of such harmful pesticides as DDT have allowed for an increase in bald eagle numbers.

One bald eagle was observed incidentally during a burrowing owl survey in May 2020. This lone bird was observed perching on a power pole within Phase 1 and has not been observed in subsequent surveys (see Figure 27.4).

**Yellow-breasted chat (*Icteria virens*).** The yellow-breasted chat is a CDFW species of special concern (CDFW 2022c). Yellow-breasted chat breeding range extends from southern California south to central Mexico, including most of the United States (Eckerle and Thompson 2001). Breeding occurs in dense brush or scrub, usually along streams or marshy areas with dense riparian woodlands. Yellow-breasted chats arrive in California to breed during April or May. Their diet consists mainly of insects and berries (Eckerle and Thompson 2001). Destruction of riparian woodlands by development and other human activities has caused population declines and it is possible that brown-headed cowbird parasitism may also have contributed to the decline of the species.



Yellow-breasted chat was detected by vocalizations during field surveys in 2018 within the mule fat scrub within the southern project-level survey areas. In 2020, this species was observed within the mule fat scrub within the area of the Beyer Boulevard extension (see Figures 27.1 and 27.8).

**Coastal California gnatcatcher (*Poliophtila californica californica*).** The coastal California gnatcatcher is federally listed as threatened, is a CDFW species of special concern, and is an MSCP-covered species (CDFW 2022e; City of San Diego 1997). The coastal California gnatcatcher is a non-migratory, resident species found on the coastal slopes of southern California, ranging from Ventura County southward through Los Angeles, Orange, Riverside, and San Diego counties into Baja California, Mexico (Atwood and Bontrager 2001). This species typically occurs in or near sage scrub habitat, although chaparral, grassland, and riparian woodland habitats are used where they occur adjacent to sage scrub. Breeding occurs from February through August, and nests are constructed most often in California sagebrush. The coastal California gnatcatcher diet consists mainly of sessile small arthropods, such as leafhoppers, spiders, beetles, and true bugs (Atwood and Bontrager 2001). The primary cause of decline in the coastal California gnatcatcher population is due to habitat loss and degradation.

Focused surveys were performed in 2018 within the MHPA in Phases 1 and the Beyer Boulevard survey area, and four coastal California gnatcatcher pairs and three additional individuals were identified within the parcel but outside the MHPA (RECON 2018e; see Figure 27.1 through 27.11). Focused surveys were also performed in the spring of 2018 within the southern project-level survey areas. In total, 11 coastal California gnatcatcher pairs were identified inside and outside of the MHPA surveyed (RECON 2018f; see Figures 27.1 through 27.11). In each case, coastal California gnatcatcher were observed foraging or quietly calling. Two additional individuals were observed during the surveys. These individuals may be associated with one of the observed pairs, but that could not be confirmed at the time of the survey.

In 2020, focused surveys were conducted and two pairs were observed within the western end of the Beyer Boulevard survey area and 10 pairs were observed within the boundaries of the storm drain outfalls and within the southern project-level survey areas (RECON 2020b; see Figures 27.1 through 27.11).

**Yellow warbler (*Setophaga petechia*).** The yellow warbler is a CDFW species of special concern (CDFW 2022d). Yellow warblers commonly breed in San Diego County and are considered to be a rare winter visitor (Unitt 2004). This species is an obligate riparian species, nesting and foraging almost exclusively in mature riparian corridors on the coastal slopes and within the desert in San Felipe Valley (Unitt 2004). Shuford and Gardali (2008) describe yellow warblers as showing a high degree of site fidelity, with 60 to 64.5 percent of males and 32 to 44 percent of females returning to their previous year's territory. They are often observed in riparian habitat where surface water is evident, although it is not necessary. Nesting occurs from April (Unitt 2004) through early August, and nests are typically three to five feet from the ground (Lowther et al. 1999). This species is declining due to the loss of riparian habitat and as a result of nest parasitism by brown-headed cowbirds (Unitt 2004; Zeiner et al. 2005).

Yellow warbler was detected by vocalizations during field surveys. This species was detected within the mule fat scrub within the southern project-level survey areas. There is also moderate potential



for this species to nest within the riparian vegetation that occurs within the western end of the Beyer Boulevard survey area (see Figure 27.8).

**Least Bell's vireo (*Vireo bellii pusillus*).** The least Bell's vireo is federally and state listed as endangered, a MSCP-covered species (CDFW 2022e; City of San Diego 1997). Its historical breeding range once extended from northwestern Baja California, Mexico, to interior northern California, as far north as Red Bluff in Tehama County, California (Franzreb 1989). Its current distribution is now restricted to eight southern counties, the majority occurring in San Diego County (USFWS 1998). The species is exclusively found in riparian habitats, including cottonwood–willow woodlands and forests, oak woodlands, and mule fat scrub, and requires dense canopy for foraging and a dense understory for nesting (Unitt 2004; USFWS 1998b). Least Bell's vireos migrate to San Diego County, arriving at the breeding grounds in mid-March and remaining until September or October. Populations are concentrated in the coastal lowlands of the County and are scattered within the foothills (Unitt 2004).

Populations of least Bell's vireo have declined drastically due to extensive loss of riparian habitat from urban development, including flood control and damming, introduction of non-native invasive plant species such as giant reed (*Arundo donax*) and saltcedar, and nest parasitism by brown-headed cowbird (*Molothrus ater*) (USFWS 2009b). The population has increased as a result of extensive brown-headed cowbird trapping programs (Unitt 2004). Least Bell's vireos respond well to restored riparian woodland, especially if it is adjacent to mature riparian habitat, and also to cowbird trapping.

Least Bell's vireo was incidentally detected by vocalizations within the mule fat scrub within the southern project-level survey areas during focused western burrowing owl surveys in 2018. Seven incidental detections were made in April and May 2020 within the western end of the Beyer Boulevard survey area, within the Beyer Park parcel during other surveys (see Figures 27.1, 27.9, 27.10, and 27.11). Focused surveys were not conducted in 2020; therefore, the pairing status of this vireo is unknown. Least Bell's vireo is assumed present within riparian habitat on and adjacent to the project-level area.

## e. Mammals

**San Diego desert woodrat (*Neotoma lepida intermedia*).** The San Diego desert woodrat is a CDFW species of special concern (CDFW 2022d). Its range extends through coastal areas from San Luis Obispo well into Baja California, inland to the San Bernardino Mountains and Julian (Hall 1981). The San Diego desert woodrat occurs west of the mountains in San Diego County within chaparral areas with a preference for rock outcrops (Bond 1977). The desert woodrat is adept at moving among spiny cactuses without injury. This species is herbivorous and can eat a large variety of plants, with cacti often being consumed as an important source of water (Tremor et al. 2017). Threats to this species include habitat fragmentation and fire (Tremor et al. 2017).

San Diego woodrat and its nests were detected in the non-native grassland within Phase 1 within the Diegan coastal sage scrub habitat (Photograph 34 and see Figures 27.4 and 27.6).





PHOTOGRAPH 34

San Diego Desert Woodrat (*Neotoma lepida intermedia*) Observed under a Wooden Board within Non-Native Grassland within the Project-level Area.

Photo Date: May 8, 2018



### 5.4.2.2 Not Observed

**Coronado skink (*Plestiodon skiltonianus interparietalis*).** The Coronado skink is a CDFW watch list species (CDFW 2022d). The Coronado skink ranges from approximately La Jolla in San Diego County south to western Baja California, Mexico (Jennings and Hayes 1994). In northern San Diego County, this species intergrades with Skilton's skink (*Plestiodon skiltonianus skiltonianus*), whose range extends north through the Pacific states into British Columbia, Canada. The Coronado skink is found in a variety of plant communities including grassland, open woodland, forest, and chaparral habitats with sunny openings. It is often associated with heavily vegetated streams. The Coronado skink is diurnal and most active from early spring until fall, and breeding occurs in June or July (Jennings and Hayes 1994). Its diet consists of a variety of insects, particularly spiders and sow bugs. This species is threatened by habitat loss and fragmentation resulting from urbanization and agriculture.

Coronado skink has moderate potential to occur within the project-level analysis area due to the presence of non-native grassland within Phases 1 and 2 and the southern area of the project-level survey area.

**Bell's sage sparrow (*Artemisiospiza belli*).** Bell's sage sparrow is a CDFW watch list species (CDFW 2022d). In San Diego County, it prefers chaparral and coastal sage scrub that is not too dense or encumbered by leaf litter (Unitt 2004) and can easily be overlooked as it moves from shrub to shrub by running on the ground instead of flying (Martin and Carlson 1998). In addition, this species shows a strong preference to post-burn chaparral, shrub habitats growing on mesa tops or on south-facing slopes, and chaparral stunted by magnesium-laden gabbro soils (Unitt 2004). In higher elevations the sparrow will also breed within big sagebrush. This species nests low in shrubs or on the ground (Martin and Carlson 1998). Urbanization has reduced the breeding territories of this species to occupying only scattered undeveloped patches throughout the county (Unitt 2004). The major threat to this species is the loss of breeding habitat to urbanization and habitat fragmentation. As a result, the Bell's sage sparrow is usually found within large tracts of habitat (Unitt 2004).

Bell's sage sparrow has moderate potential to occur within the project-level analysis area and the southern area of the project-level survey area due to the presence of Diegan coastal sage scrub and maritime succulent scrub areas within Phases 1 and 2.

**Loggerhead shrike (*Lanius ludovicianus*).** The loggerhead shrike is a CDFW species of special concern (CDFW 2022d). This species inhabits most of the continental United States and Mexico and is an uncommon year-round resident of southern California. In San Diego County, loggerhead shrikes are most numerous in the Anza-Borrego Desert, where they are widespread on both the desert floor and in desert-edge scrub on the east slopes of the mountains (Unitt 2004). They prefer washes with scattered trees or shrubs, or valley floors with scattered thickets of mesquite (*Prosopis* spp.) or saltbush (*Atriplex* spp.). Outside the desert they inhabit grasslands, agricultural fields, open sage scrub, and chaparral (Unitt 2004), requiring open habitat with tall shrubs or trees to use as perches for hunting and fairly dense shrubs for nesting. They may also use fences or power lines for hunting perches (Shuford and Gardali 2008; Yosef 1996). Loggerhead shrikes are highly territorial and usually live in pairs in permanent territories (Yosef 1996). This bird may also be associated with freshly plowed or mowed fields, as these activities present foraging opportunities for this species (Yosef 1996). Loggerhead shrike populations are declining, likely due to urbanization and loss of



habitat and, to a lesser degree, pesticide use (Yosef 1996). This species has also shown a decline in undeveloped areas, which suggests that it is susceptible to habitat fragmentation (Unitt 2004).

This species was not observed during any project surveys; however, an observation within the project-level survey area was posted to a citizen science mobile application (I-Naturalist) and there is suitable habitat present to support a moderate potential for this species to occur within the project-level analysis area and the southern area of the project-level survey area.

**Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)** is described in more detail in Section 5.4.1 above. While coastal cactus wren was not detected during site visits, this species has been known to occur within the maritime succulent scrub habitat at the western end of the proposed Beyer Boulevard extension area in 2017 (RECON 2019c); and, therefore assumed to be present within the maritime succulent scrub areas dominated by prickly pear cactus located along the western end of Beyer Boulevard. Maritime succulent scrub dominated with coastal cholla and prickly pear suitable for cactus wren nesting was not observed on other project-level areas.

**Southern mule deer (*Odocoileus hemionus fuliginatus*)**. The southern mule deer is not state or federally listed but is an MSCP-covered species. It is a wide-ranging species, occurring from central Canada through the United States into central Mexico. The southern subspecies occurs from Orange and Riverside counties, south through San Diego to central Baja California, Mexico (Tremor et al. 2017). In San Diego County, it is widespread throughout undeveloped areas from Camp Pendleton to the Laguna Mountains, Sweetwater River, and Otay Lakes at elevations of 400 to 3,600 feet (Bleich and Holl 1982). This species requires relatively large, undisturbed tracts of chaparral, coastal sage scrub, mixed grassland/shrub habitats, oak woodlands, and/or coniferous forests (Tremor et al. 2017). The reproductive cycle begins with the male rutting season as early as September, with breeding continuing through January, and fawning between June and August (Tremor et al. 2017). The diet of the southern mule deer consists of forbs, grasses, and nuts. Populations of mule deer appear to show a long-term decline, primarily as a result of urbanization and habitat fragmentation (Tremor et al. 2017).

This species has not been observed; however, there is a moderate potential for the species to occur. The relatively large, undisturbed tracts of coastal sage scrub and mixed grassland/shrub habitats within the project-level survey area provide suitable habitat for this species; however, habitat fragmentation has limited this species range and frequent human disturbance may reduce habitat value.



## 5.5 Jurisdictional Resources

### 5.5.1 Program-level Area

As detailed in the OMCP FEIR, wetlands habitats in the area consist primarily of vernal pools, basins with fairy shrimp, freshwater marsh, mule fat scrub, alkali seep, and riparian habitat. Figure 30 shows the potential categories of wetlands within the program-level areas, although additional resources may be identified at the time of site-specific surveys and jurisdictional delineations.

### 5.5.2 Project-level Area

Jurisdictional resource delineations were conducted within the project-level survey areas. These delineations evaluated for the presence of drainages, wetlands, and vernal pools.

The summary of findings from the wetland delineations found potential USACE federal waters of the U.S. and CDFW and RWQCB waters of the state within the project-level survey area. These resources include non-wetland waters/streambed, and various wetlands waters including disturbed wetlands, vernal pools, and vernal pools with San Diego and Riverside fairy shrimp. Wetlands potentially under the jurisdiction of the City include mule fat scrub, southern willow scrub, wetlands, disturbed wetlands, tamarisk scrub, disturbed riparian, and vernal pools. As stated in Section 4.2.2.12, many vernal pools include San Diego fairy shrimp, while one vernal pool contained Riverside fairy shrimp.

Results of the delineation are further summarized in the wetland delineation report prepared for the project (RECON 2024a). Tables 5a-5f summarize the jurisdictional resources present within the project area as well as by each phase. Jurisdictional resources within the Candlelight, Southwind, West Otay Mesa A, West Otay Mesa B, Furby North Preserve, and Beyer Park projects are presented below.



**Table 5a**  
**Existing Potential Jurisdictional Resources within the Project-level Survey Areas**  
**(acres)**

Jurisdictional Resource	Phase 1	Phase 2	Beyer Boulevard	Phase 4	Emergency Vehicle Access Road	Remaining Project-Level Survey Area <sup>1</sup>	Total Acres
<b>Waters of the U.S. – USACE</b>							
<i>Non-wetland Waters</i>							
Ephemeral Stream Channel (Non-vegetated Channel)	0.14	0.06	0.07	0.17	-	1.22	1.67
<i>Subtotal Non-wetland Waters</i>	<i>0.14</i>	<i>0.06</i>	<i>0.07</i>	<i>0.17</i>	<i>-</i>	<i>1.22</i>	<i>1.67</i>
<i>Wetland Waters</i>							
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.50	0.04	<0.01	-	-	0.95	1.49
Vernal Pools	0.15	0.07	0.02	-	-	0.04	0.27
Vernal Pools with Fairy Shrimp	0.56	0.05	0.01	<0.01	0.02	0.90	1.54
<i>Subtotal Wetland Waters</i>	<i>1.21</i>	<i>0.16</i>	<i>0.03</i>	<i>&lt;0.01</i>	<i>0.02</i>	<i>1.89</i>	<i>3.30</i>
<b>Total Potentially Jurisdictional Area</b>	<b>1.33</b>	<b>0.21</b>	<b>0.10</b>	<b>0.17</b>	<b>0.02</b>	<b>3.11</b>	<b>4.97</b>
<b>Waters of the U.S. – CDFW</b>							
<i>Non-wetland Waters/Streambed</i>							
Ephemeral Stream Channel (Non-vegetated Channel)	0.14	0.06	0.08	0.17	-	1.24	1.69
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.14</i>	<i>0.06</i>	<i>0.08</i>	<i>0.17</i>	<i>-</i>	<i>1.24</i>	<i>1.69</i>
<i>Wetland or Riparian Areas</i>							
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.44	-	0.35	0.01	-	5.52	6.34
Vernal Pools <sup>2</sup>	0.01	-	-	-	-	0.02	0.03
<i>Subtotal Wetland/Riparian</i>	<i>0.45</i>	<i>-</i>	<i>0.35</i>	<i>0.01</i>	<i>-</i>	<i>5.55</i>	<i>6.36</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.59</b>	<b>0.06</b>	<b>0.43</b>	<b>0.19</b>	<b>-</b>	<b>6.79</b>	<b>8.06</b>
<b>Waters of the U.S. – RWQCB</b>							
<i>Non-wetland Waters</i>							
Ephemeral Stream Channel (Non-vegetated Channel)	0.14	0.06	0.08	0.17	-	1.24	1.69
<i>Subtotal Non-wetland Waters</i>	<i>0.14</i>	<i>0.06</i>	<i>0.08</i>	<i>0.17</i>	<i>-</i>	<i>1.24</i>	<i>1.69</i>
<i>Wetland or Riparian Areas</i>							
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.55	0.04	<0.01	-	-	0.95	1.54
Vernal Pools	0.16	0.07	0.02	-	-	0.04	0.28
Vernal Pools with Fairy Shrimp	0.58	0.05	0.02	<0.01	0.02	0.90	1.57
Seasonal Basins	0.26	<0.01	<0.01	-	-	0.39	0.66
<i>Subtotal Wetland/Riparian</i>	<i>1.45</i>	<i>0.16</i>	<i>0.03</i>	<i>&lt;0.01</i>	<i>0.02</i>	<i>2.28</i>	<i>3.94</i>
<b>Total Potentially Jurisdictional Area</b>	<b>1.59</b>	<b>0.22</b>	<b>0.11</b>	<b>0.17</b>	<b>0.02</b>	<b>3.53</b>	<b>5.63</b>
<b>City of San Diego Wetlands</b>							
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-	-	0.35	0.01	-	5.76	6.13
Disturbed Wetlands	0.07	0.04	-	-	-	1.12	1.23
Vernal Pools	0.67	0.12	0.03	<0.01	0.02	0.94	1.77
<b>Total Potentially Jurisdictional Area</b>	<b>0.74</b>	<b>0.16</b>	<b>0.38</b>	<b>0.01</b>	<b>0.02</b>	<b>7.81</b>	<b>9.13</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.							
<sup>1</sup> Remaining project-level survey areas include potential mitigation lands in addition to other surveyed areas associated with prior versions of the project.							
<sup>2</sup> Includes only the vernal pools that support a state-listed endangered plant species, San Diego button-celery.							



Table 5b Existing Potential Jurisdictional Resources within the Phase 1 Project-level Survey Areas (acres)				
Jurisdictional Resource	Phase 1	Phase 1 - Candlelight	Phase 1 - Southwind	Total Acres
<b>Waters of the U.S. – USACE</b>				
<i>Non-wetland Waters</i>				
Ephemeral Stream Channel (Non-vegetated Channel)	0.12	0.02	-	0.14
<i>Subtotal Non-wetland Waters</i>	<i>0.12</i>	<i>0.02</i>	<i>-</i>	<i>0.14</i>
<i>Wetland Waters</i>				
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.04	0.46	-	0.50
Vernal Pools	0.12	-	0.02	0.15
Vernal Pools with Fairy Shrimp	0.51	0.04	0.01	0.56
<i>Subtotal Wetland Waters</i>	<i>0.67</i>	<i>0.50</i>	<i>0.04</i>	<i>1.21</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.79</b>	<b>0.52</b>	<b>0.04</b>	<b>1.35</b>
<b>Waters of the U.S. – CDFW</b>				
<i>Non-wetland Waters/Streambed</i>				
Ephemeral Stream Channel (Non-vegetated Channel)	0.12	0.02	-	0.14
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.12</i>	<i>0.02</i>	<i>-</i>	<i>0.14</i>
<i>Wetland or Riparian Areas</i>				
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-	0.44	-	0.44
Vernal Pools <sup>1</sup>	0.01	-	-	0.01
<i>Subtotal Wetland/Riparian</i>	<i>0.01</i>	<i>0.44</i>	<i>-</i>	<i>0.59</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.13</b>	<b>0.46</b>	<b>-</b>	<b>0.59</b>
<b>Waters of the U.S. – RWQCB</b>				
<i>Non-wetland Waters</i>				
Ephemeral Stream Channel (Non-vegetated Channel)	0.12	0.02	-	0.14
<i>Subtotal Non-wetland Waters</i>	<i>0.12</i>	<i>0.02</i>	<i>-</i>	<i>0.14</i>
<i>Wetland or Riparian Areas</i>				
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.04	0.44	-	0.48
Vernal Pools	0.12	-	0.02	0.15
Vernal Pools with Fairy Shrimp	0.51	0.04	0.01	0.56
Seasonal Basins	0.03	0.23	-	0.26
<i>Subtotal Wetland/Riparian</i>	<i>0.70</i>	<i>0.71</i>	<i>0.04</i>	<i>1.45</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.81</b>	<b>0.74</b>	<b>0.04</b>	<b>1.59</b>
<b>City of San Diego Wetlands</b>				
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-	-	-	-
Disturbed Wetlands	0.07	-	-	0.07
Vernal Pools	0.63	-	0.04	0.67
<b>Total Potentially Jurisdictional Area</b>	<b>0.70</b>	<b>-</b>	<b>0.04</b>	<b>0.74</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.				
<sup>1</sup> Includes only the vernal pools that supports a state-listed endangered plant species, San Diego button-celery.				



Table 5c Existing Potential Jurisdictional Resources within the Phase 2 Project-level Survey Areas (acres)	
Jurisdictional Resource	Phase 2 Development Area <sup>1</sup>
<b>Waters of the U.S. – USACE</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.06
<i>Subtotal Non-wetland Waters</i>	0.06
<i>Wetland Waters</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.04
Vernal Pools	0.07
Vernal Pools with Fairy Shrimp	0.05
<i>Subtotal Wetland Waters</i>	0.16
<b>Total Potentially Jurisdictional Area</b>	<b>0.21</b>
<b>Waters of the U.S. – CDFW</b>	
<i>Non-wetland Waters/Streambed</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.06
<i>Subtotal Non-wetland Waters/Streambed</i>	0.06
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-
Vernal Pools	-
<i>Subtotal Wetland/Riparian</i>	0.06
<b>Total Potentially Jurisdictional Area</b>	<b>0.06</b>
<b>Waters of the U.S. – RWQCB</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.06
<i>Subtotal Non-wetland Waters</i>	0.06
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.04
Vernal Pools	0.07
Vernal Pools with Fairy Shrimp	0.05
Seasonal Basins	<0.01 (179 sq ft)
<i>Subtotal Wetland/Riparian</i>	0.16
<b>Total Potentially Jurisdictional Area</b>	<b>0.22</b>
<b>City of San Diego Wetlands</b>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-
Disturbed Wetlands	0.04
Vernal Pools	0.12
<b>Total Potentially Jurisdictional Area</b>	<b>0.16</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.	
<sup>1</sup> Includes the project level trails and south drainage outfall	



<p>Table 5d Existing Potential Jurisdictional Resources within the Beyer Boulevard Project-level Survey Areas (acres)</p>					
Jurisdictional Resource	Beyer Park	Furby North Preserve	West Otay Mesa A	West Otay Mesa B	Total Acres
<b>Waters of the U.S. – USACE</b>					
<i>Non-wetland Waters</i>					
Ephemeral Stream Channel (Non-vegetated Channel)	0.05	-	-	0.02	0.07
<i>Subtotal Non-wetland Waters</i>	<i>0.05</i>	<i>-</i>	<i>-</i>	<i>0.02</i>	<i>0.07</i>
<i>Wetland Waters</i>					
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-	-	<0.01 (19 sq ft)	-	<0.01 (19 sq ft)
Vernal Pools	-	-	0.02	-	0.02
Vernal Pools with Fairy Shrimp	-	0.01	-	-	0.01
<i>Subtotal Wetland Waters</i>	<i>-</i>	<i>0.01</i>	<i>0.02</i>	<i>-</i>	<i>0.03</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.05</b>	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.10</b>
<b>Waters of the U.S. – CDFW</b>					
<i>Non-wetland Waters/Streambed</i>					
Ephemeral Stream Channel (Non-vegetated Channel)	0.05	-	0.01	0.02	0.14
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.05</i>	<i>-</i>	<i>0.01</i>	<i>0.02</i>	<i>0.08</i>
<i>Wetland or Riparian Areas</i>					
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.35	-	-	-	0.35
Vernal Pools	-	-	-	-	-
<i>Subtotal Wetland/Riparian</i>	<i>0.35</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>0.35</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.40</b>	<b>-</b>	<b>0.01</b>	<b>0.02</b>	<b>0.43</b>
<b>Waters of the U.S. – RWQCB</b>					
<i>Non-wetland Waters</i>					
Ephemeral Stream Channel (Non-vegetated Channel)	0.05	-	0.01	0.02	0.08
<i>Subtotal Non-wetland Waters</i>	<i>0.05</i>	<i>-</i>	<i>0.01</i>	<i>0.02</i>	<i>0.08</i>
<i>Wetland or Riparian Areas</i>					
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-	-	<0.01 (19 sq ft)	-	<0.01 (19 sq ft)
Vernal Pools	-	-	0.02	-	0.02
Vernal Pools with Fairy Shrimp	-	0.01	-	-	0.01
Seasonal Basins	-	<0.01 (54 sq ft)	-	-	<0.01 (54 sq ft)
<i>Subtotal Wetland/Riparian</i>	<i>-</i>	<i>0.01</i>	<i>0.02</i>	<i>-</i>	<i>0.03</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.05</b>	<b>0.01</b>	<b>0.03</b>	<b>0.02</b>	<b>0.11</b>
<b>City of San Diego Wetlands</b>					
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.35	-	-	-	0.35
Disturbed Wetlands	-	<0.01 (54 sq ft)	<0.01 (19 sq ft)	-	<0.01 (73 sq ft)
Vernal Pools	-	0.01 (264 sq ft)	0.02 (847 sq ft)	-	0.03 (1,111 sq ft)
<b>Total Potentially Jurisdictional Area</b>	<b>0.35</b>	<b>0.01</b>	<b>0.02</b>	<b>-</b>	<b>0.38</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.					



**Table 5e**  
**Existing Potential Jurisdictional Resources within the Phase 4 Project-level Survey Areas**  
**(acres)**

Jurisdictional Resource	Phase 4 Development Area
<b>Waters of the U.S. – USACE</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.17
<i>Subtotal Non-wetland Waters</i>	<i>0.17</i>
<i>Wetland Waters</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-
Vernal Pools	-
Vernal Pools with Fairy Shrimp	<0.01 (35 sq ft)
<i>Subtotal Wetland Waters</i>	<i>0.17</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.17</b>
<b>Waters of the U.S. – CDFW</b>	
<i>Non-wetland Waters/Streambed</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.17
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.17</i>
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.01
Vernal Pools	-
<i>Subtotal Wetland/Riparian</i>	<i>0.01</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.19</b>
<b>Waters of the U.S. – RWQCB</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.17
<i>Subtotal Non-wetland Waters</i>	<i>0.17</i>
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-
Vernal Pools	-
Vernal Pools with Fairy Shrimp	<0.01 (35 sq ft)
Seasonal Basins	-
<i>Subtotal Wetland/Riparian</i>	<i>&lt;0.01 (35 sq ft)</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.17</b>
<b>City of San Diego Wetlands</b>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.01
Disturbed Wetlands	-
Vernal Pools	<0.01 (35 sq ft)
<b>Total Potentially Jurisdictional Area</b>	<b>0.01</b>

NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.



Table 5f Existing Potential Jurisdictional Resources within the Emergency Vehicle Access Road Project-level Survey Areas (acres)	
Jurisdictional Resource	EVA Road
<b>Waters of the U.S. – USACE</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	-
<i>Subtotal Non-wetland Waters</i>	-
<i>Wetland Waters</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-
Vernal Pools	-
Vernal Pools with Fairy Shrimp	0.02
<i>Subtotal Wetland Waters</i>	0.02
<b>Total Potentially Jurisdictional Area</b>	<b>0.02</b>
<b>Waters of the U.S. – CDFW</b>	
<i>Non-wetland Waters/Streambed</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	-
<i>Subtotal Non-wetland Waters/Streambed</i>	-
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-
Vernal Pools	-
<i>Subtotal Wetland/Riparian</i>	-
<b>Total Potentially Jurisdictional Area</b>	<b>-</b>
<b>Waters of the U.S. – RWQCB</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	-
<i>Subtotal Non-wetland Waters</i>	-
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-
Vernal Pools	-
Vernal Pools with Fairy Shrimp	0.02
Seasonal Basins	-
<i>Subtotal Wetland/Riparian</i>	0.02
<b>Total Potentially Jurisdictional Area</b>	<b>0.02</b>
<b>City of San Diego Wetlands</b>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-
Disturbed Wetlands	-
Vernal Pools	0.02
<b>Total Potentially Jurisdictional Area</b>	<b>0.02</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.	



### 5.5.2.1 Waters of the U.S. – USACE

According to the USACE manual (USACE 1987), wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions.” In accordance with Section 404 of the Clean Water Act, USACE regulates the discharge of dredged or fill material into waters of the U.S.

Wetlands are delineated using three parameters: hydrophytic vegetation, wetland hydrology, and hydric soils. According to USACE, positive indicators for all three parameters (hydrophytic vegetation, hydric soils, and wetland hydrology) must be present to qualify as a wetland. USACE also requires the delineation of non-wetland waters. These waters must have strong hydrology indicators such as the presence of seasonal flows and an ordinary high water mark.

Potential USACE jurisdictional resources located in the project-level survey area include non-wetland waters, isolated wetlands, vernal pools, and vernal pools with fairy shrimp (see Tables 5a-5f and Figure 31.1 through 31.37). These waters of the U.S. are discussed below.

#### a. Non-Wetland Waters of the U.S.

Twenty-one ephemeral drainage courses were mapped within project-level survey area. These drainages are largely unvegetated, lacking hydrophytic vegetation, hydric soils, and wetland hydrology, but do exhibit an ordinary high-water mark.

#### b. Wetland Waters of the U.S.

Twenty-five disturbed wetlands that contain hydrophytic vegetation, but no vernal pool flora indicator species occur within the project-level survey area. The presence of hydrophytic vegetation, in conjunction with evidence of ponding (i.e., soil surface cracks, biotic crusts), were used to determine that wetland hydrology were present. All depressions occur within soils mapped as hydric soils (NRCS 2020). The waters type for these aquatic features is considered “isolate”, as these depressions do not have a distinct connection to any wetland or non-wetland water drainage courses.

#### c. Vernal Pools and Vernal Pools with Listed Fairy Shrimp and Immature Fairy Shrimp

Two hundred and sixty-three depressions were identified as vernal pools given that they support one or more vernal pool plant indicator species (USACE 1997). Some of the vernal pools also support a federally listed fairy shrimp, a vernal pool fauna indicator species (see Figure 27.1 through 27.11). Additionally, some pools contain immature fairy shrimp species that could be identified to the genus of *Branchinecta* but could not be identified to species. The presence of vernal pool flora and fauna, in conjunction with evidence of ponding (i.e., soil surface cracks, biotic crusts), were used to conclude that wetland hydrology was present. The waters type for these aquatic features is considered “isolate”, as these depressions do not have a distinct connection to any wetland or non-wetland water drainage courses.



### 5.5.2.2 Waters of the State – CDFW

Waters of the state potentially under the jurisdiction of CDFW within the project-level area include 21 ephemeral streambeds, the four riverine wetlands along Drainage C-A potentially under USACE jurisdiction, the additional 10 riverine wetland areas along Drainages O, G, and S, and the vernal pool that supports a state-listed plant species (see Table 3b and Figure 32.1 through 32.37). In 2019, San Diego button-celery, a state listed endangered species, was detected within two vernal pools within the project-level survey area. San Diego button-celery is also a vernal pool indicator plant species (USACE 1997). Vernal pools with San Diego button-celery are covered under the CESA.

### 5.5.2.3 Waters of the State – RWQCB

Waters of the state potentially under the jurisdiction of the RWQCB include wetlands, vernal pools, and vernal pools that include those pools that support the federally listed fairy shrimp species, and seasonal depressions (basins with San Diego fairy shrimp), that support fairy shrimp (see Tables 5a-5d and Figure 32.1 through 32.37). RWQCB jurisdiction is anticipated to include the same areas as USACE (as described earlier in this report) as well as the ephemeral drainages and the seasonal basins, which are discussed below.

#### a. Seasonal Basins (Basins with San Diego fairy shrimp)

Forty-two depressions that contain San Diego fairy shrimp, but no vernal pool flora indicator species occur within the project-level survey area. These depressions are either not dominated with hydrophytic vegetation or have no vegetation at all. However, there was either evidence of ponding (i.e., soil surface cracks, biotic crusts) or observed ponding, which was used to determine that wetland hydrology was present. Based on the presence of ponding conditions sufficient to support federal listed fairy shrimp, the features may be considered surface waters of the state.

### 5.5.2.4 City of San Diego Wetlands

City wetlands include the same areas identified as CDFW wetlands which includes areas of mule fat scrub, southern willow scrub, disturbed southern willow scrub, disturbed riparian and disturbed wetlands, and vernal pools. Some, but not all of the ponding basins within the project-level survey areas contain vernal pool indicator plants. As defined by the Biology Guidelines, all depressions that contain the presence of one or more USACE vernal pool plant indicator species fall under the jurisdiction of the City and are identified as vernal pools (City of San Diego 2019).

An additional 25 isolated ponding basins occur within the project-level survey area that do not contain vernal pool plant indicator species, but do contain hydrophytic vegetation, hydric soils, and hydrology; therefore, these basins have been mapped as disturbed wetlands (see Tables 5a-5d and Figure 33.1 through 33.32). Additionally, 42 basins designated as seasonal basins by the RWQCB (ponding depressions that are not a wetland or vernal pool, but contain shrimp), as described in Section 5.5.2.3, are also classified as City disturbed wetlands as these basins meet the hydrology parameter.



## 5.6 Wildlife Corridors

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important, because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations (Beier and Loe 1992). Wildlife movement corridors are considered sensitive by resource and conservation agencies.

### 5.6.1 Program-level Area

The Specific Plan area is located on mesa tops and occurs within a large block of undeveloped land, just north of the U.S./Mexico border, east of I-805 and south of SR-905. Wildlife movement within and between designated core biological resource areas is currently restricted south of the mesa tops by development in Mexico and the U.S. Mexico border wall. Movement to the west is restricted by the community of San Ysidro and I-805 located west of the Specific Plan area. Movement north of the Specific Plan area is restricted by Otay Mesa Road and SR-905, although a bridge under SR-905 to the east provides a connection to habitat blocks to the north (Figure 34).

In 2020, the Wildlife Tracking Institute conducted a large-scale wildlife tracking study which included the entire Specific Plan area and additional areas outside of the Specific Plan boundary (see Attachment 2). The study area was broken into three survey areas (A, B and C) known to support the highest wildlife use. Survey areas are depicted on Figure 35. As shown, the majority of wildlife use is within the canyons surrounding the Specific Plan area. Wildlife movement is supported by extensive canyon networks through Moody Canyon, west of the Specific Plan area, and Spring Canyon. Moody and Spring canyons are designated as MSCP regional wildlife corridors (City of San Diego 1997). East of the Specific Plan area, a large block of habitat associated with Spring Canyon provides access to the SR-905 undercrossing to Dennerly Canyon. Beyond Spring Canyon to the east, wildlife movement is restricted by existing industrial and commercial developments (Wildlife Tracking Institute 2020).

The Otay Mesa Road culvert, occurring in Study Area C, is large enough to allow movement for coyote and bobcat and small animals, but it is not large enough to support movement of mule deer (*Odocoileus hemionus fuliginata*). As wildlife moves south from Dennerly Canyon, the canyons, mesa tops and existing dirt roads provide opportunities for local movement within the Specific Plan area. Within the program-level areas, significant wildlife movement patterns were noted (see Figure 35).

All study areas provide wildlife movement opportunities for large and small mammals, and reptiles, and it was determined that the large mammals that frequently used Moody and Spring Canyons were predominantly coyote and bobcat (Wildlife Tracking Institute 2020).



## 5.6.2 Project-level Area

As detailed above, an overview of the wildlife movement paths based on the findings of the wildlife tracking study is shown on Figure 35 and species identified as part of this study are included in Section 4.1.3. As shown on Figure 35, Survey Areas A and B occur within the project-level survey area. Survey Area A, which covers most of Phase 1 and the Beyer Boulevard survey area, contains a system of east-west ridges and two deep canyons within the southern portion of this study area. Additionally, there are three north-south swales that are south of Moody Canyon and allow movement from the canyon into the mesa top areas. Bobcat and coyote were found to frequently use these swales. Moody Canyon, an east-west canyon, provides a regional corridor for local movement (City of San Diego 1997). The focus of the wildlife tracking study was to provide recommendations for wildlife crossings as with the implementation of Beyer Boulevard (within Study Area A), movement through Moody Canyon would be interrupted by this road.

Study Area B covers a portion of the Beyer Boulevard survey area and all of Phase 2 and includes dirt roads along the mesa edges and a drainage with riparian habitat that are commonly used by large and small mammals. The southeastern portion of Area B contains the southwestern extent of the Spring Canyon drainage area located further east within the southern portion of Survey Area A. This is a key drainage and wildlife movement corridor, allowing wildlife to move through Study Areas B and C (see Figure 35).

Study Area C includes the Spring Canyon Drainage and surrounding open space and associated finger canyons. Wildlife movement coming south from Dennery Canyon through the Otay Mesa Road culvert may enter into the area using canyons, mesa tops and existing dirt roads which provide opportunities for local movement within area (see Figure 35).

## 5.7 Designated Critical Habitats

The USFWS has designated revised critical habitat for San Diego fairy shrimp, Riverside fairy shrimp, and spreading navarretia within the Otay Mesa area (USFWS 2007b, 2012, and 2010, respectively). Critical habitats for these species occur within and surrounding the Specific Plan area (see Figure 28.1 through 28.3). No critical habitat is designated for Quino checkerspot butterfly or Otay tarplant within either the program-level or project-level areas.

### 5.7.1 Program-level Area

San Diego fairy shrimp, Riverside fairy shrimp, and spreading navarretia critical habitats occur within the program-level areas (see Figure 28.1 through 28.3 and Table 6a). Future project-level surveys would be required to determine if these species are present within these areas.



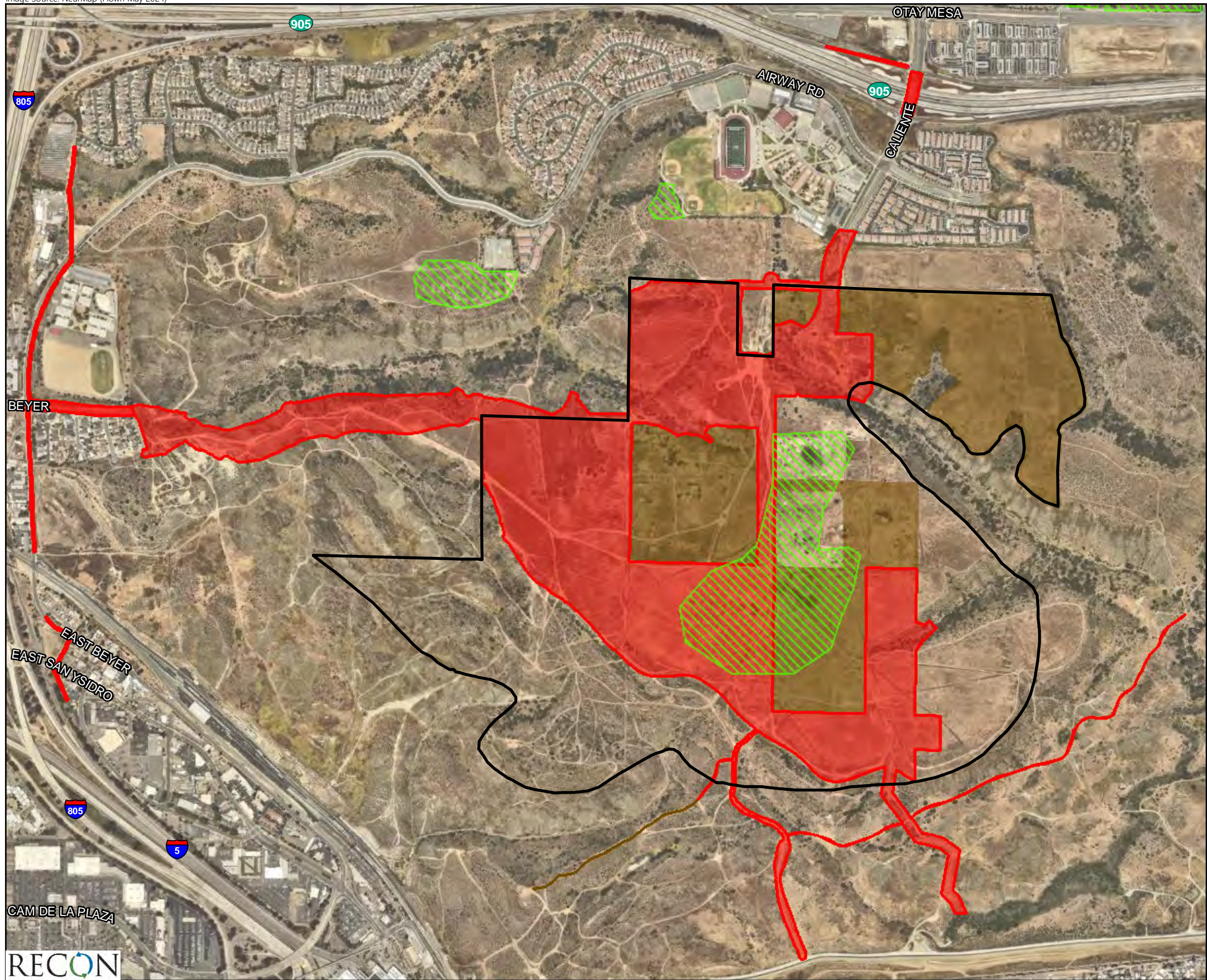
Table 6a Critical Habitats Located within the Program-level Survey Area	
Critical Habitat	Acres
San Diego fairy shrimp	37.35
Riverside fairy shrimp	0.07
Spreading navarretia	12.27

## 5.7.2 Project-level Area

Critical habitats for San Diego fairy shrimp, Riverside fairy shrimp, and spreading navarretia occur within the project-level survey area (see Figure 28 and Table 6b). To date, San Diego fairy shrimp have been detected within the project-level survey area, both inside and outside of the designated critical habitat areas. Riverside fairy shrimp was detected in one vernal pool located north of the designated critical habitat for this species (refer to Figure 40.2 for the location of the detected Riverside fairy shrimp). No spreading navarretia has been observed within the project-level survey areas.

Table 6b Critical Habitats Located within the Project-level Survey Area		
Critical Habitat	Survey Area (acres)	Development Areas (acres) <sup>1</sup>
San Diego fairy shrimp	311.90	77.94
Riverside fairy shrimp	160.14	4.09
Spreading navarretia	18.15	18.15
<sup>1</sup> Includes Phases 1, 2, 4, Beyer Boulevard, and EVA Road		





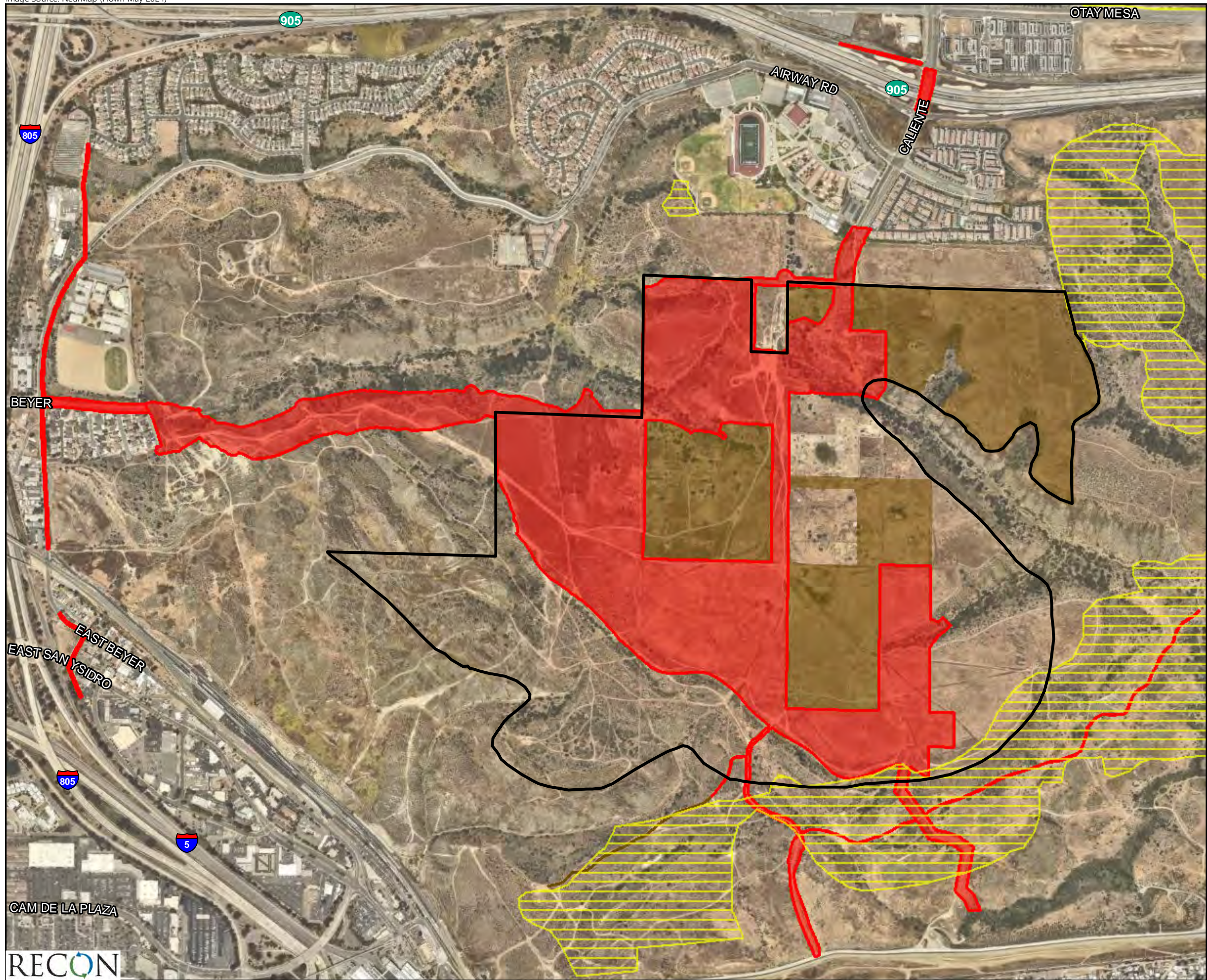
- Project-level Analysis Area
- Project-level Analysis Trails
- Program-level Analysis Area
- Program-level Analysis Trails
- Specific Plan Boundary
- Critical Habitat for Spreading Navarretia (*Navarretia fossalis*)

0 Feet 900



FIGURE 28.1  
Project Location in Relation to  
Spreading Navarretia Critical Habitat





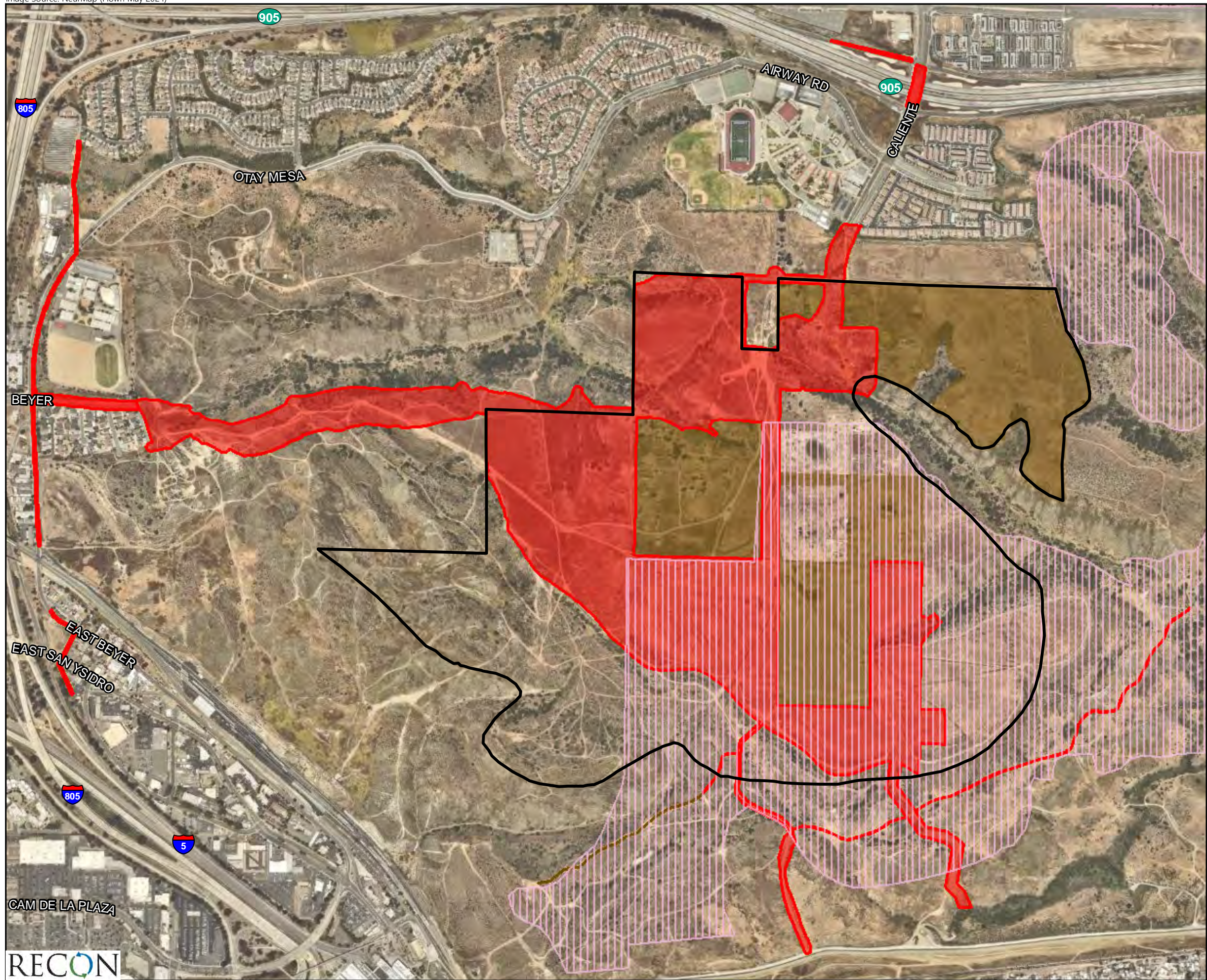
- Project-level Analysis Area
- Project-level Analysis Trails
- Program-level Analysis Area
- Program-level Analysis Trails
- Specific Plan Boundary
- Critical Habitat for Riverside Fairy Shrimp (*Streptocephalus woottoni*)

0 Feet 900



FIGURE 28.2  
Project Location in Relation to  
Riverside Fairy Shrimp Critical Habitat





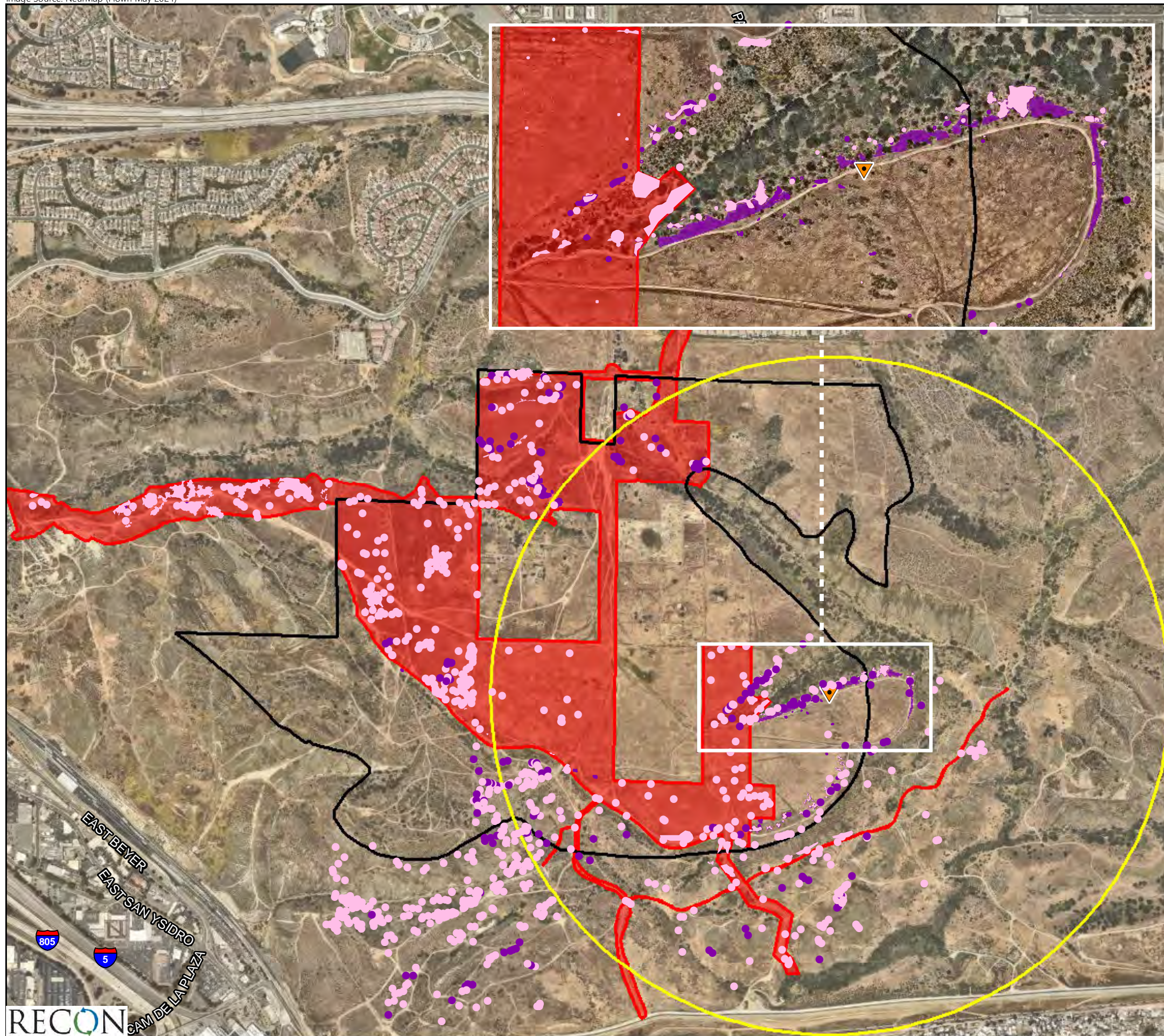
- Project-level Analysis Area
- Project-level Analysis Trails
- Program-level Analysis Area
- Program-level Analysis Trails
- Specific Plan Boundary
- Critical Habitat for San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

0 Feet 850



FIGURE 28.3  
Project Location in Relation to  
San Diego Fairy Shrimp Critical Habitat





- Project-level Analysis Area
- Specific Plan Boundary
- Quino Checkerspot Butterfly 2019 Observation (*Euphydryas editha quino*)
- 2019 QCB Observation 1 KM Radius
- Quino Checkerspot Butterfly Habitat**
- Host Plant Area
- Nectar Plant Area

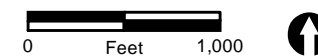


FIGURE 29.1  
Suitable Quino Checkerspot Butterfly Habitat



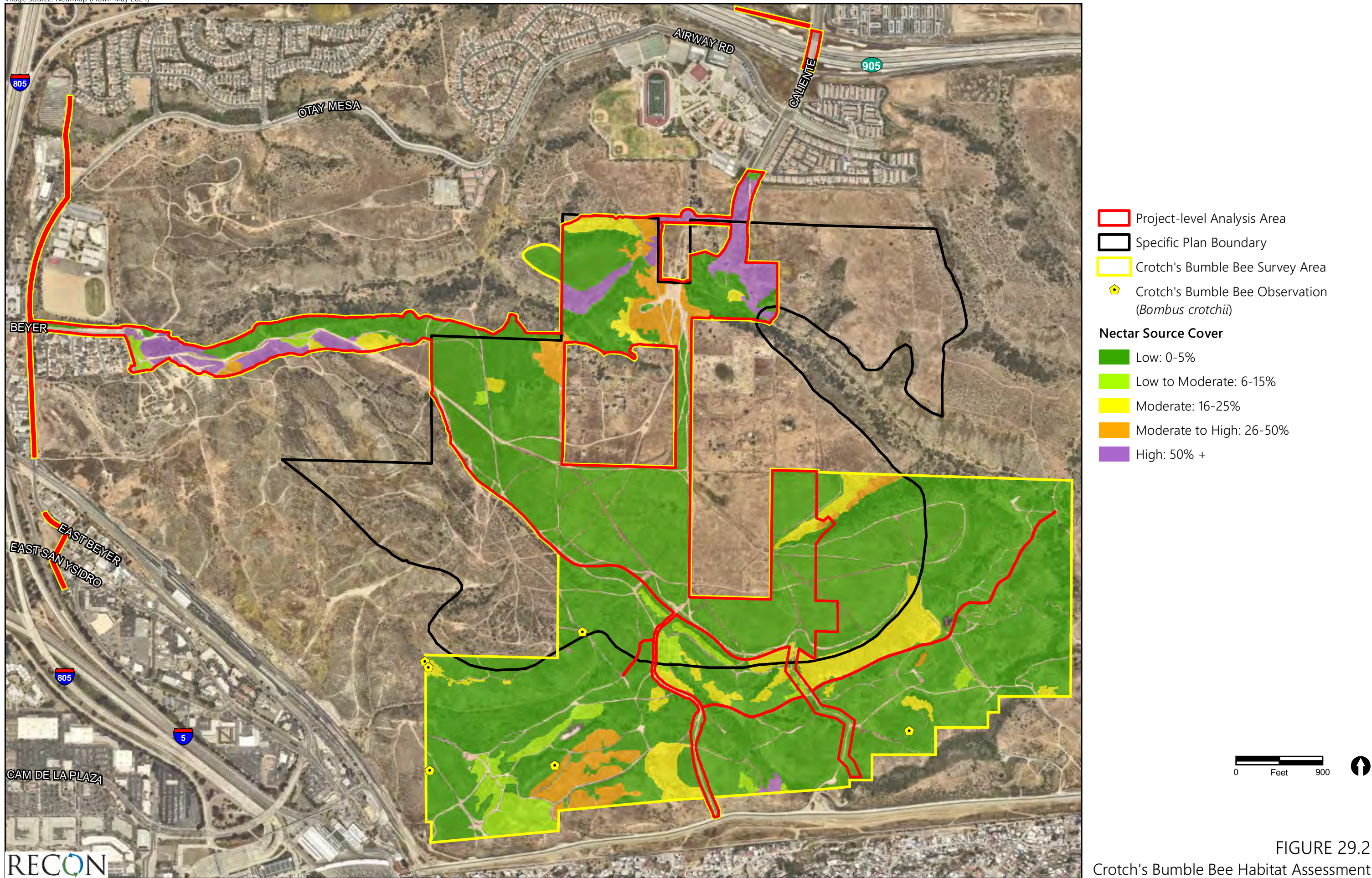
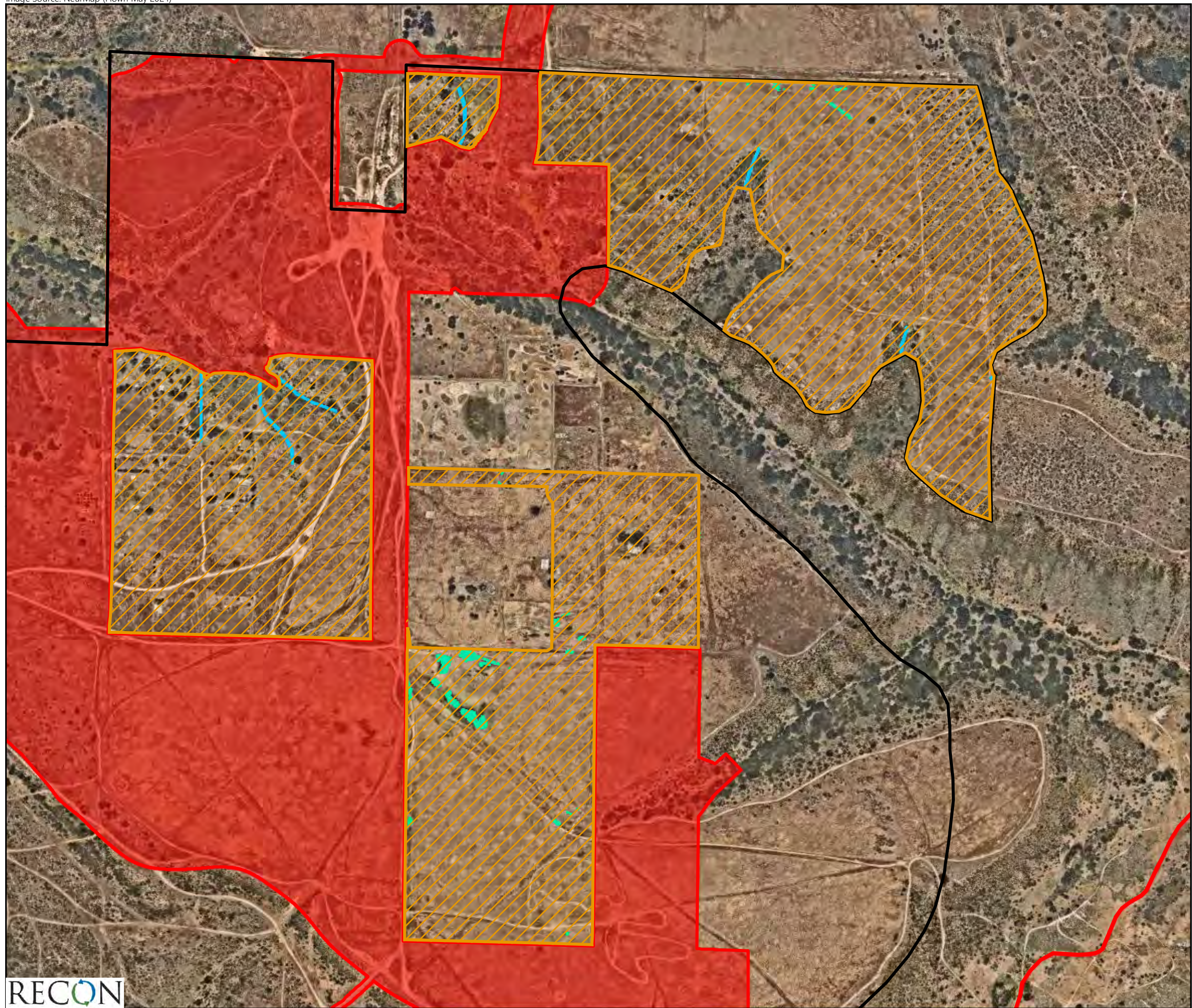






FIGURE 29.2  
Crotch's Bumble Bee Habitat Assessment





-  Program-level Analysis Area
-  Project-level Analysis Area
-  Specific Plan Boundary
- Potential Aquatic Resources\***
-  Wetland
-  Non-wetland Waters

\*Resources mapped based on SanGIS and National Wetlands Inventory (NWI) data. Site specific surveys required to verify resources



FIGURE 30  
Potential Jurisdictional Resources -  
Program-level Analysis Areas



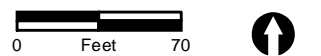
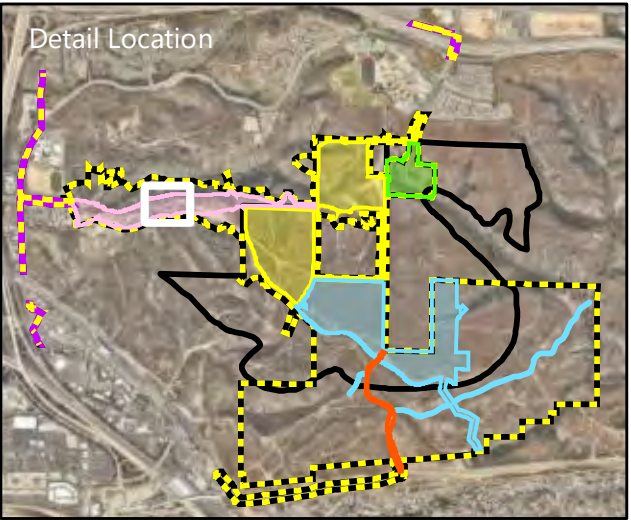
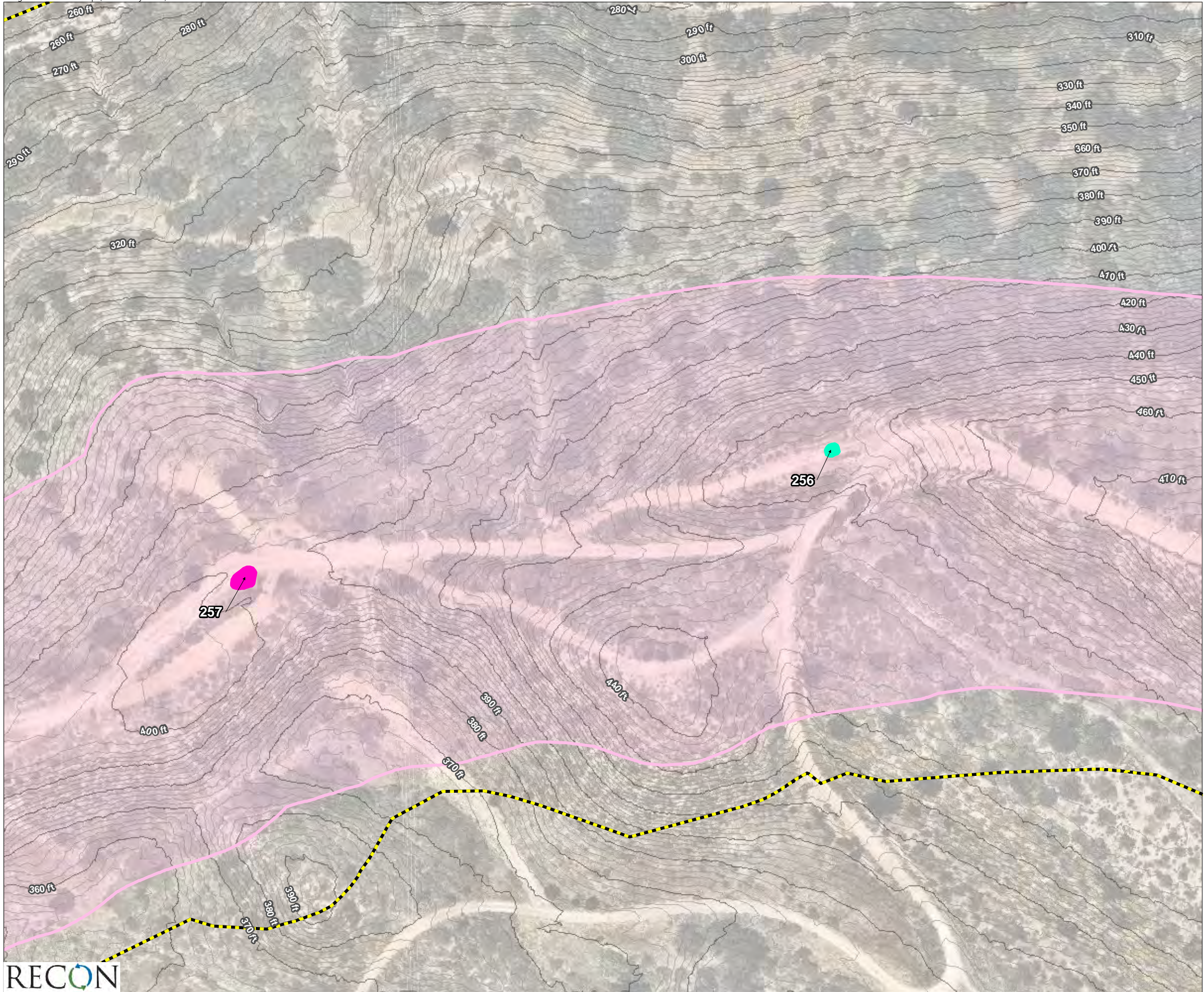


FIGURE 31.1  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)

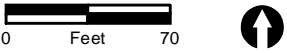
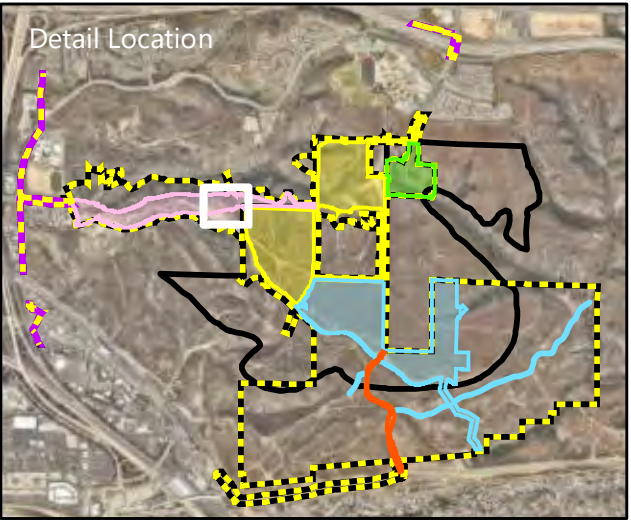
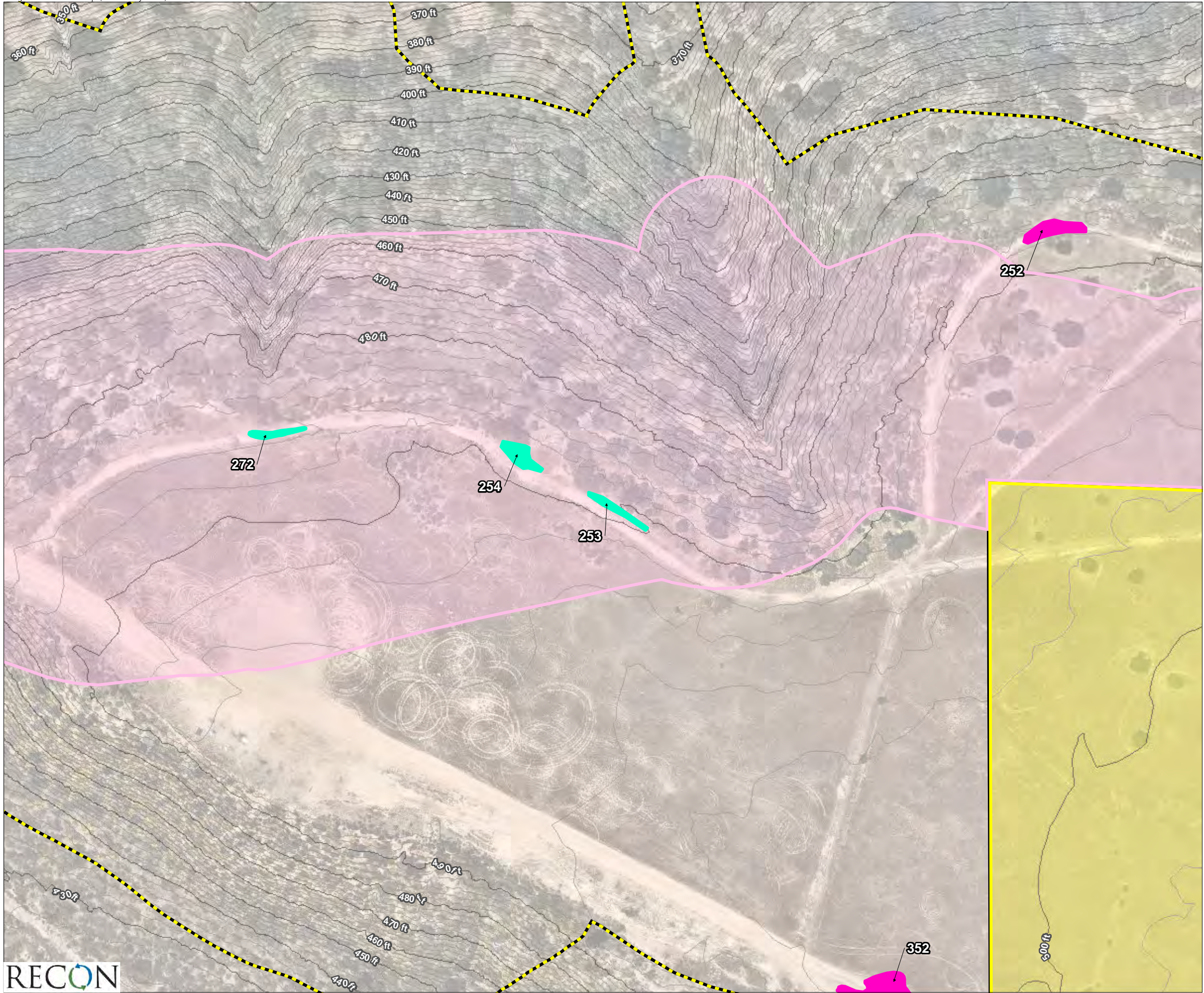


FIGURE 31.2  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)

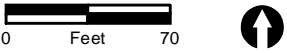
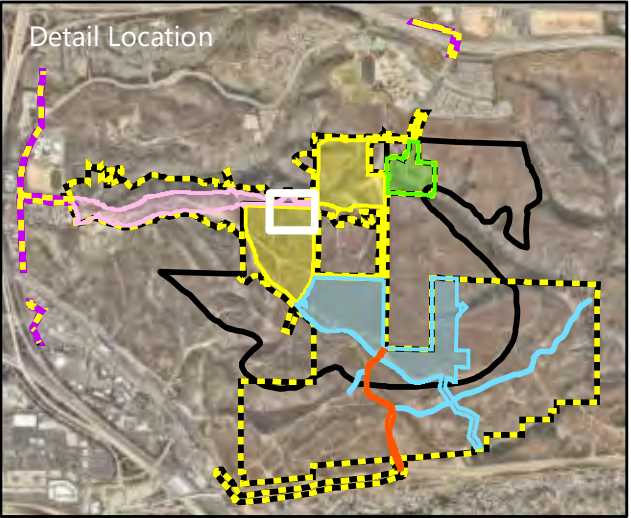
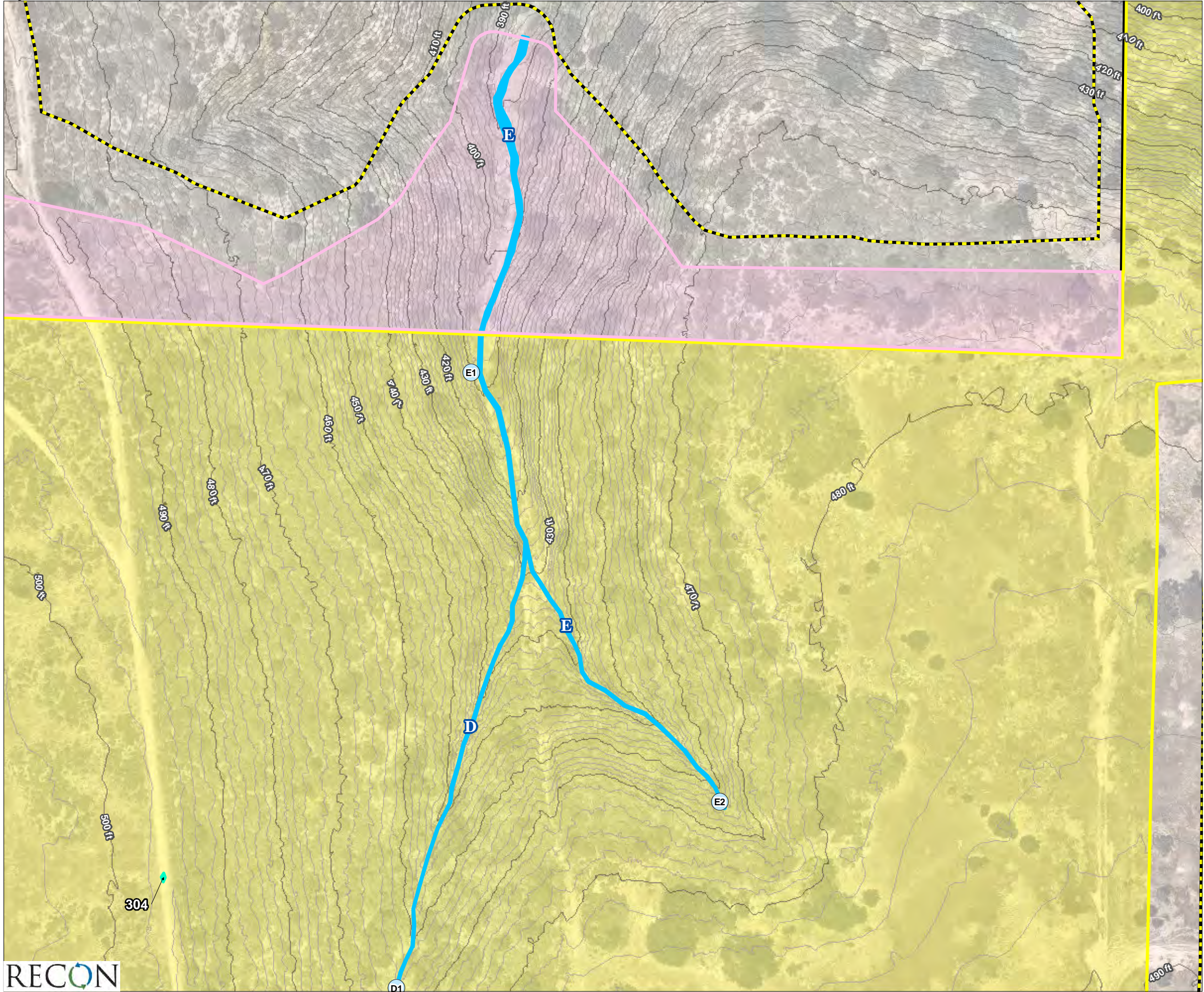


FIGURE 31.3  
Potential USACE Waters of the U.S.



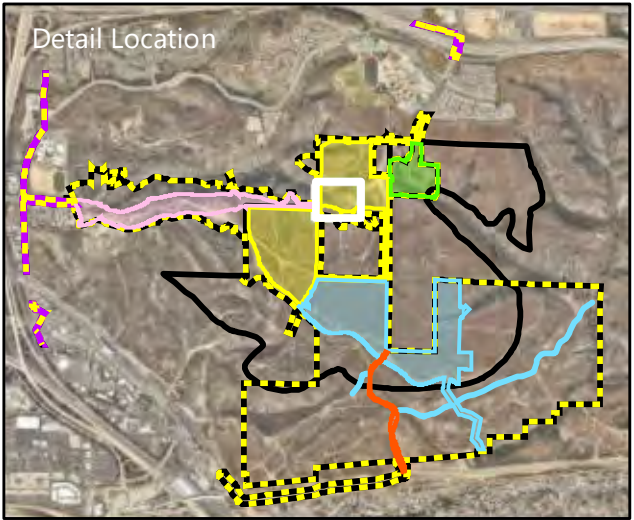
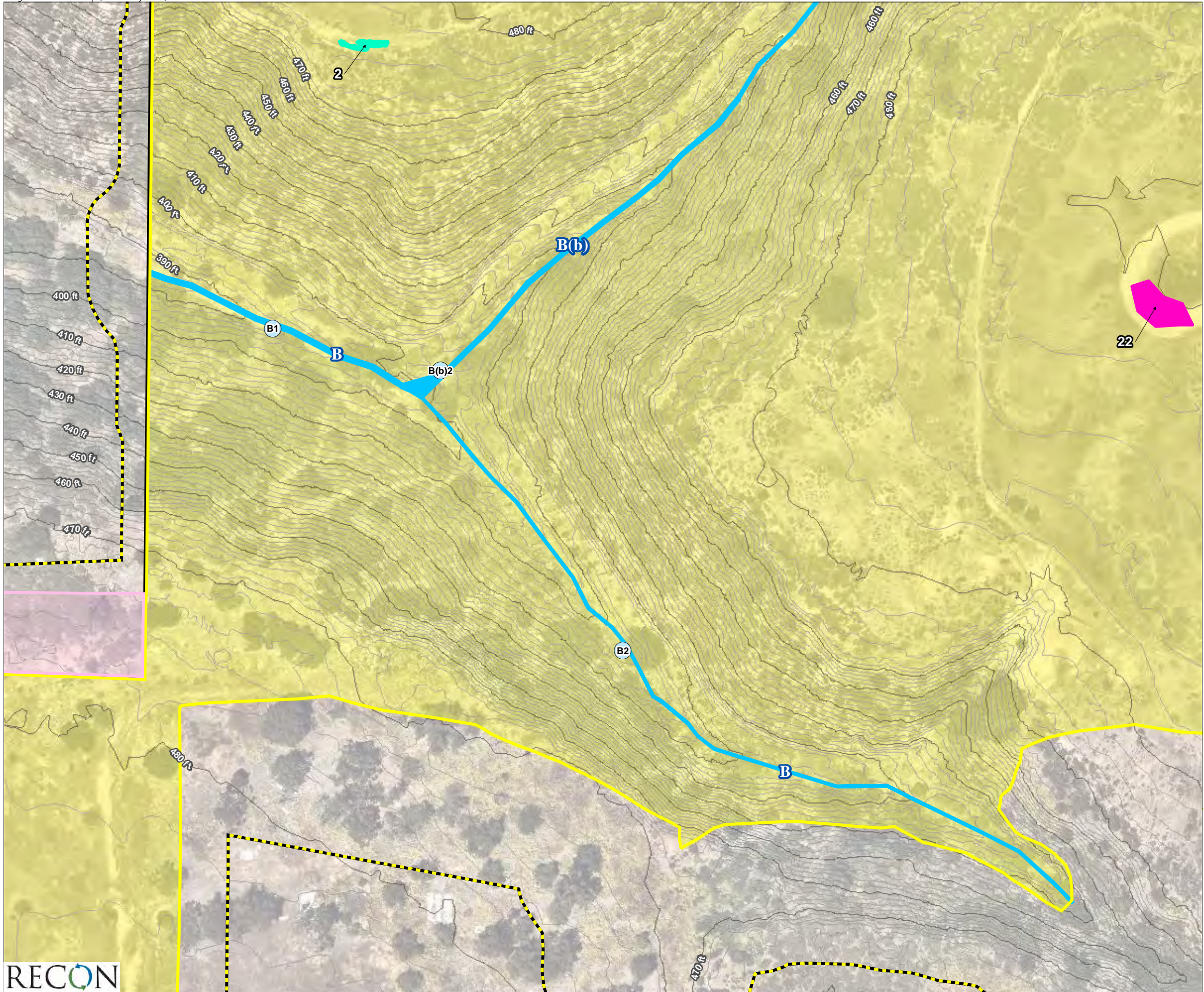


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)



FIGURE 31.4  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)

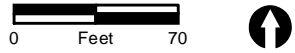
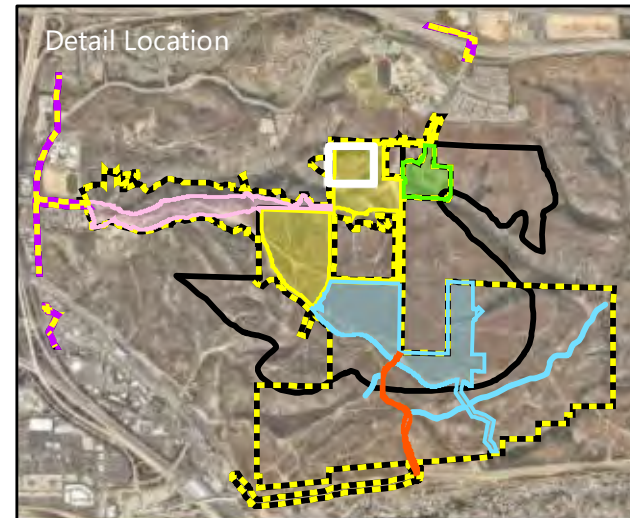
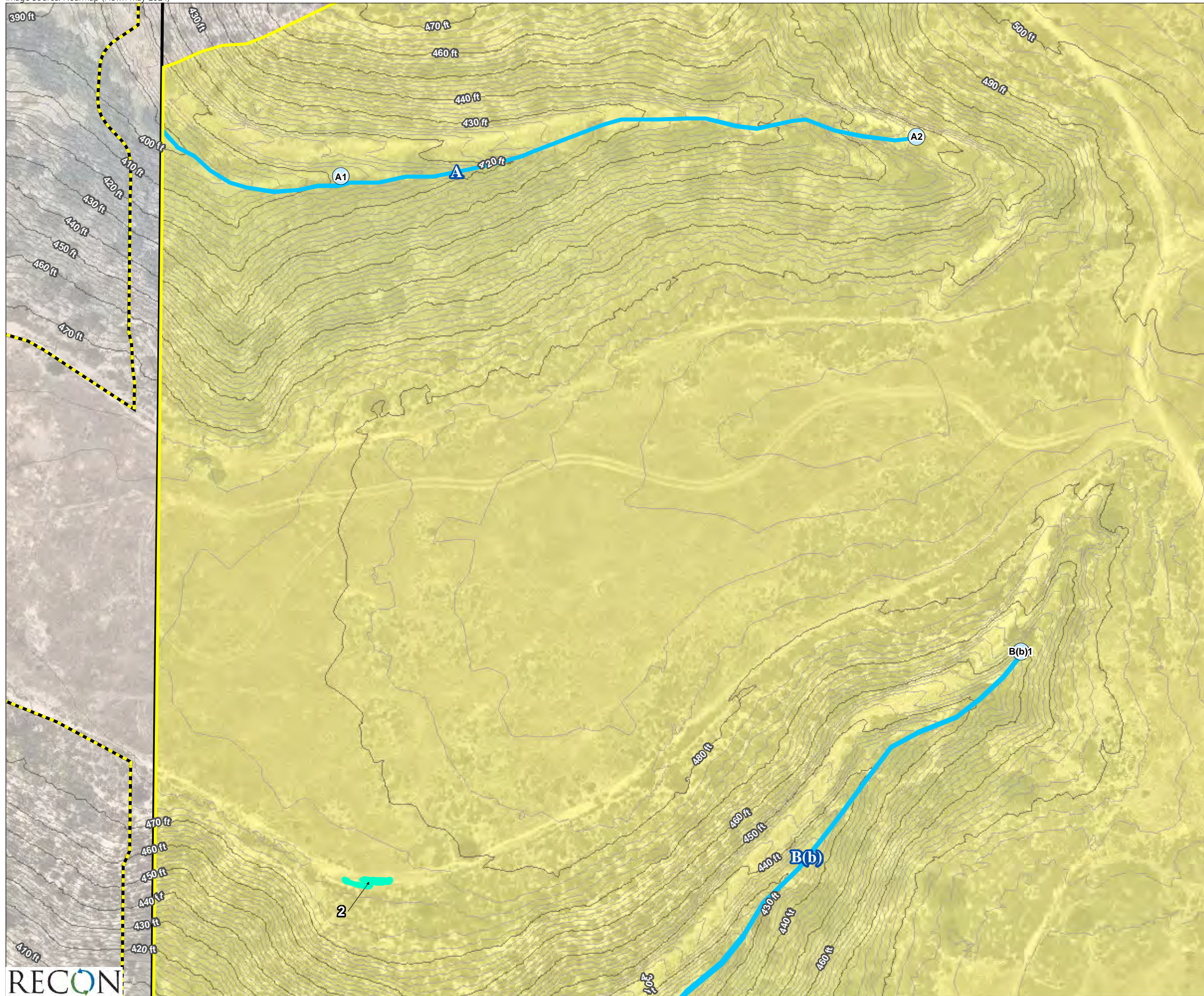


FIGURE 31.5  
Potential USACE Waters of the U.S.





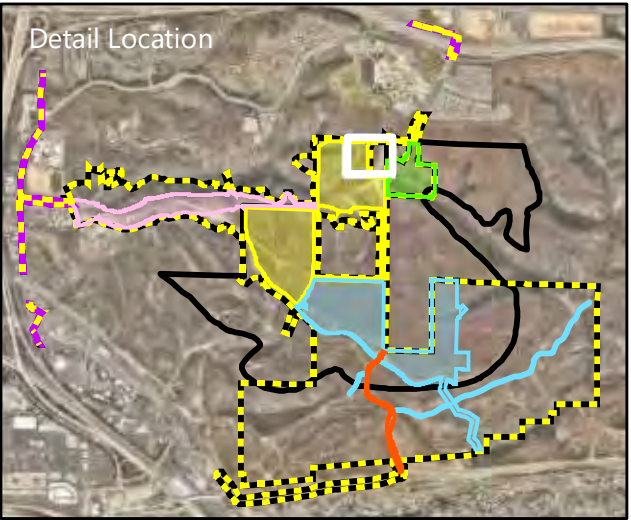
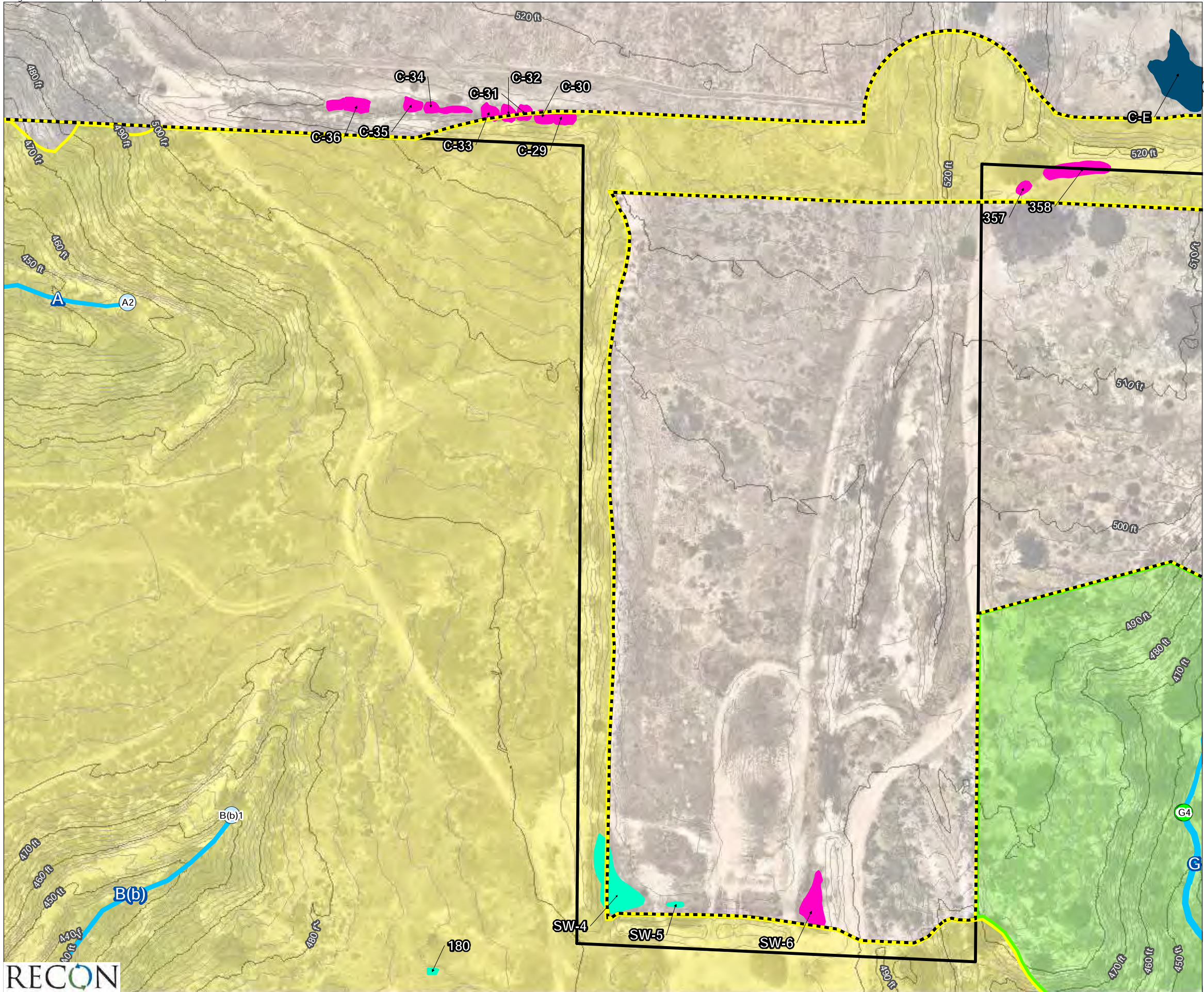
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)

0 Feet 70



FIGURE 31.6  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)
  - OHWM Data Sheet Point (ODP)

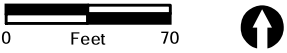
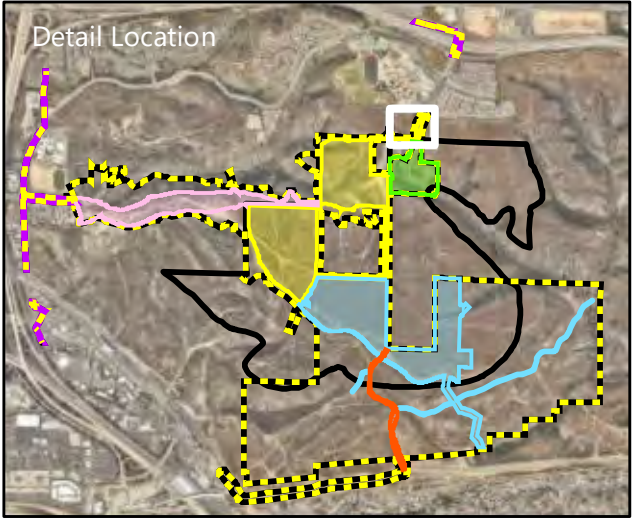
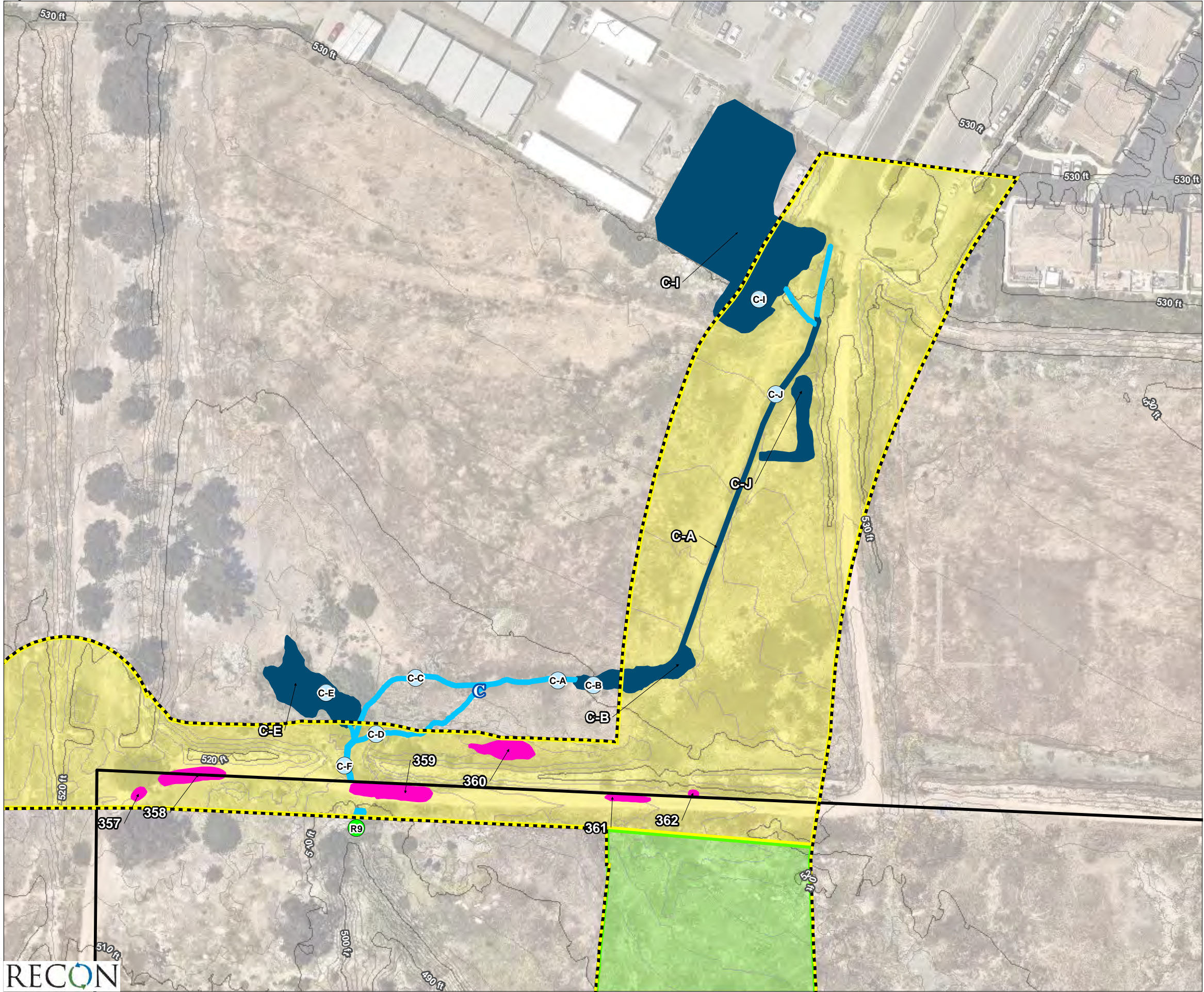


FIGURE 31.7  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)
  - OHWM Data Sheet Point (ODP)

Wetland deviations within this area previously approved as part of the City of San Diego entitled Candlelight Development Project (PTS #30329)

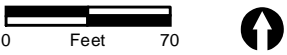
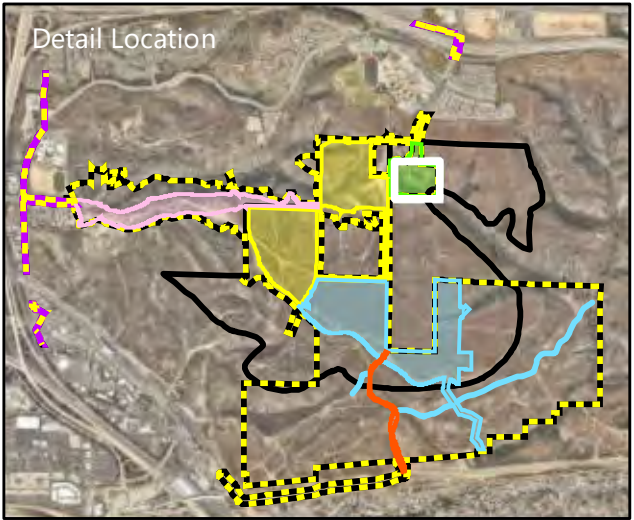
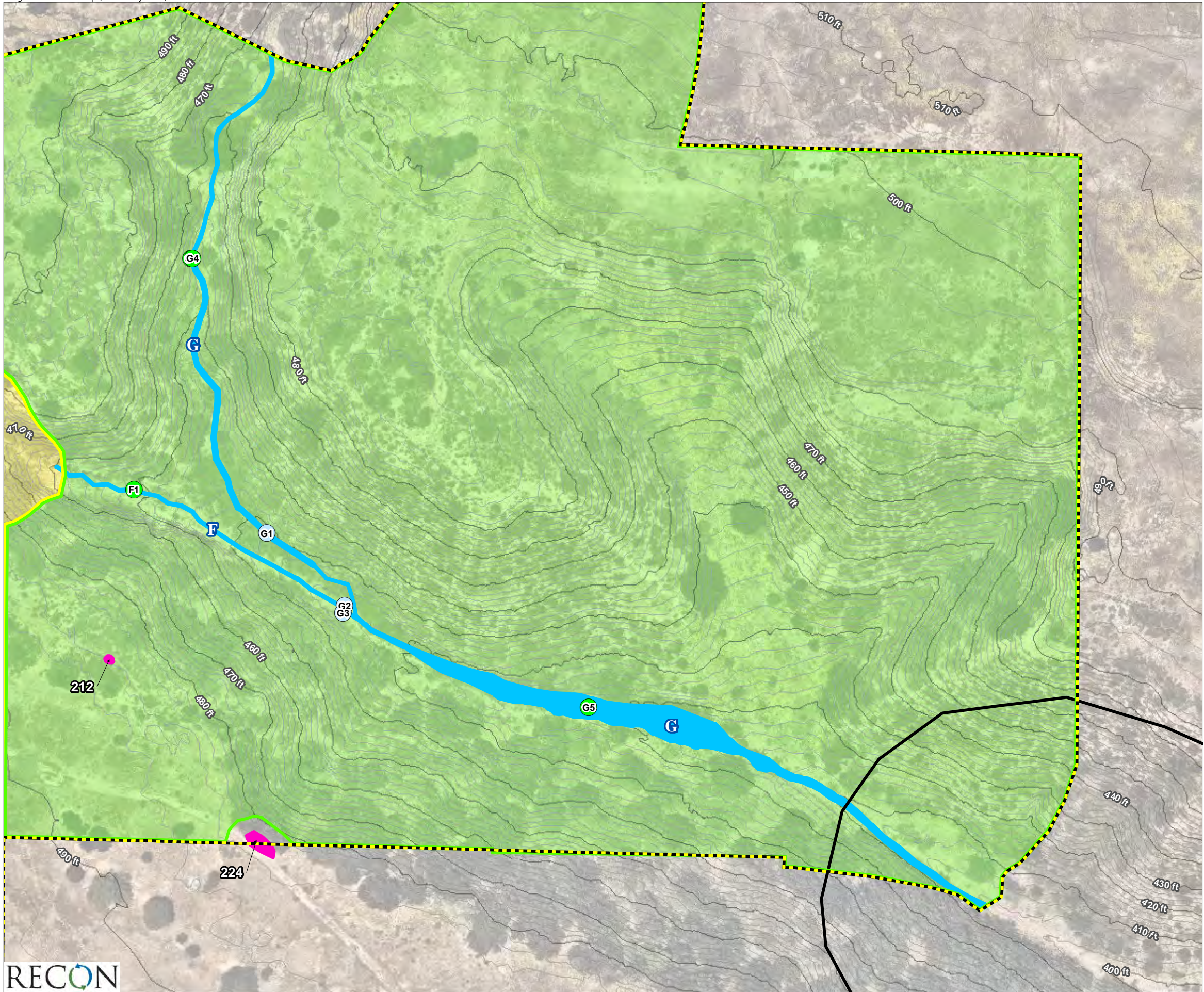


FIGURE 31.8  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)
  - OHWM Data Sheet Point (ODP)

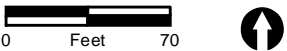
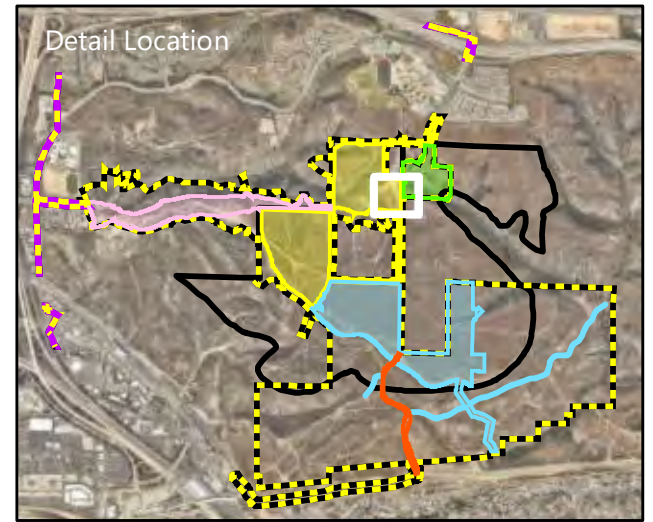
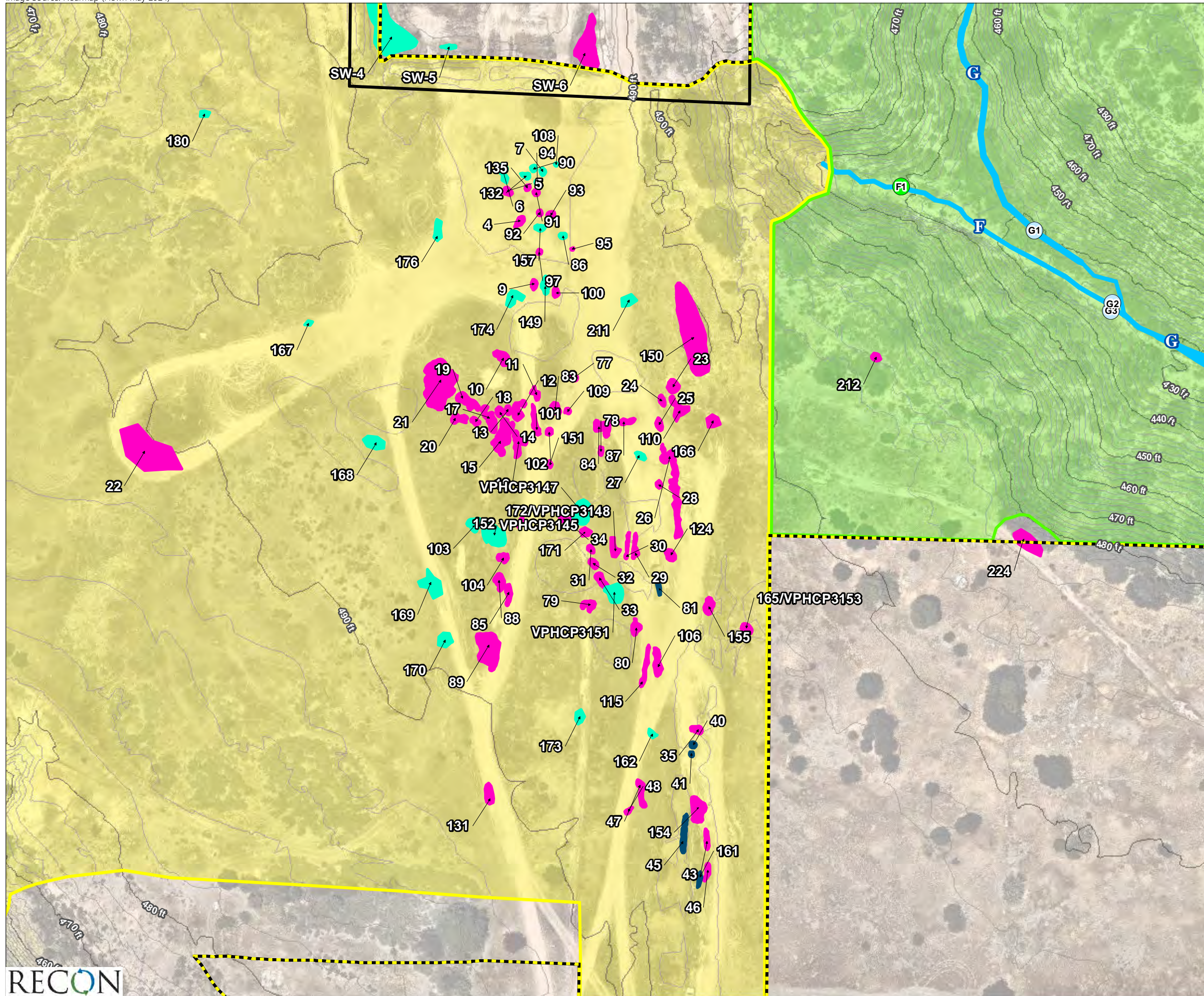


FIGURE 31.9  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)
  - OHWM Data Sheet Point (ODP)

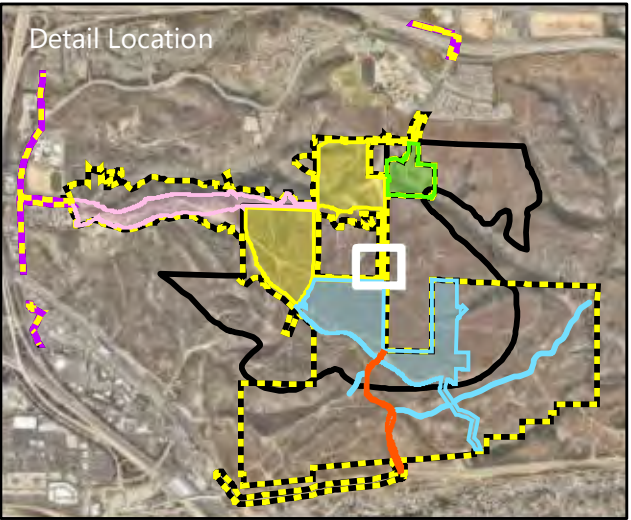
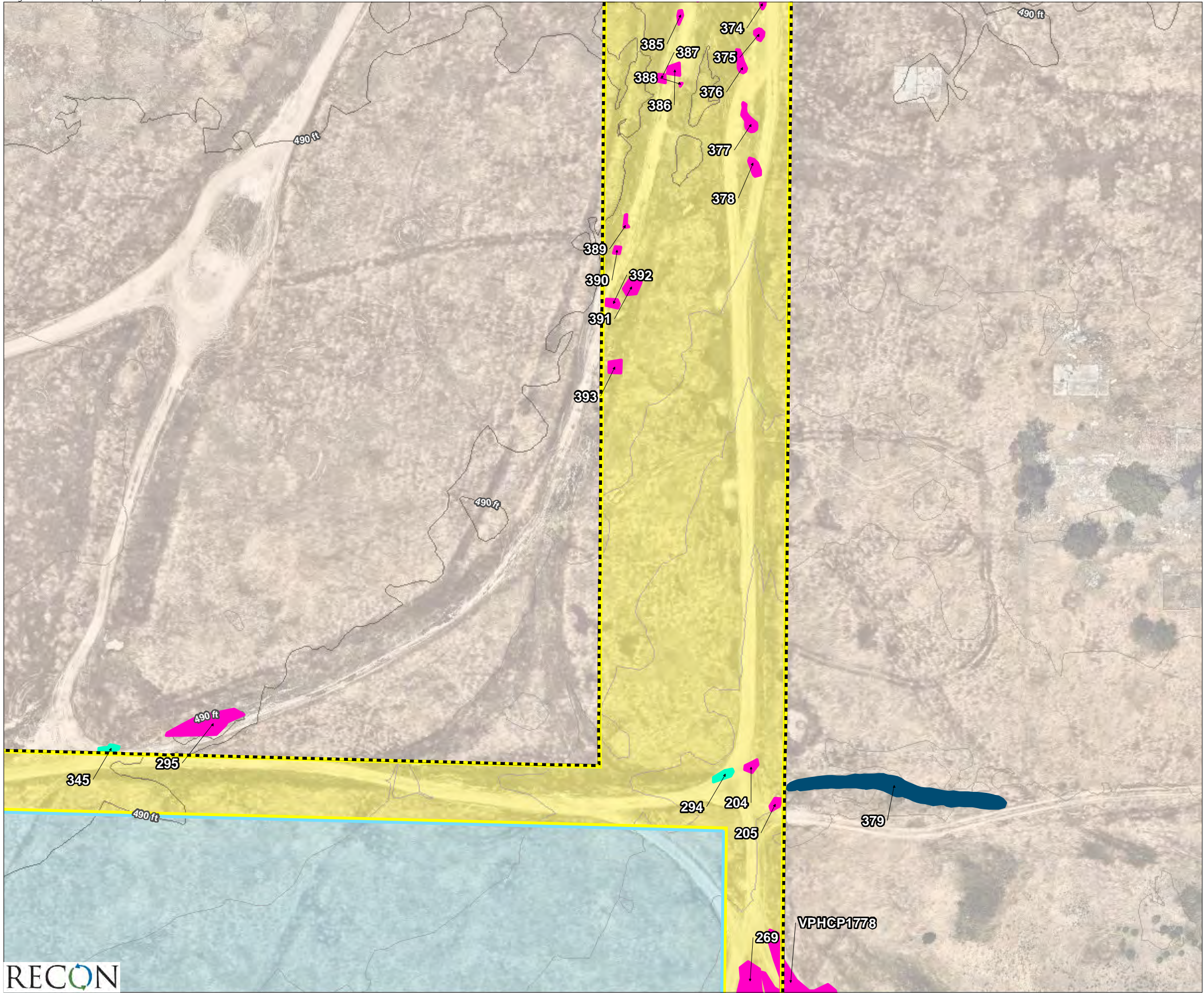
FIGURE 31.10  
Potential USACE Waters of the U.S.





FIGURE 31.11  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)

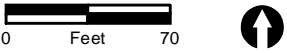
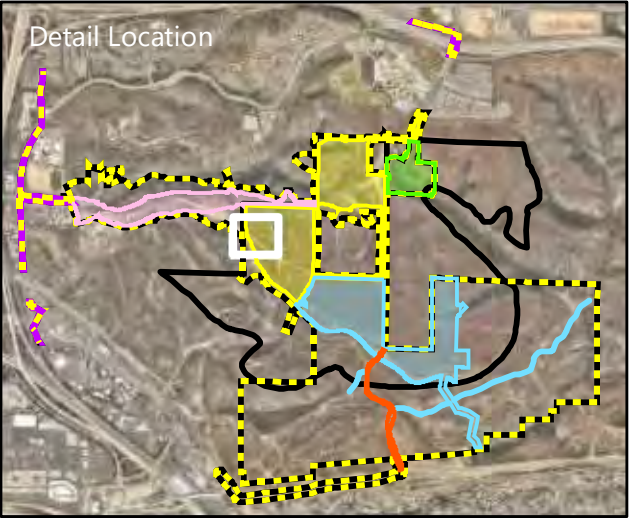
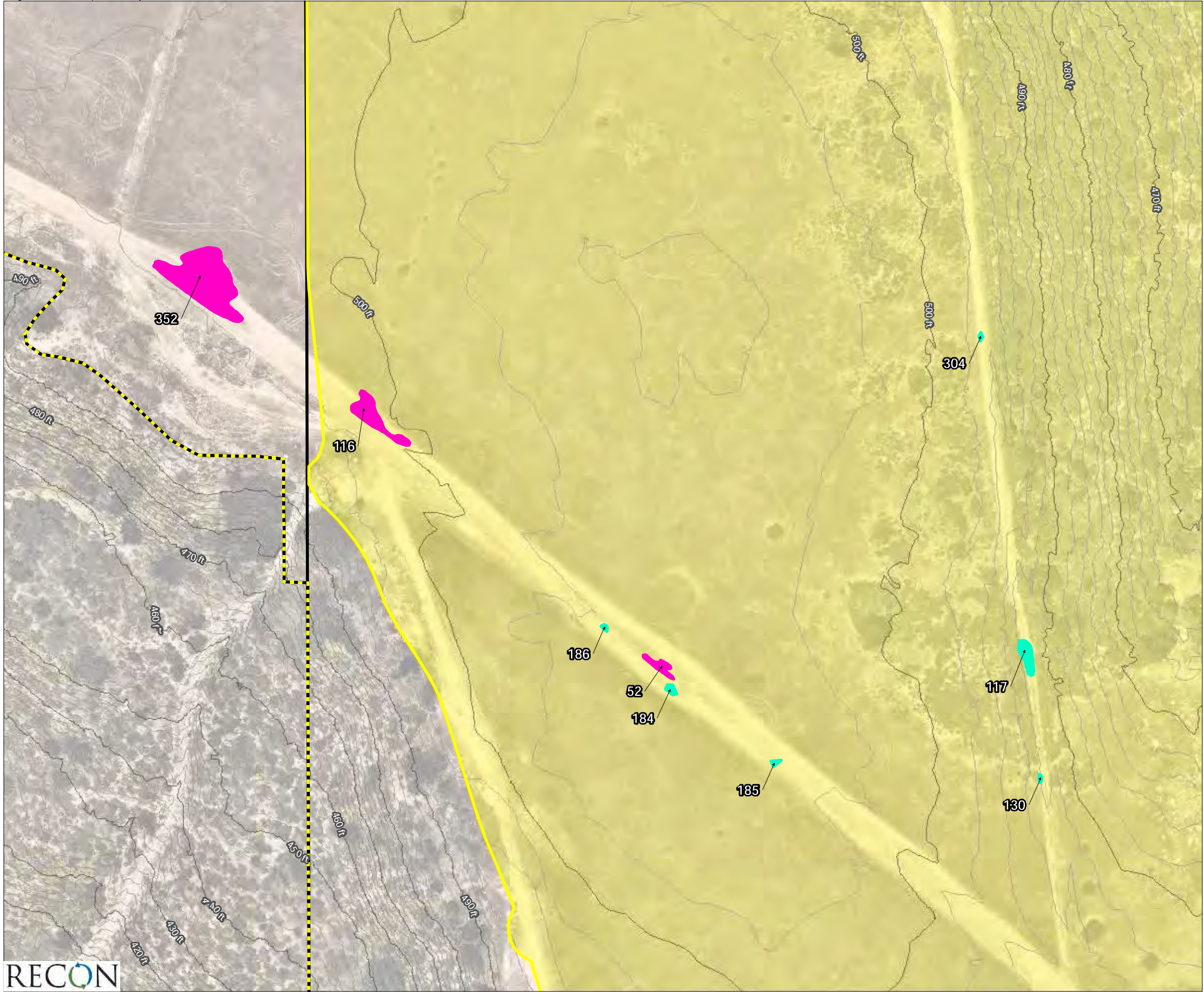


FIGURE 31.12  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)

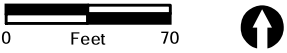
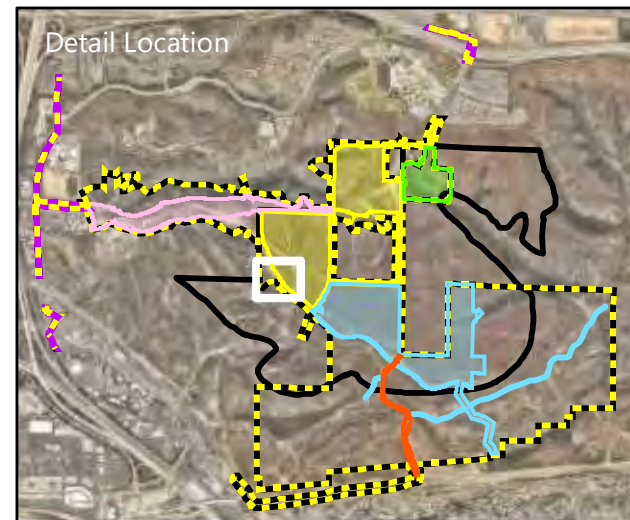
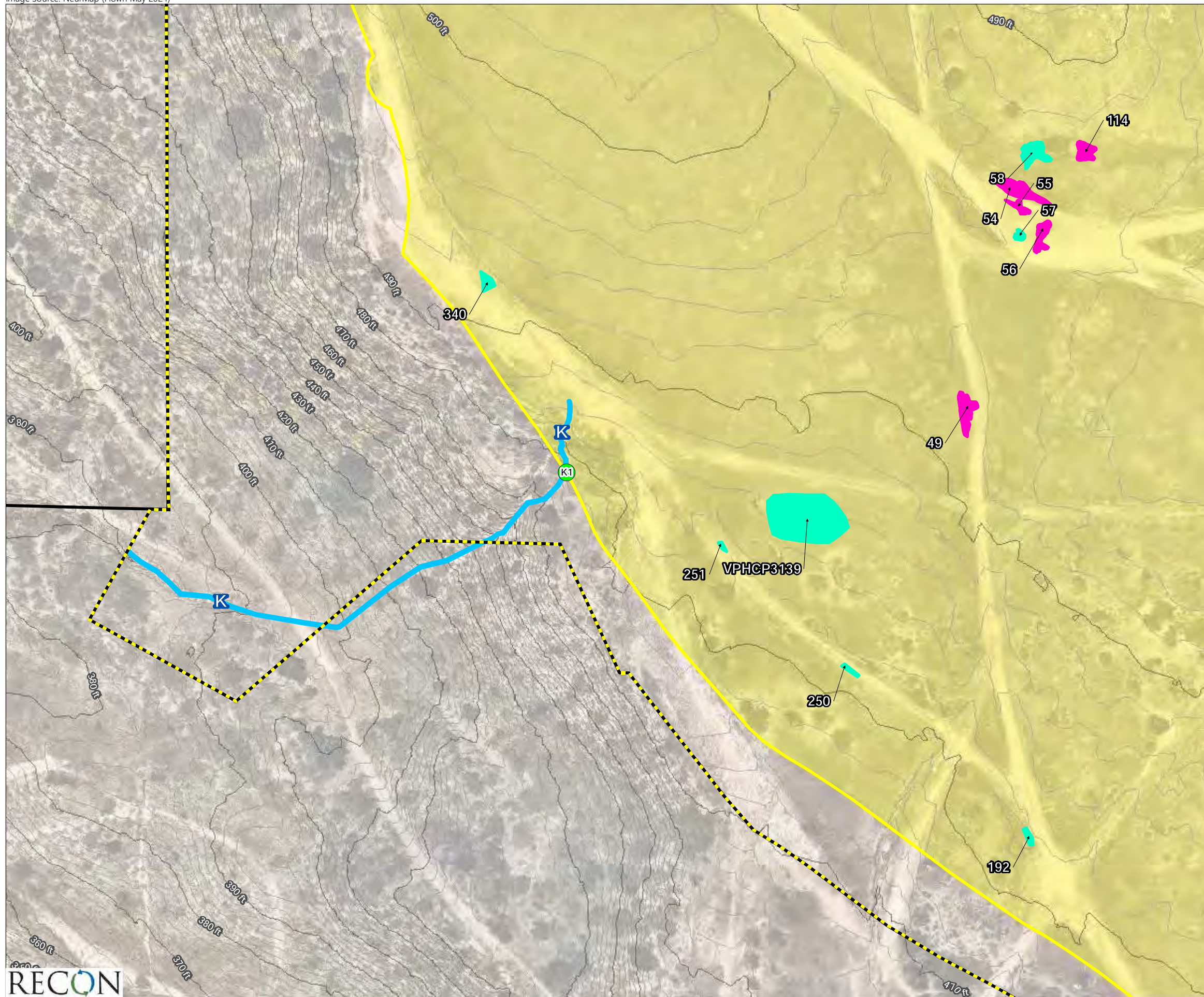


FIGURE 31.13  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Non-wetland Waters (Waters ID)
  - OHWM Data Sheet Point (ODP)

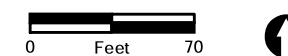
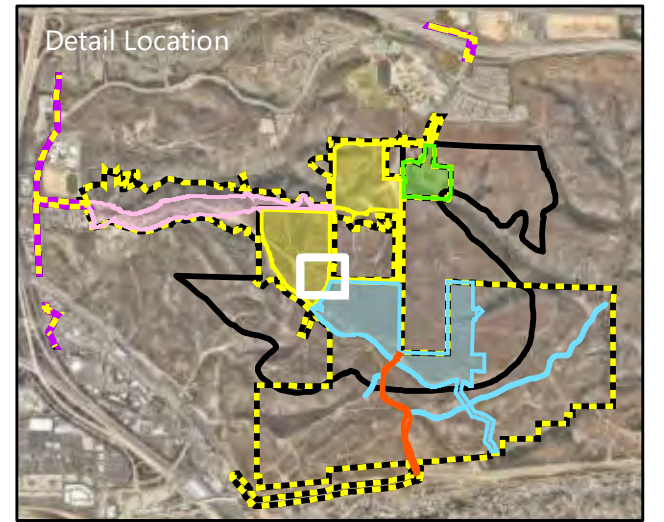
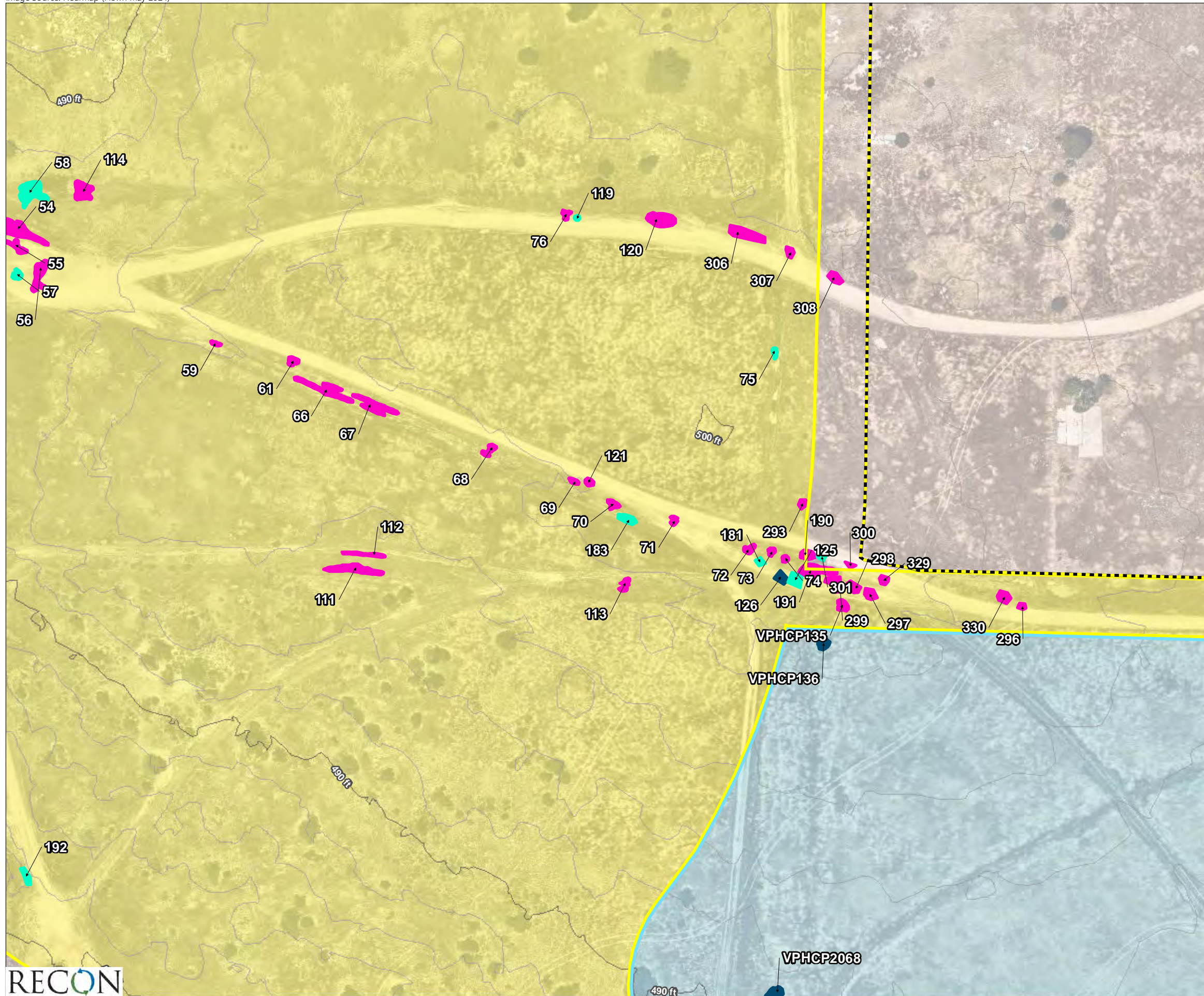


FIGURE 31.14  
Potential USACE Waters of the U.S.



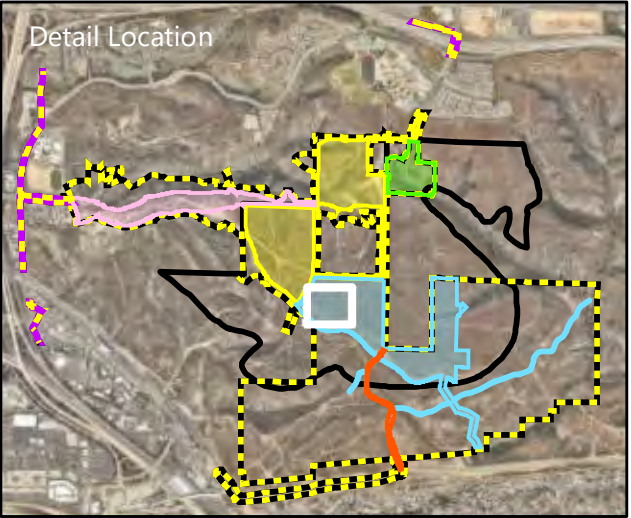


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)



FIGURE 31.15  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)

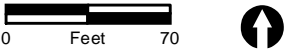
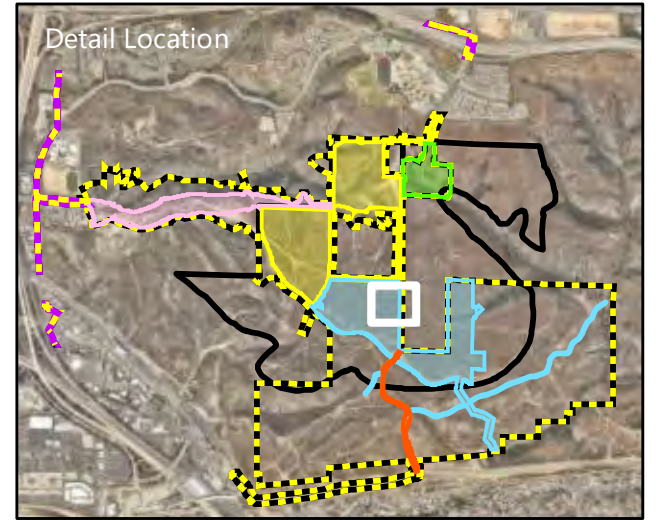
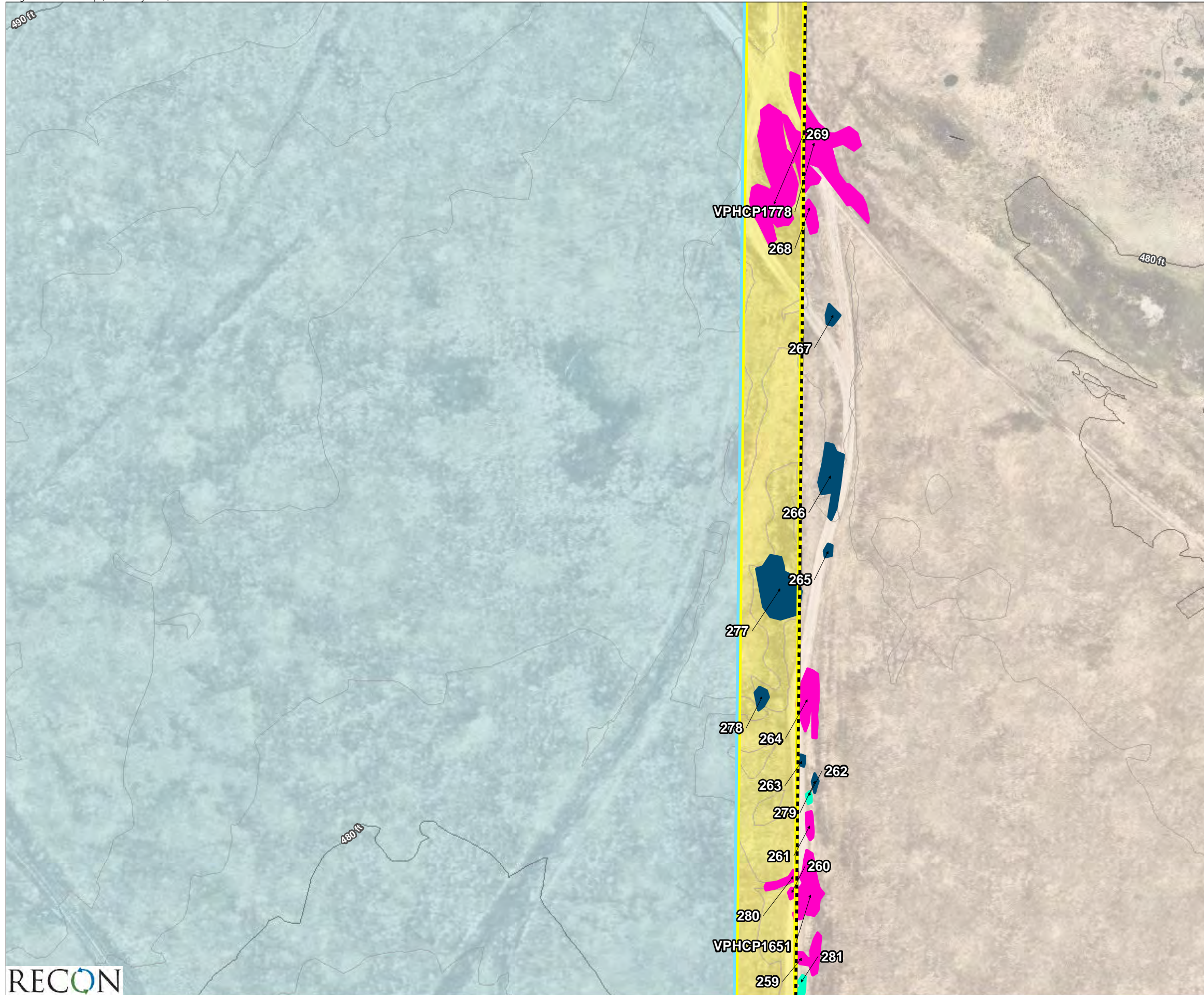


FIGURE 31.16  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)



FIGURE 31.17  
Potential USACE Waters of the U.S.



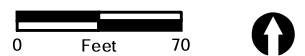
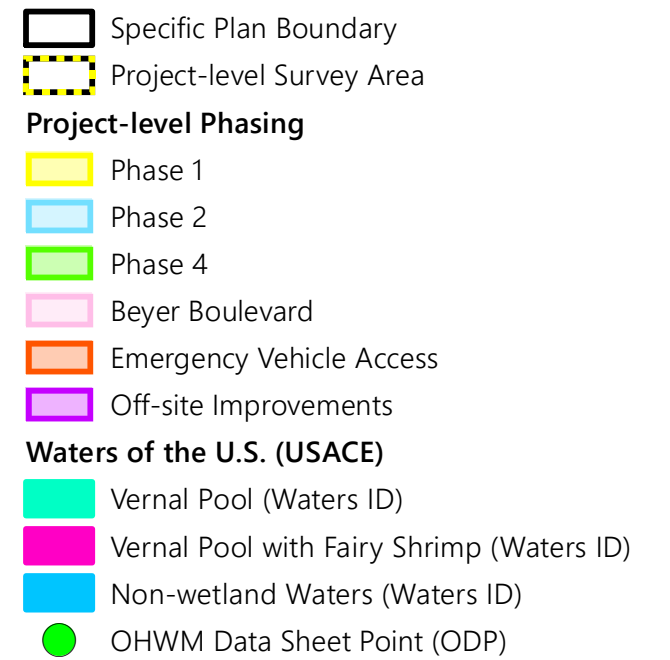
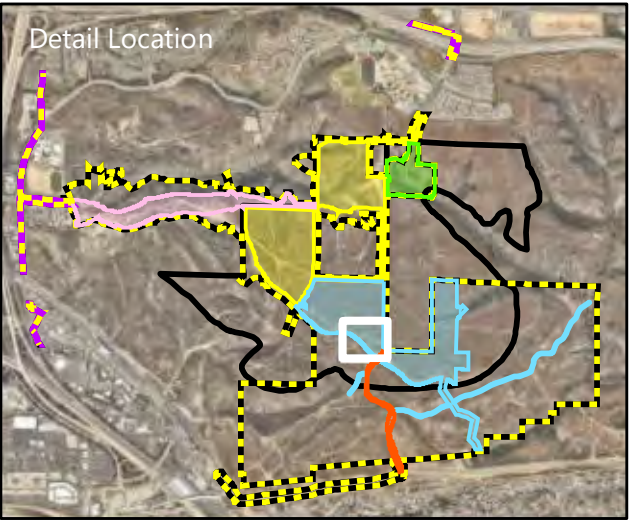
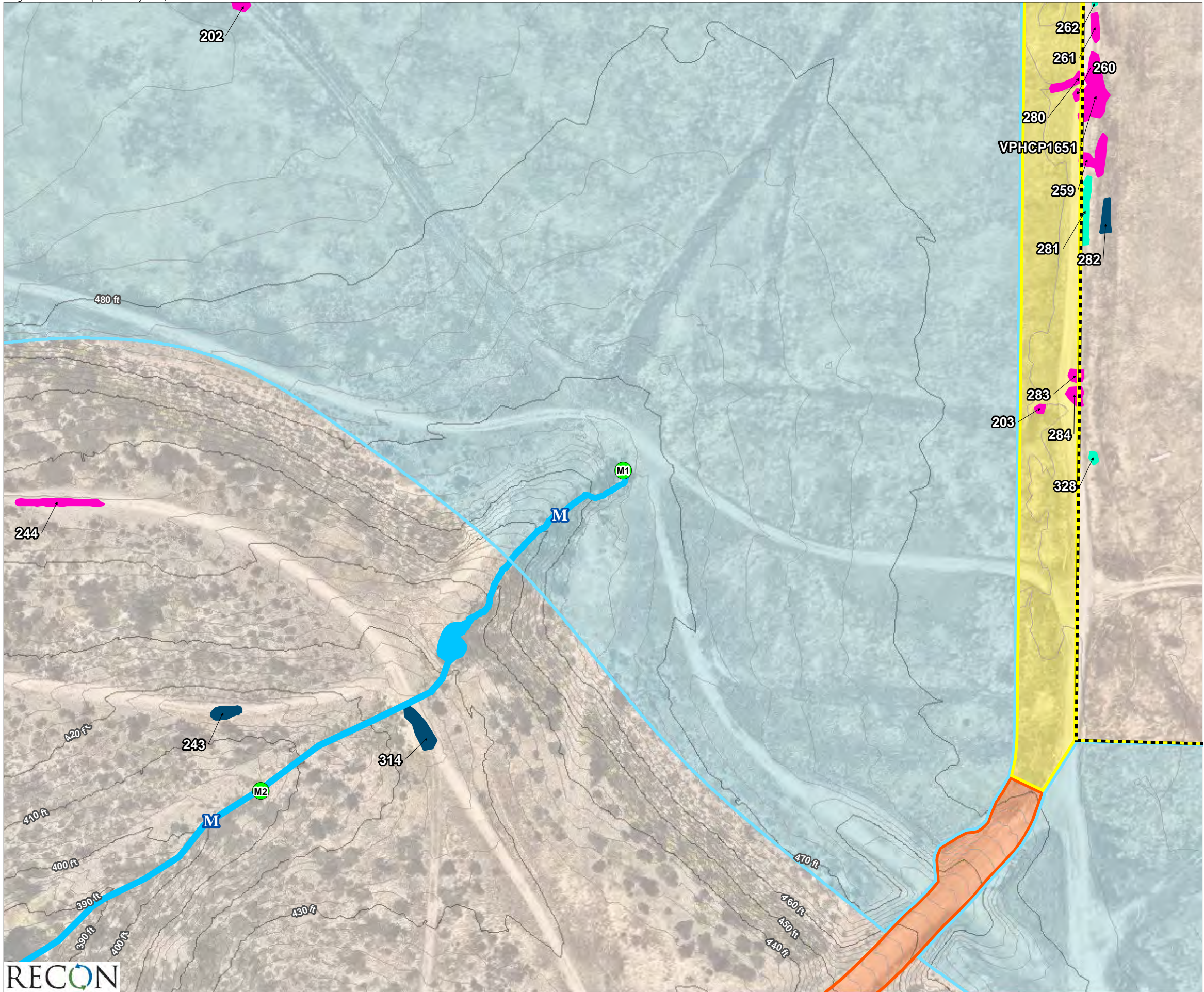


FIGURE 31.18  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)
  - Non-wetland Waters (Waters ID)
  - OHWM Data Sheet Point (ODP)

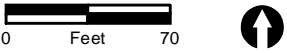
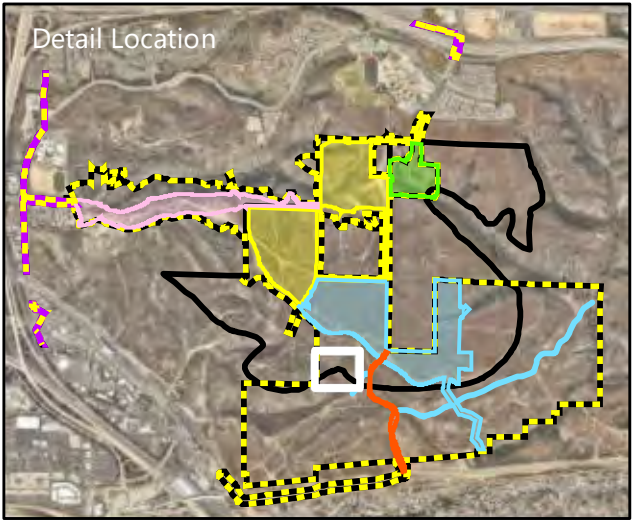
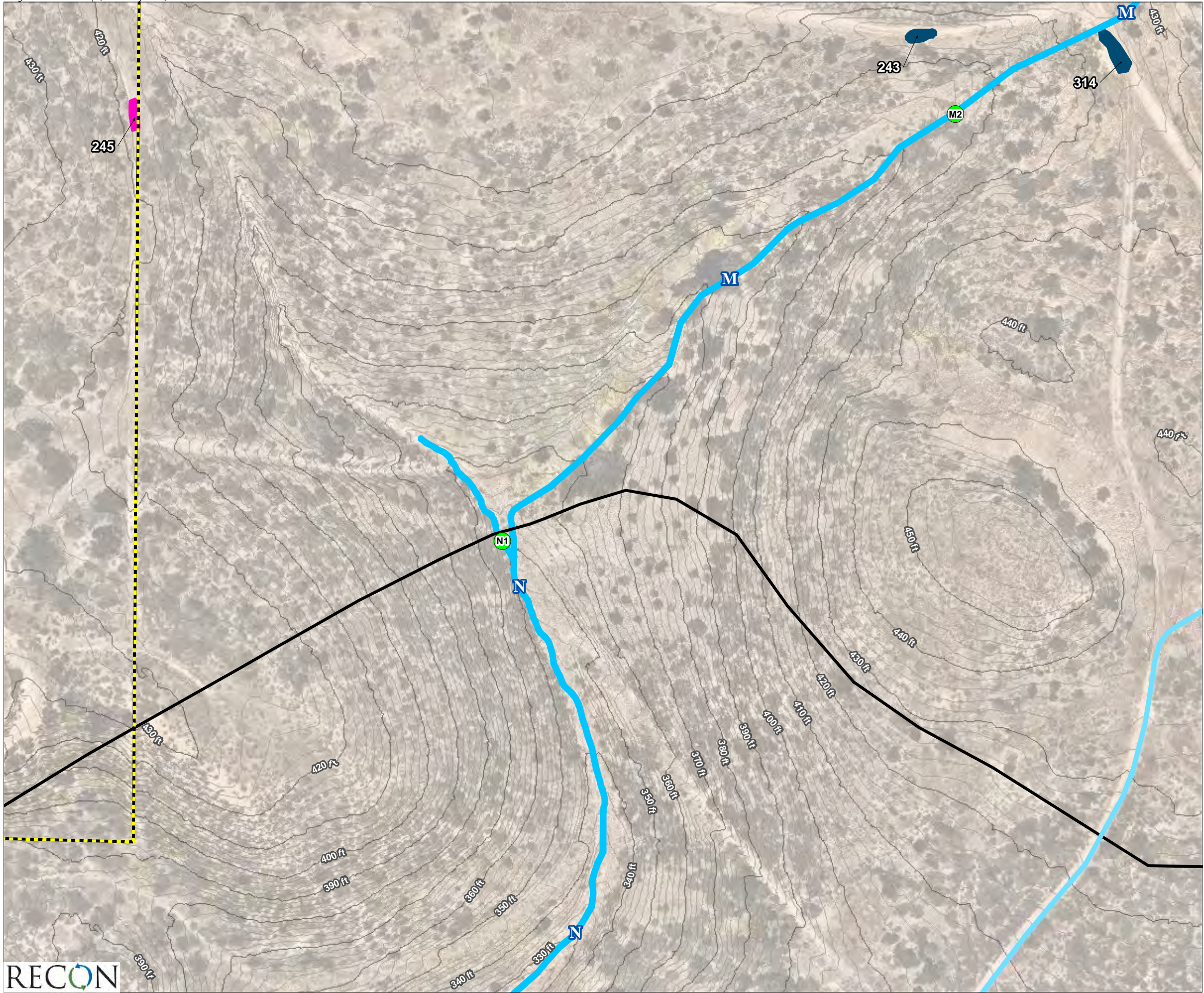


FIGURE 31.19  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)
  - Non-wetland Waters (Waters ID)
  - OHWM Data Sheet Point (ODP)

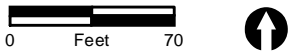
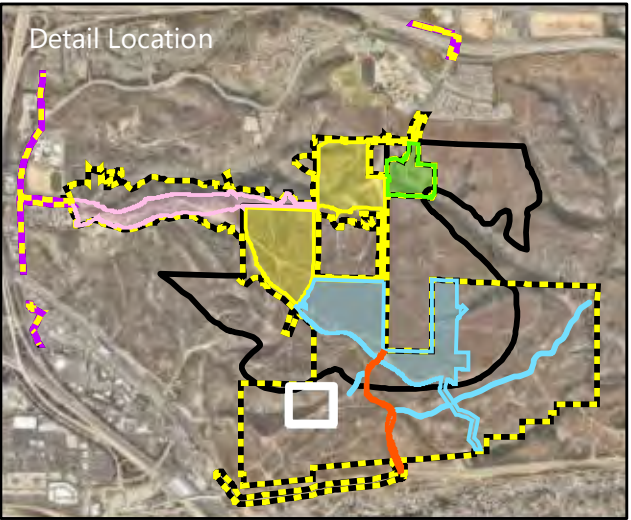


FIGURE 31.20  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Wetland (Waters ID)
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)
  - OHWM Data Sheet Point (ODP)

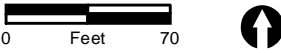
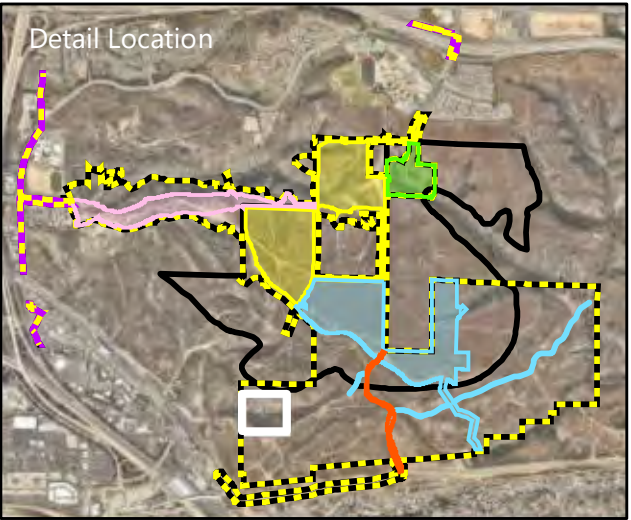


FIGURE 31.21  
Potential USACE Waters of the U.S.





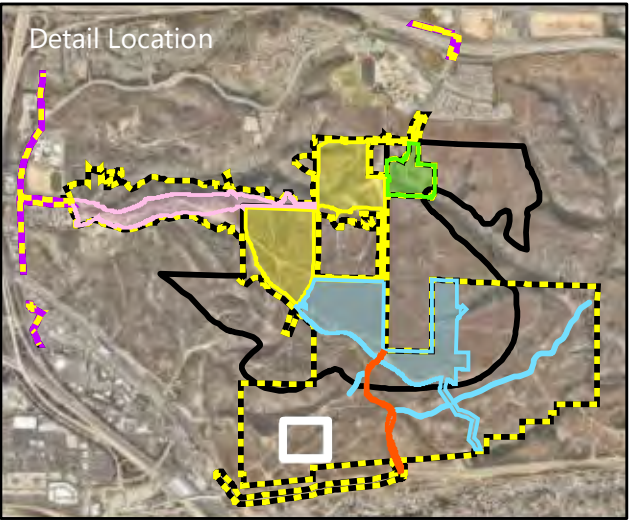
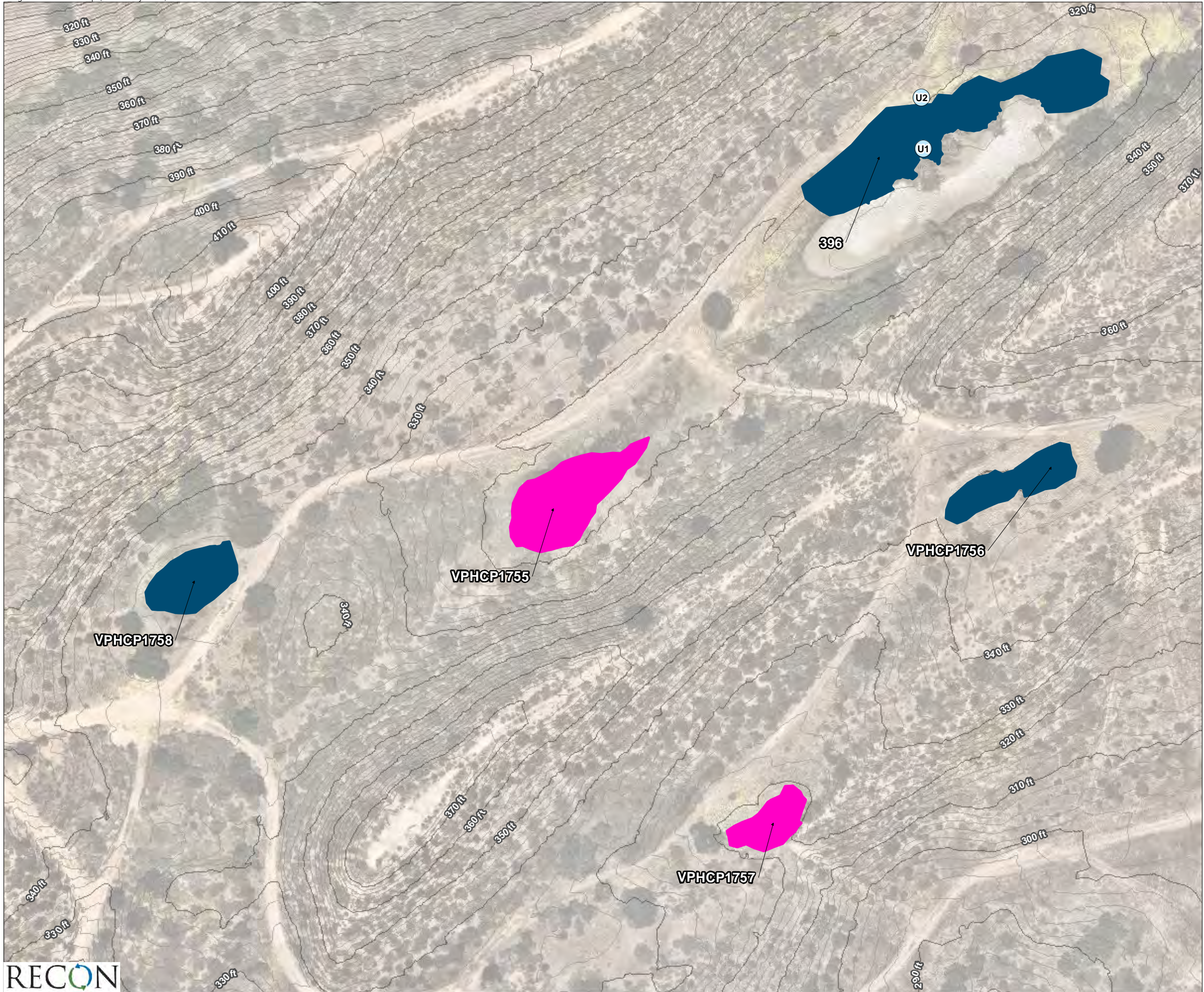
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Non-wetland Waters (Waters ID)

0 Feet 70



FIGURE 31.22  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)
  - Wetland Data Form Point (WDP)

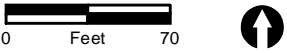
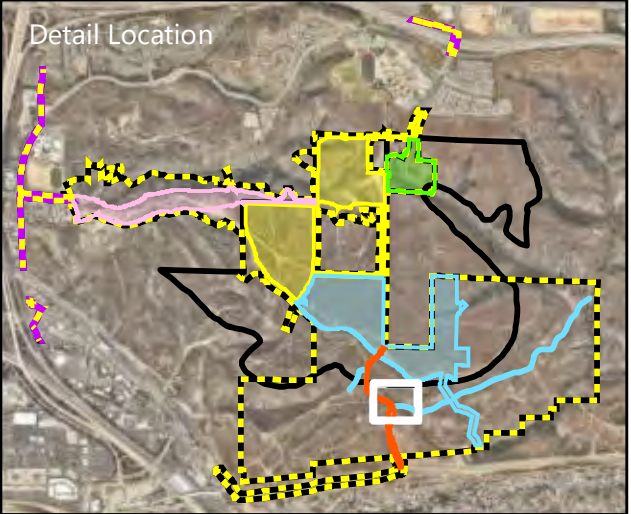
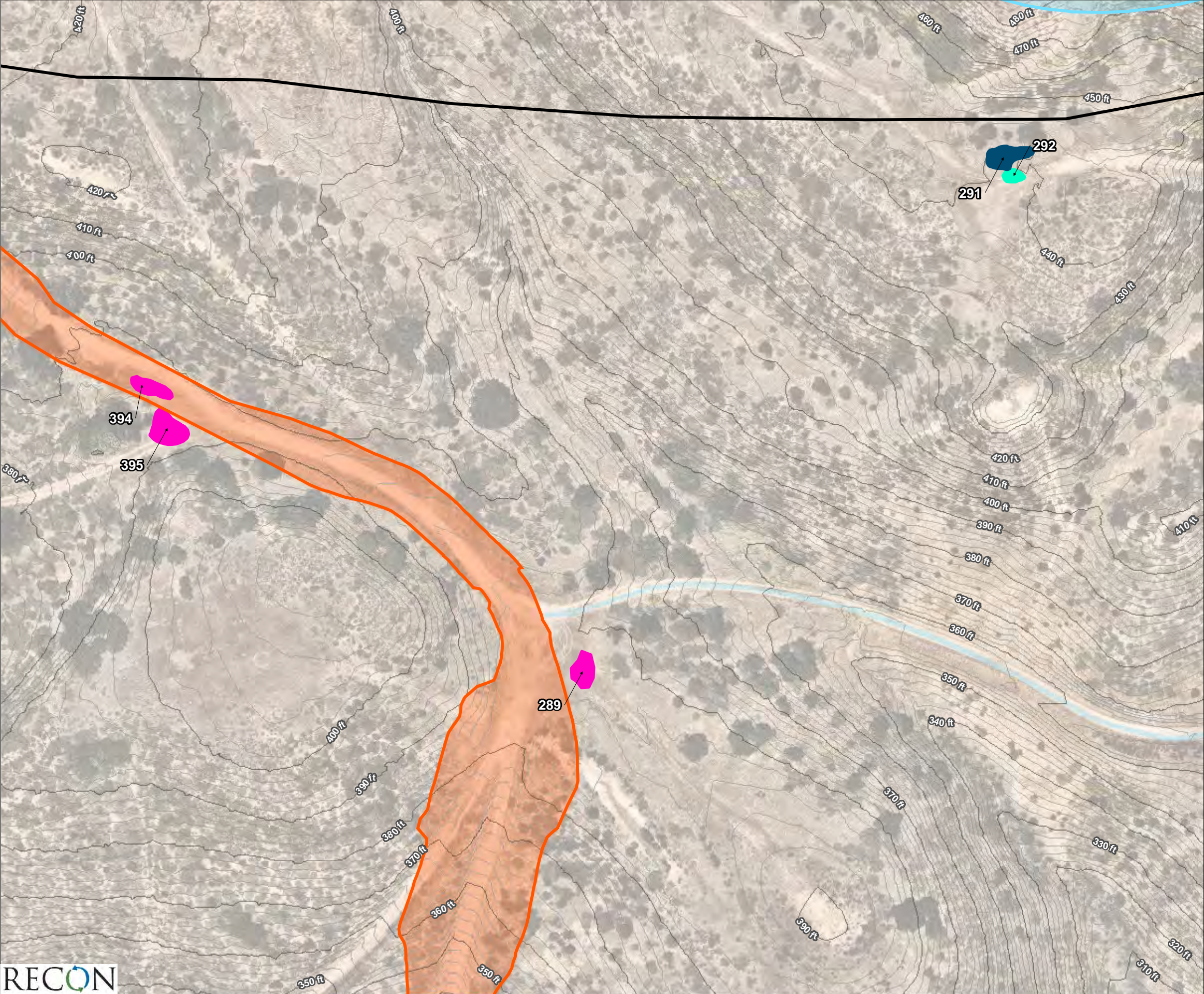


FIGURE 31.23  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)

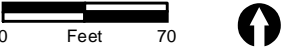
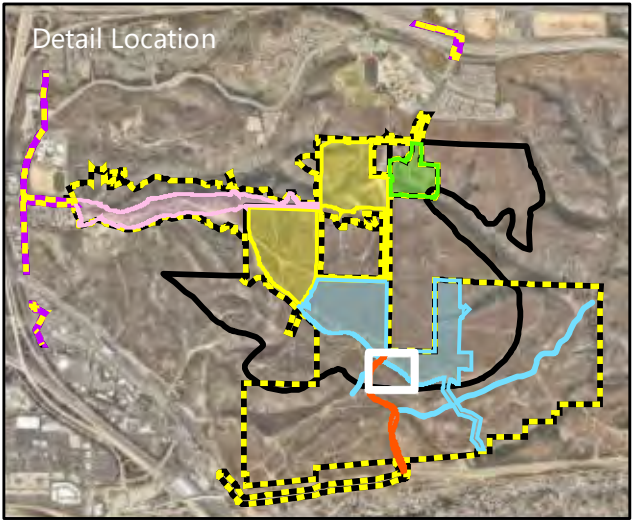
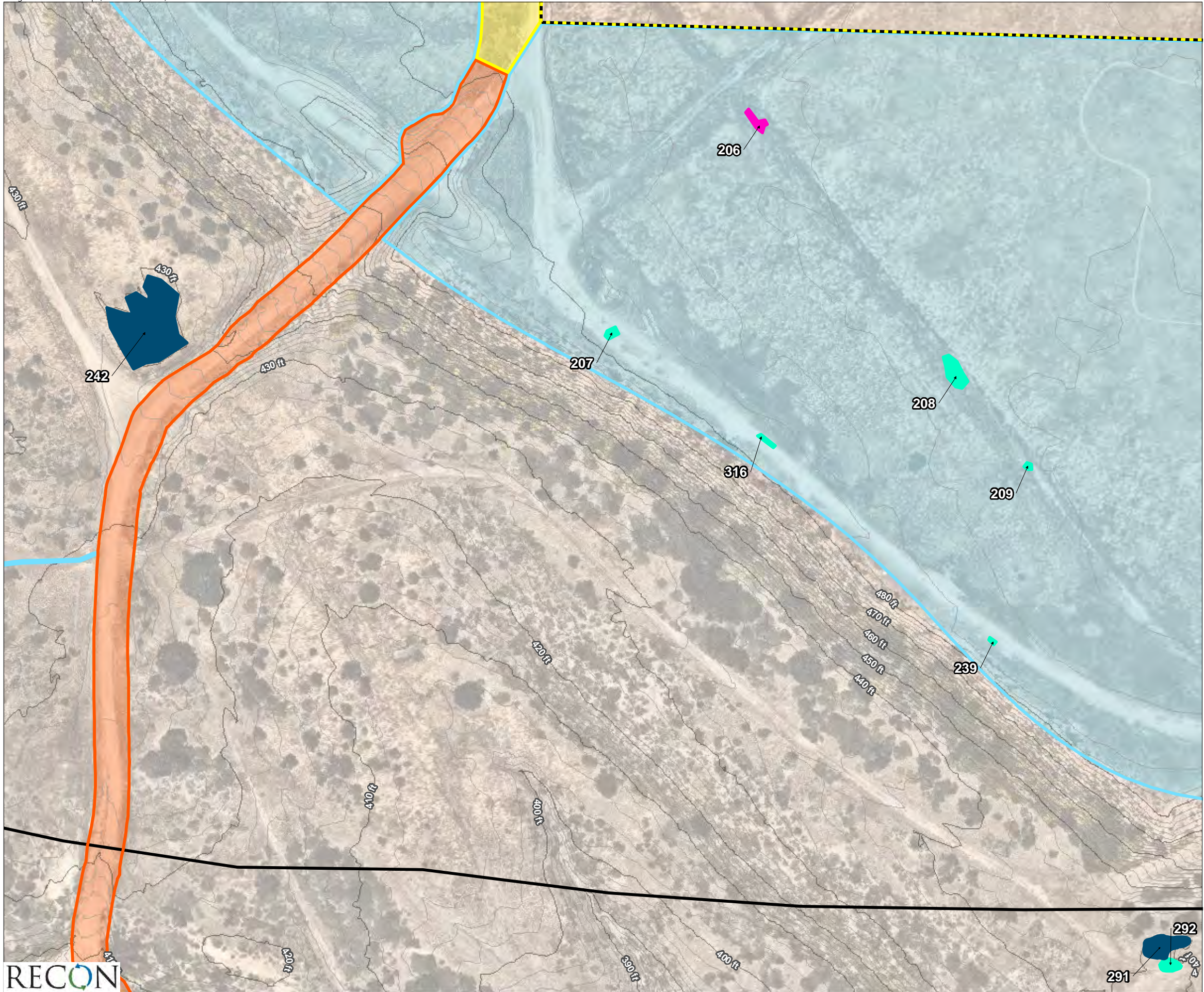


FIGURE 31.24  
Potential USACE Waters of the U.S.



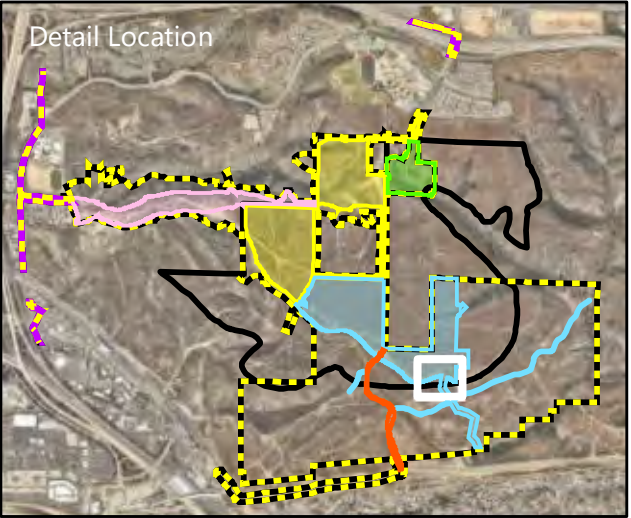


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)



FIGURE 31.25  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area

**Project-level Phasing**

- Phase 1
- Phase 2
- Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements

**Waters of the U.S. (USACE)**

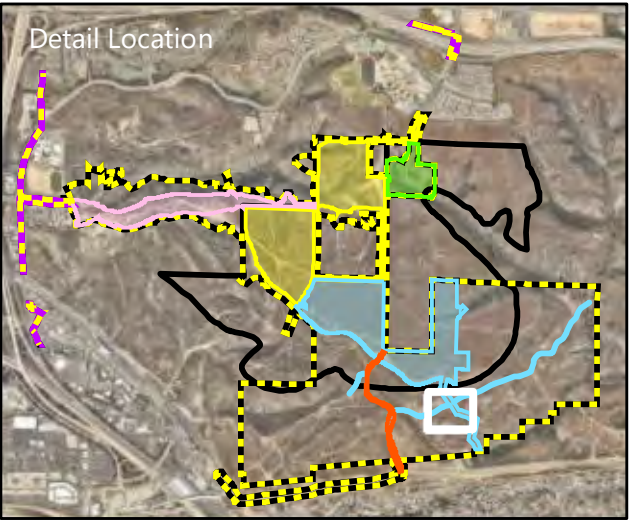
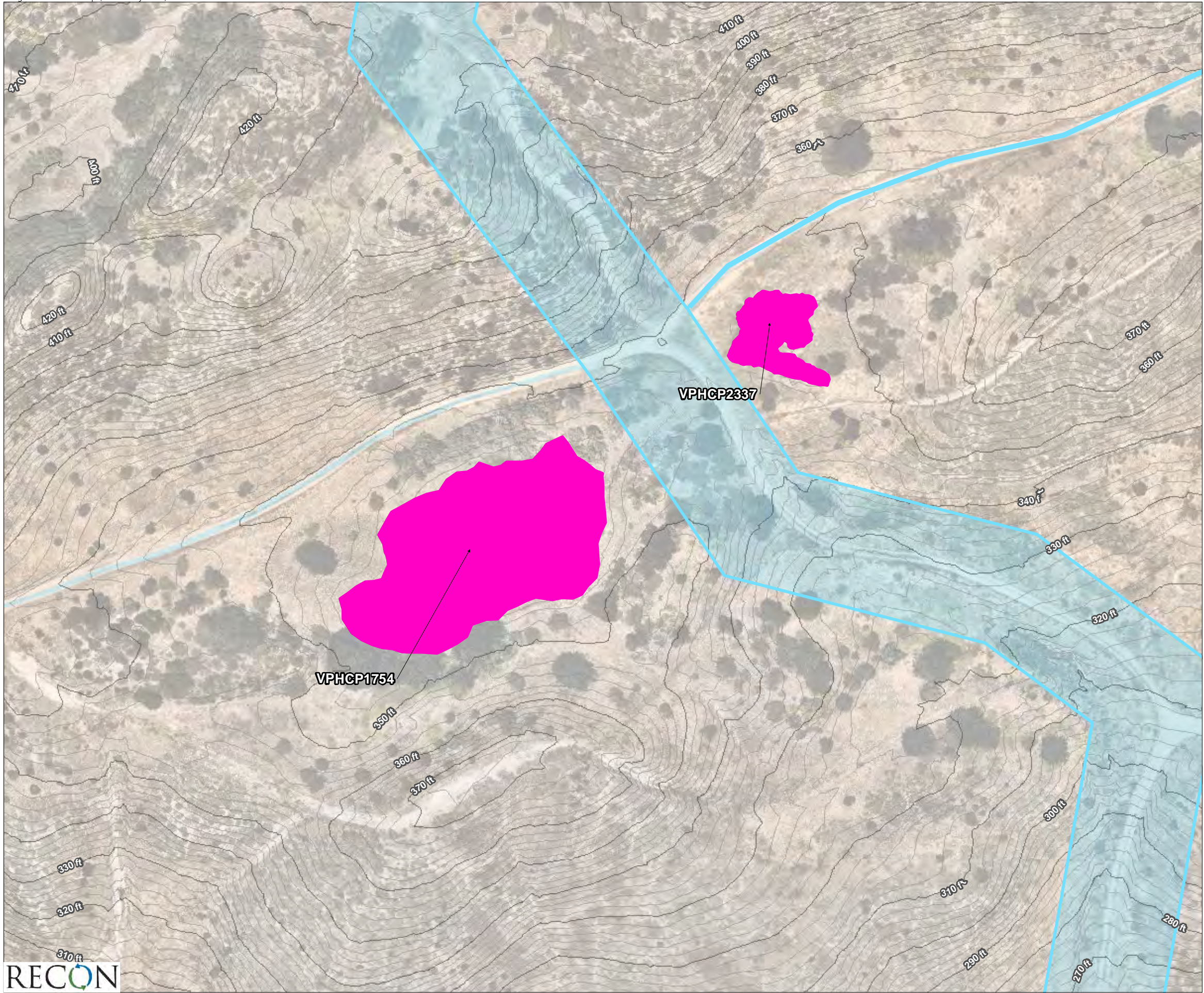
- Vernal Pool (Waters ID)
- Wetland (Waters ID)

0 Feet 70



FIGURE 31.26  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool with Fairy Shrimp (Waters ID)

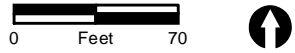
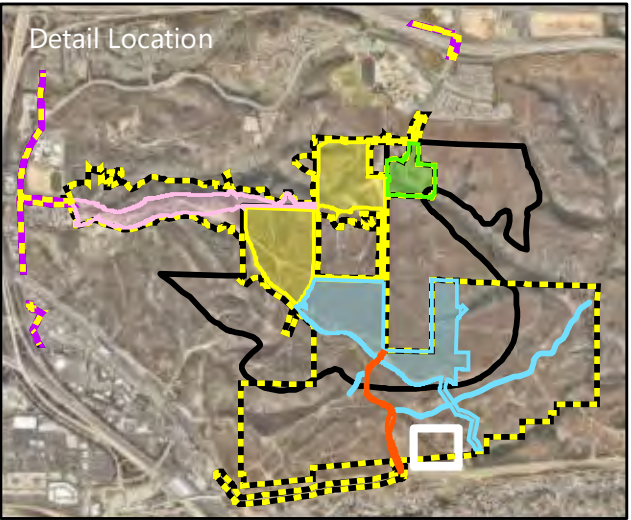
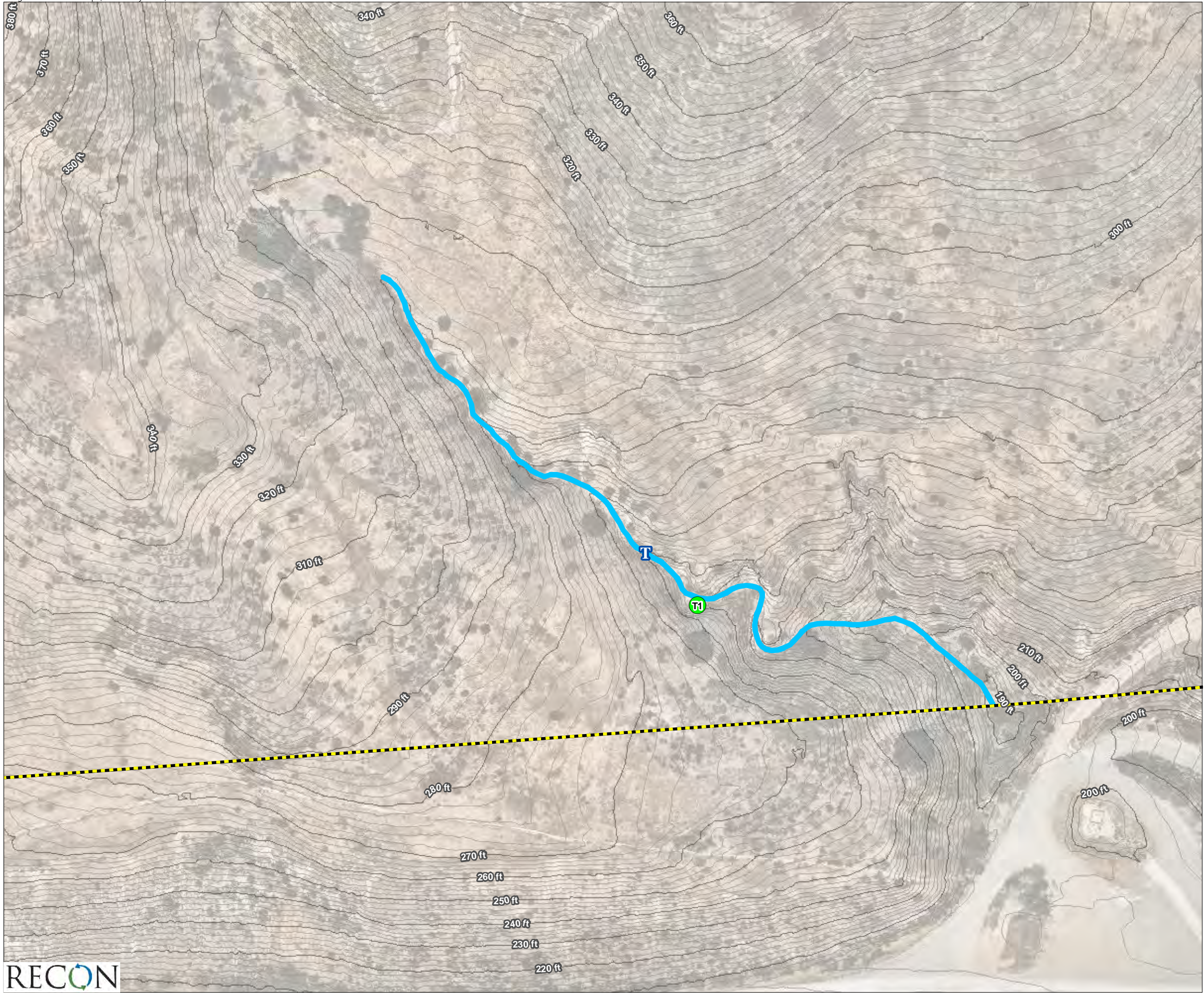


FIGURE 31.27  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Non-wetland Waters (Waters ID)
  - OHWM Data Sheet Point (ODP)

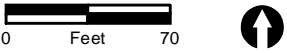
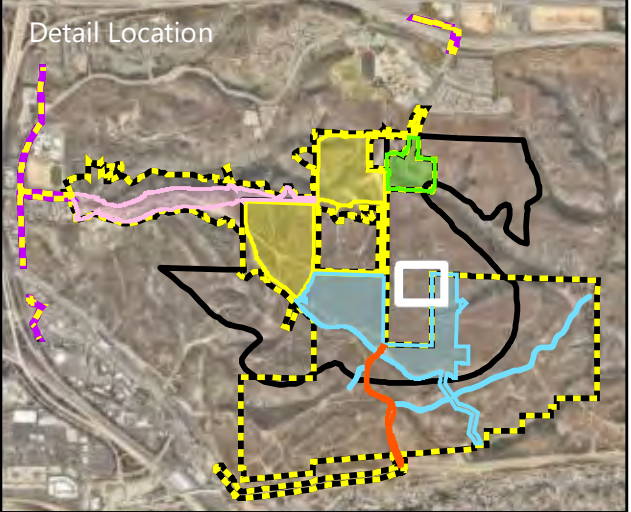
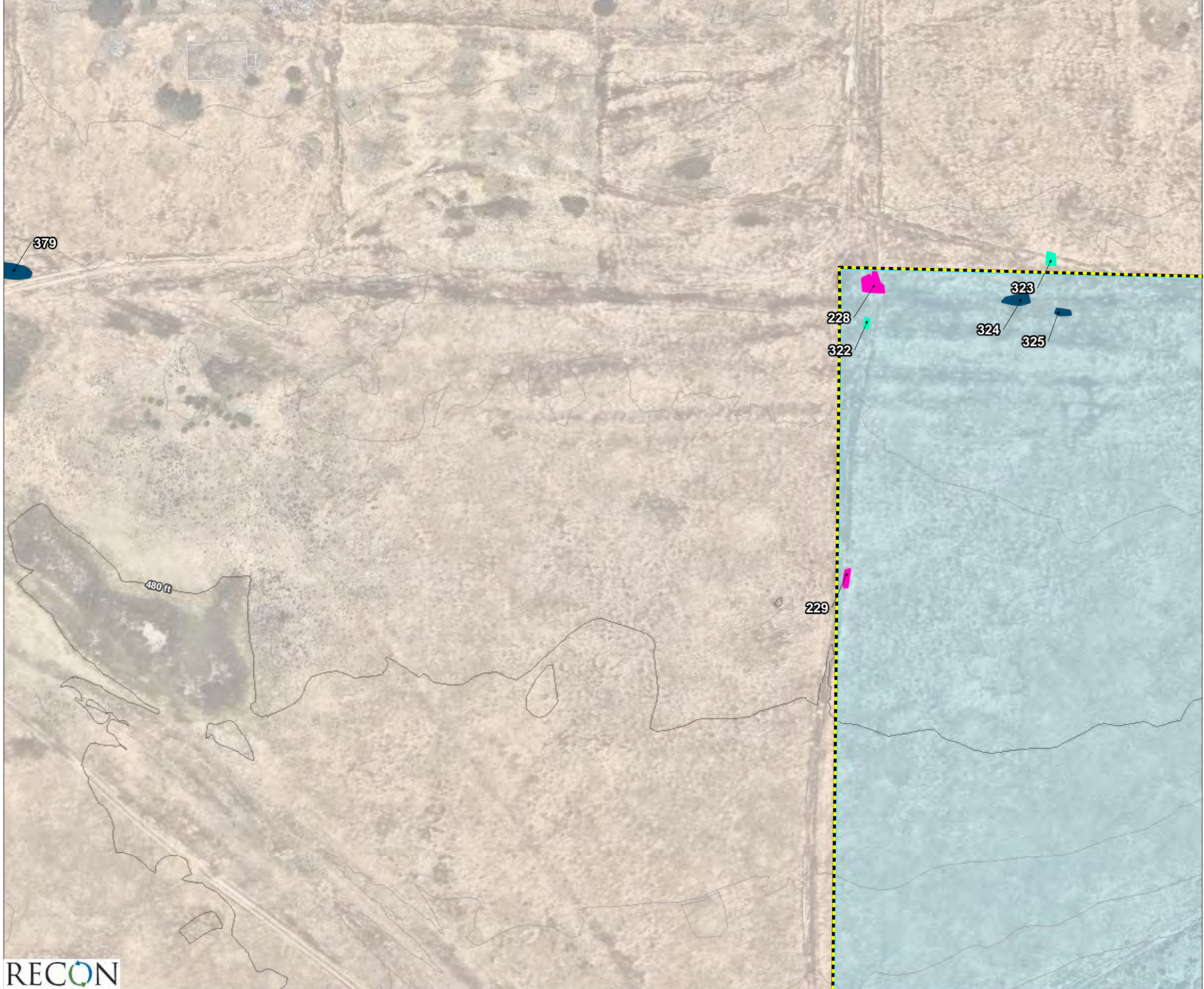


FIGURE 31.28  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)

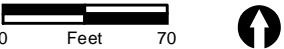
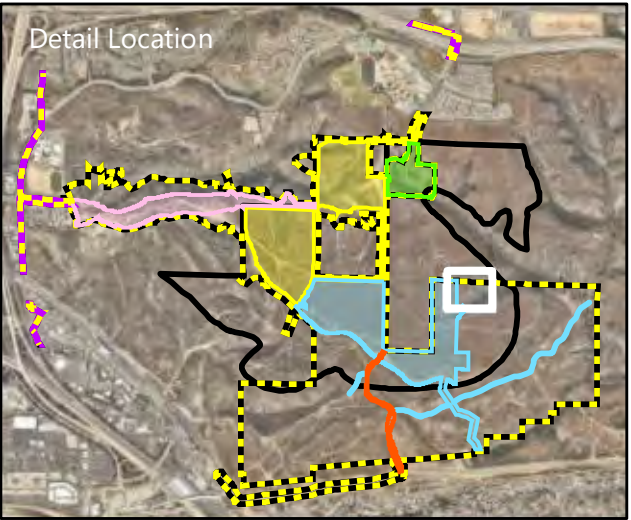
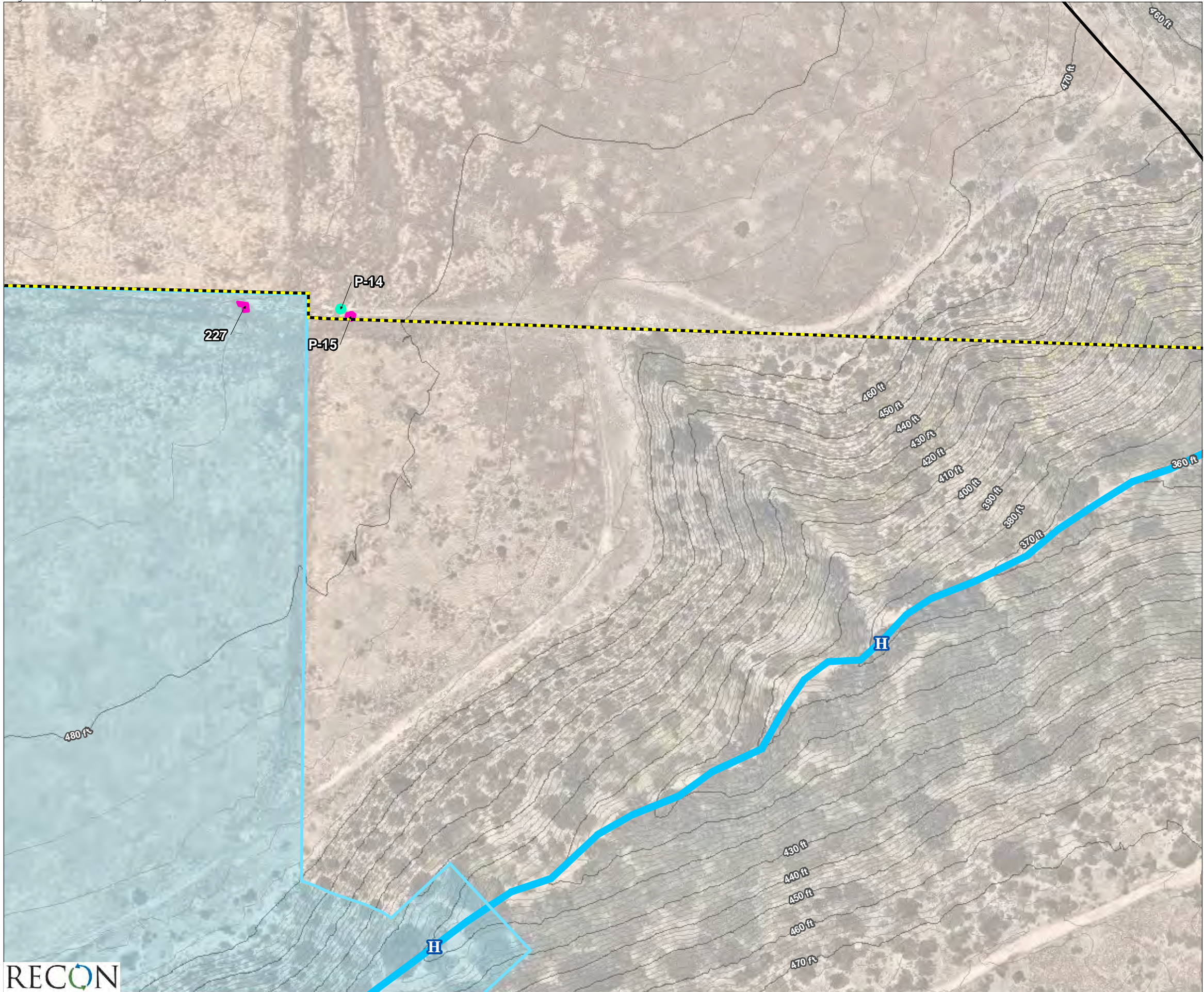


FIGURE 31.29  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Non-wetland Waters (Waters ID)

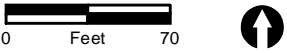
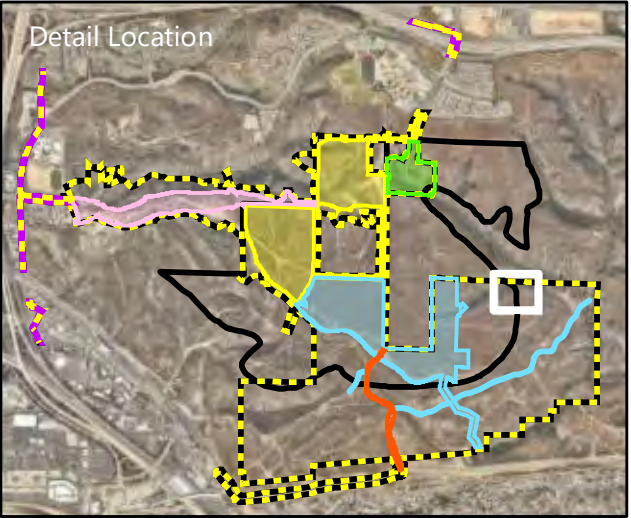
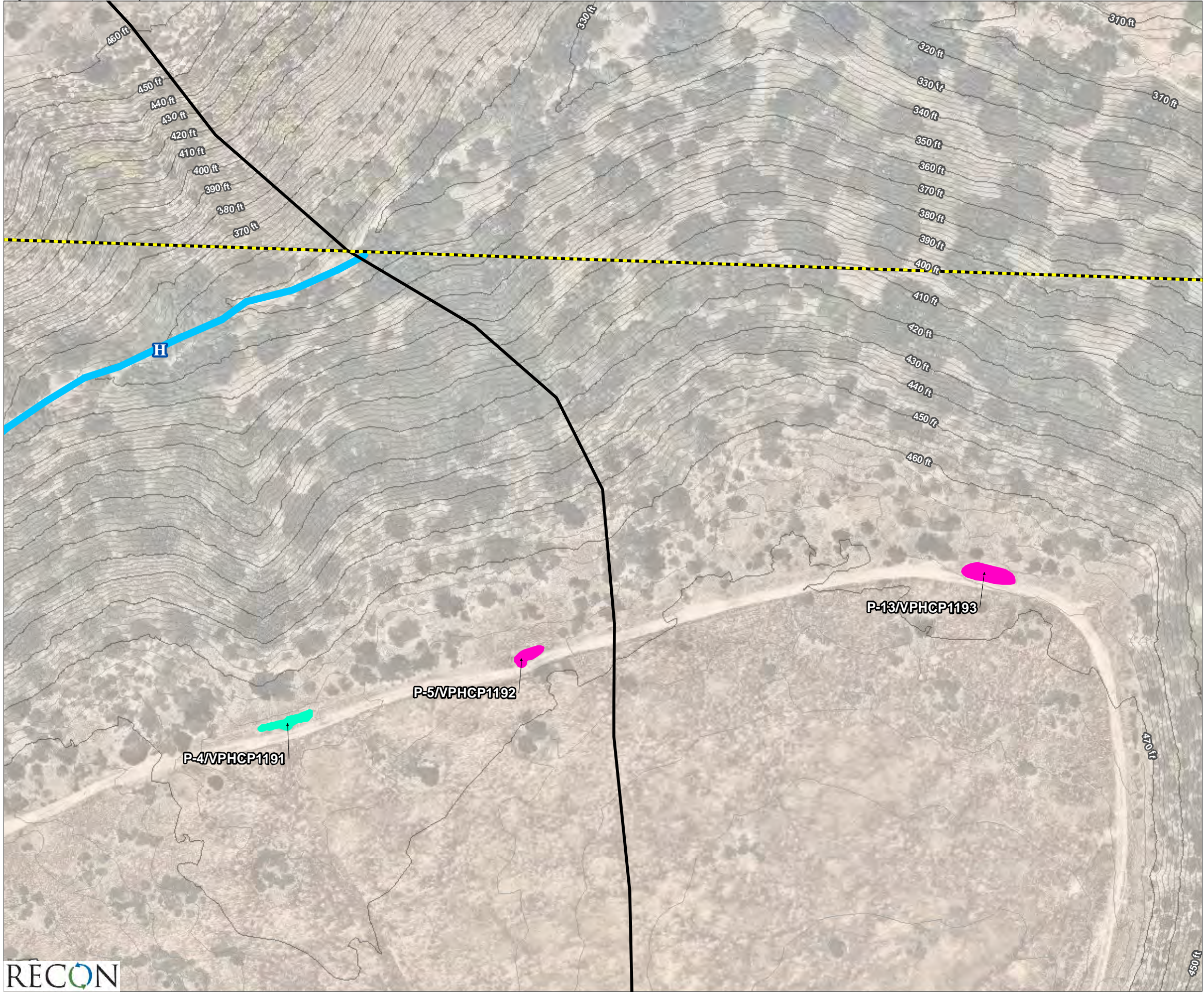


FIGURE 31.30  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Non-wetland Waters (Waters ID)

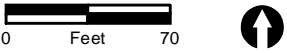


FIGURE 31.31  
Potential USACE Waters of the U.S.



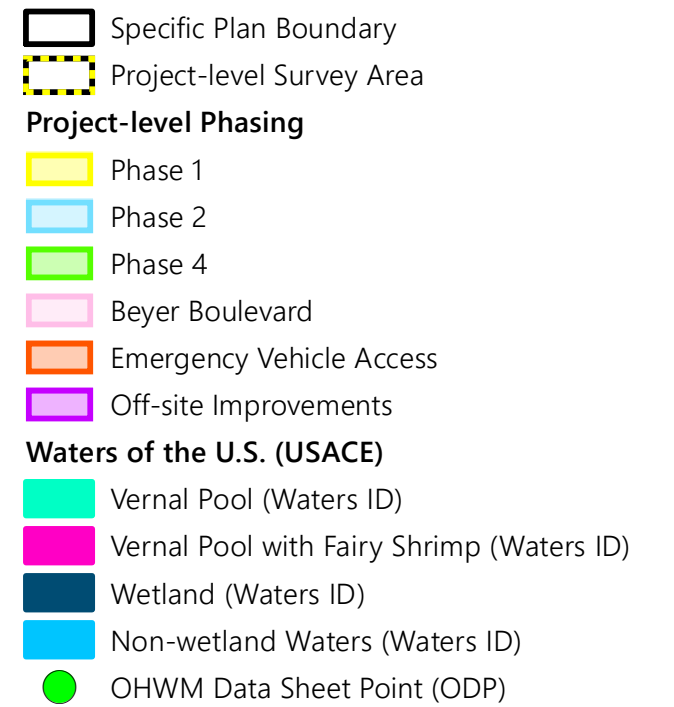
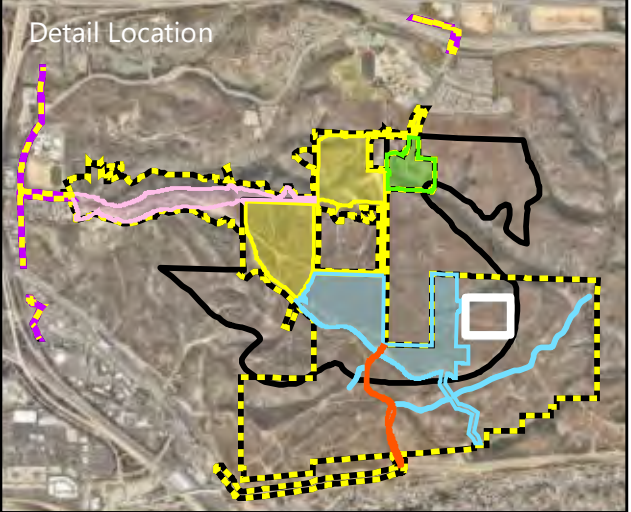
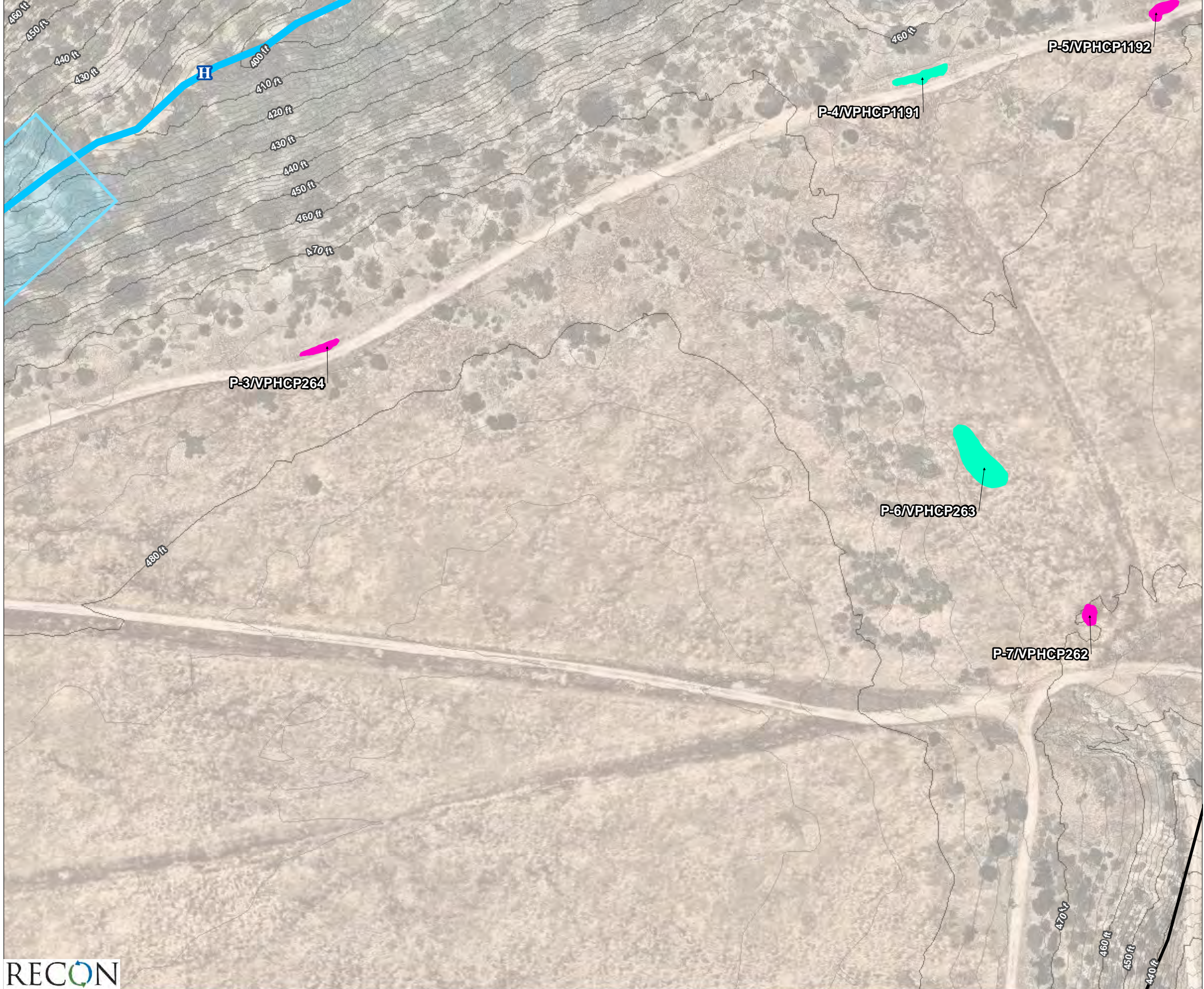


FIGURE 31.32  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Non-wetland Waters (Waters ID)

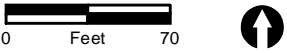
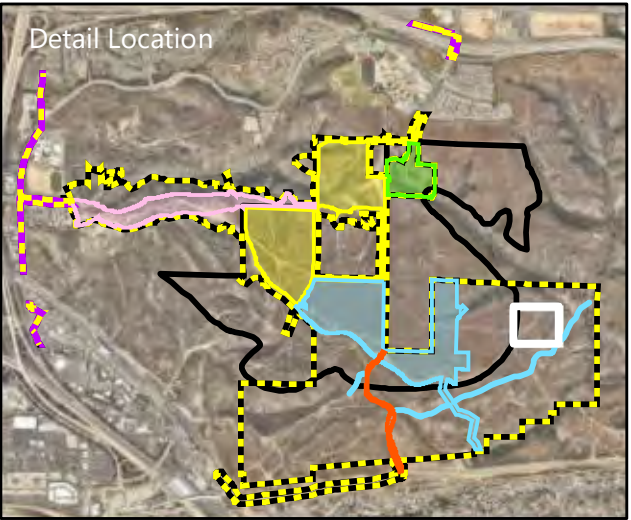
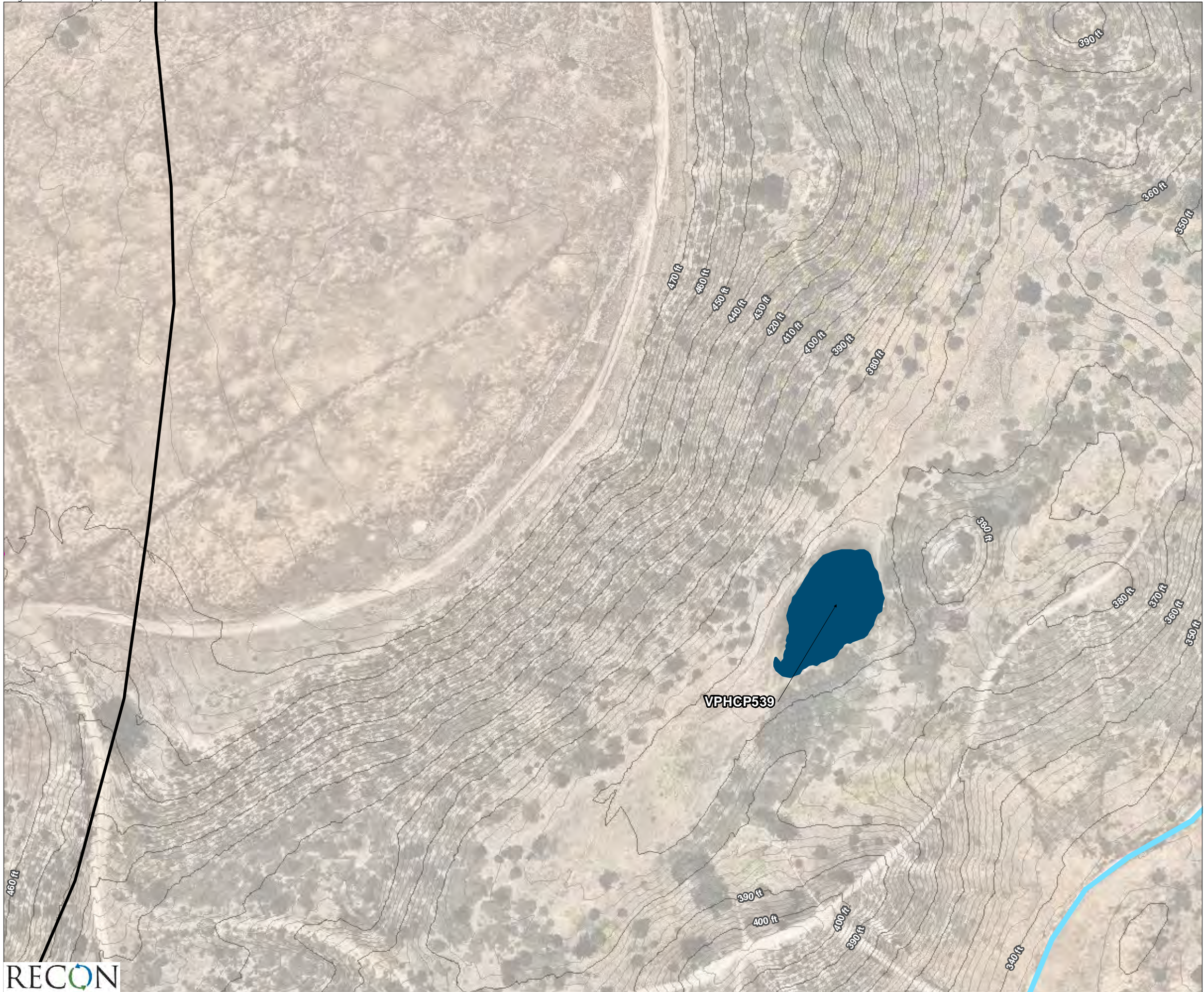


FIGURE 31.33  
Potential USACE Waters of the U.S.





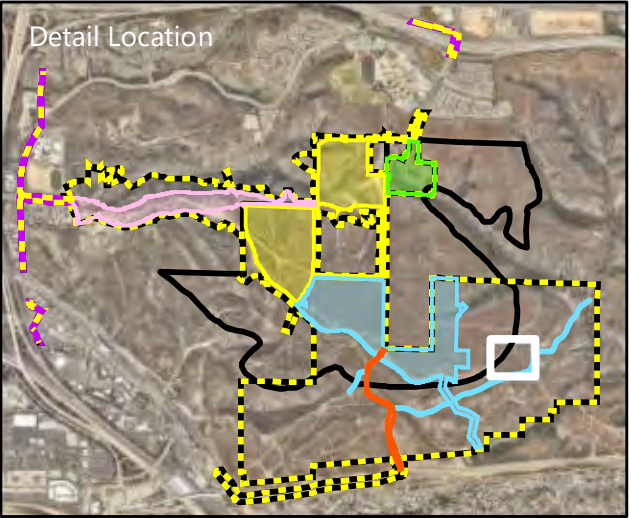
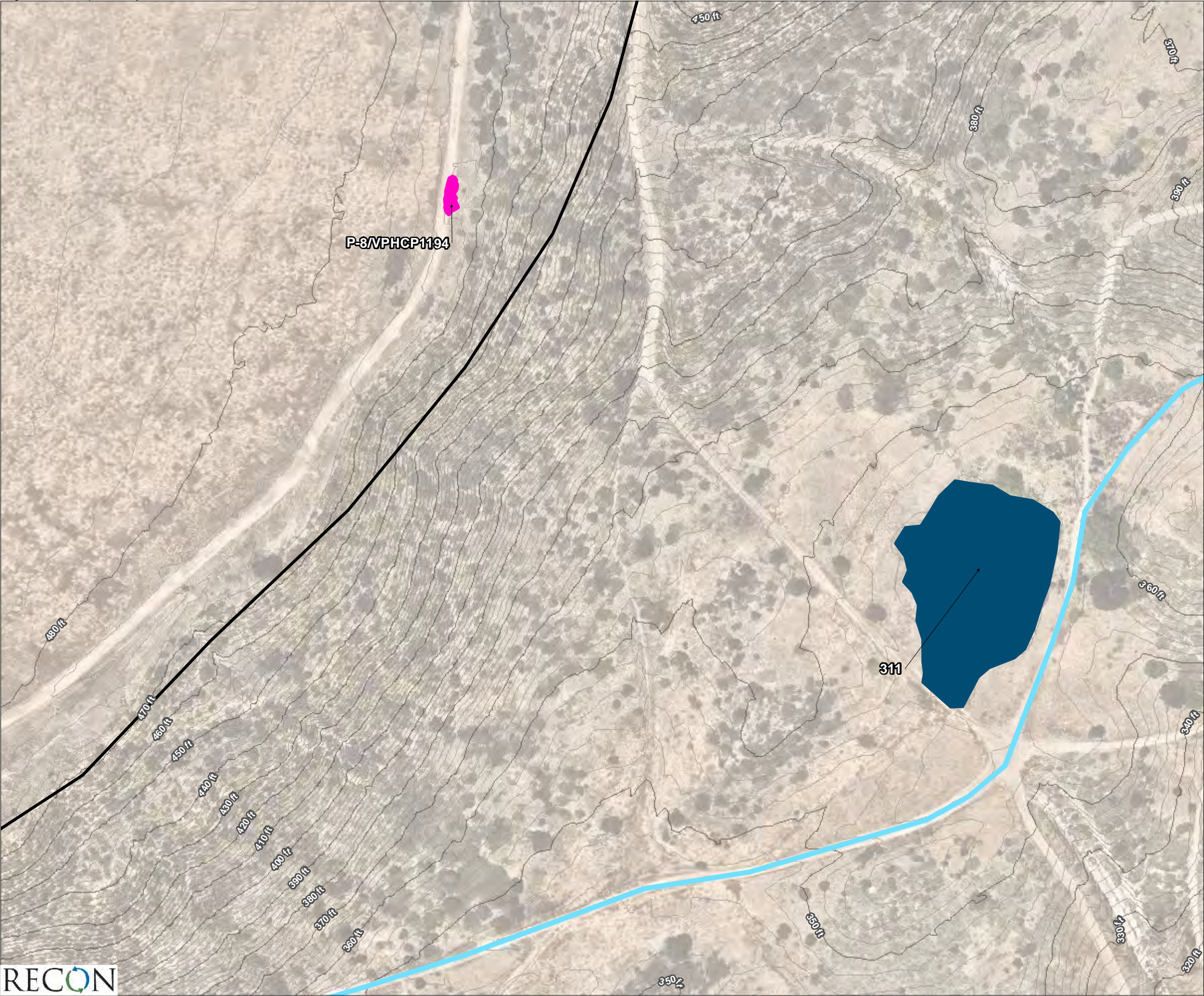
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the U.S. (USACE)**
  - Wetland (Waters ID)

0 Feet 70



FIGURE 31.34  
Potential USACE Waters of the U.S.





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)

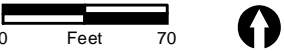
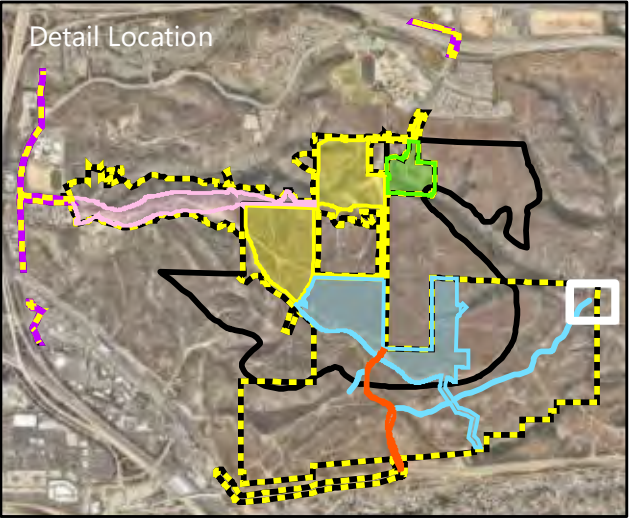


FIGURE 31.35  
Potential USACE Waters of the U.S.





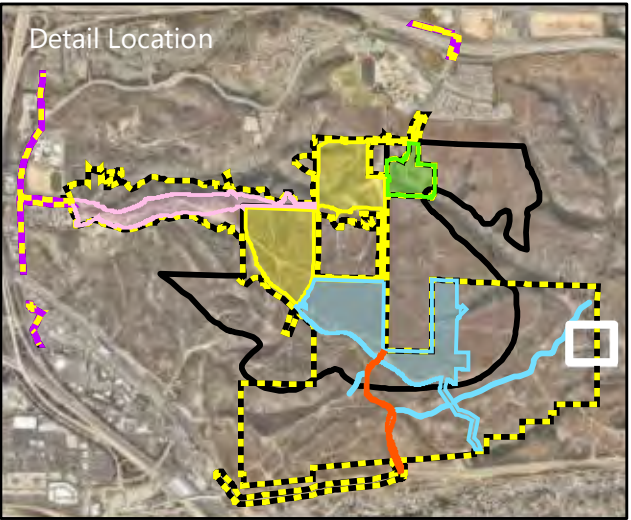
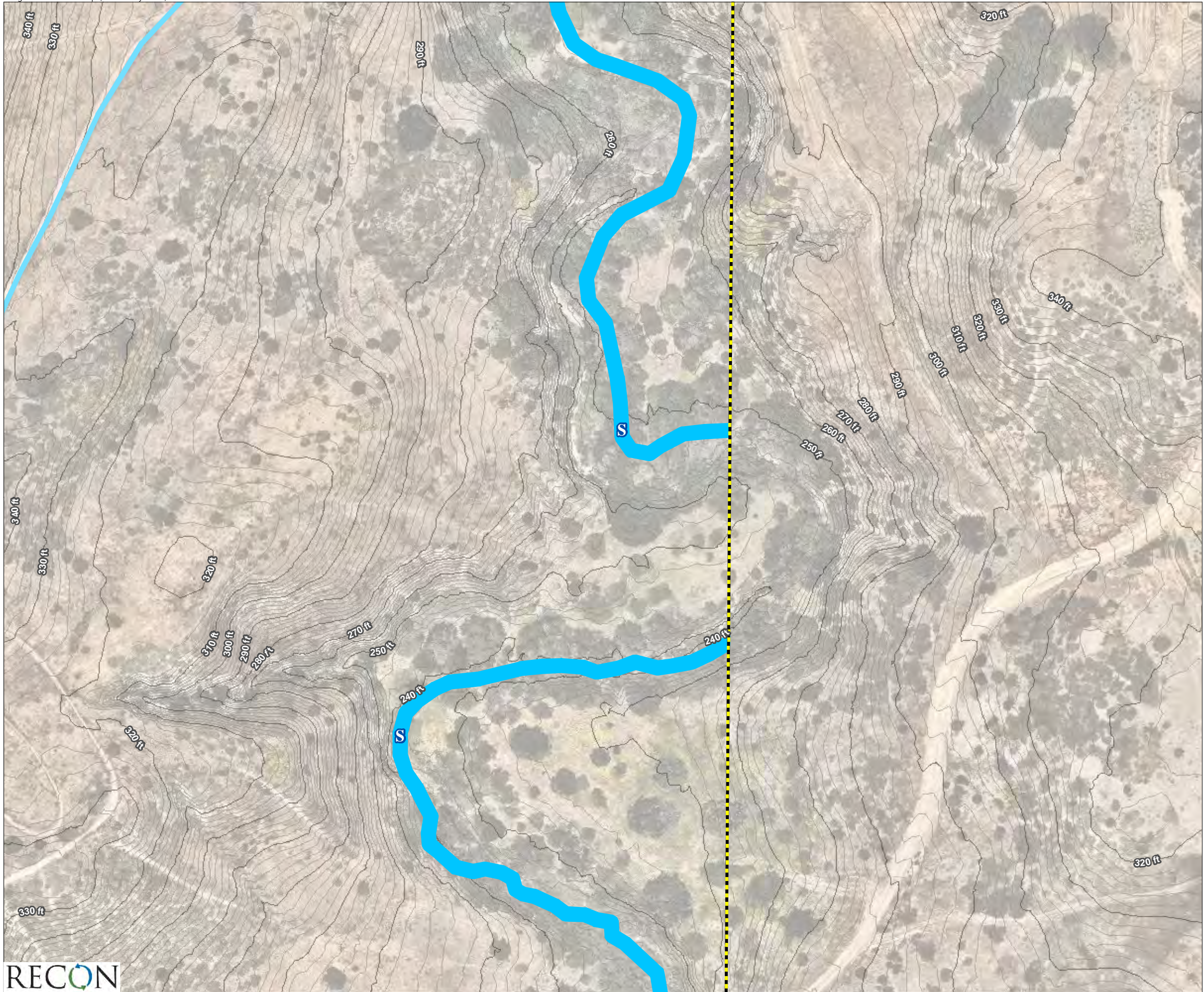
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Non-wetland Waters (Waters ID)

0 Feet 70



FIGURE 31.36  
Potential USACE Waters of the U.S.





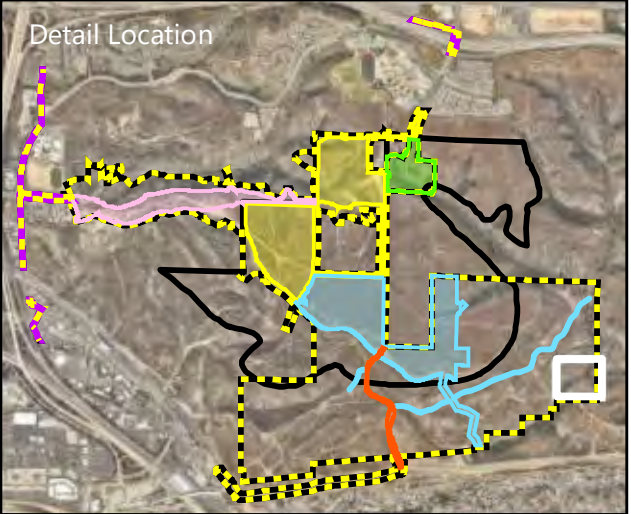
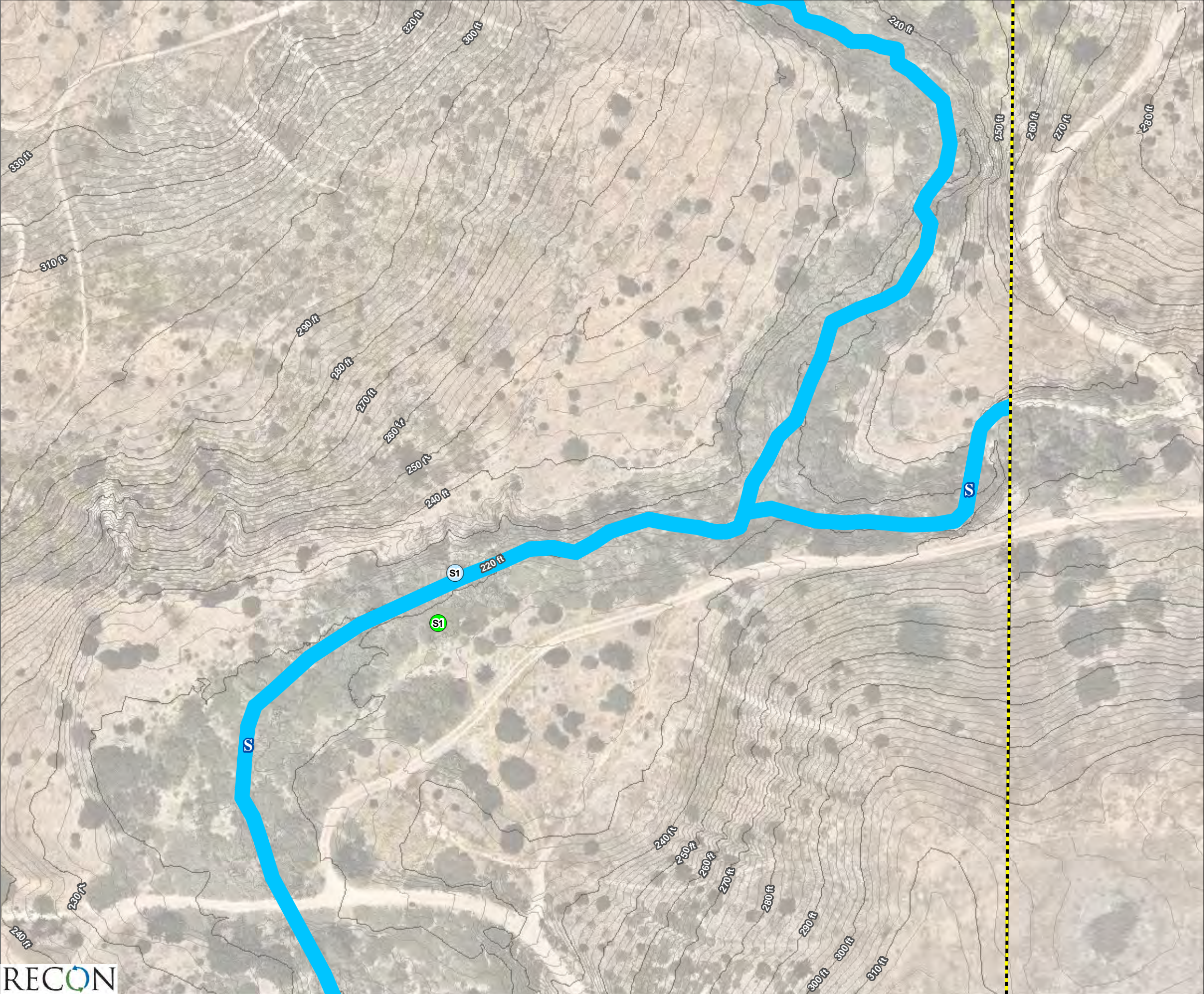
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Non-wetland Waters (Waters ID)

0 Feet 70



FIGURE 31.37  
Potential USACE Waters of the U.S.





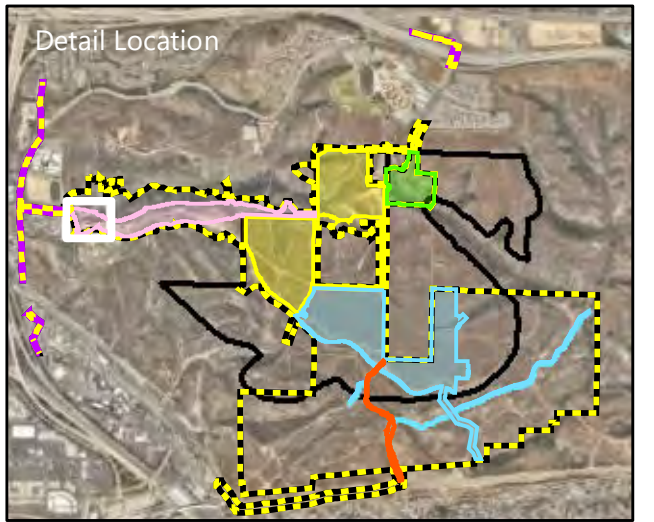
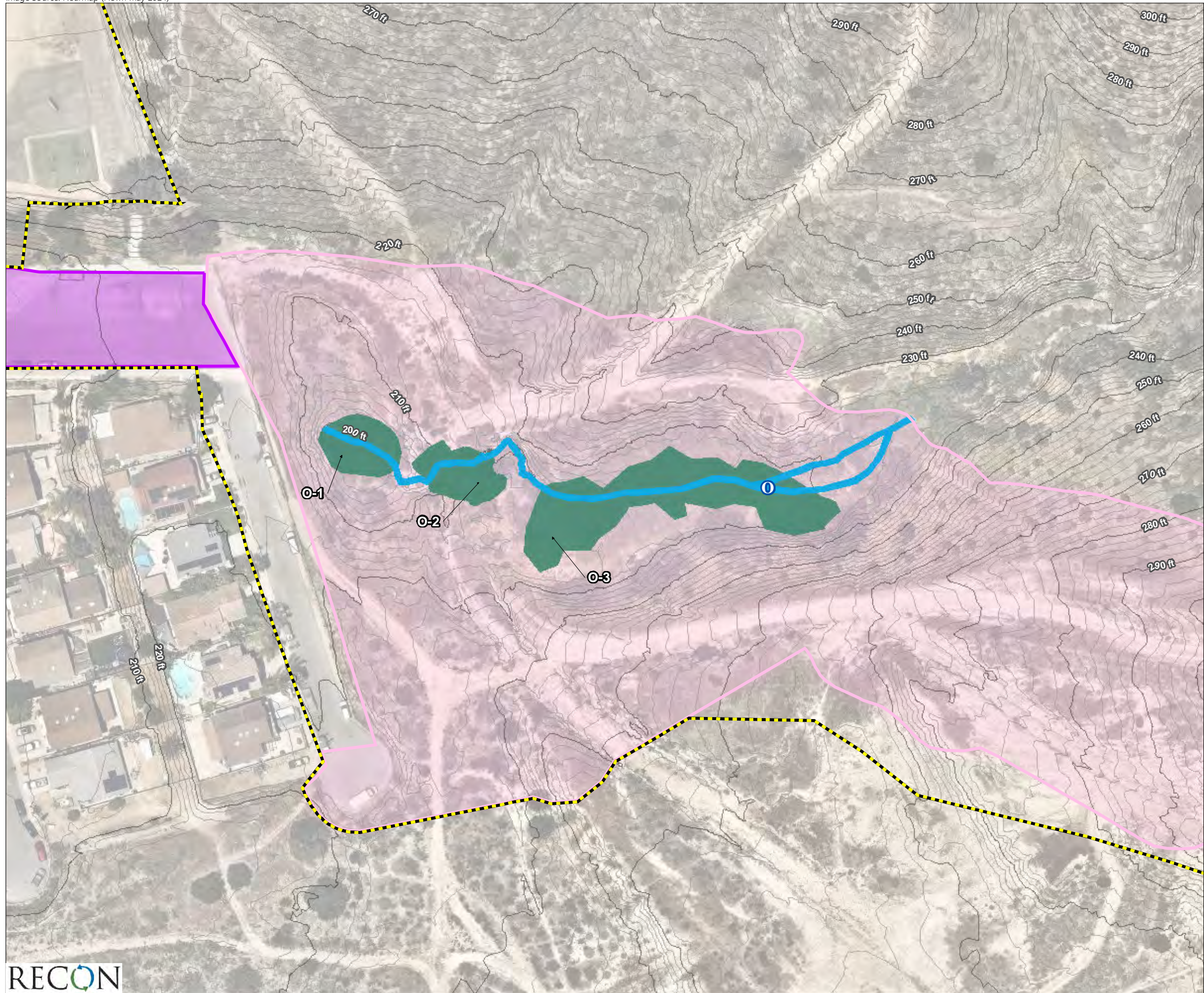
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the U.S. (USACE)**
  - Non-wetland Waters (Waters ID)
  - Wetland Data Form Point (WDP)
  - OHWM Data Sheet Point (ODP)

0 Feet 70



FIGURE 31.38  
Potential USACE Waters of the U.S.





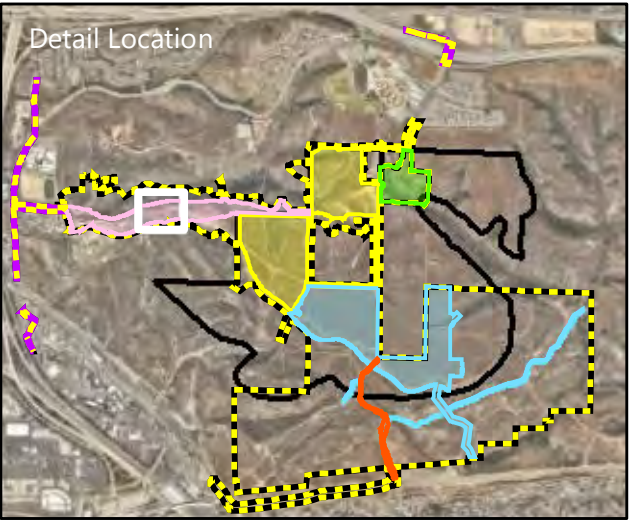
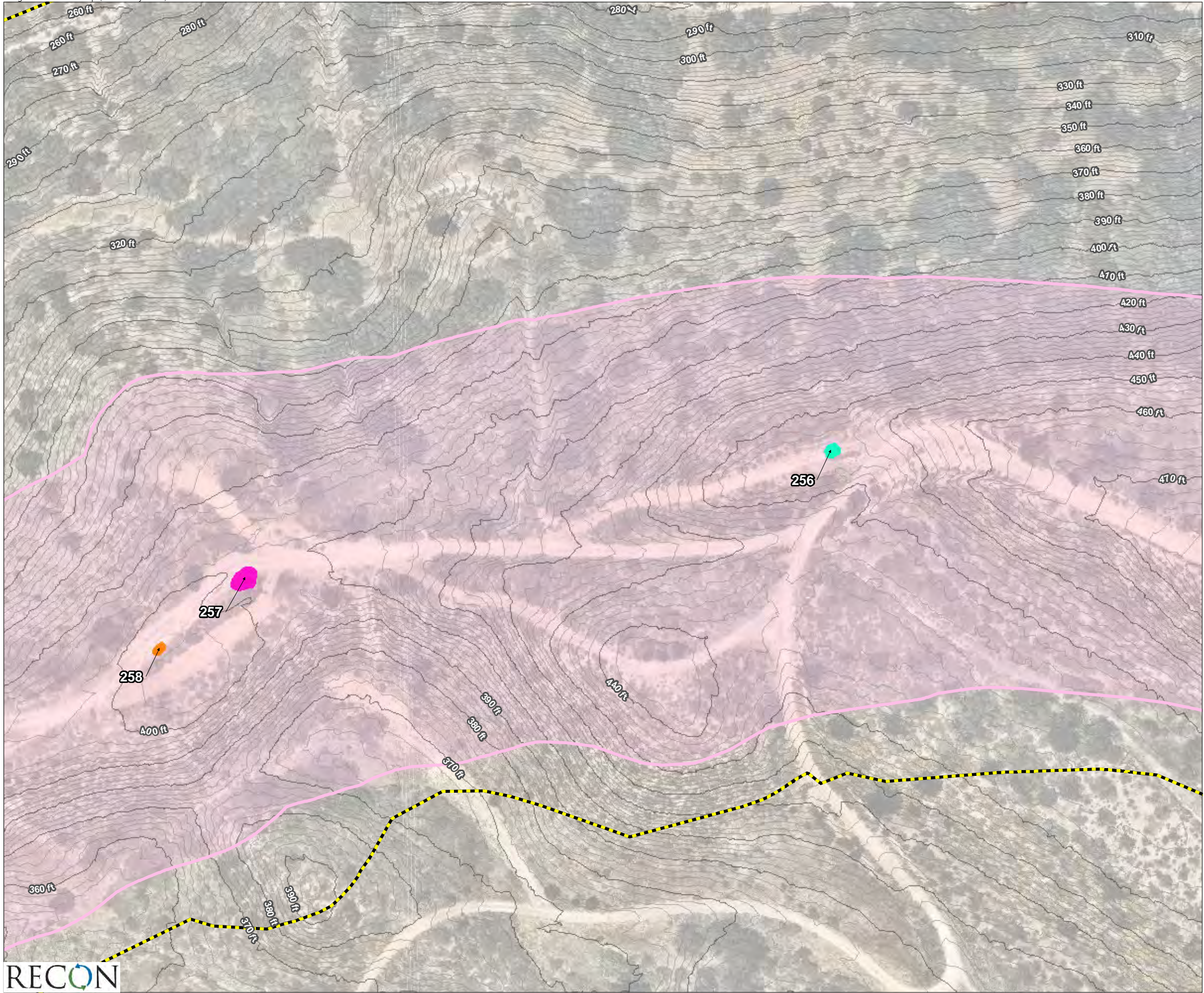
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the State (CDFW)**
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

0 Feet 70



FIGURE 32.1  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)

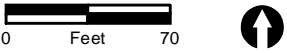
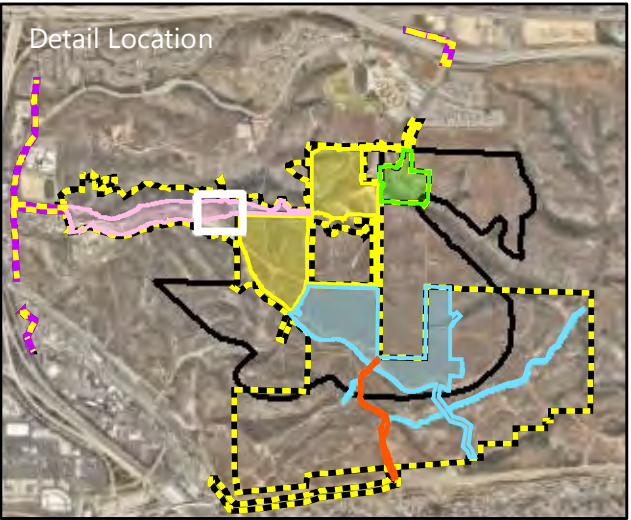
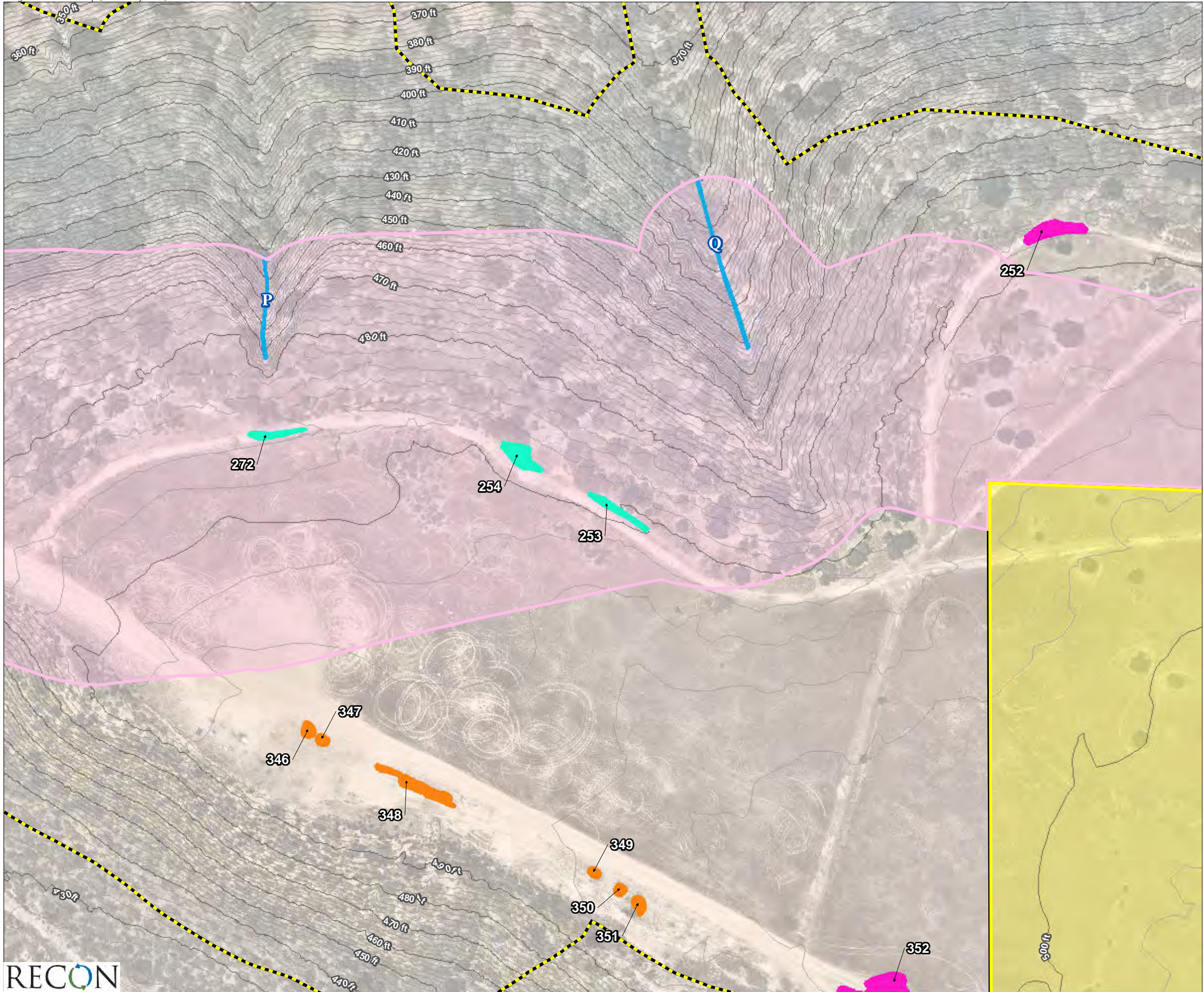


FIGURE 32.2  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

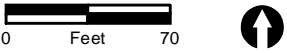
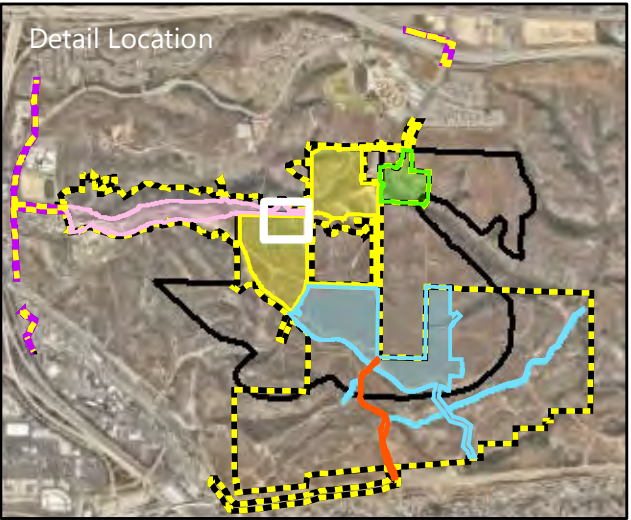
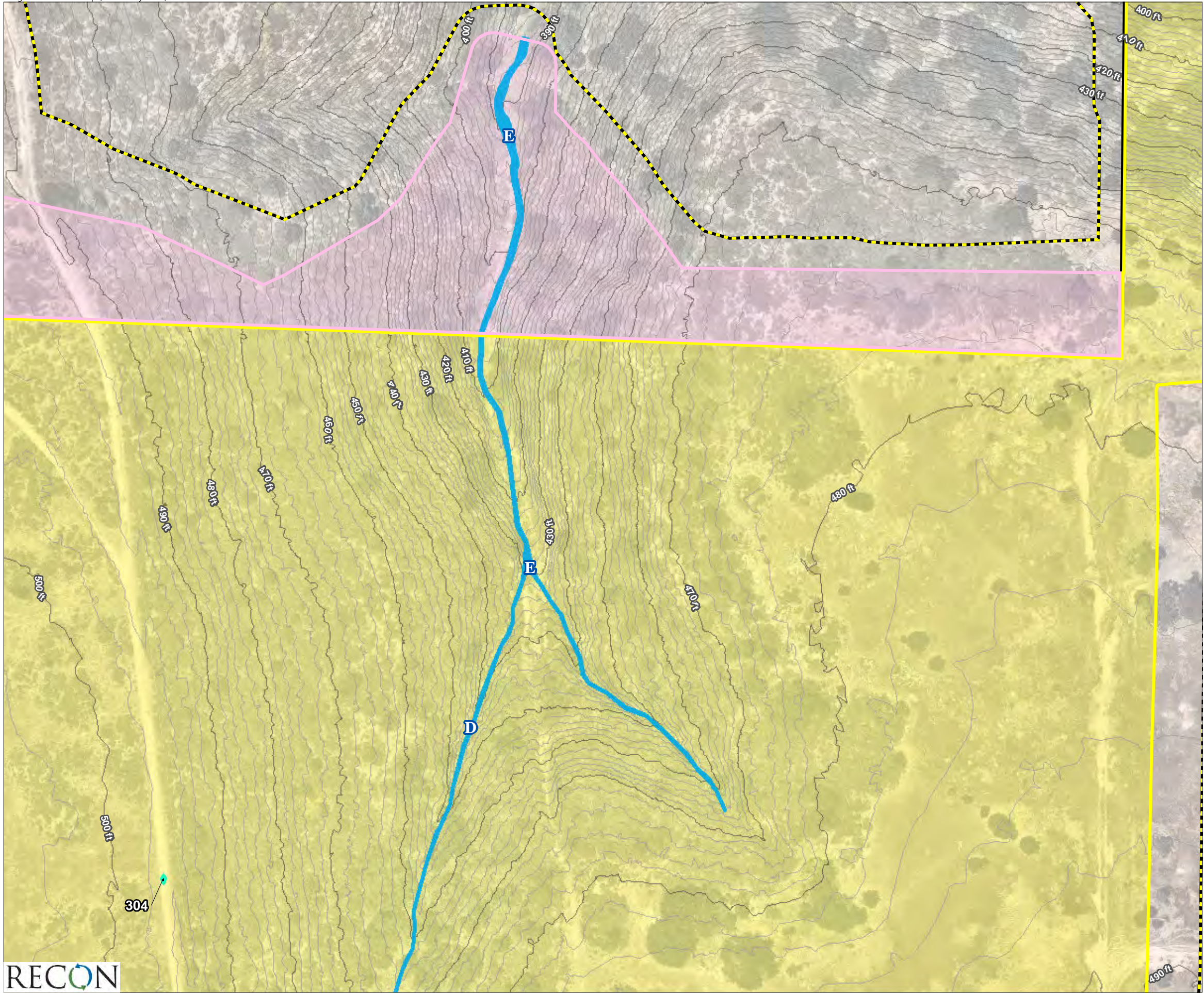


FIGURE 32.3  
Potential CDFW and RWQCB  
Waters of the State





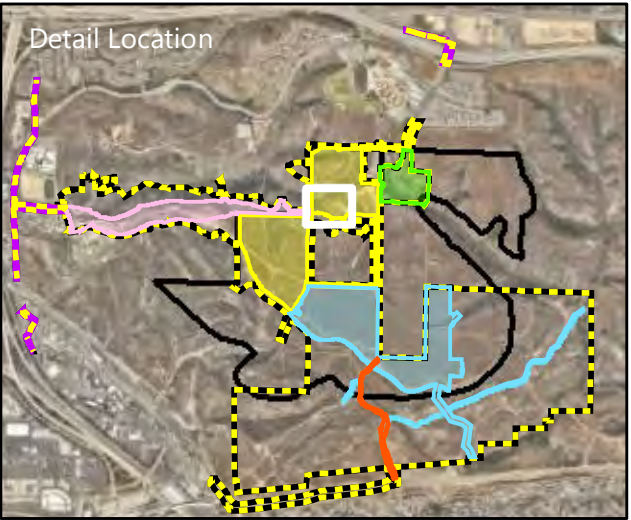
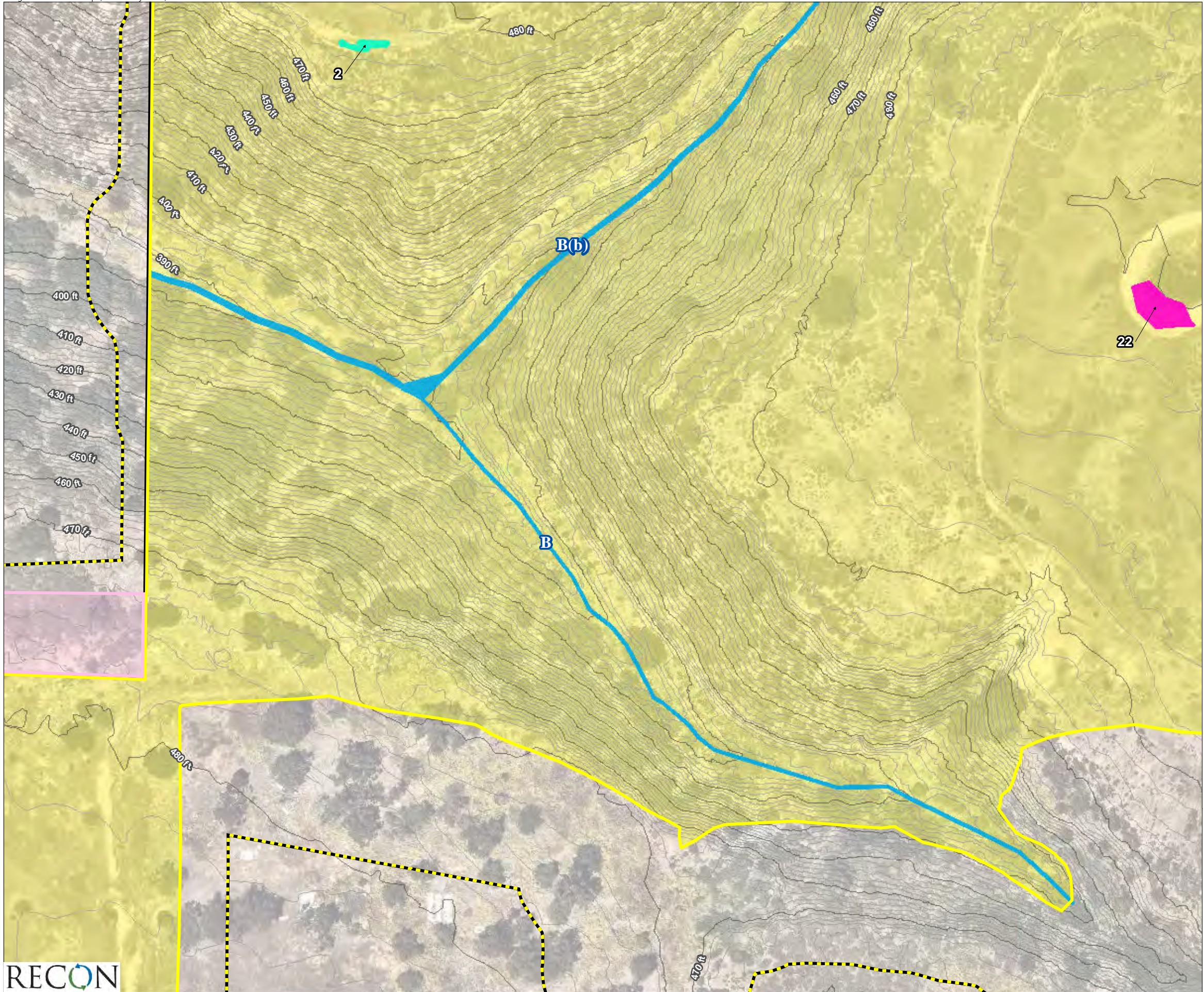
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

0 Feet 70



FIGURE 32.4  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

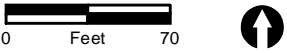
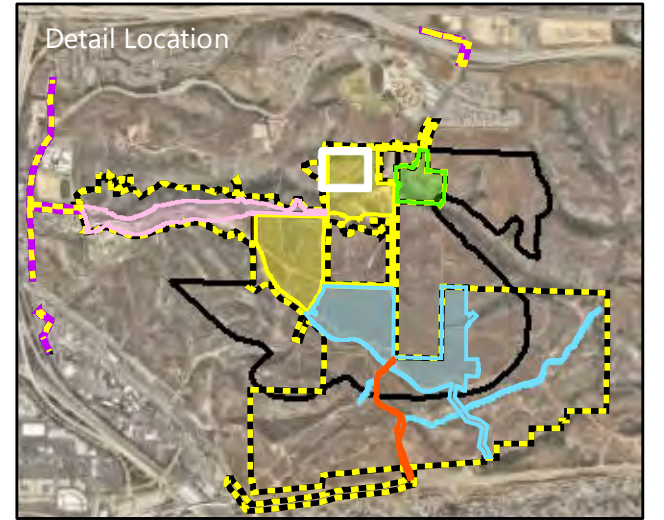
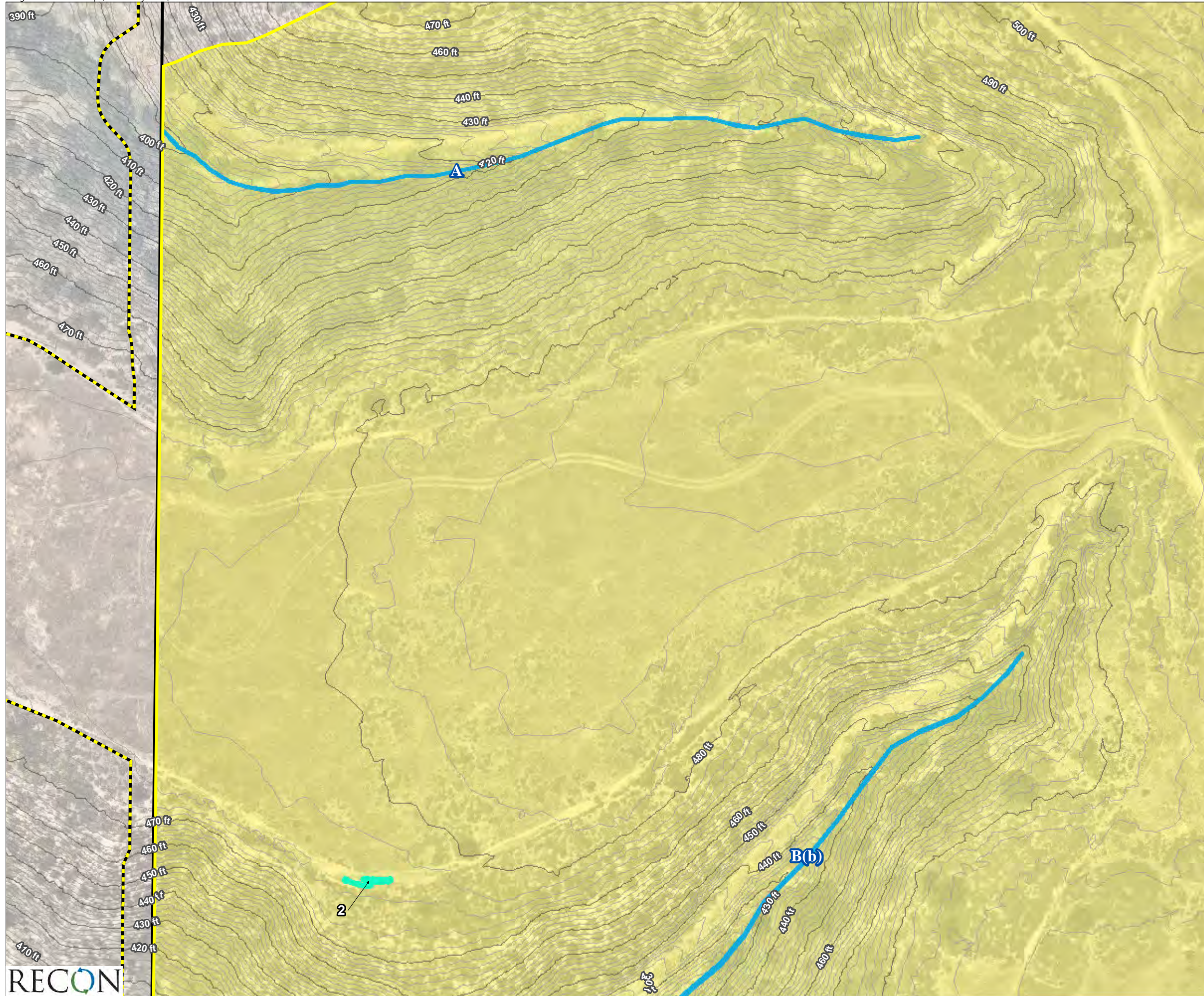


FIGURE 32.5  
Potential CDFW and RWQCB  
Waters of the State



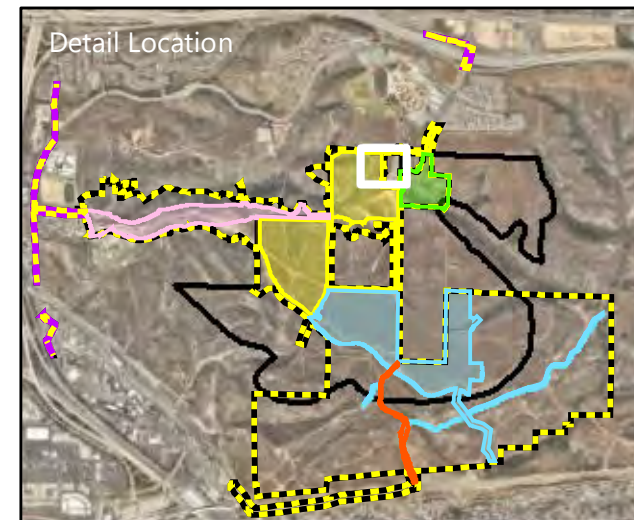
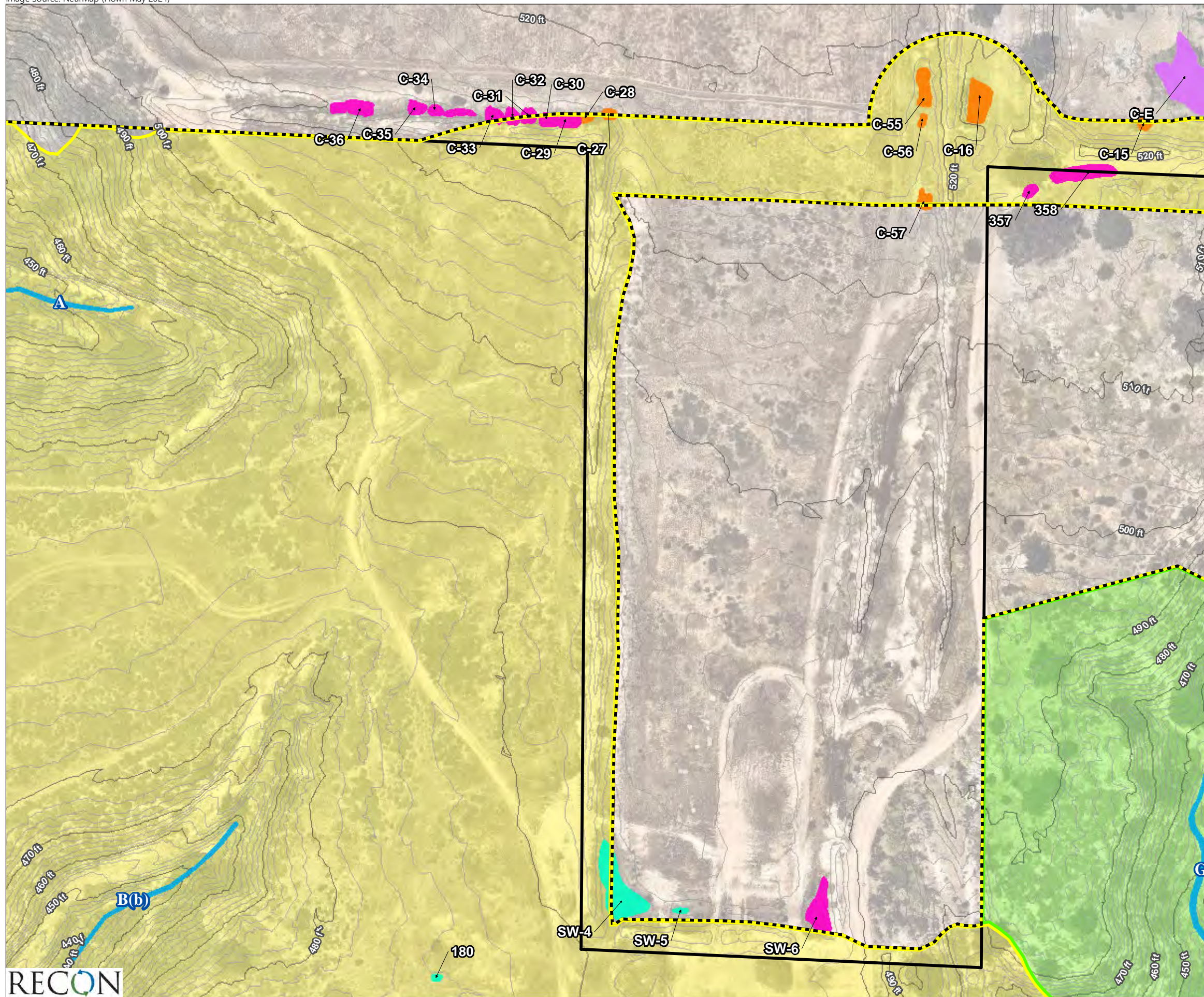


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)



FIGURE 32.6  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Wetland (Waters ID)
  - Non-Wetland Waters (Waters ID)

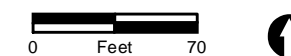
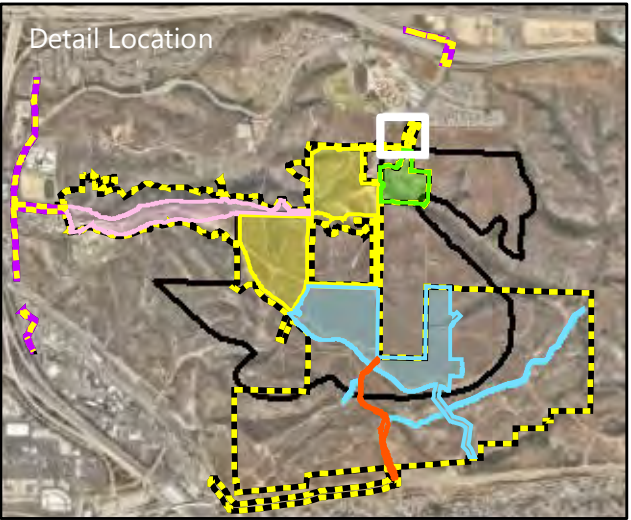
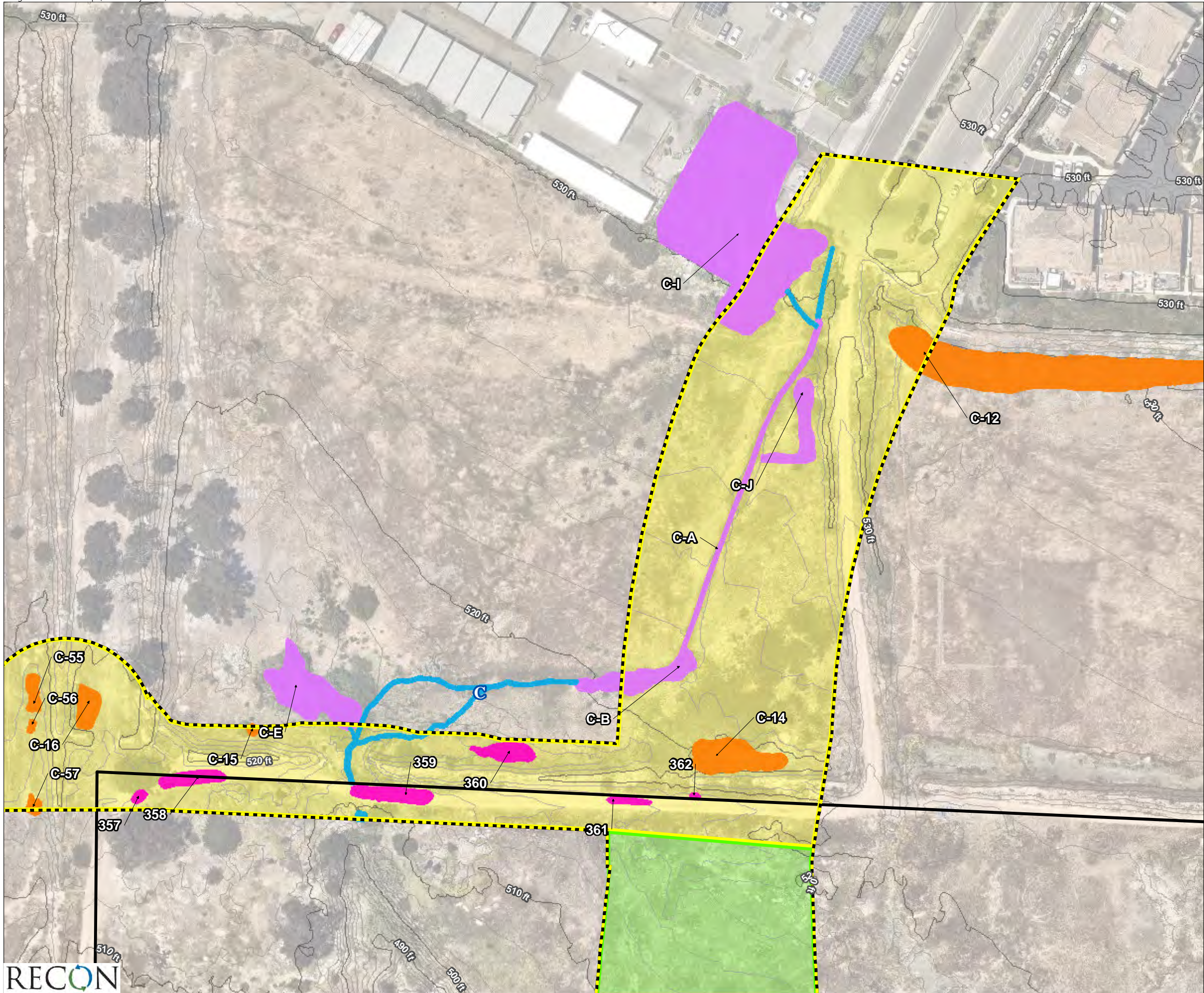


FIGURE 32.7  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Wetland (Waters ID)
  - Non-Wetland Waters (Waters ID)

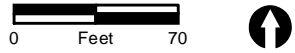
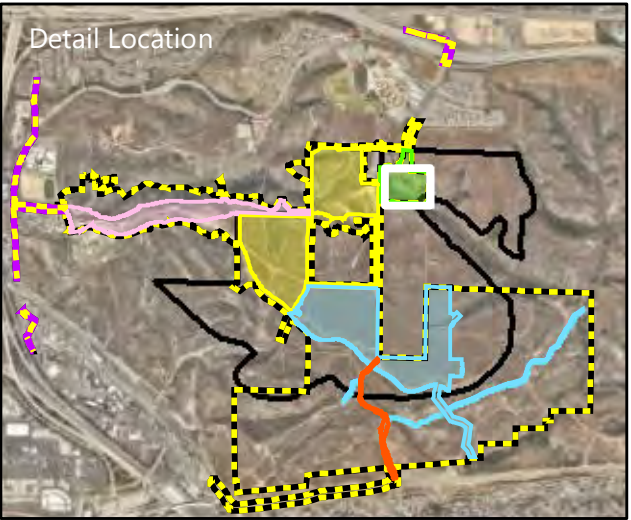
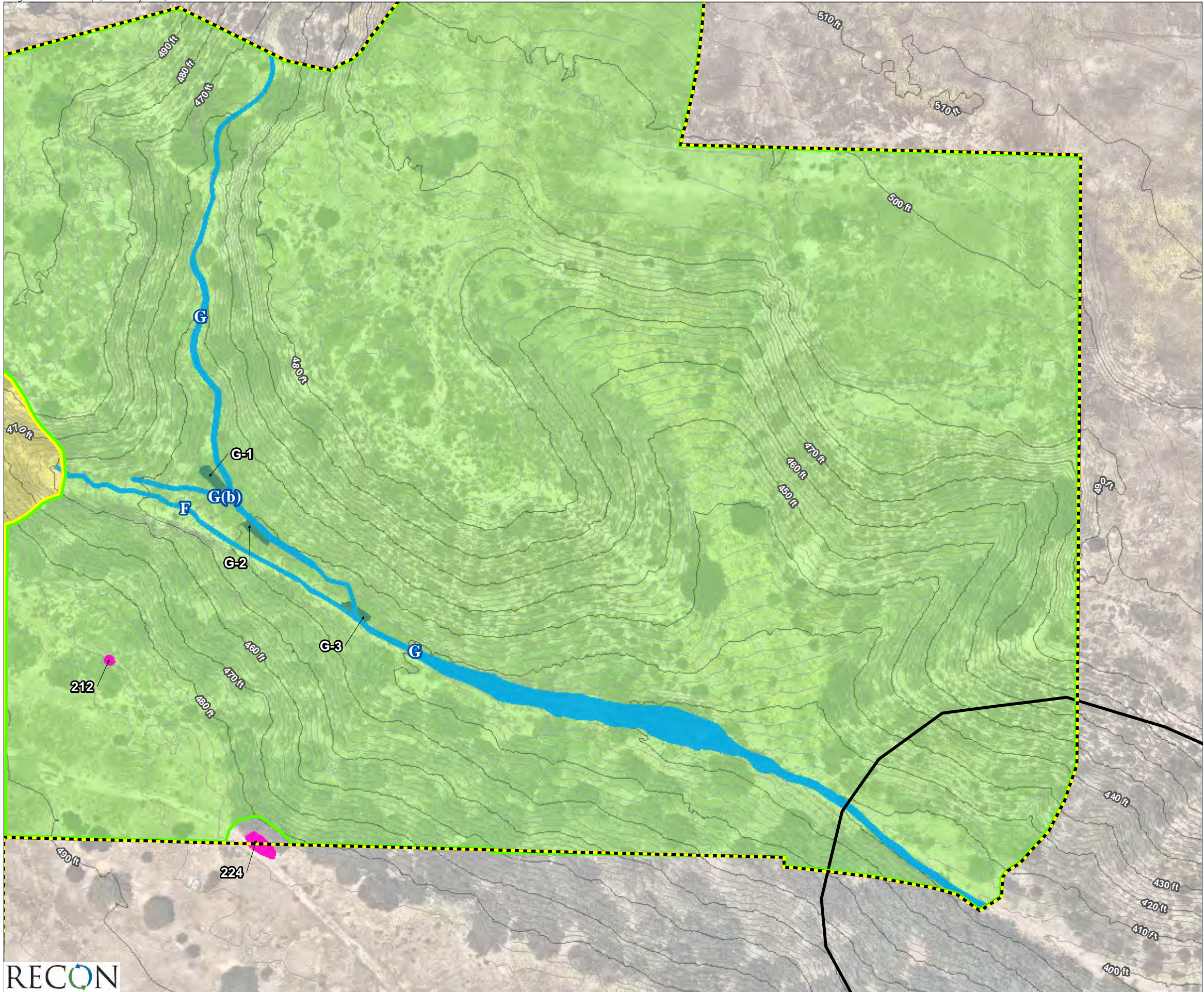


FIGURE 32.8  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
- Waters of the State (CDFW)**
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

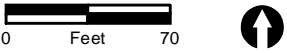
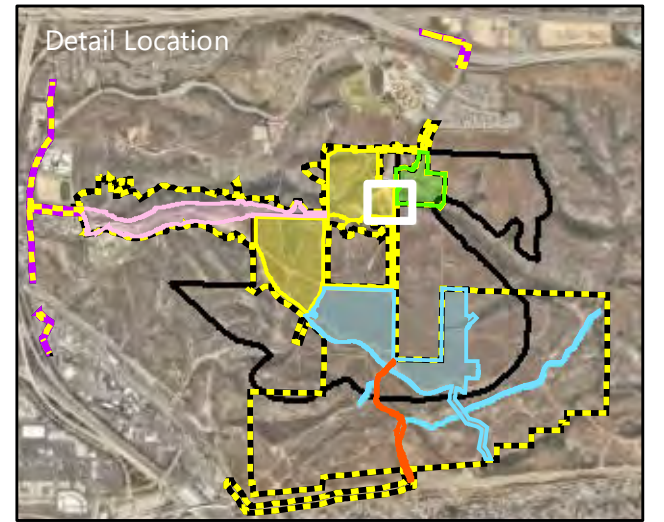
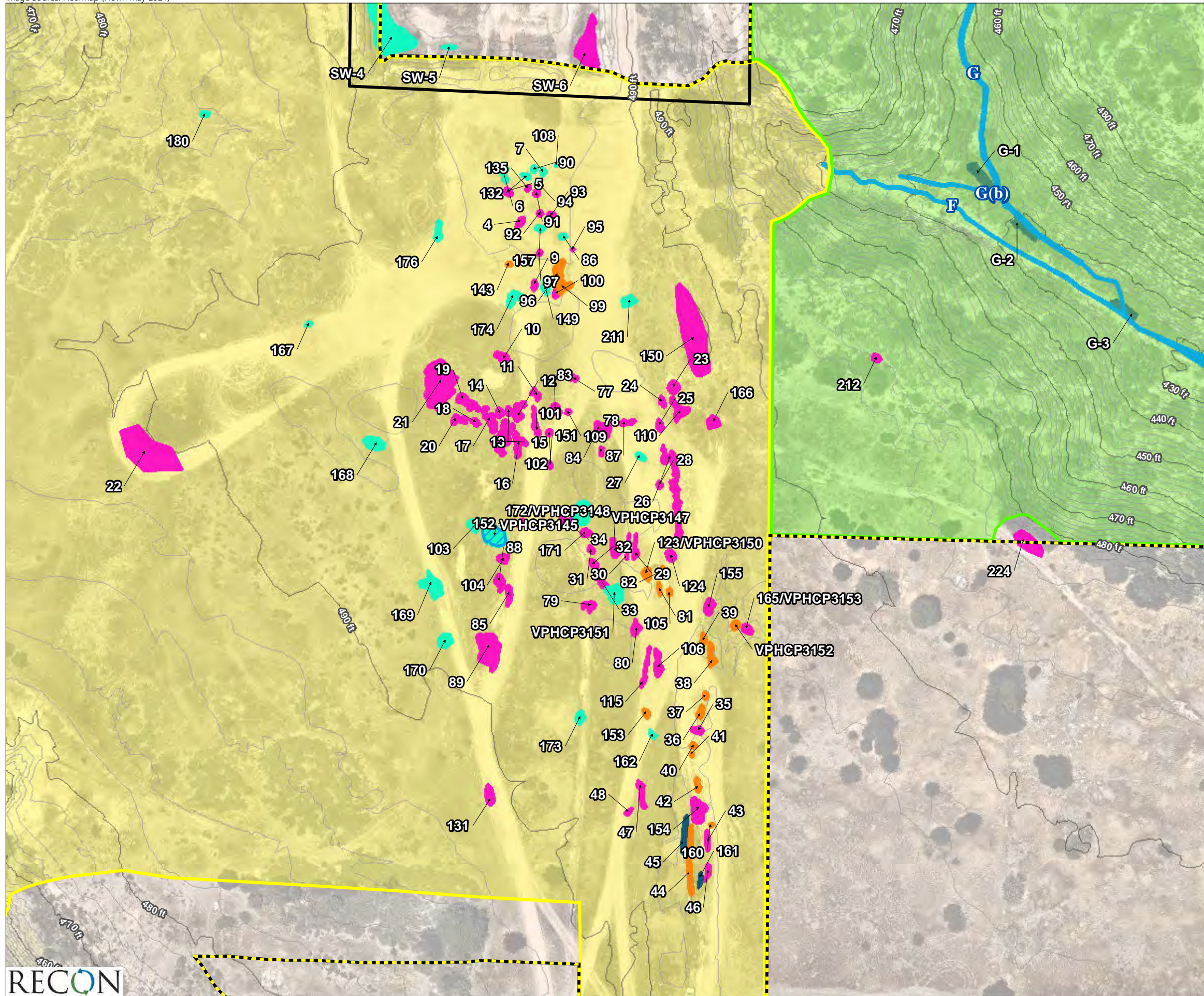


FIGURE 32.9  
Potential CDFW and RWQCB  
Waters of the State



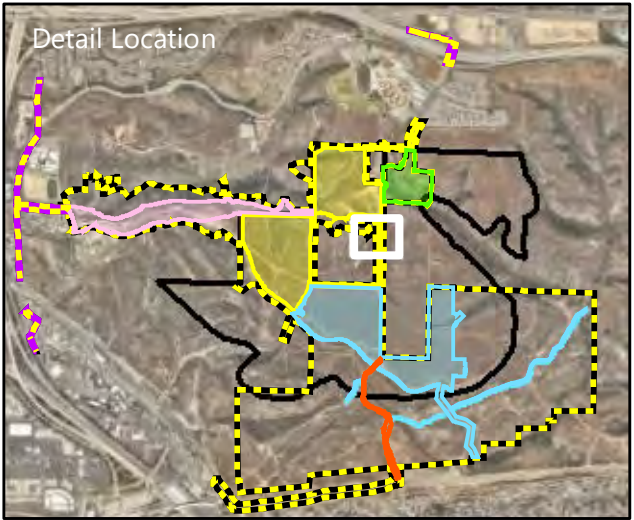
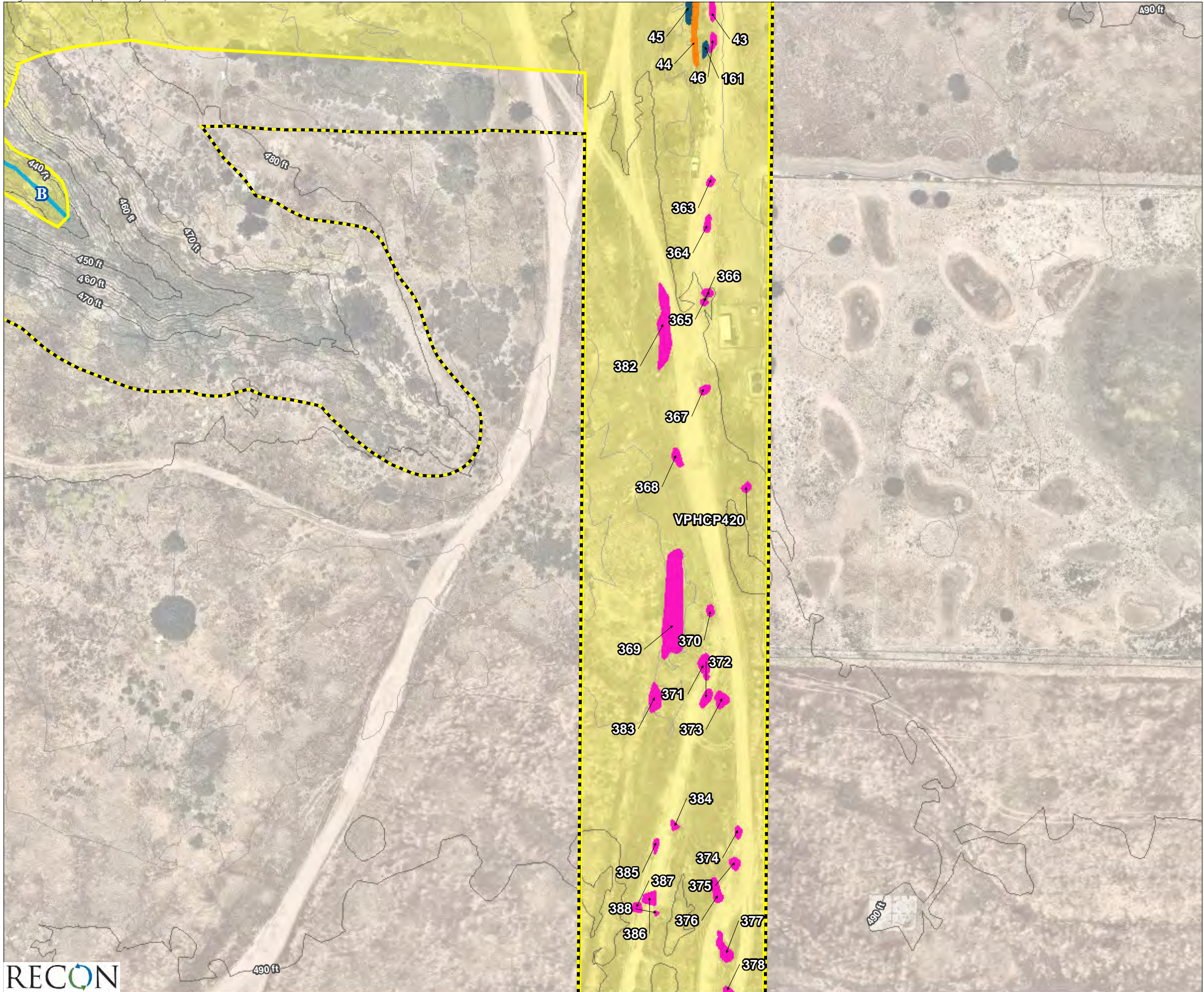


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
  - Wetland (Waters ID)
- Waters of the State (CDFW)**
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)
  - Vernal Pool (Waters ID)



FIGURE 32.10  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

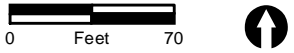


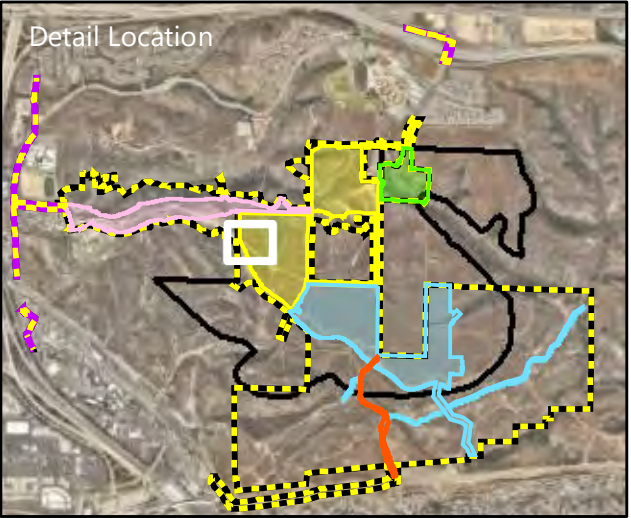
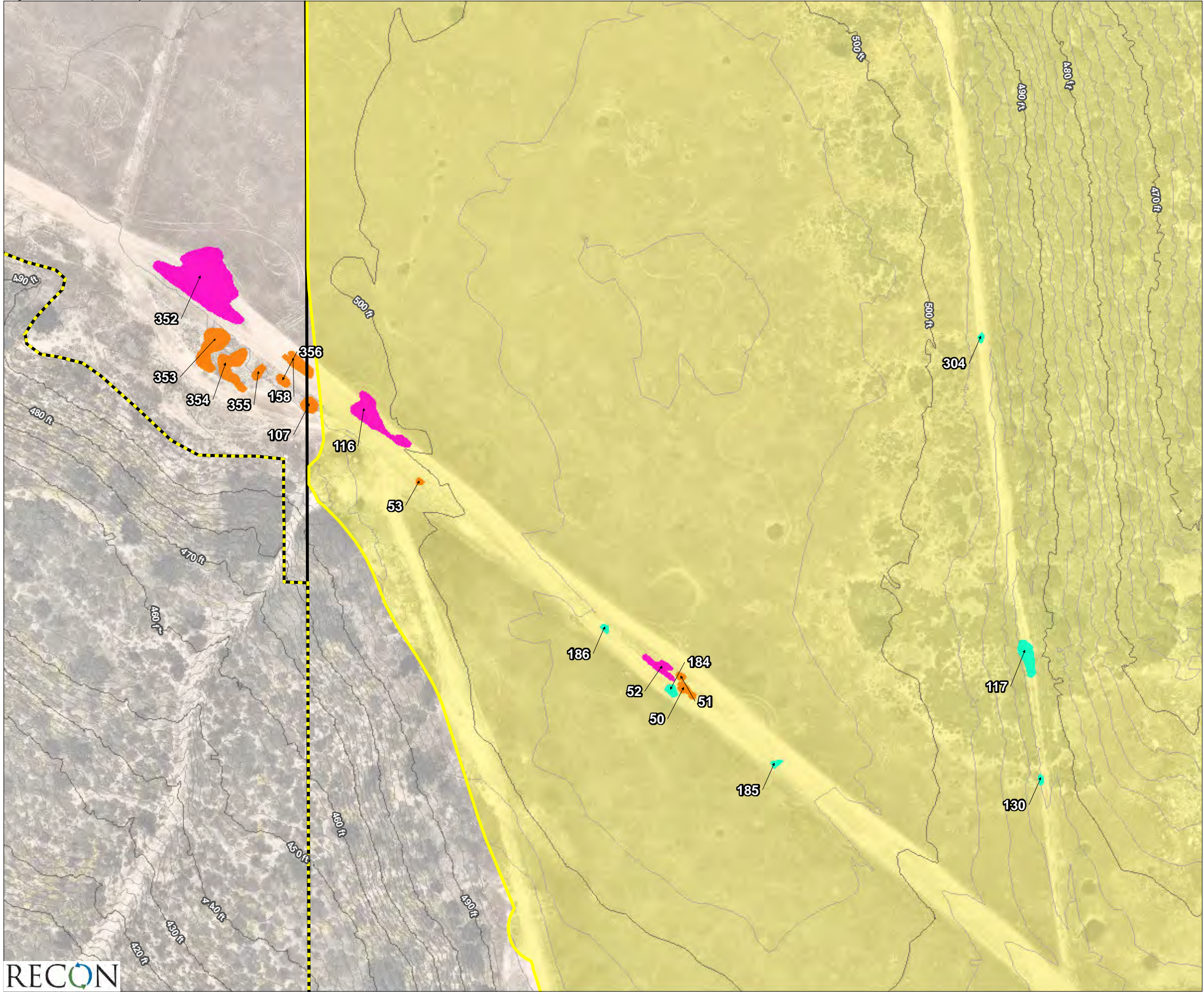
FIGURE 32.11  
Potential CDFW and RWQCB  
Waters of the State





FIGURE 32.12  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)

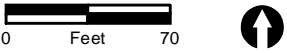
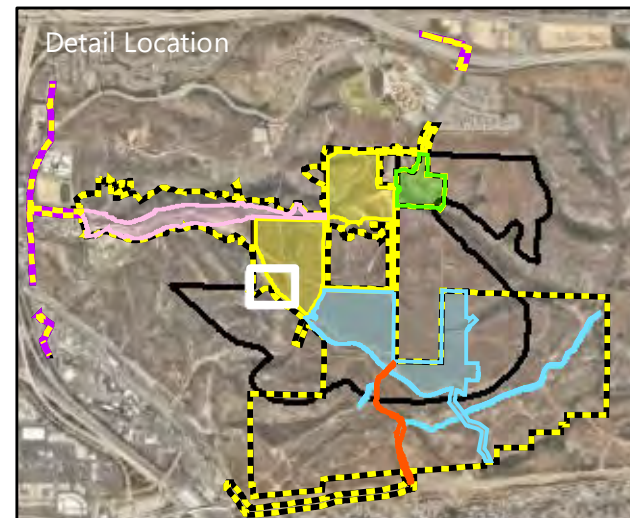
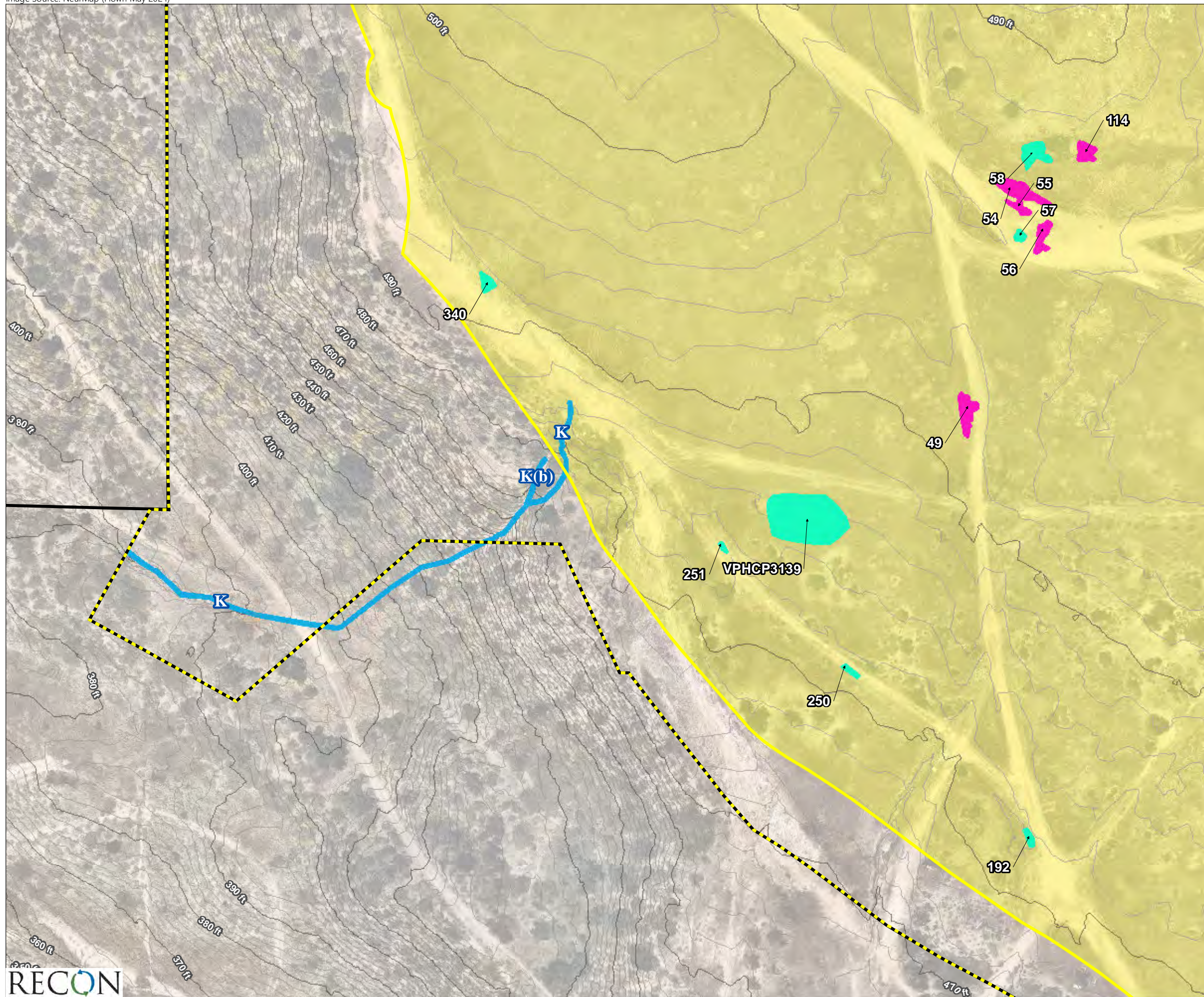


FIGURE 32.13  
Potential CDFW and RWQCB  
Waters of the State





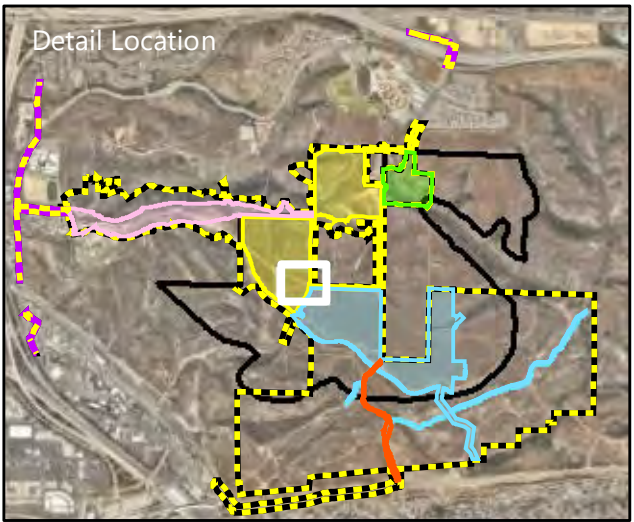
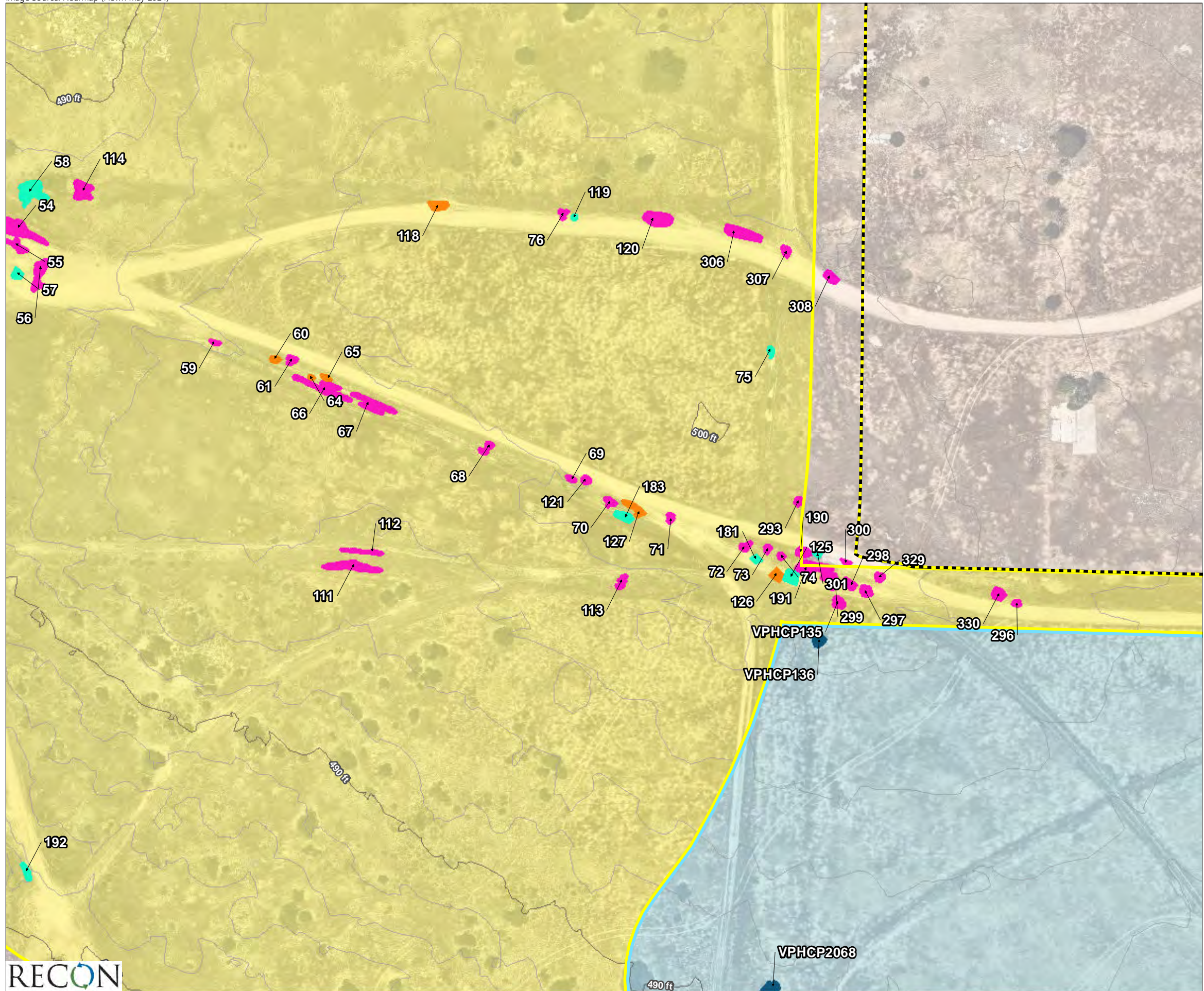
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

0 Feet 70



FIGURE 32.14  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
  - Wetland (Waters ID)

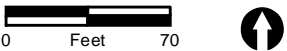
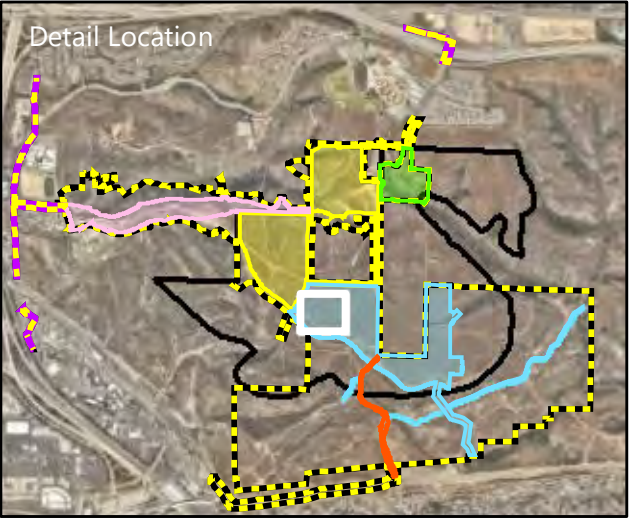


FIGURE 32.15  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)

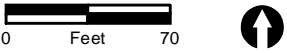
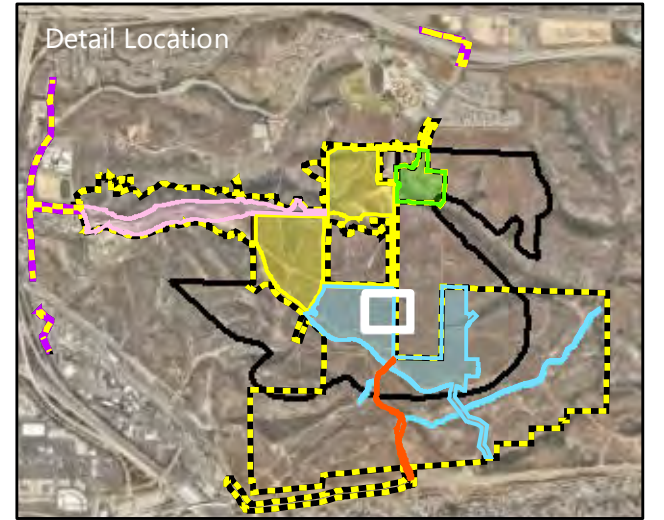
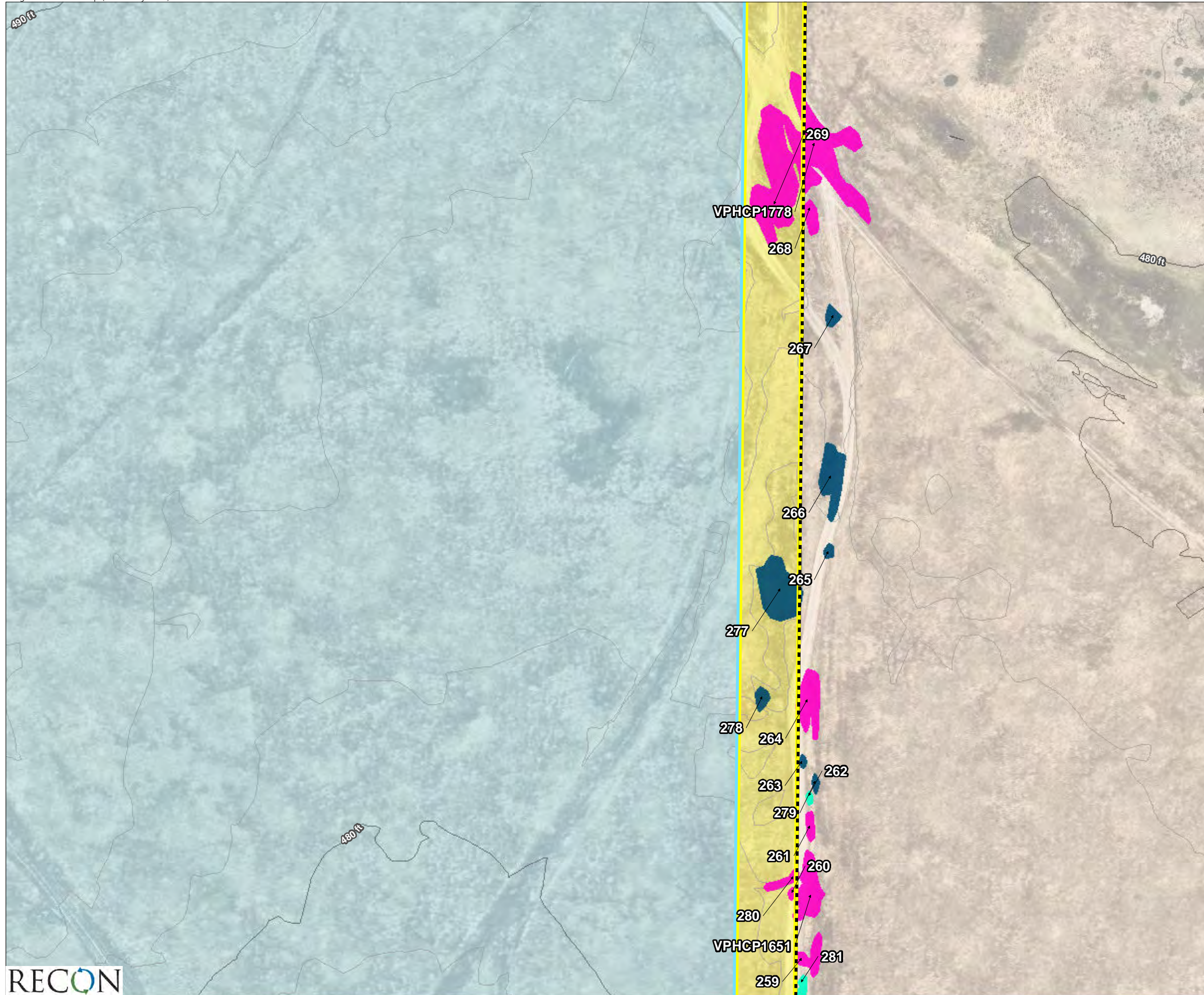


FIGURE 32.16  
Potential CDFW and RWQCB  
Waters of the State



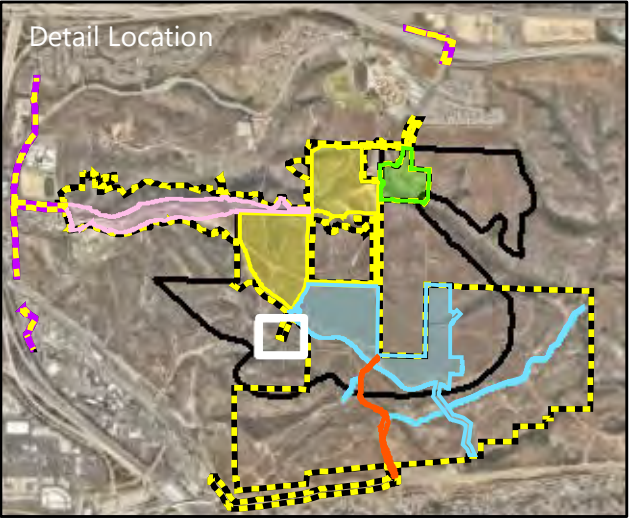


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)



FIGURE 32.17  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

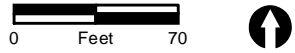
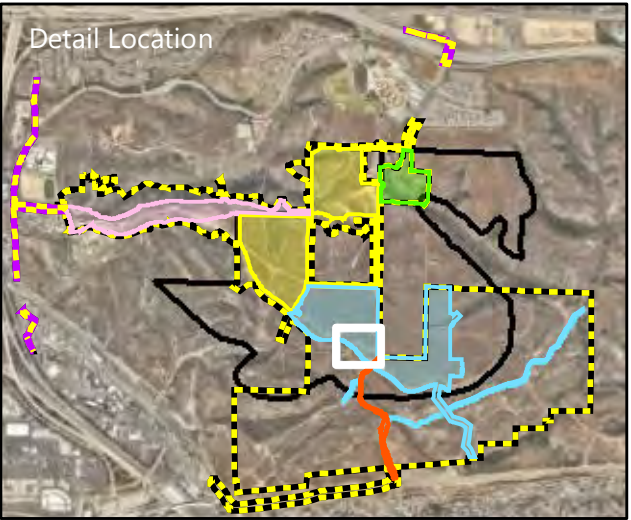
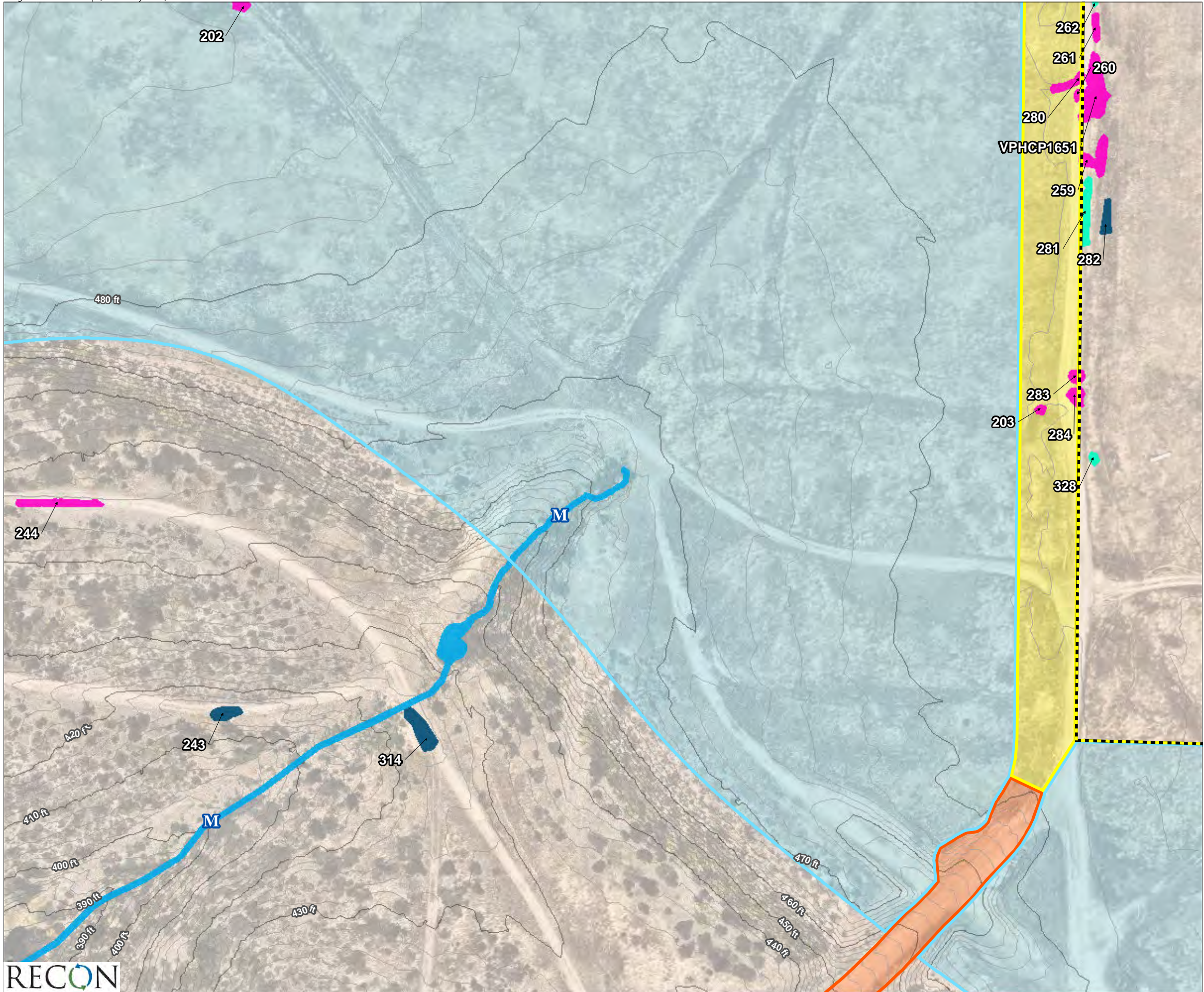


FIGURE 32.18  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

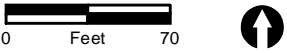
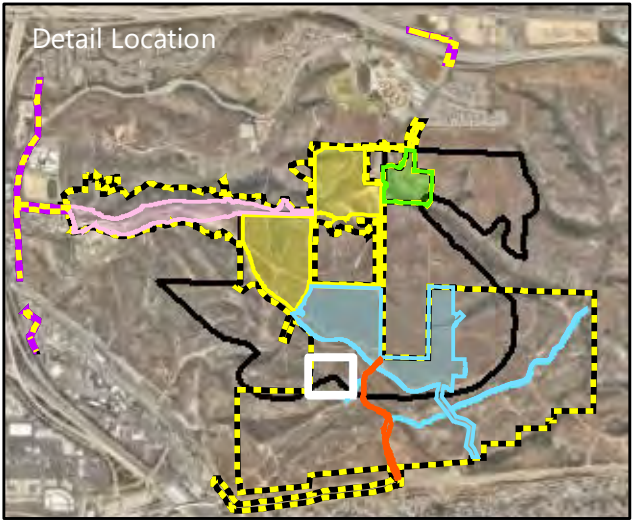
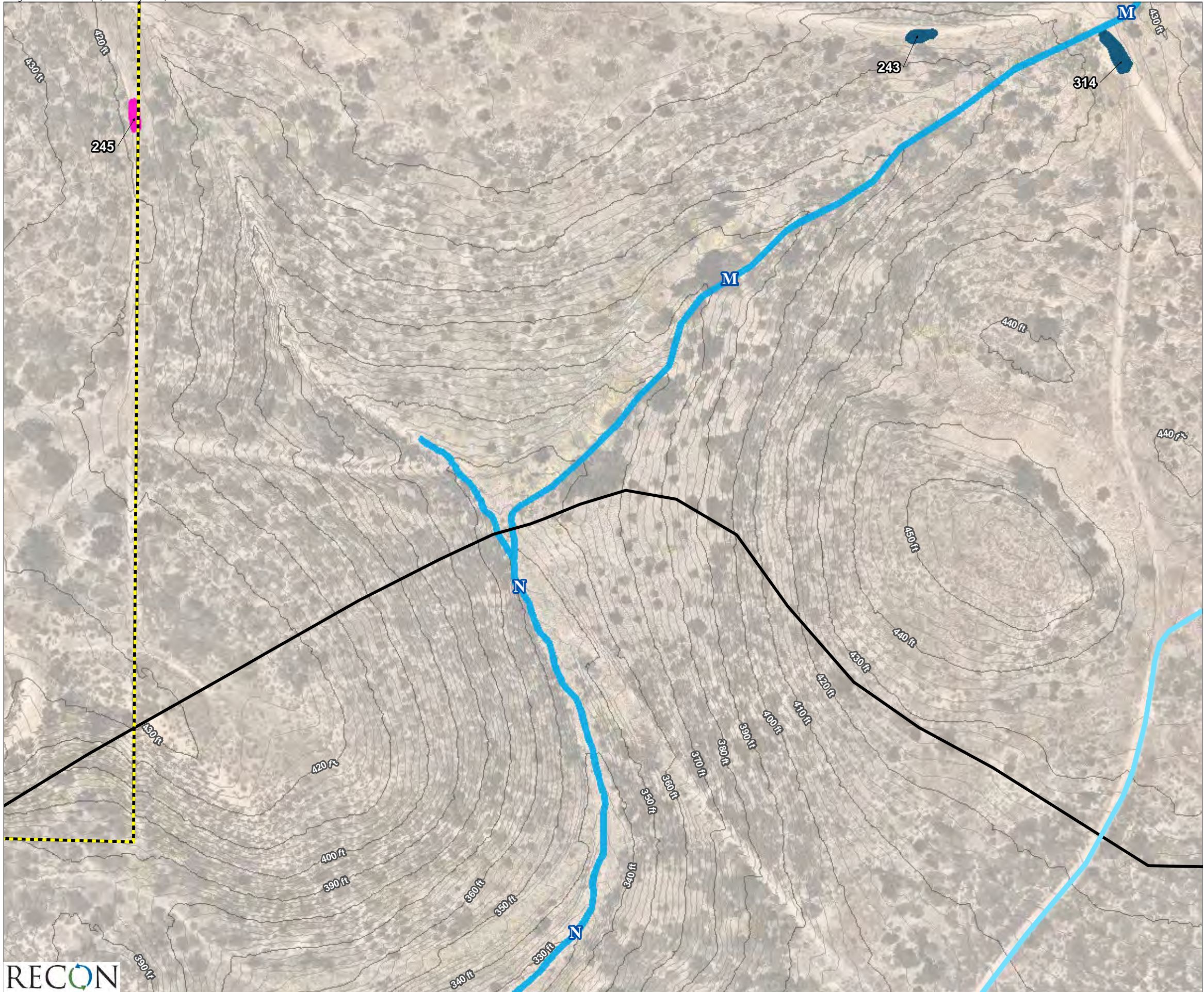


FIGURE 32.19  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

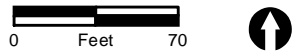
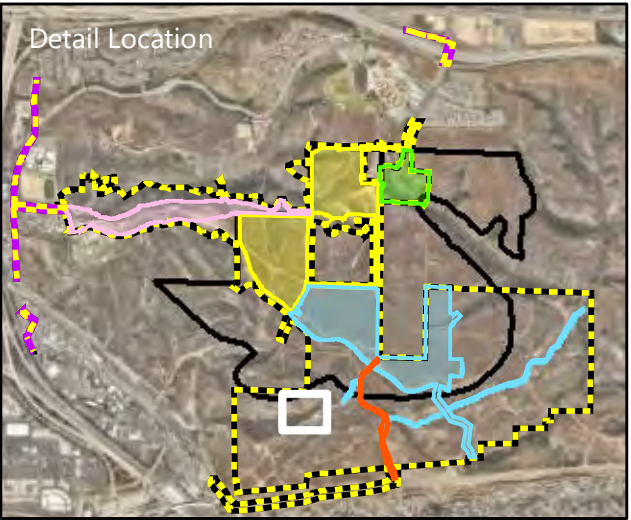
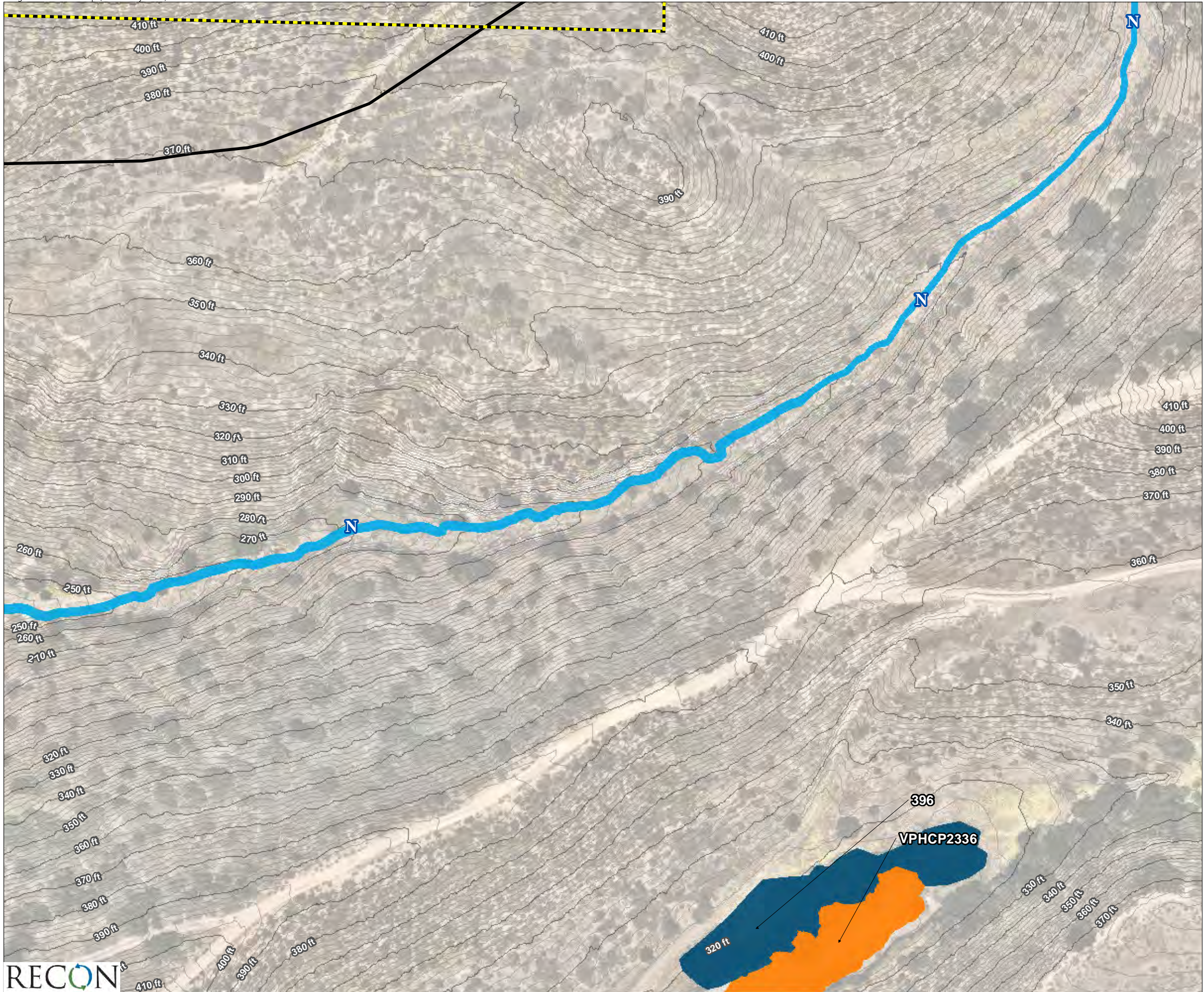


FIGURE 32.20  
Potential CDFW and RWQCB  
Waters of the State





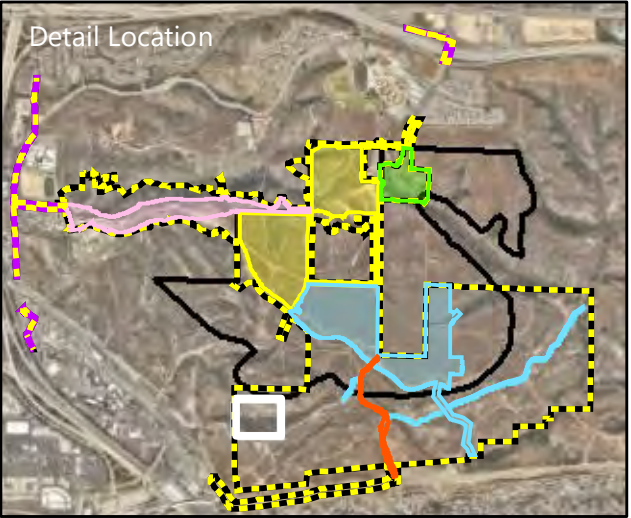
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Seasonal Basin (Waters ID)
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

0 Feet 70



FIGURE 32.21  
Potential CDFW and RWQCB  
Waters of the State





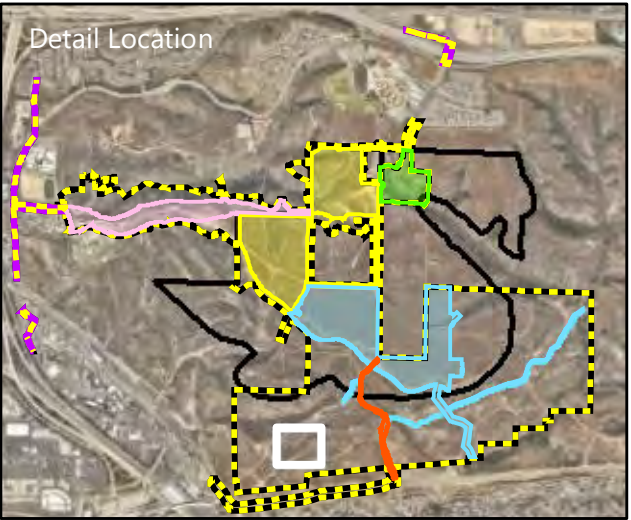
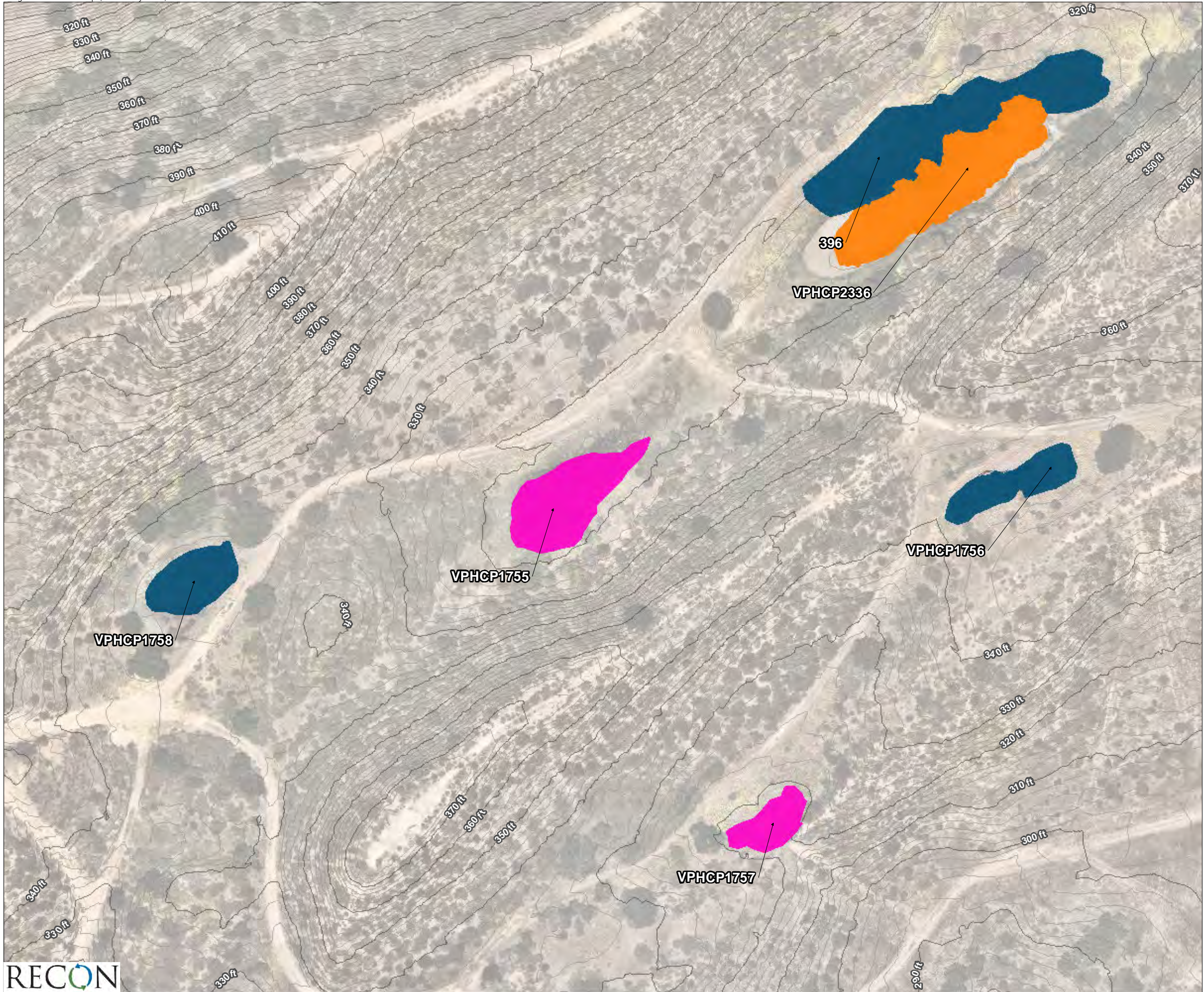
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

0 Feet 70



FIGURE 32.22  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
  - Wetland (Waters ID)

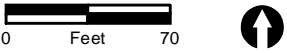
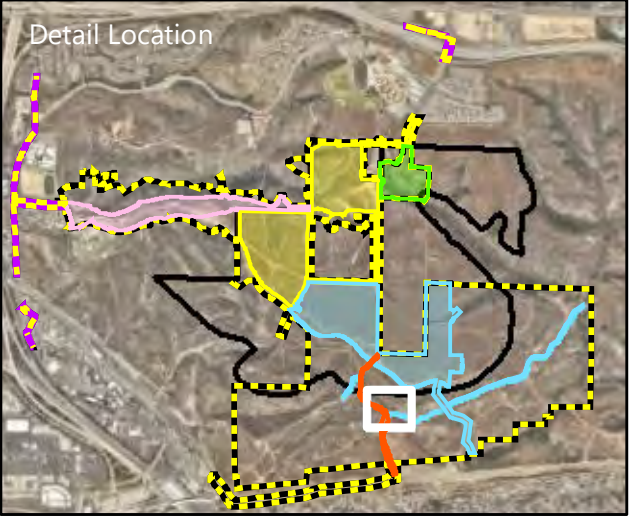
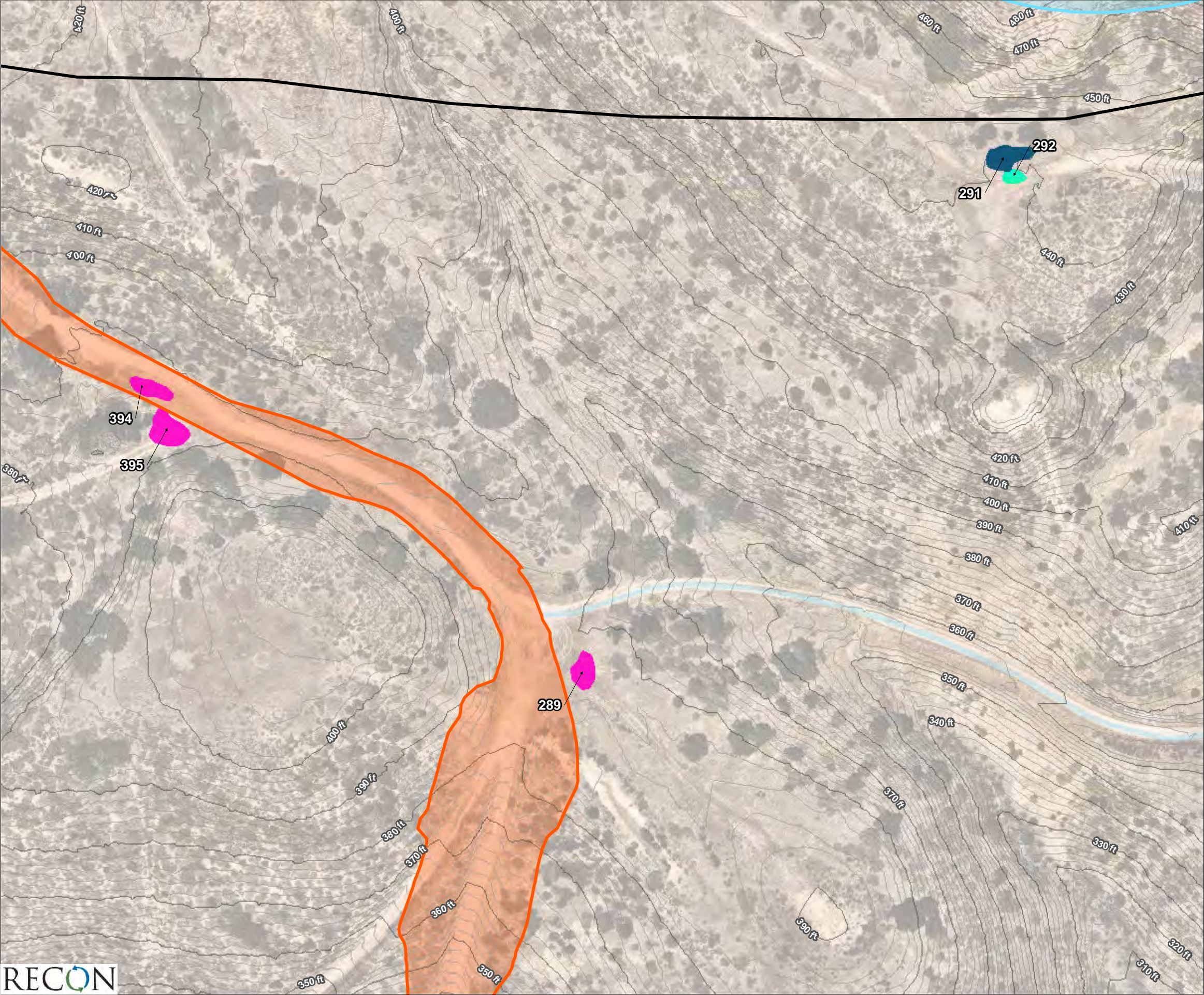


FIGURE 32.23  
Potential CDFW and RWQCB  
Waters of the State



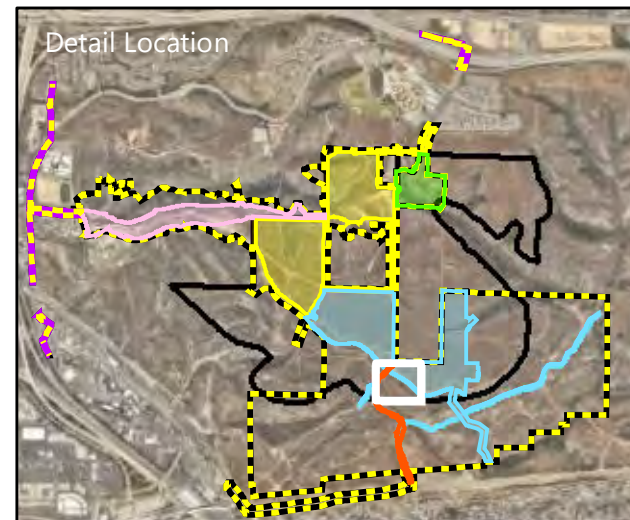
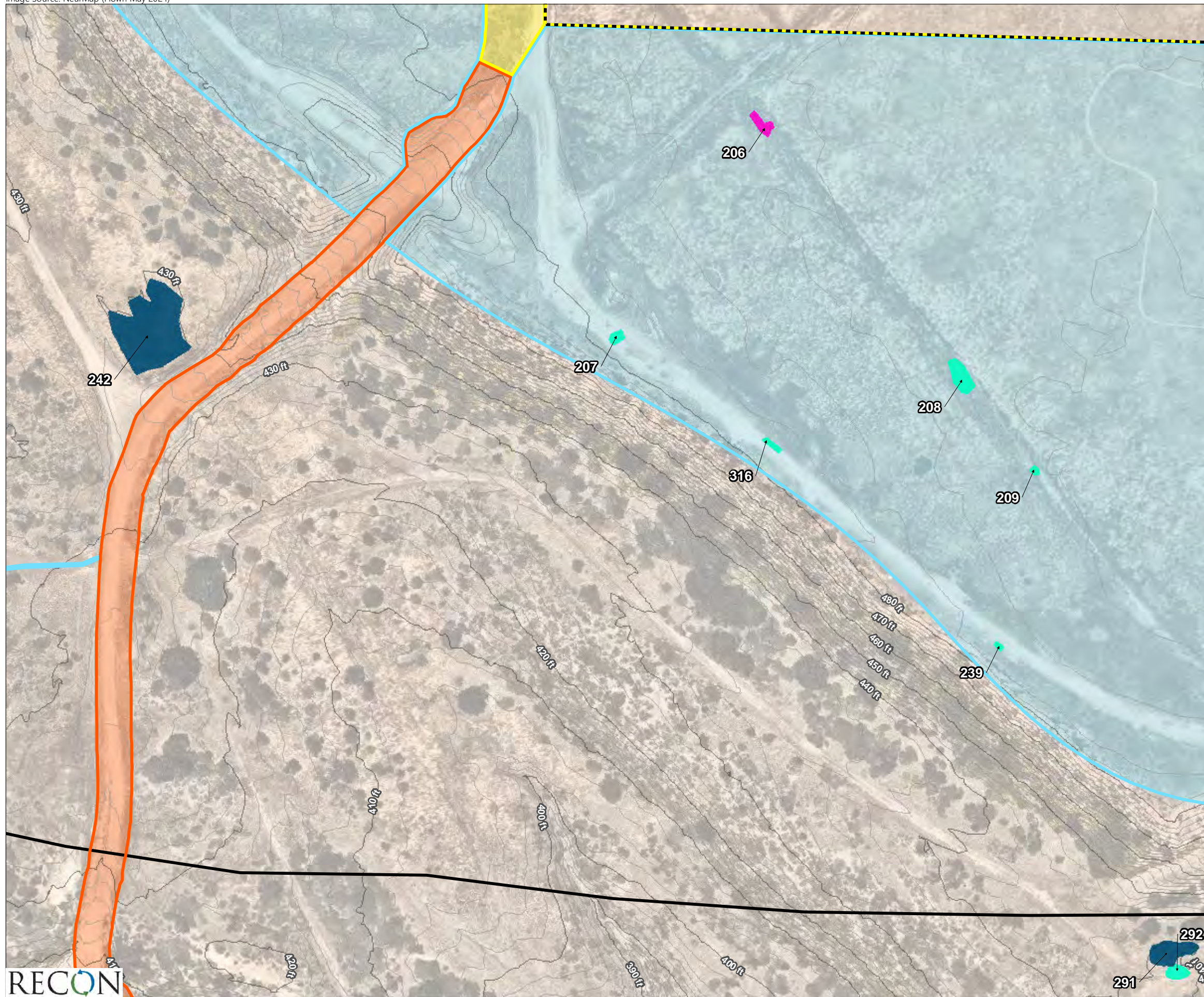


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)



FIGURE 32.24  
Potential CDFW and RWQCB  
Waters of the State





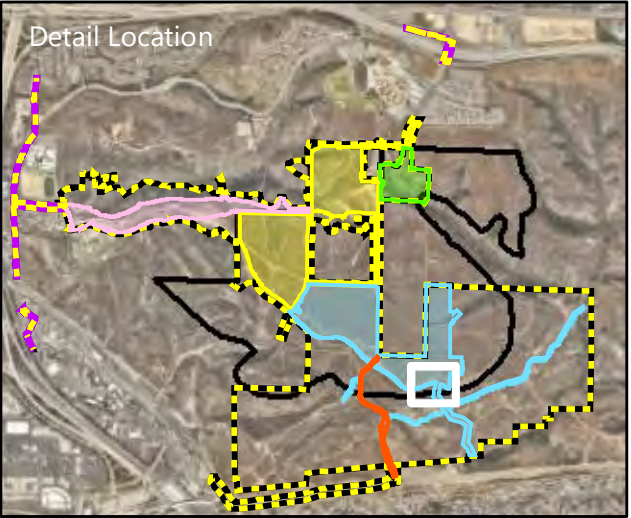
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)

0 Feet 70



FIGURE 32.25  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area

**Project-level Phasing**

- Phase 1
- Phase 2
- Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements

**Waters of the State (RWQCB)**

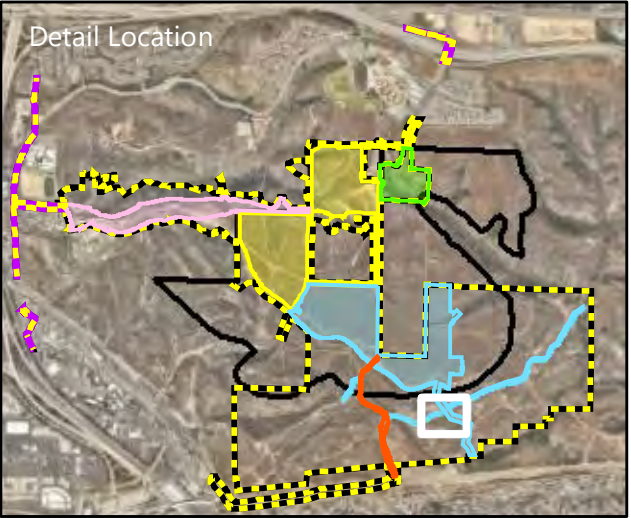
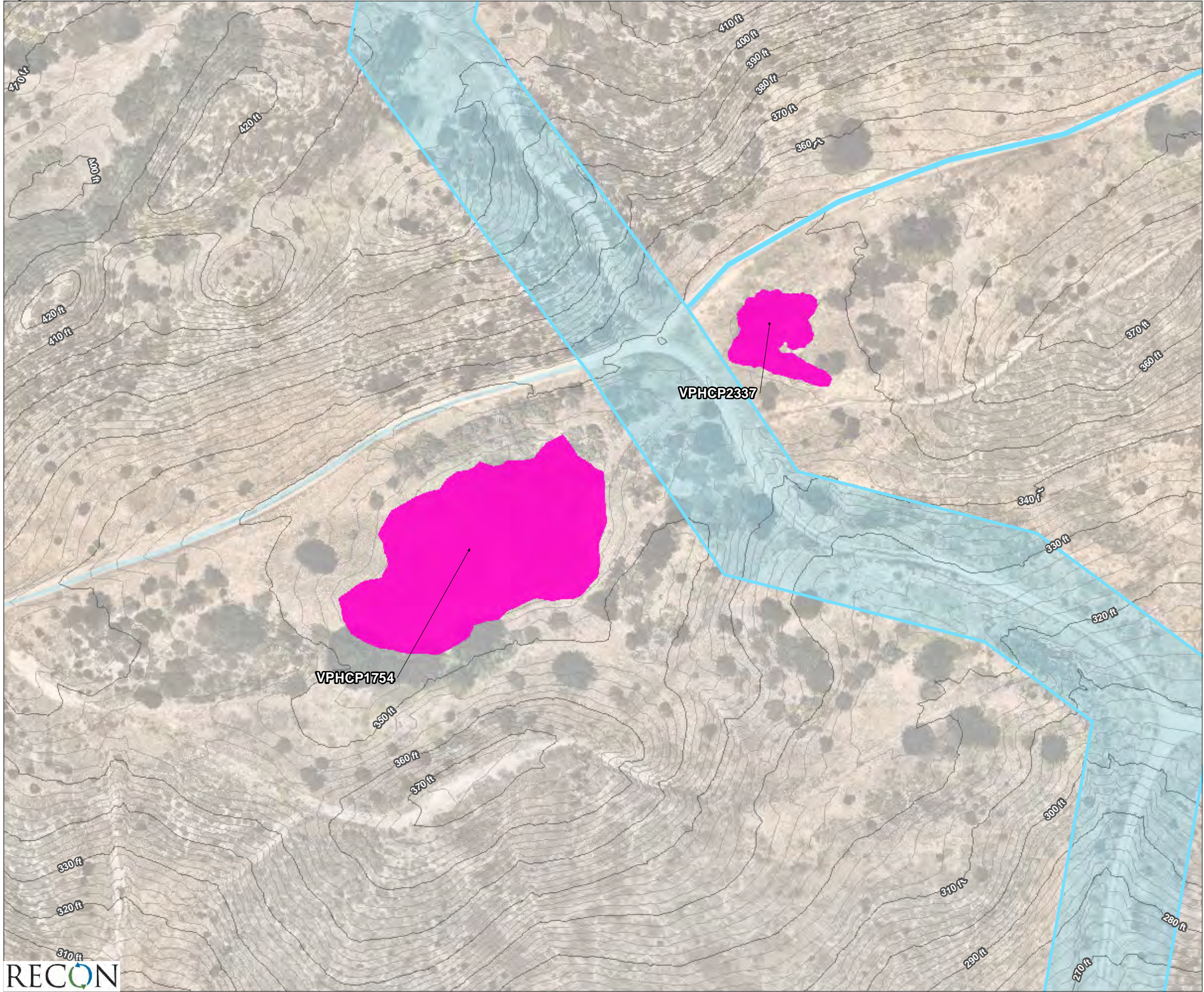
- Vernal Pool (Waters ID)
- Wetland (Waters ID)

0 Feet 70



FIGURE 32.26  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool with Fairy Shrimp (Waters ID)

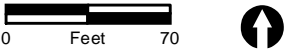
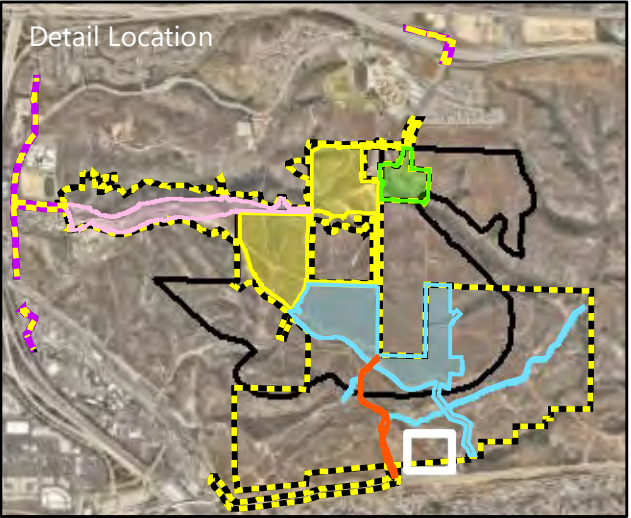


FIGURE 32.27  
Potential CDFW and RWQCB  
Waters of the State





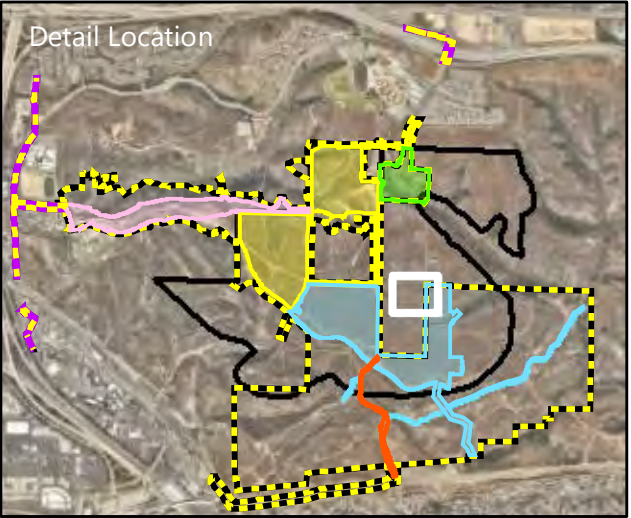
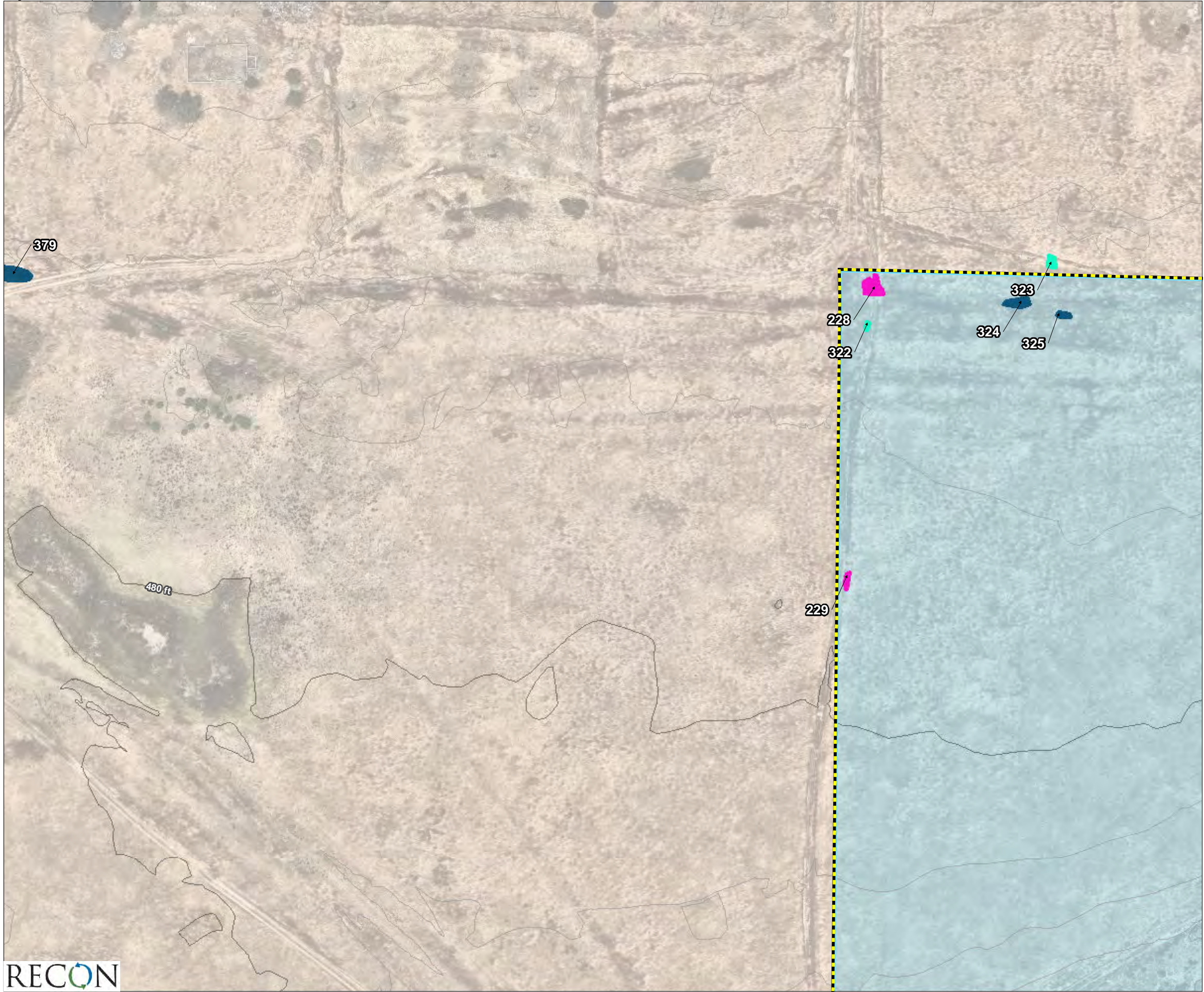
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

0 Feet 70



FIGURE 32.28  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Wetland (Waters ID)

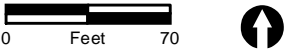
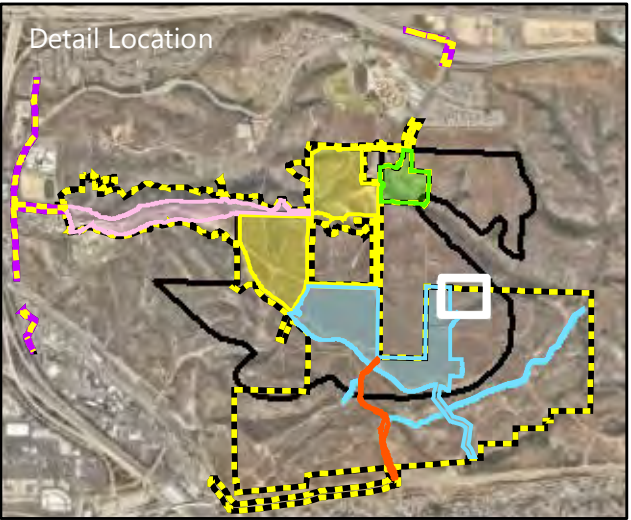
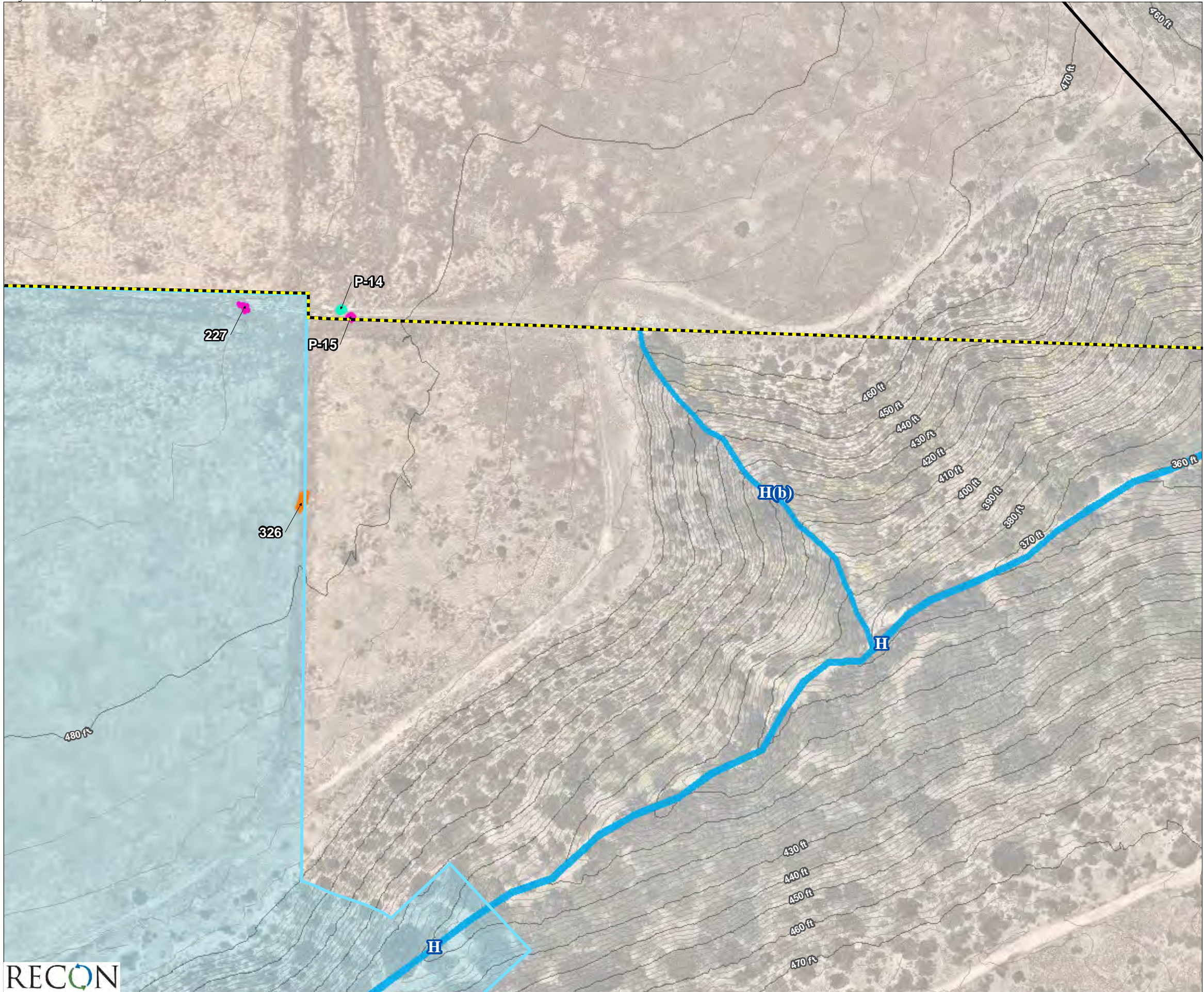


FIGURE 32.29  
Potential CDFW and RWQCB  
Waters of the State

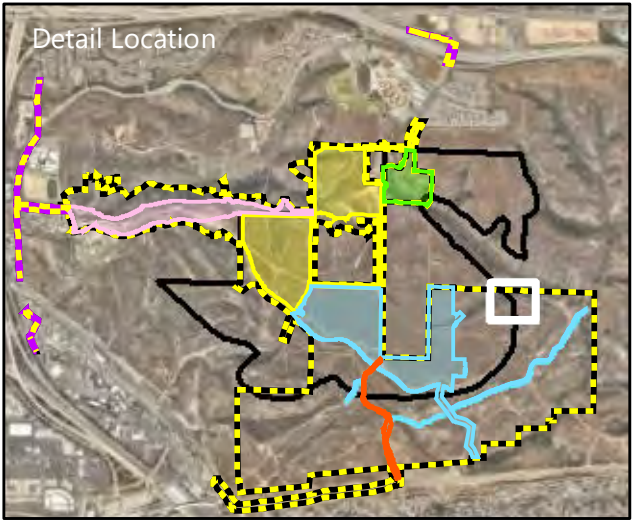
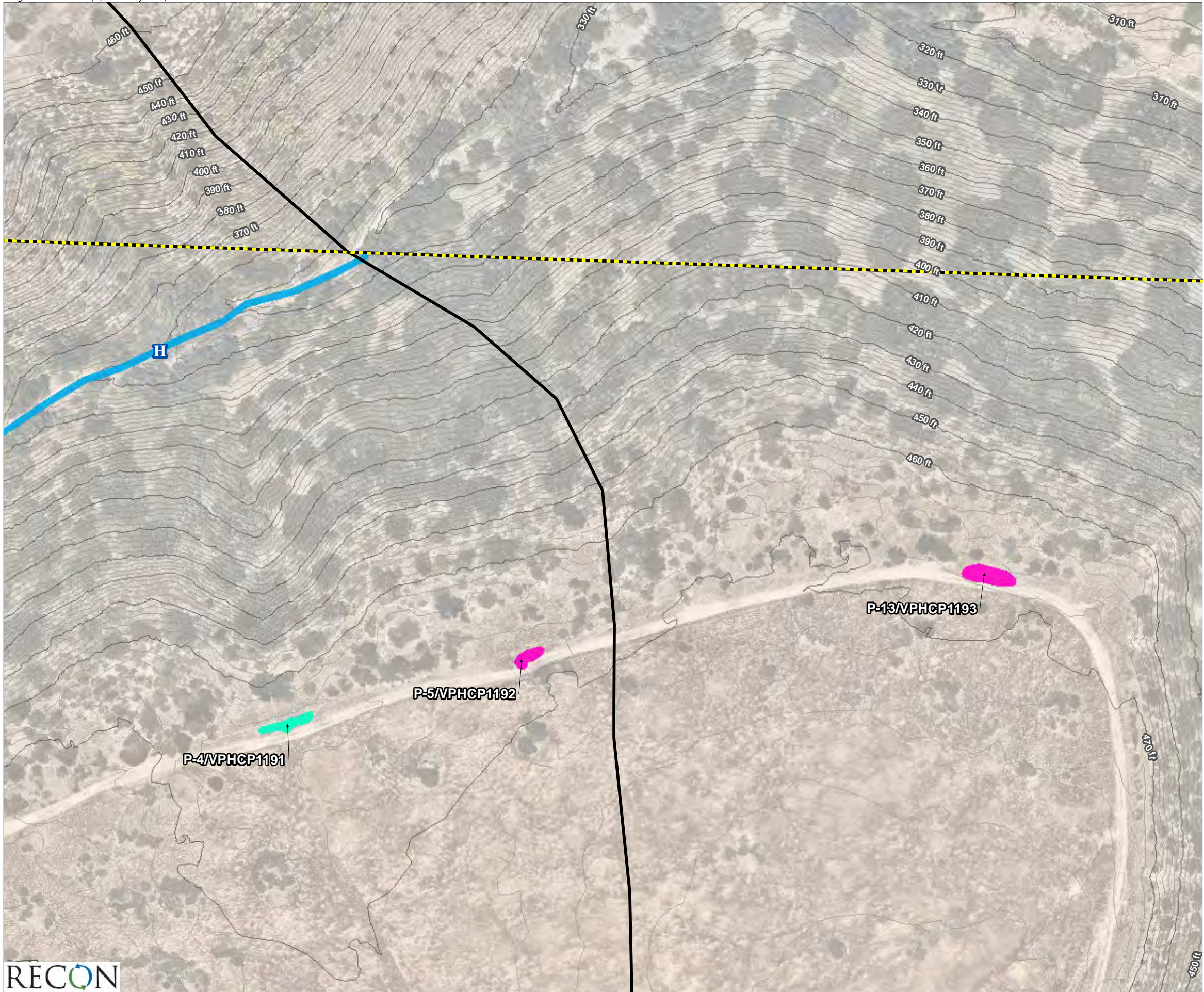




- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

FIGURE 32.30  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

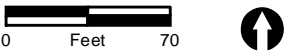
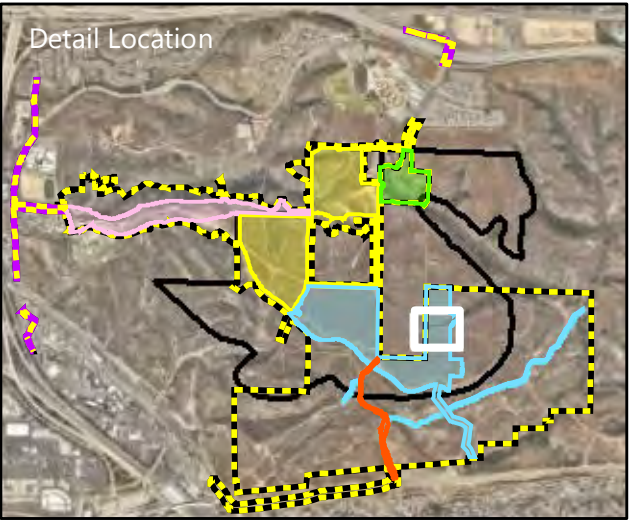
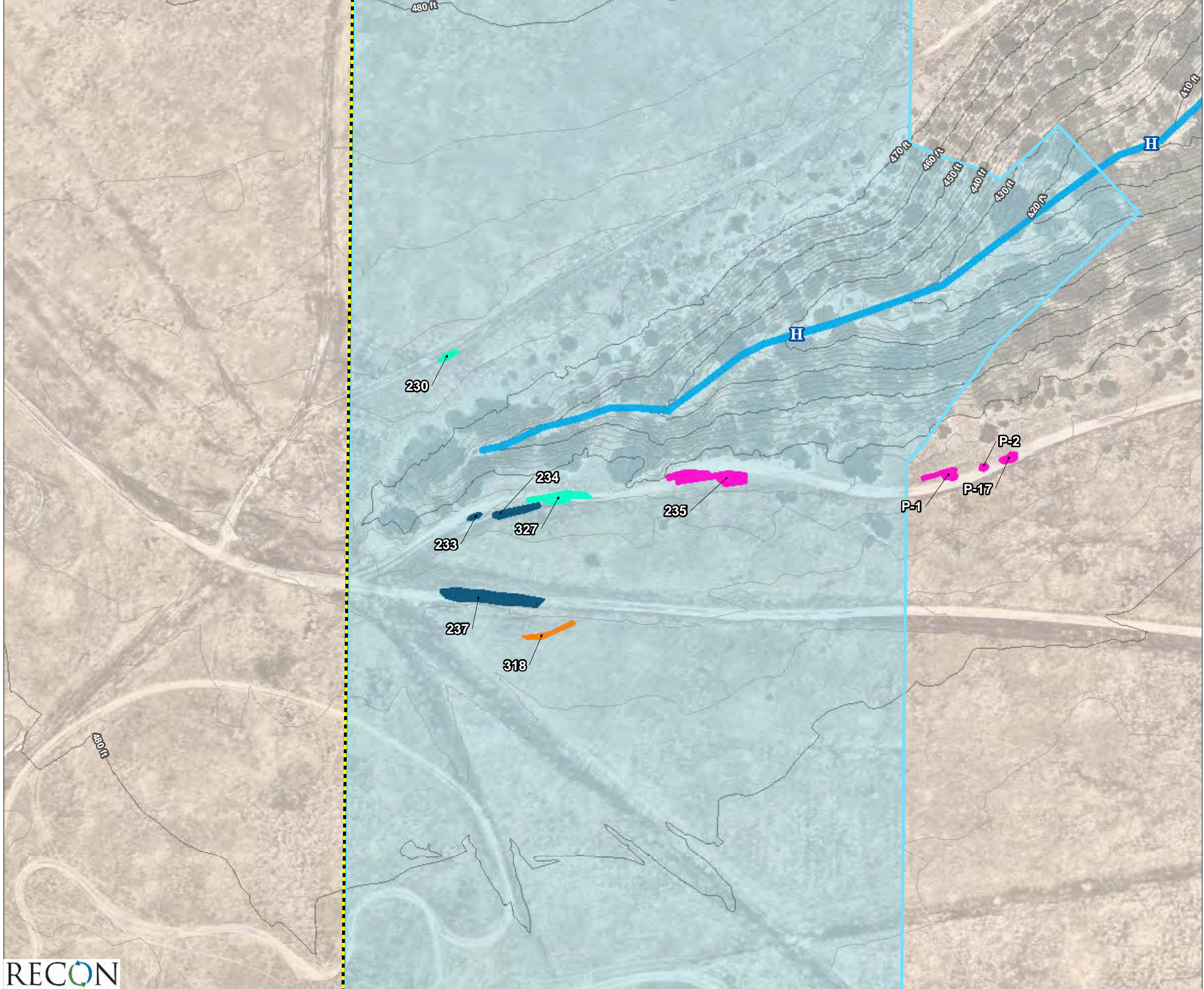


FIGURE 32.31  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

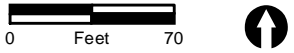
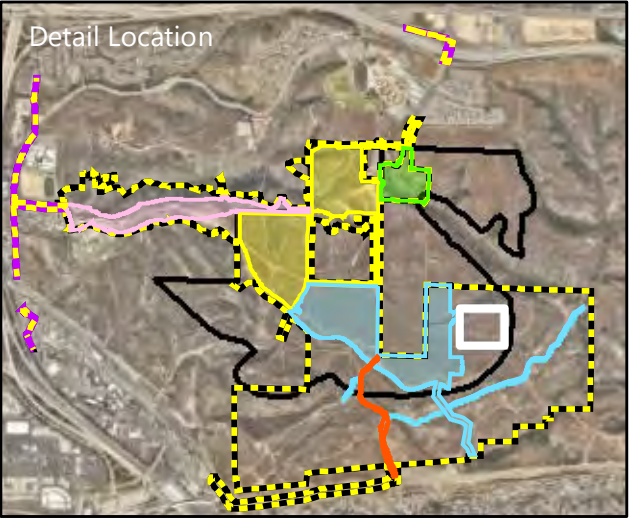
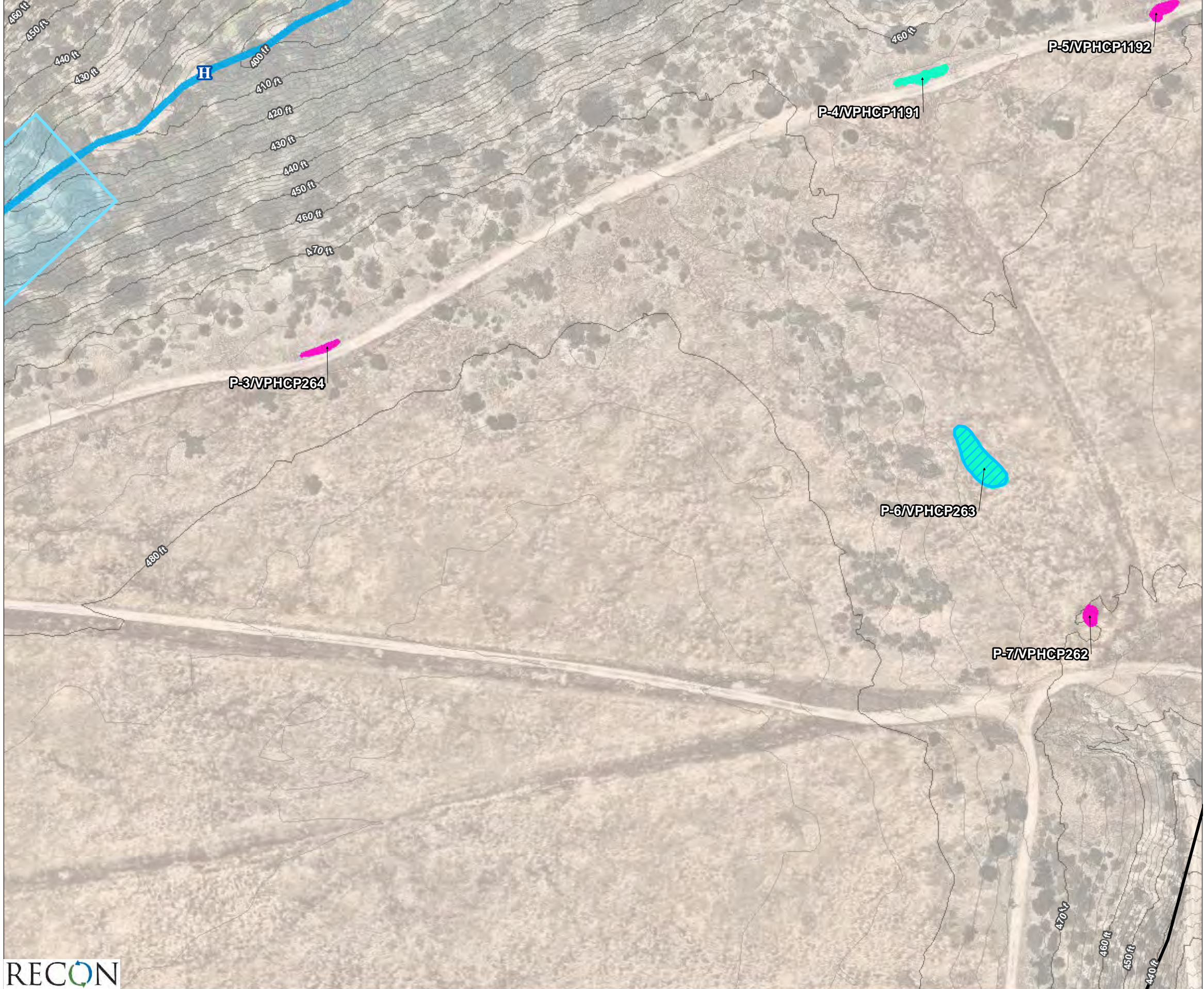


FIGURE 32.32  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool (Waters ID)
  - Vernal Pool with Fairy Shrimp (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)
  - Vernal Pool (Waters ID)

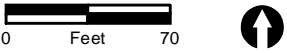
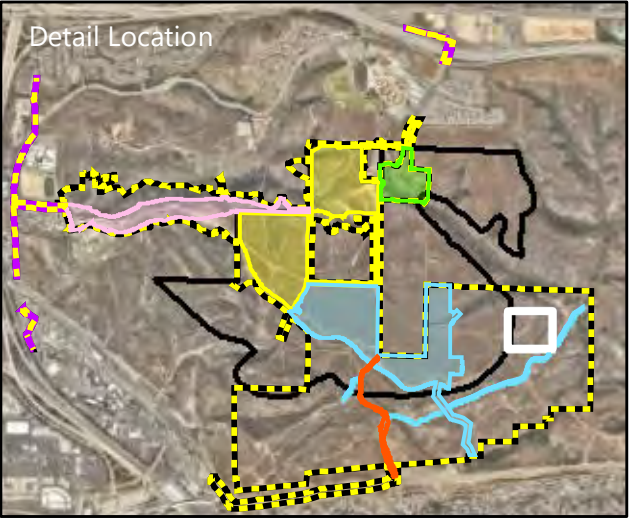
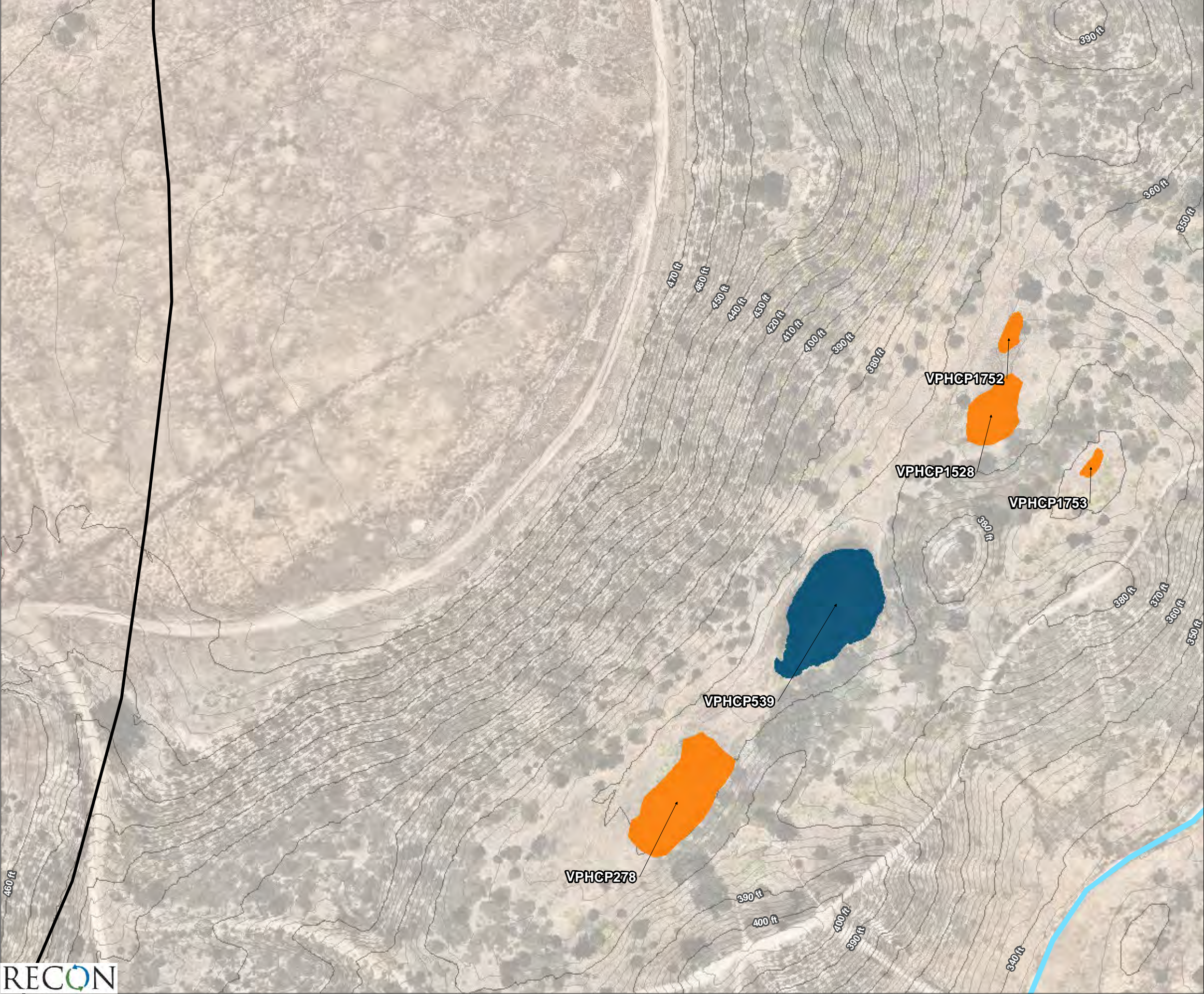


FIGURE 32.33  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area

**Project-level Phasing**

- Phase 1
- Phase 2
- Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements

**Waters of the State (RWQCB)**

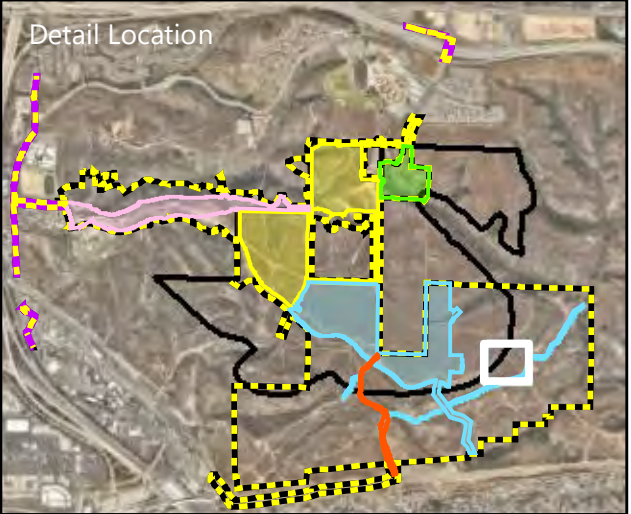
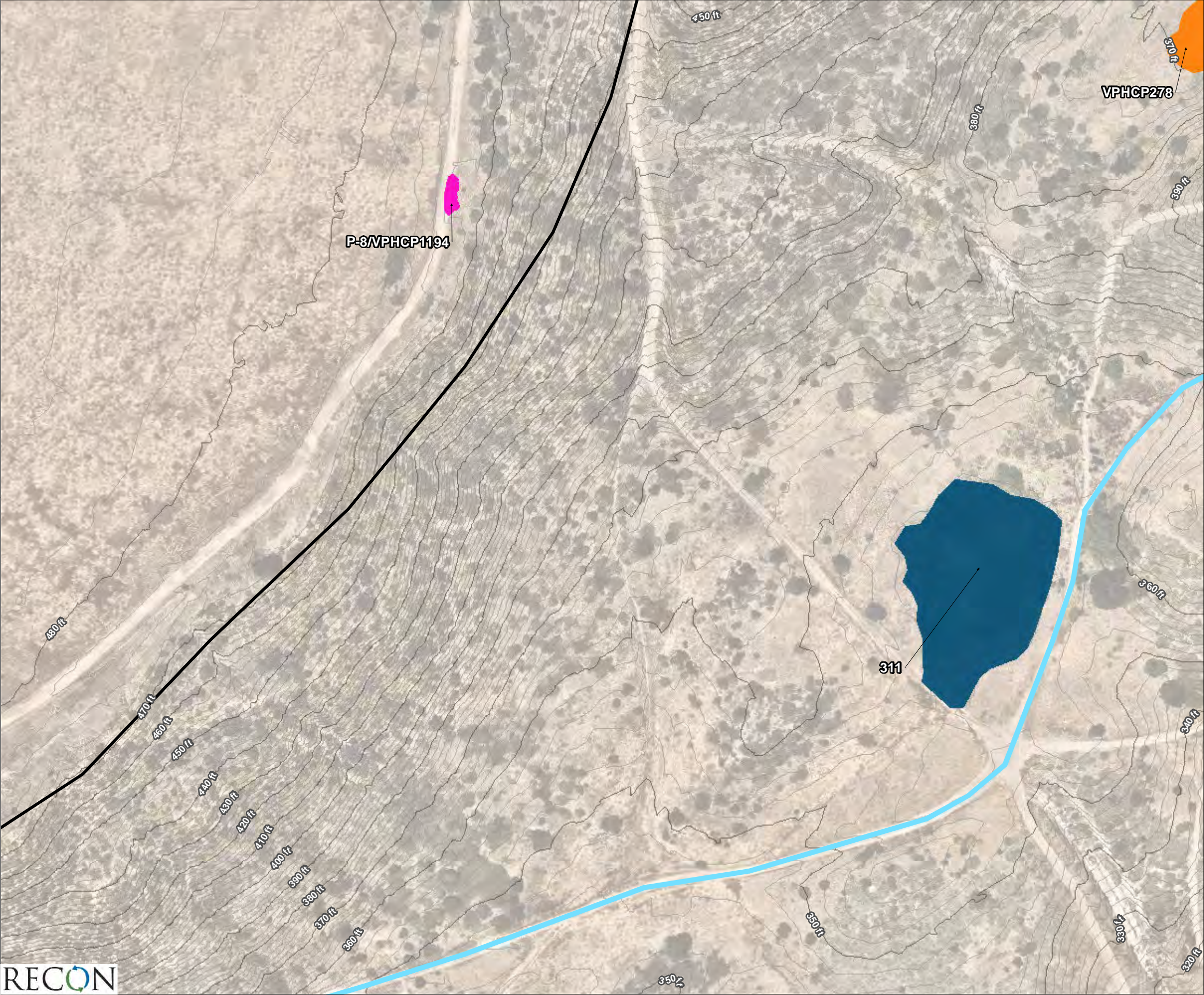
- Seasonal Basin (Waters ID)
- Wetland (Waters ID)

0 Feet 70



FIGURE 32.34  
Potential CDFW and RWQCB  
Waters of the State



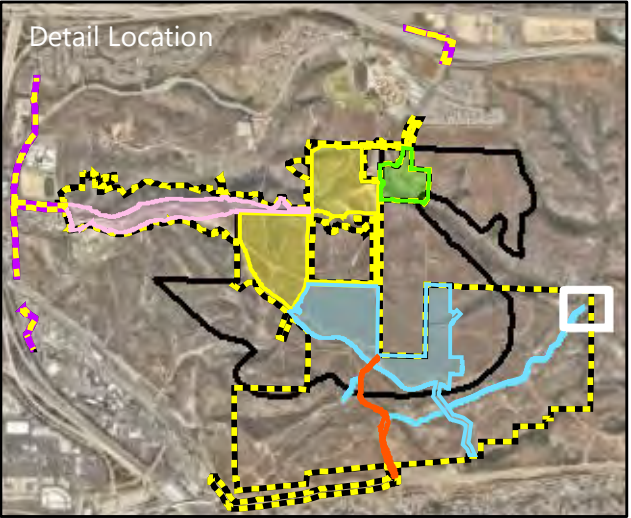


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (RWQCB)**
  - Vernal Pool with Fairy Shrimp (Waters ID)
  - Seasonal Basin (Waters ID)
  - Wetland (Waters ID)



FIGURE 32.35  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (CDFW)**
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

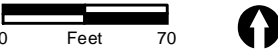
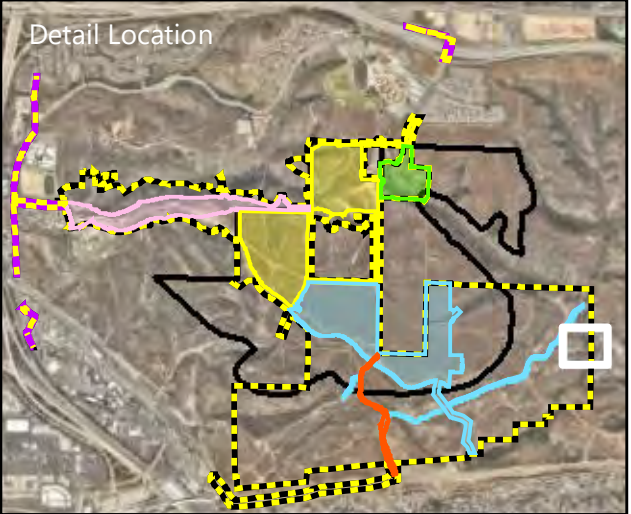
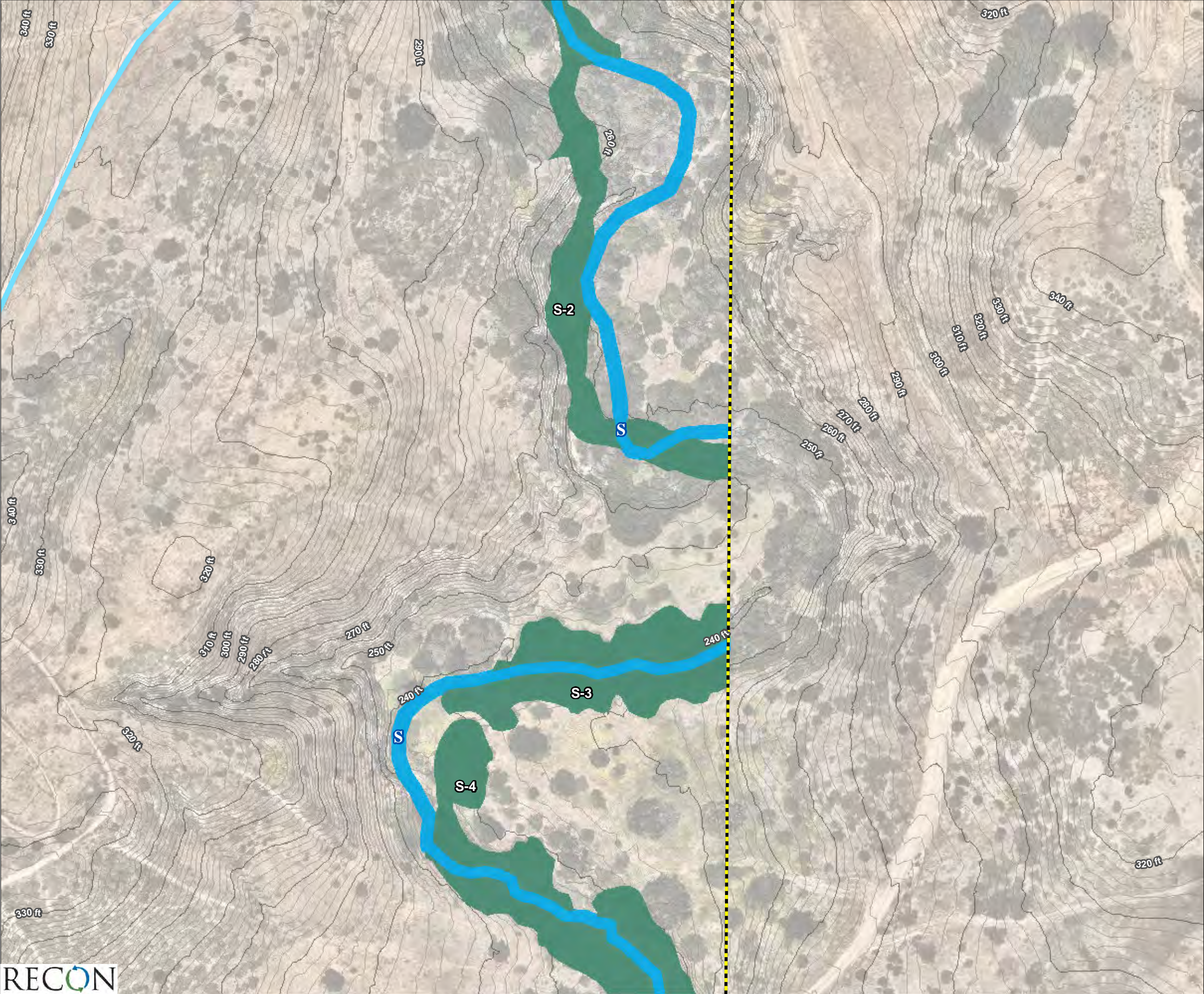


FIGURE 32.36  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (CDFW)**
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

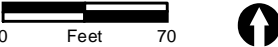
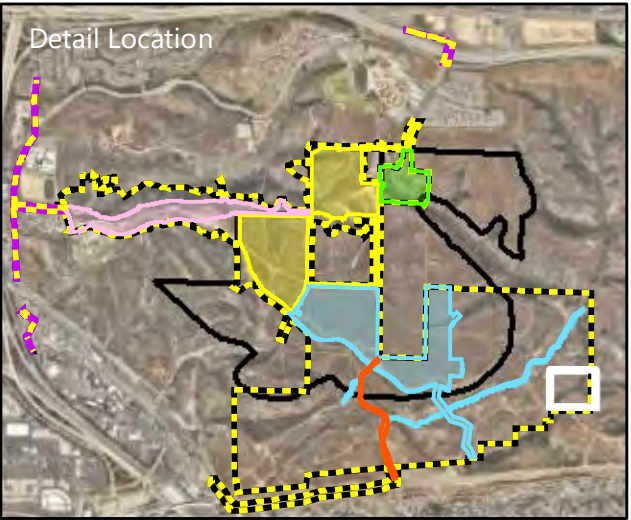
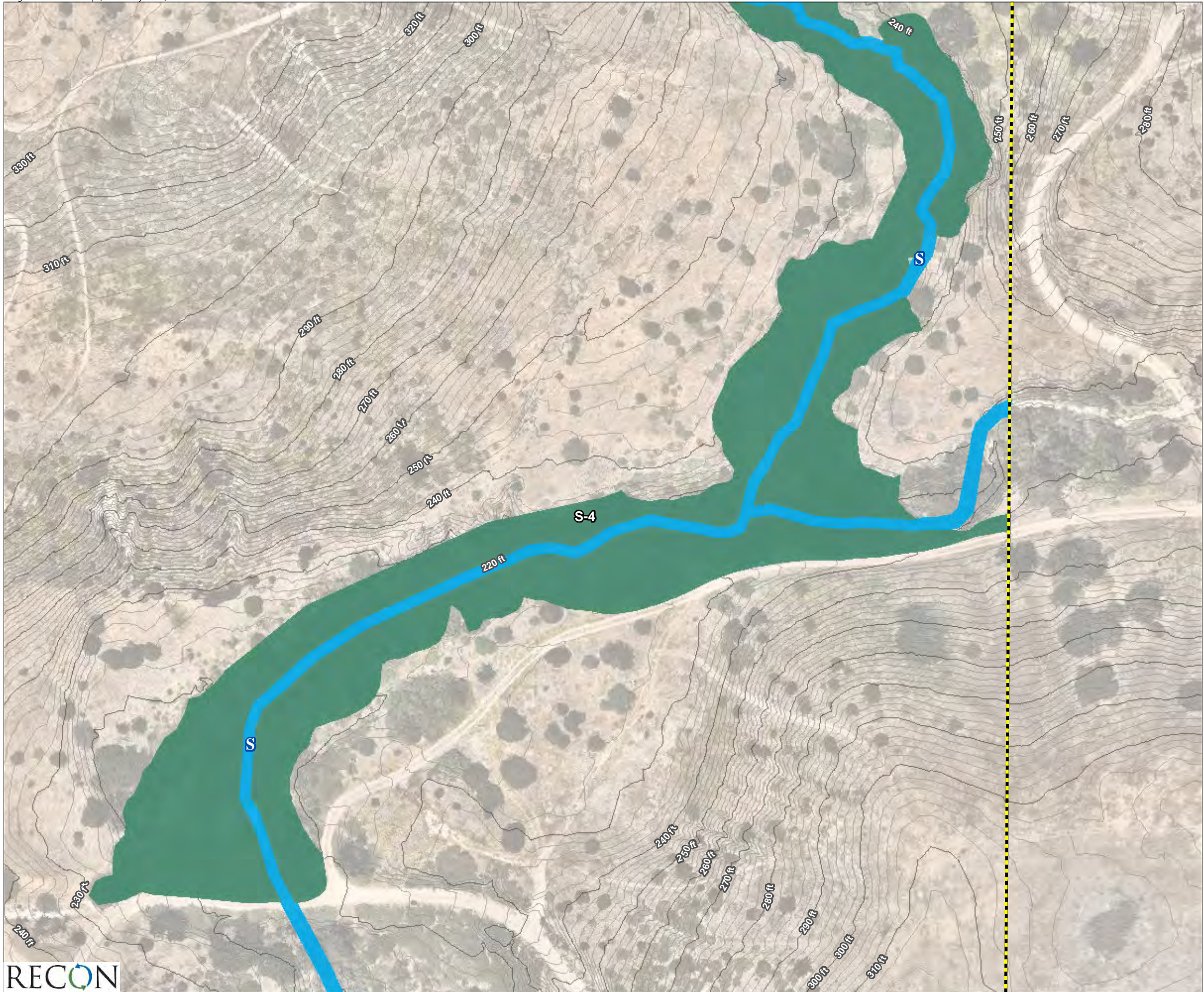


FIGURE 32.37  
Potential CDFW and RWQCB  
Waters of the State





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- Waters of the State (CDFW)**
  - Wetland (Waters ID)
- Waters of the State (CDFW & RWQCB)**
  - Non-Wetland Waters (Waters ID)

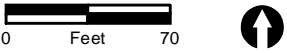
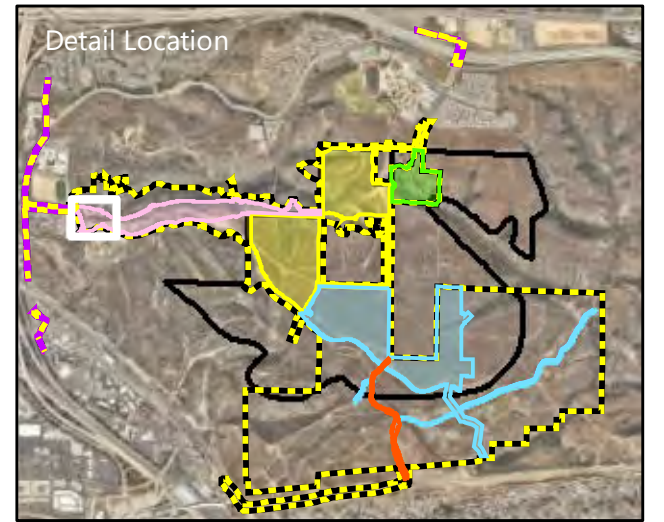
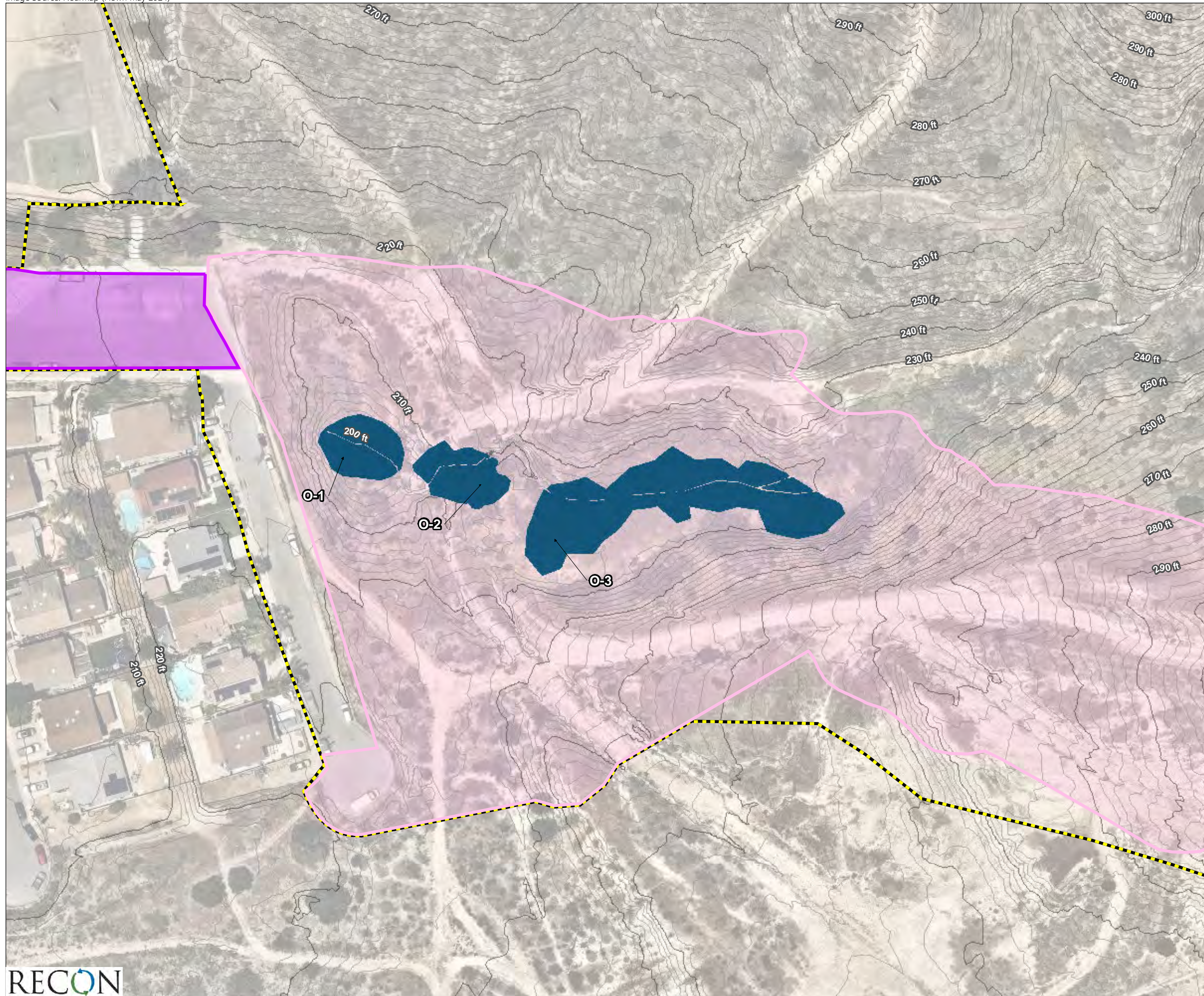


FIGURE 32.38  
Potential CDFW and RWQCB  
Waters of the State



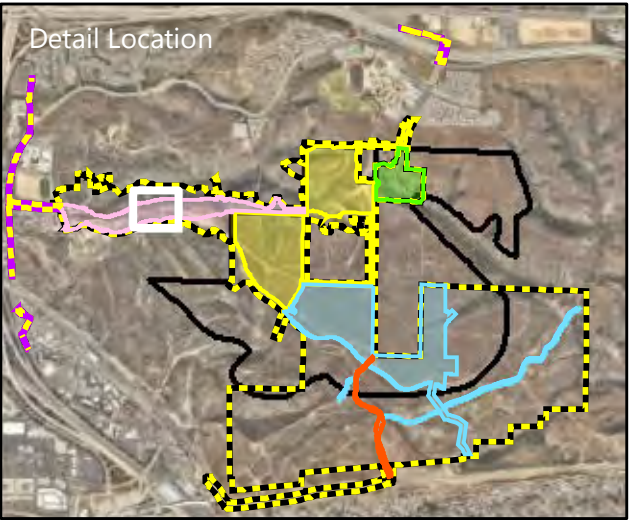
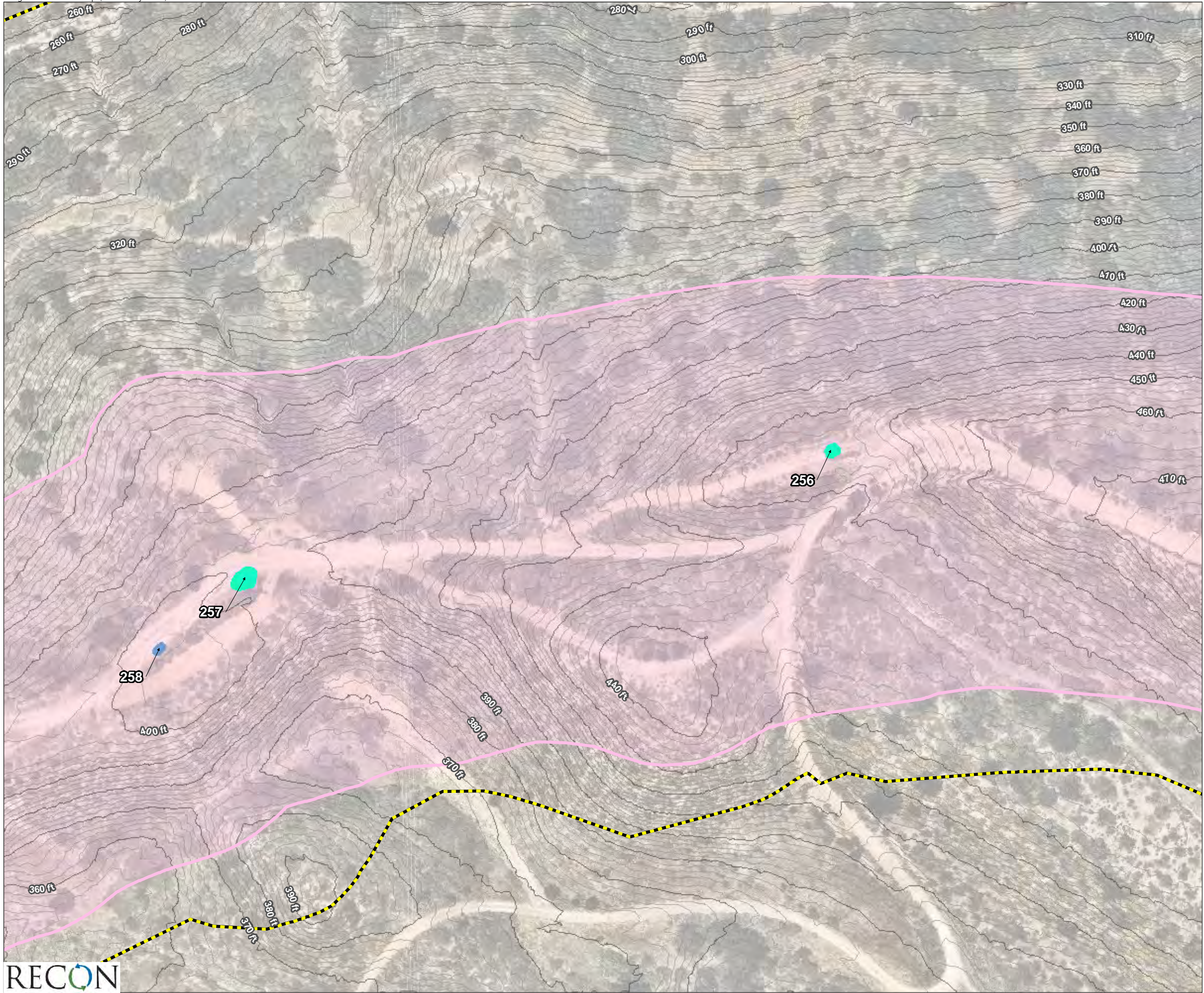


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- City of San Diego Wetlands**
  - Wetland (Waters ID)



FIGURE 33.1  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

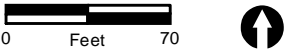
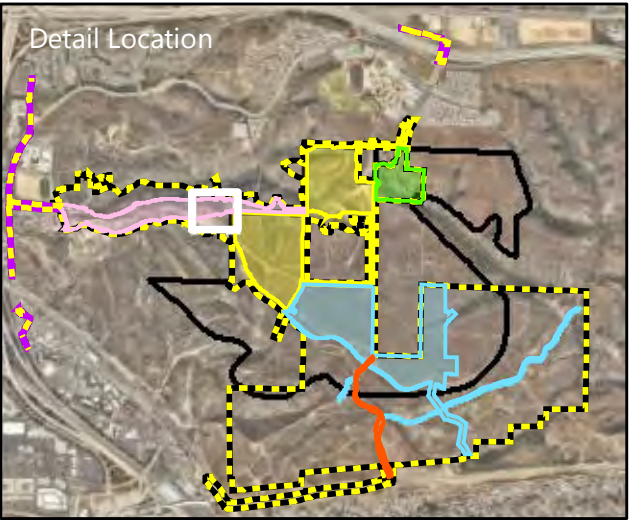
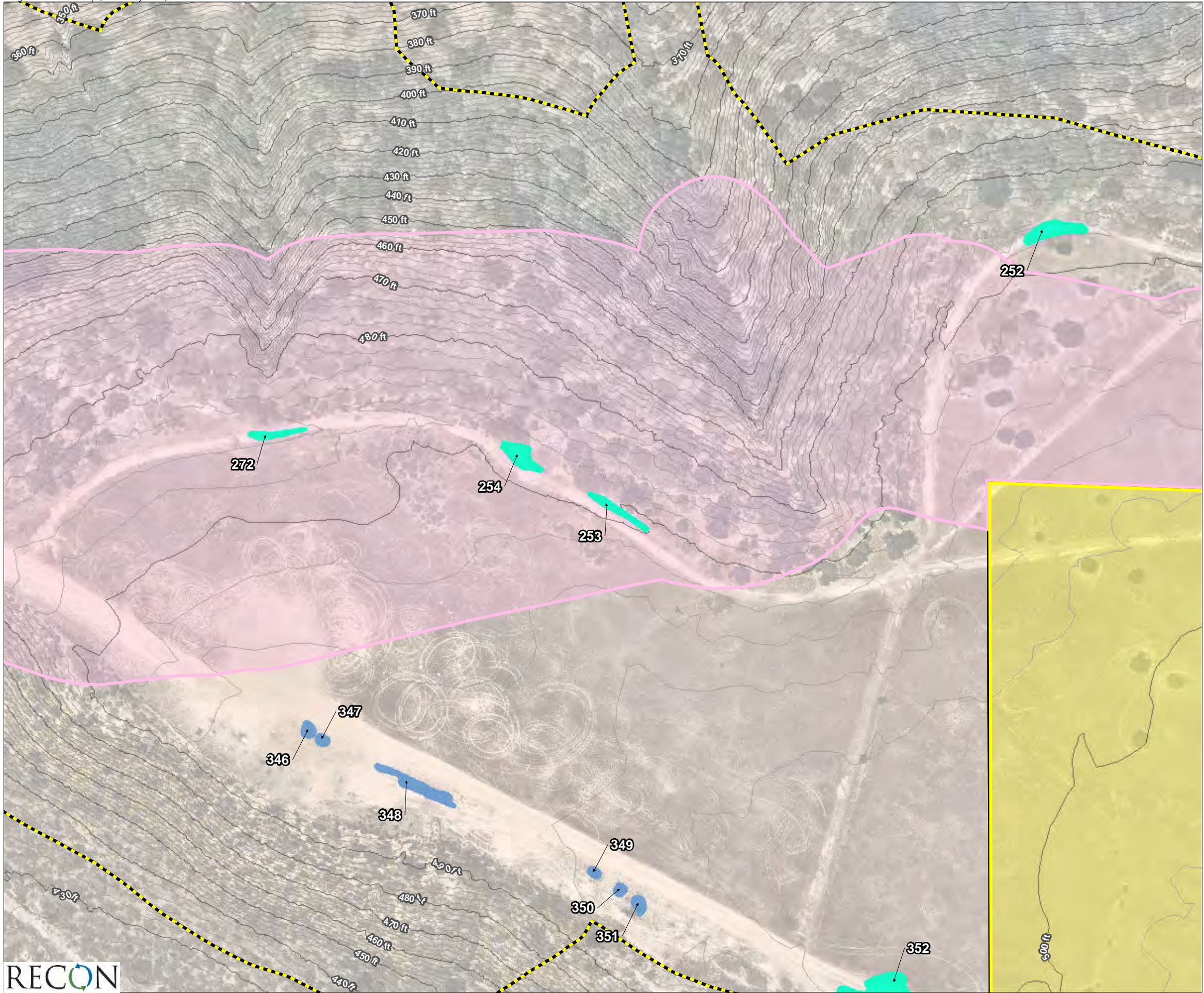


FIGURE 33.2  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

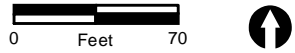
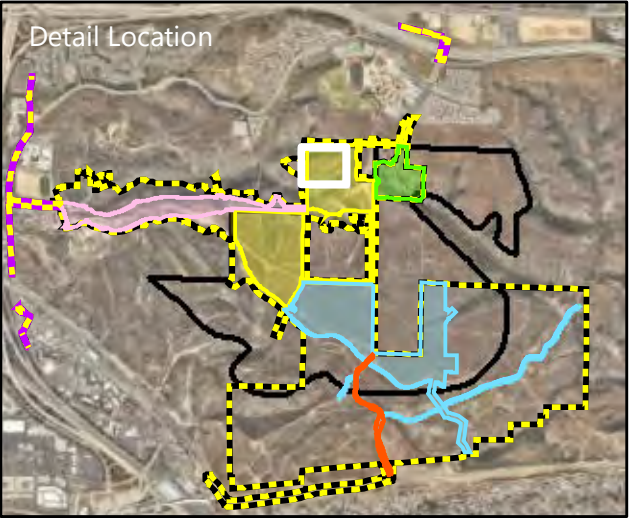
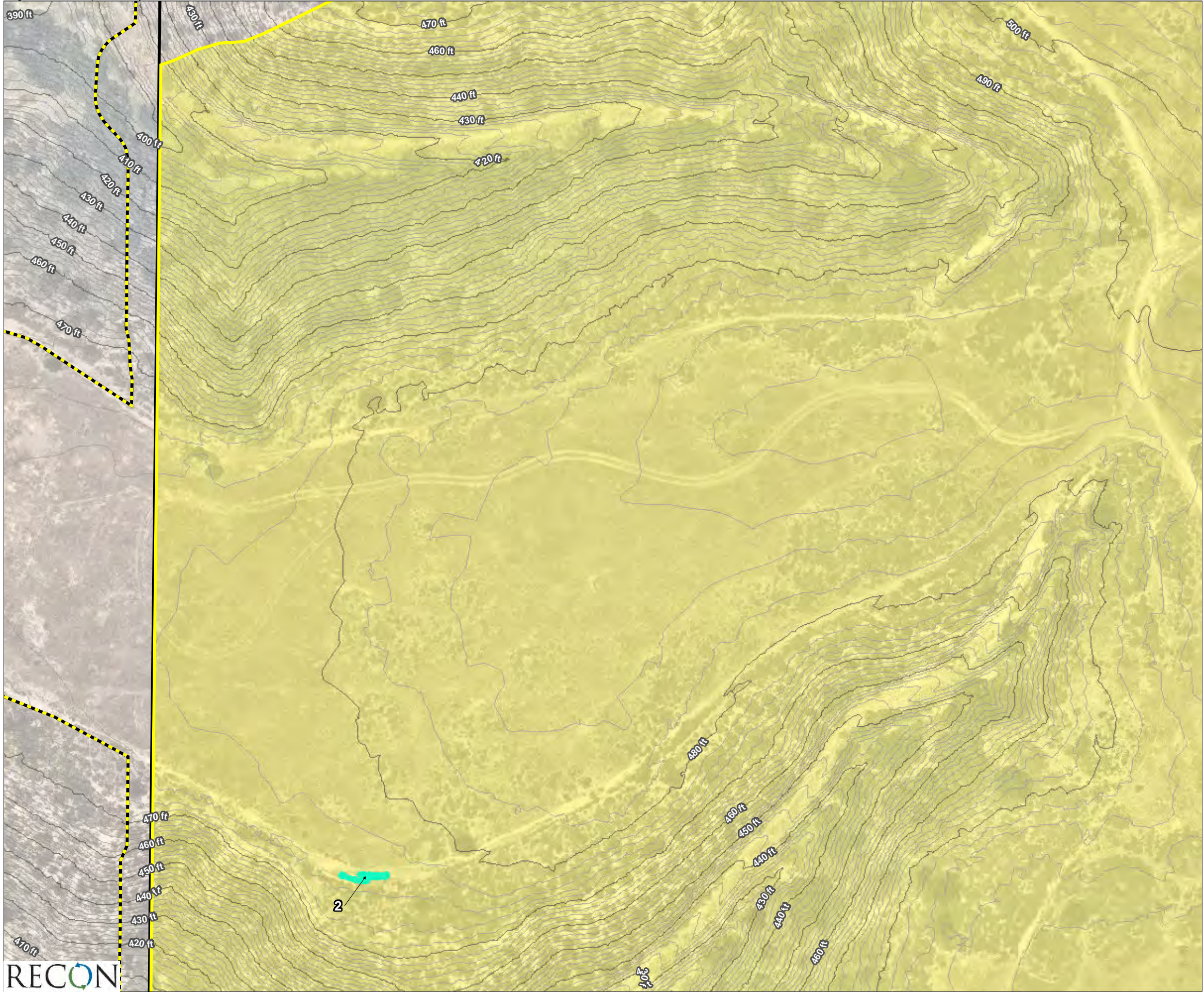


FIGURE 33.3  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area

**Project-level Phasing**

- Phase 1
- Phase 2
- Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements

**City of San Diego Wetlands**

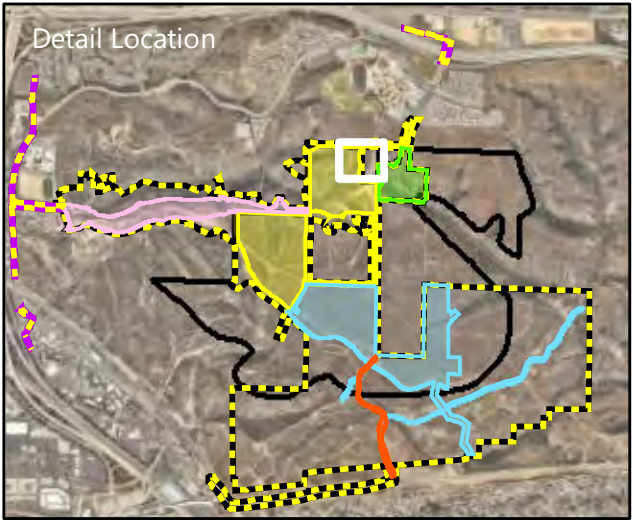
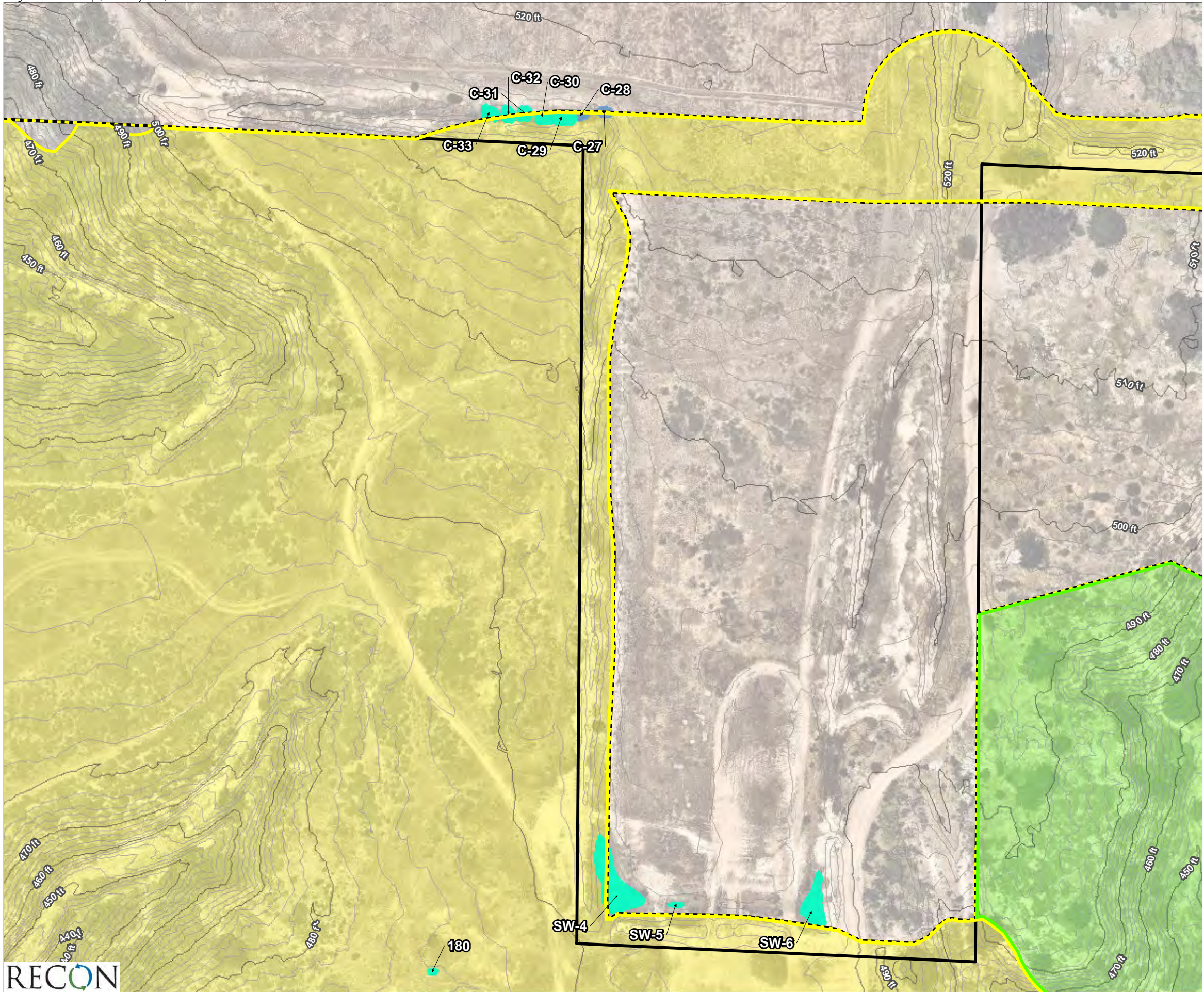
- Vernal Pool (Waters ID)

0 Feet 70



FIGURE 33.4  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

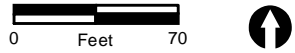
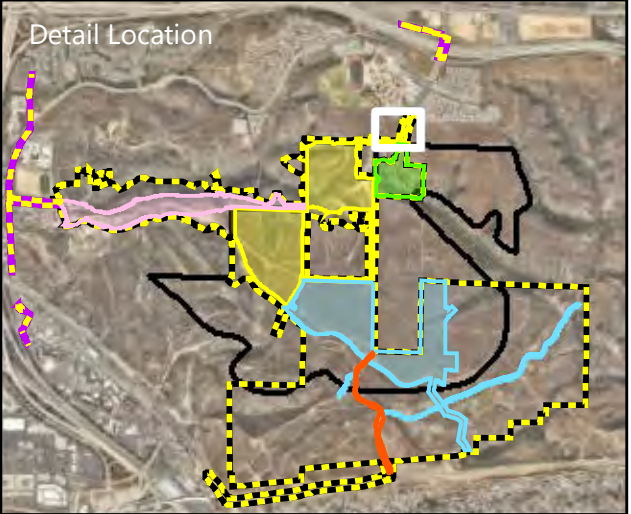
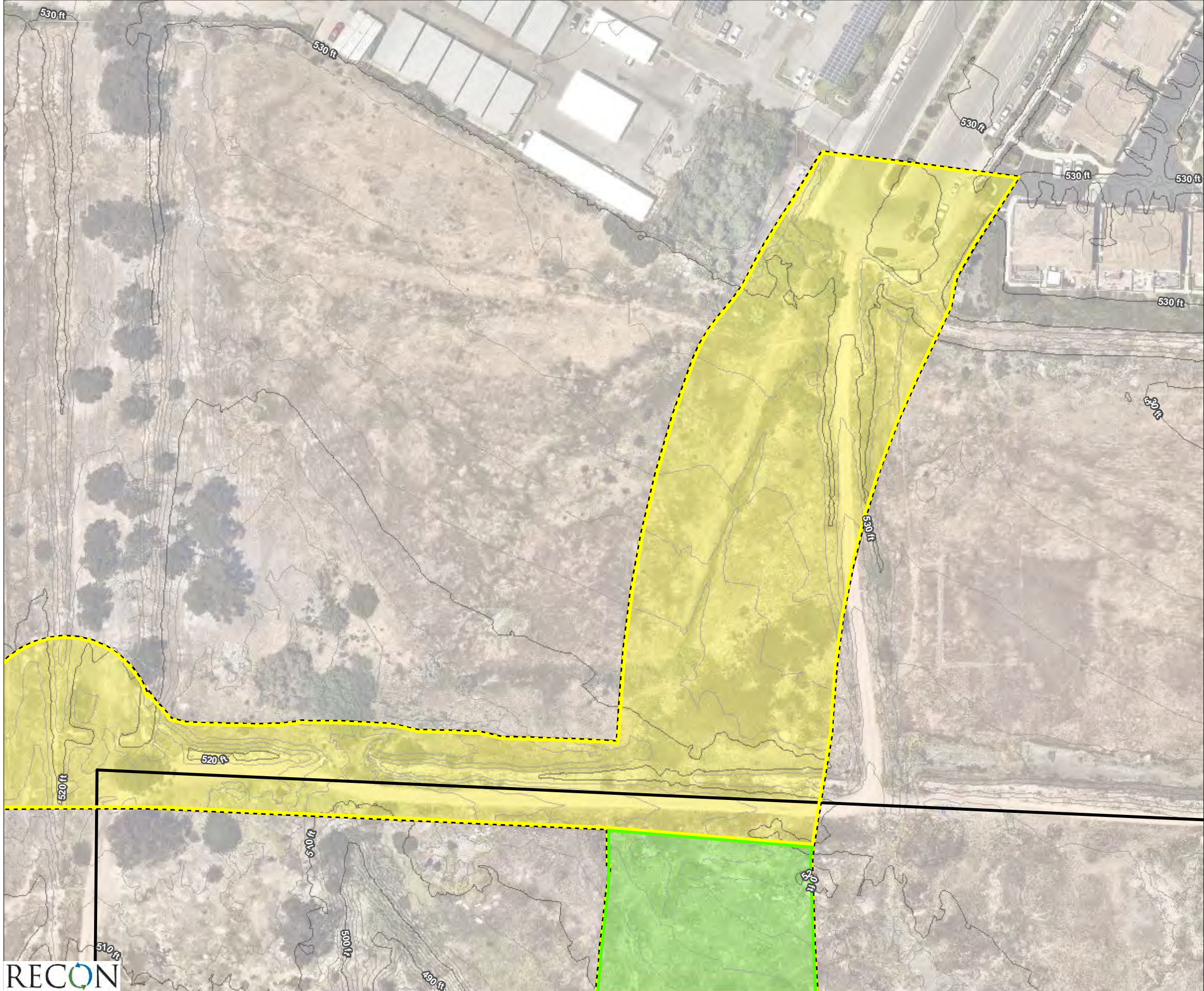


FIGURE 33.5  
City of San Diego Wetlands





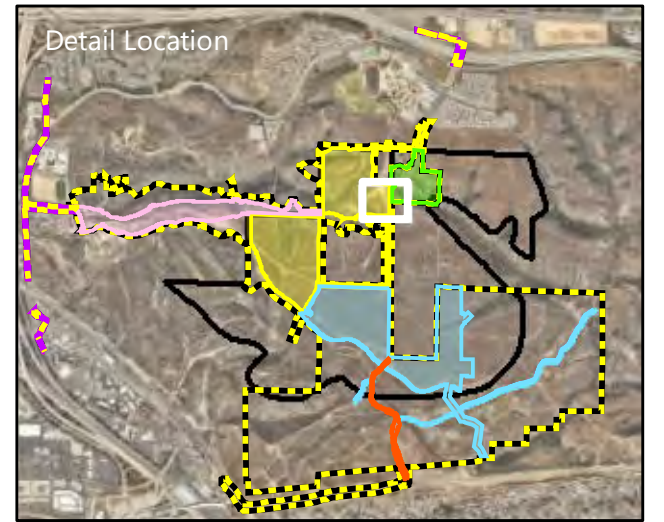
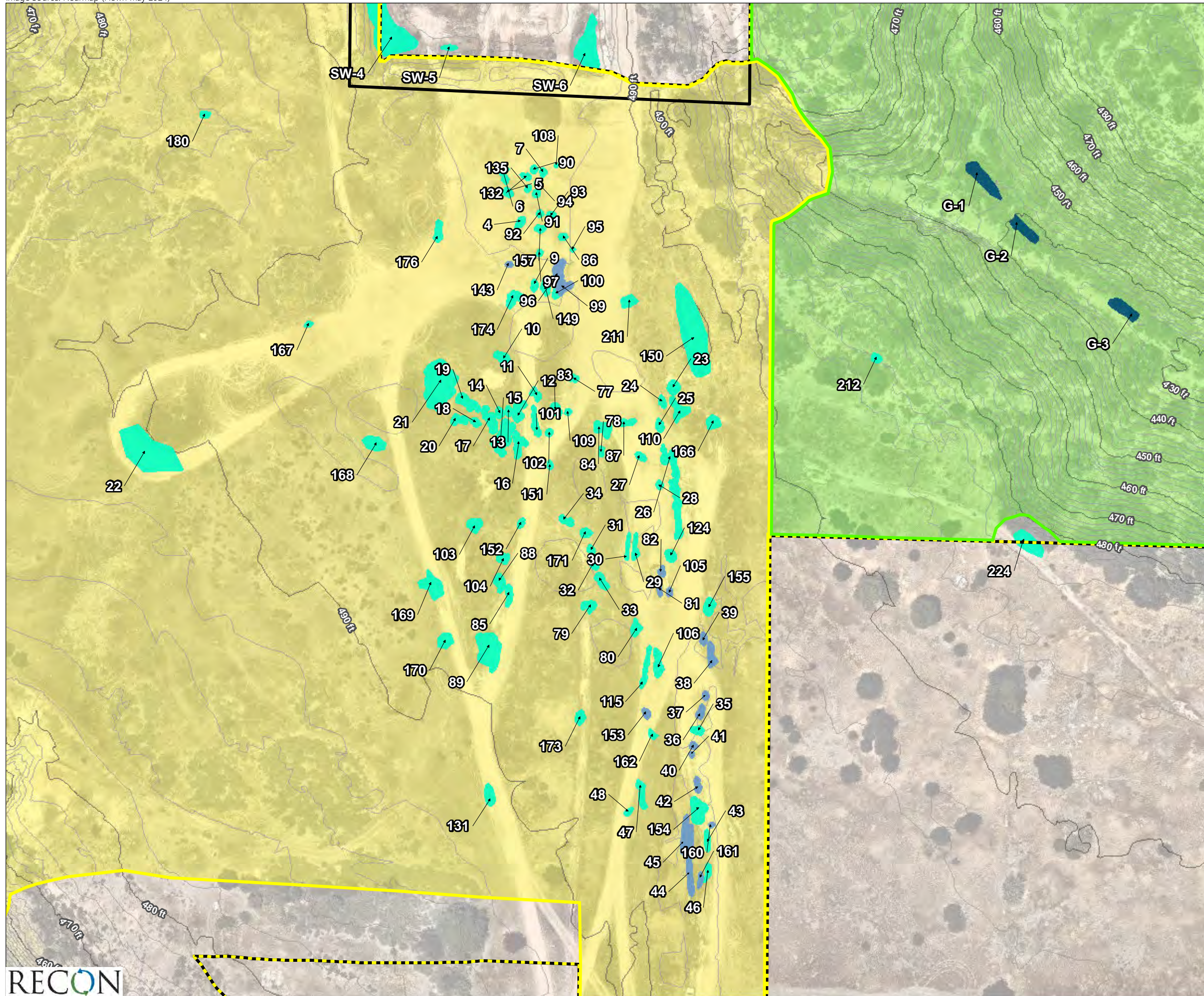
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements

0 Feet 70



FIGURE 33.6  
City of San Diego Wetlands



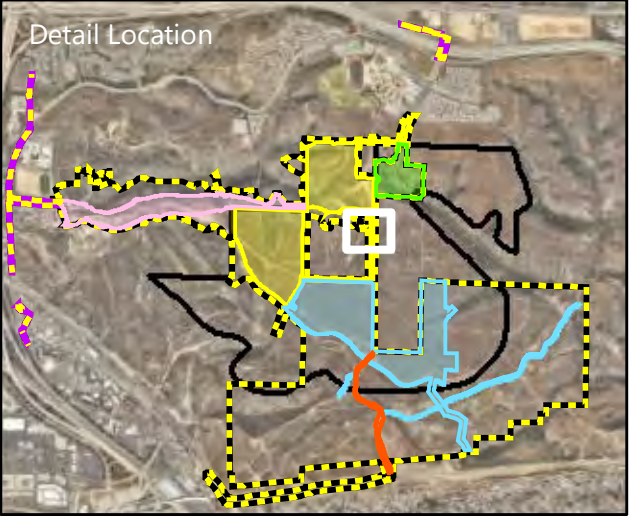
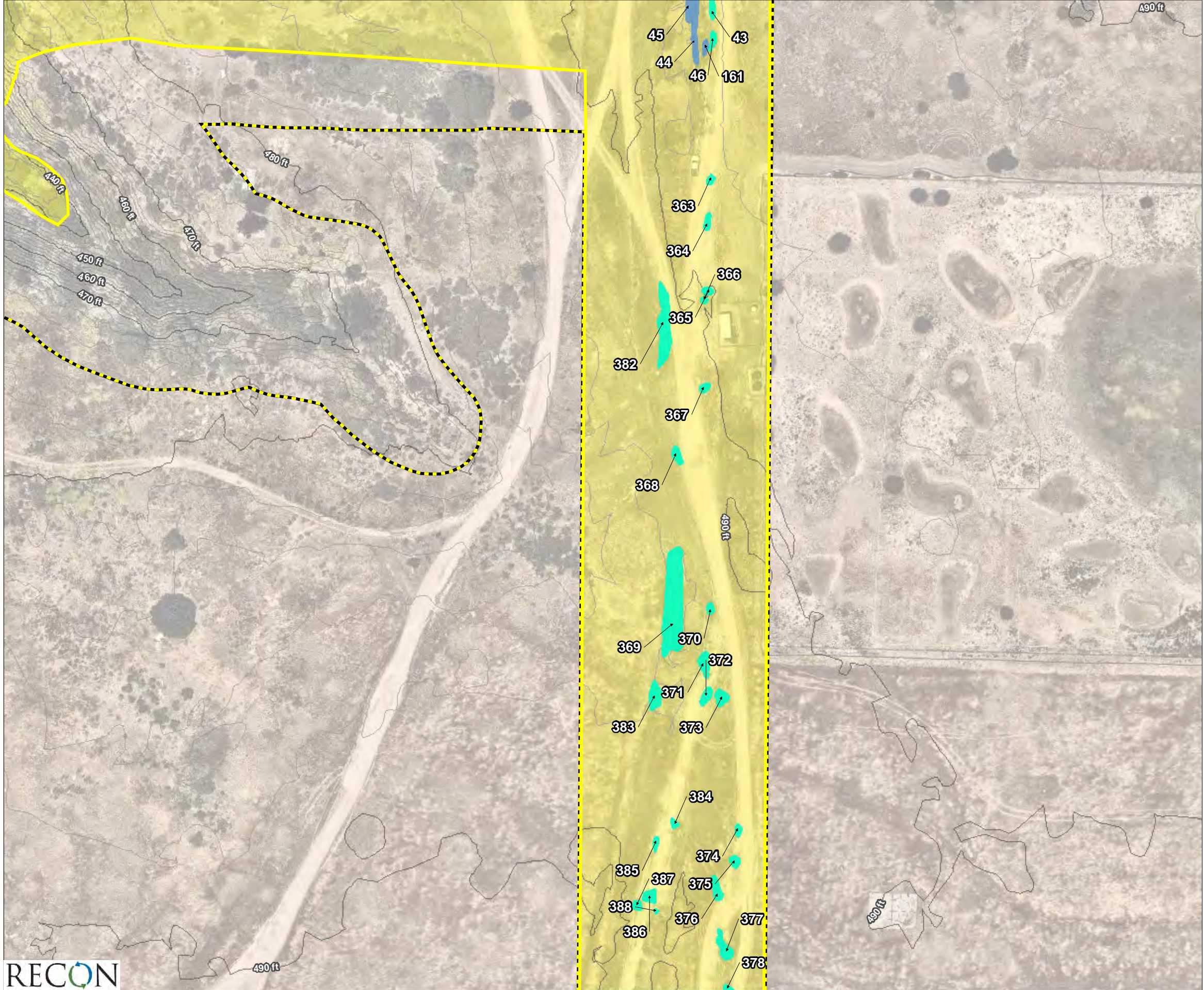


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Wetland (Waters ID)
  - Disturbed Wetland (Waters ID)



FIGURE 33.7  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

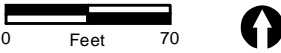


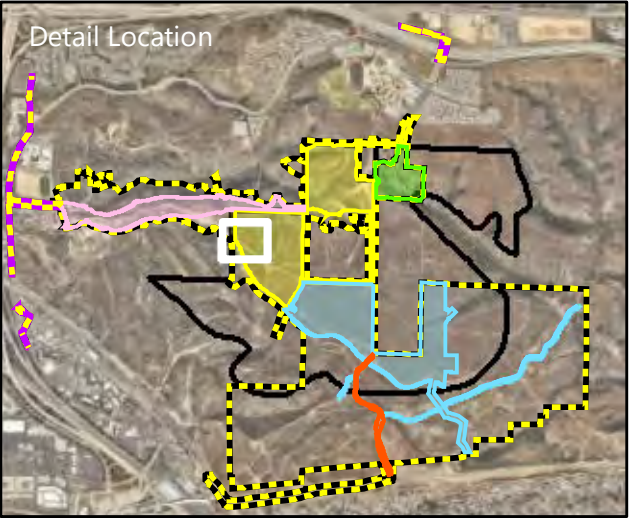
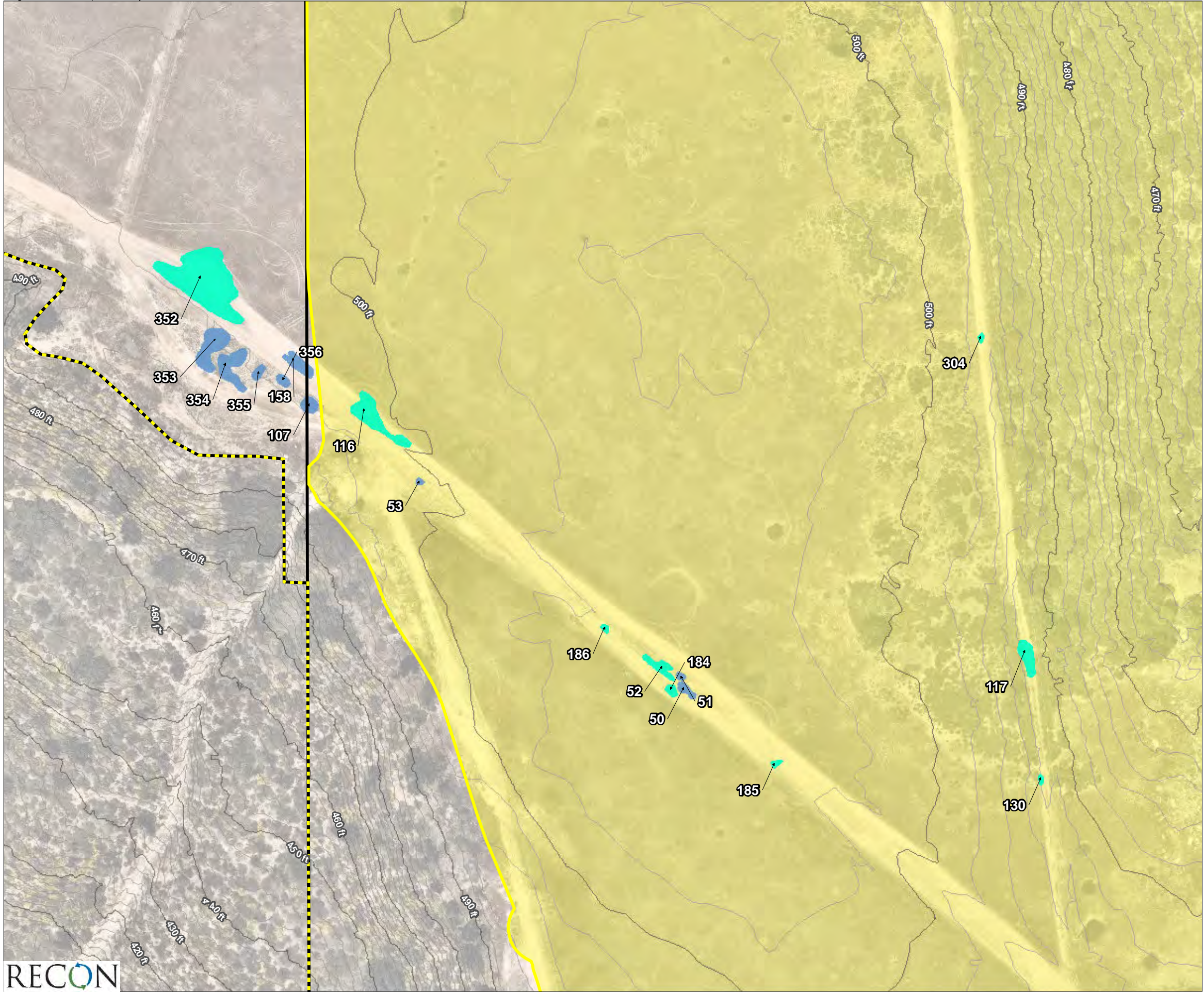
FIGURE 33.8  
City of San Diego Wetlands





FIGURE 33.9  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

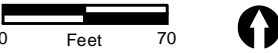
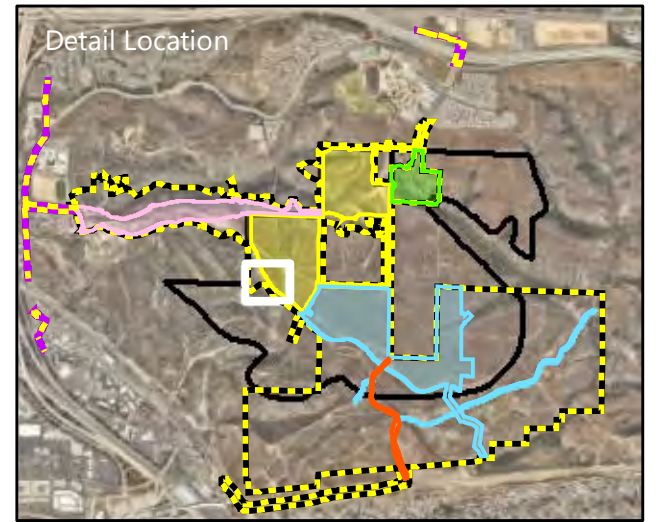
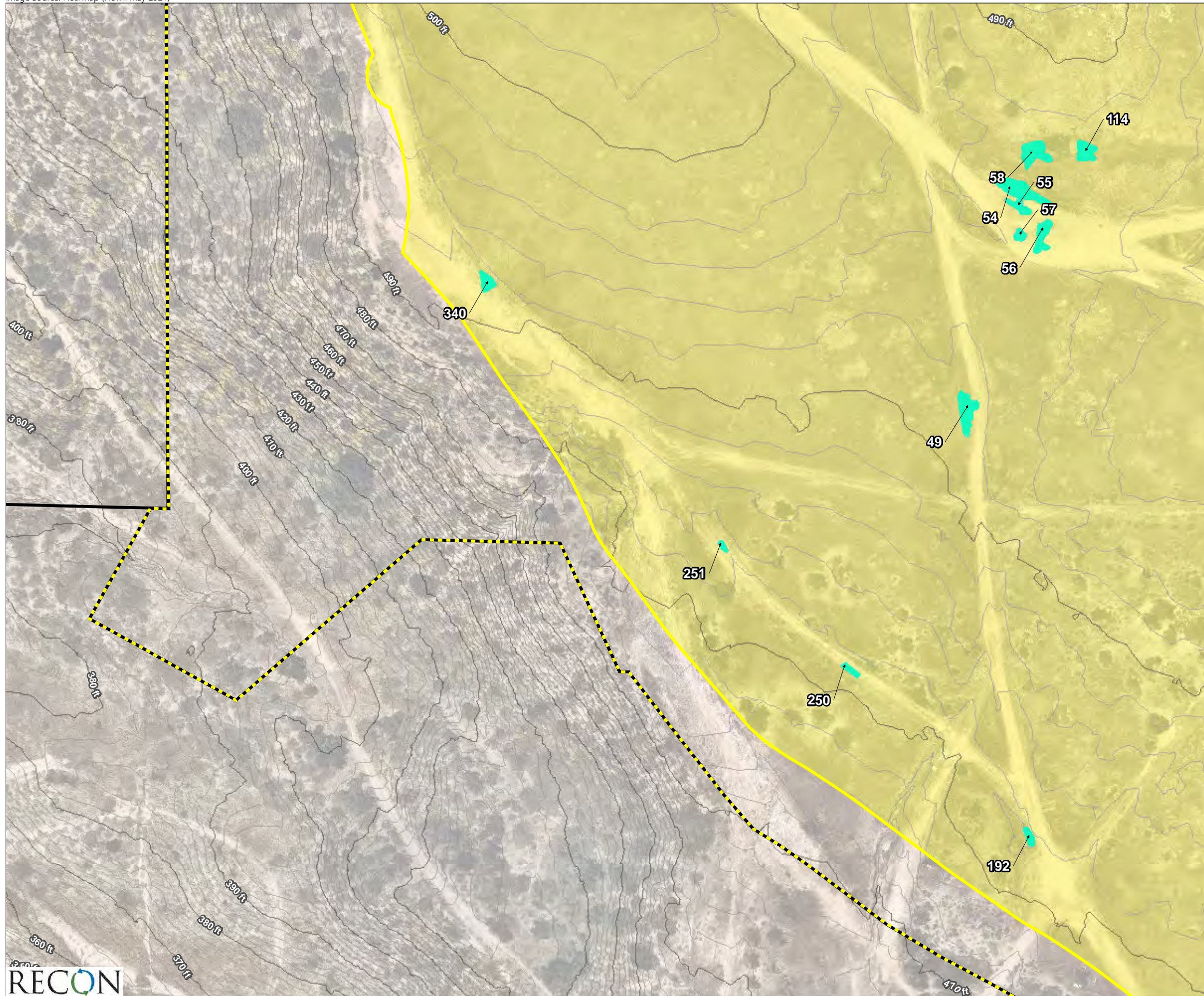


FIGURE 33.10  
City of San Diego Wetlands





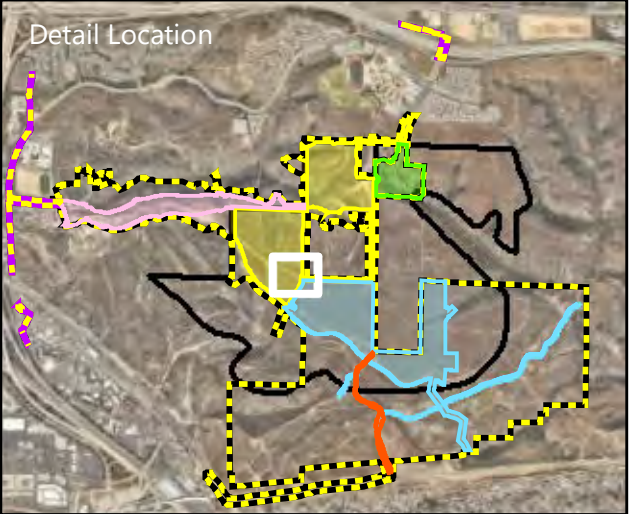
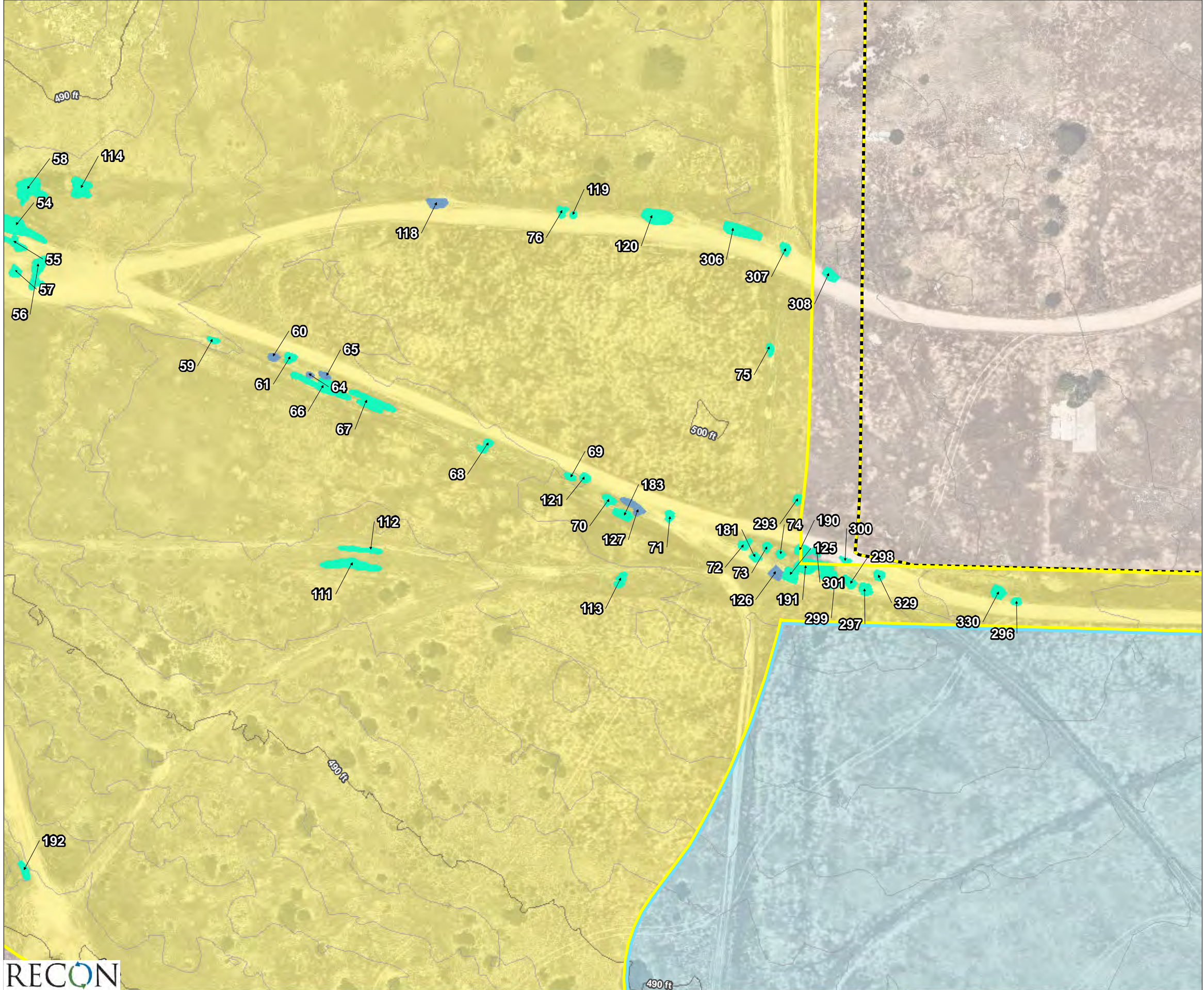
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)

0 Feet 70



FIGURE 33.11  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

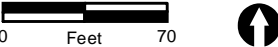
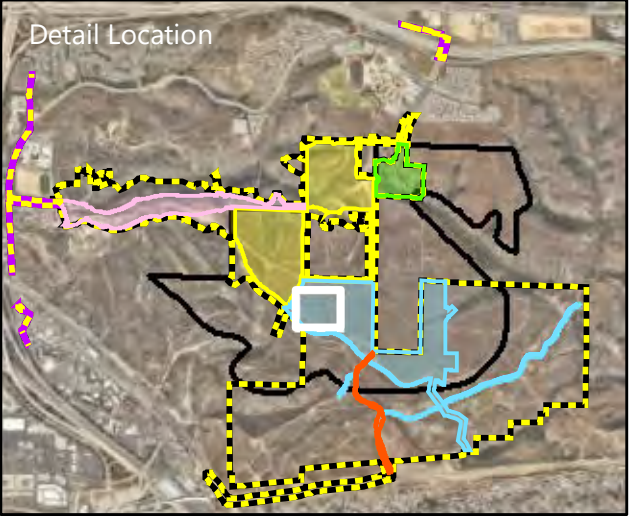


FIGURE 33.12  
City of San Diego Wetlands



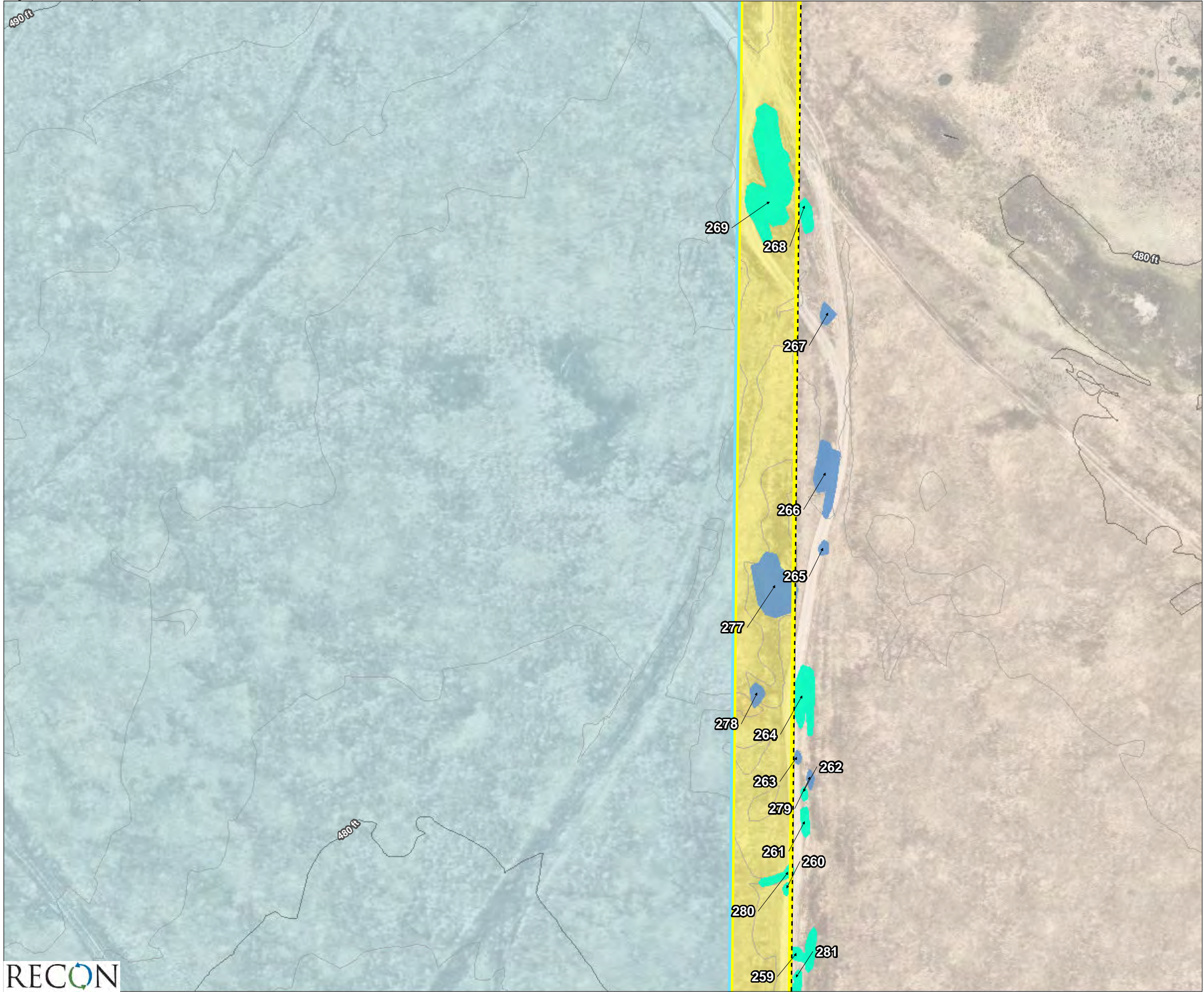


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)



FIGURE 33.13  
City of San Diego Wetlands



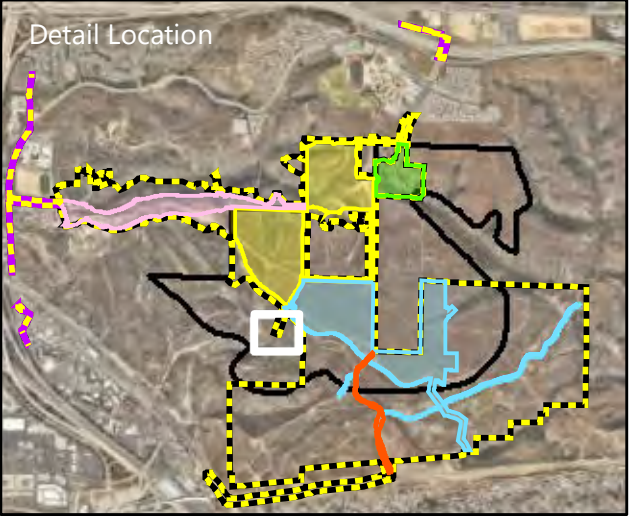


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)



FIGURE 33.14  
City of San Diego Wetlands



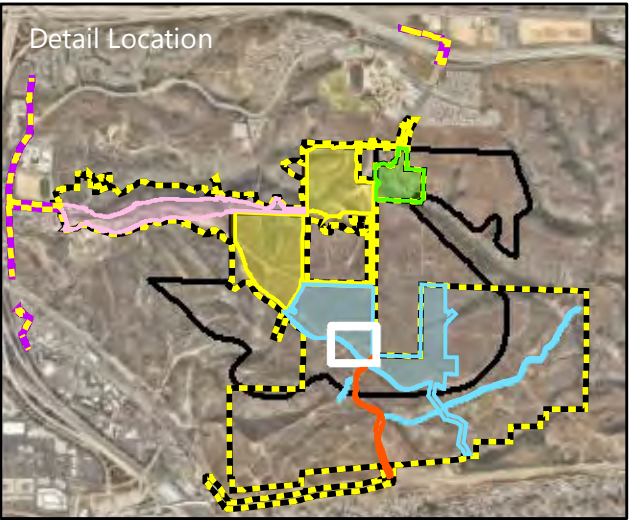
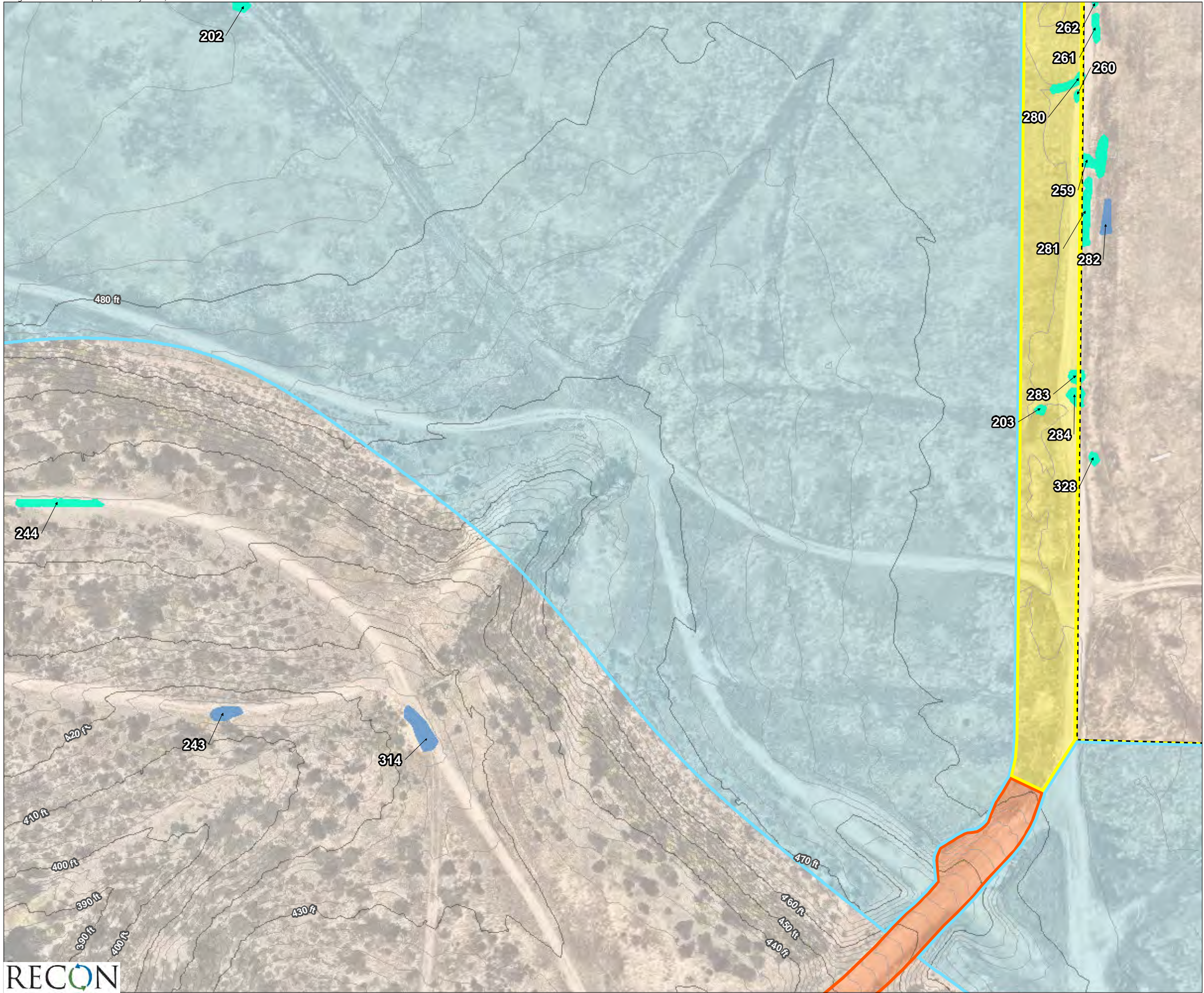


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)



FIGURE 33.15  
City of San Diego Wetlands



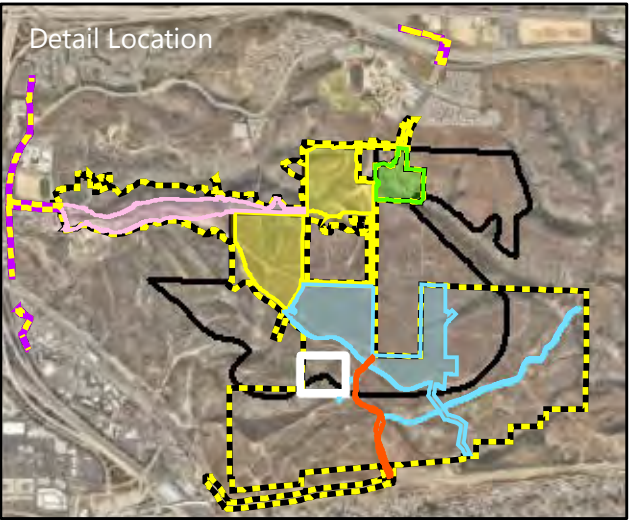


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)



FIGURE 33.16  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

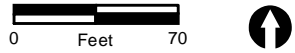
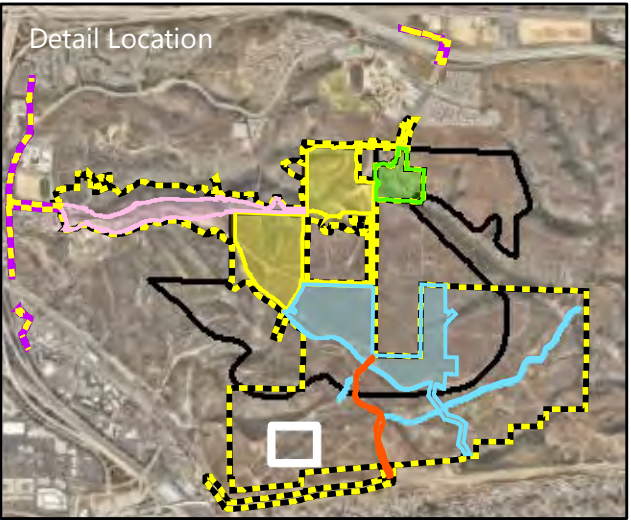


FIGURE 33.17  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area

**Project-level Phasing**

- Phase 1
- Phase 2
- Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements

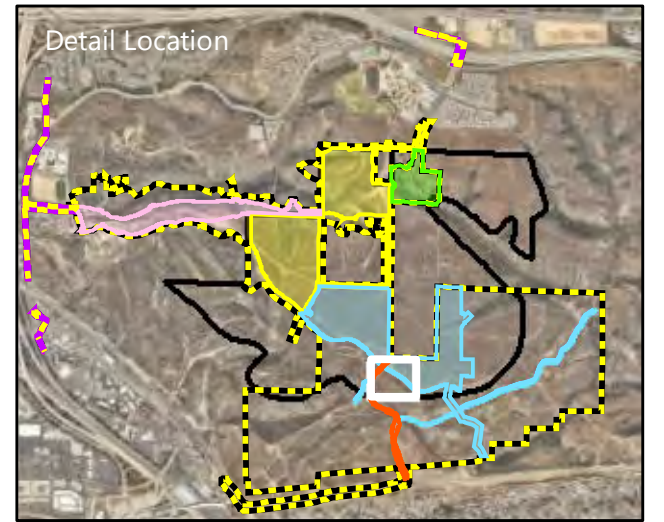
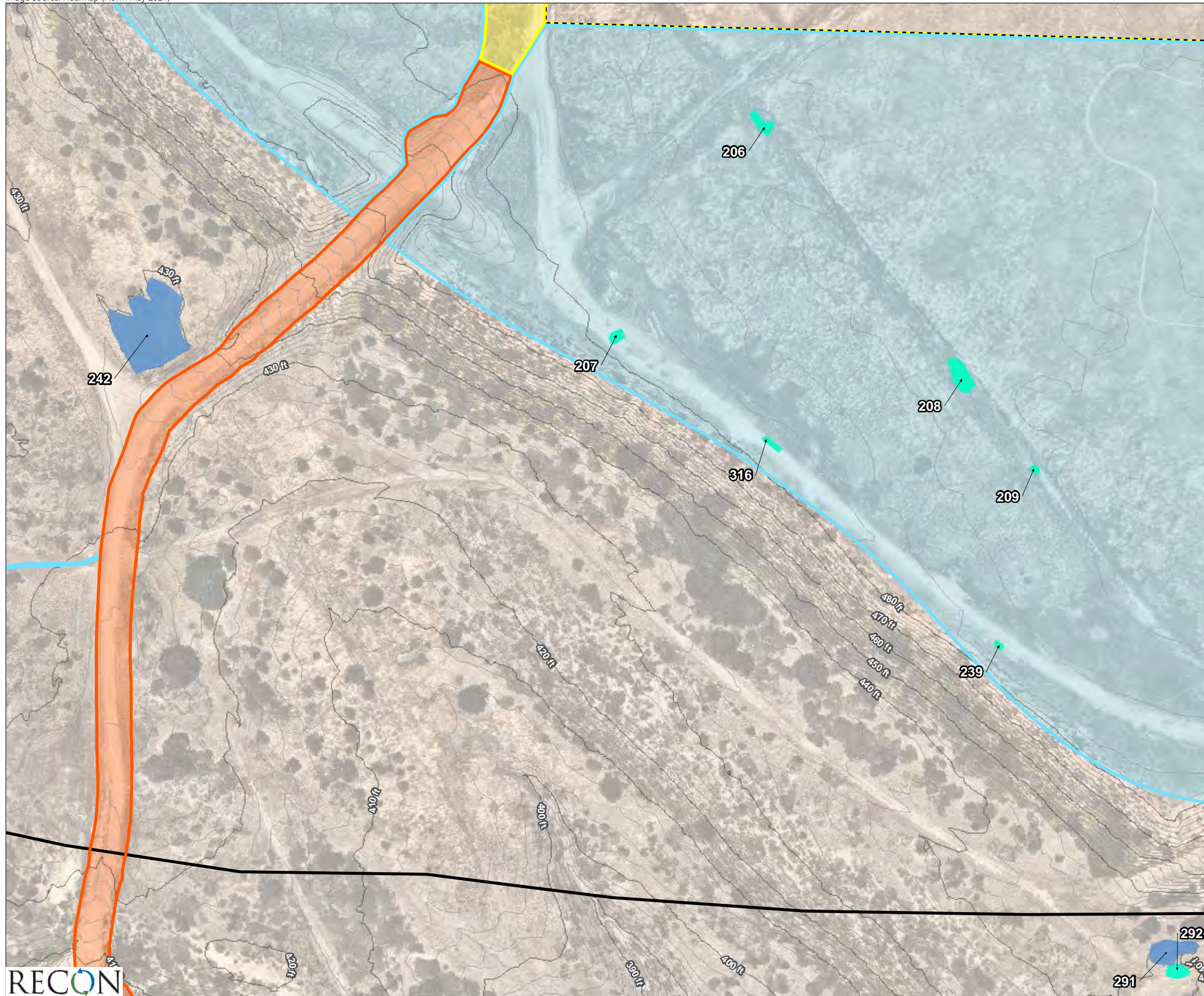
**City of San Diego Wetlands**

- Wetland (Waters ID)



FIGURE 33.18  
City of San Diego Wetlands



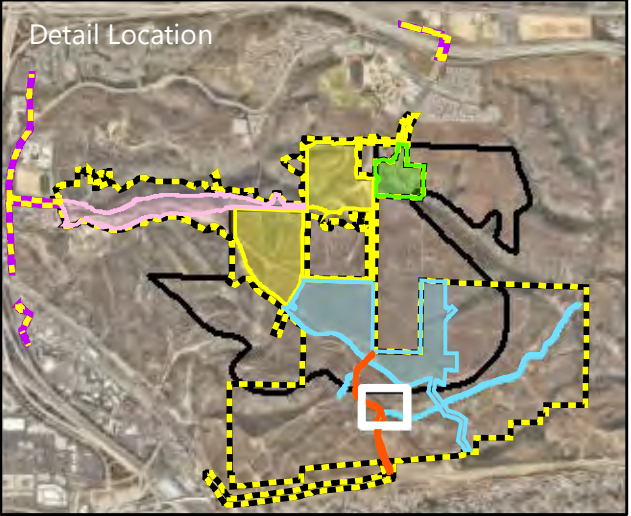
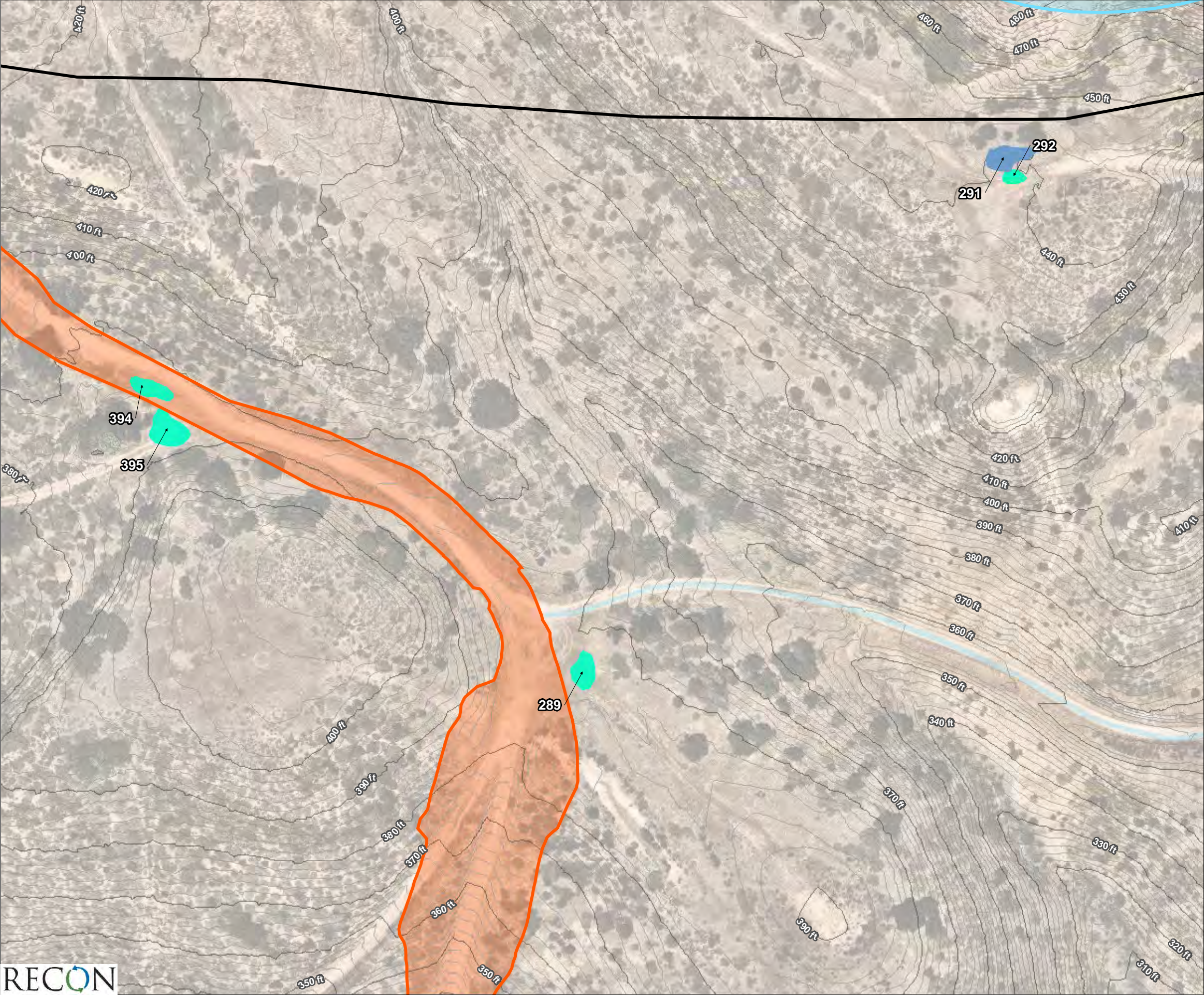


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)



FIGURE 33.19  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

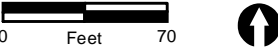
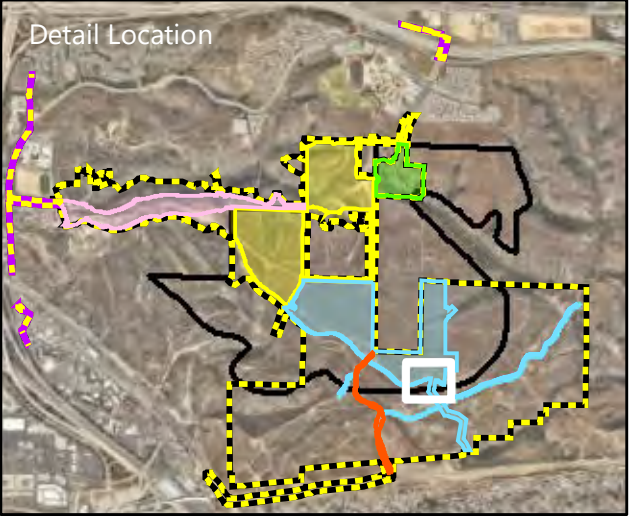


FIGURE 33.20  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

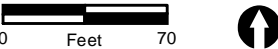
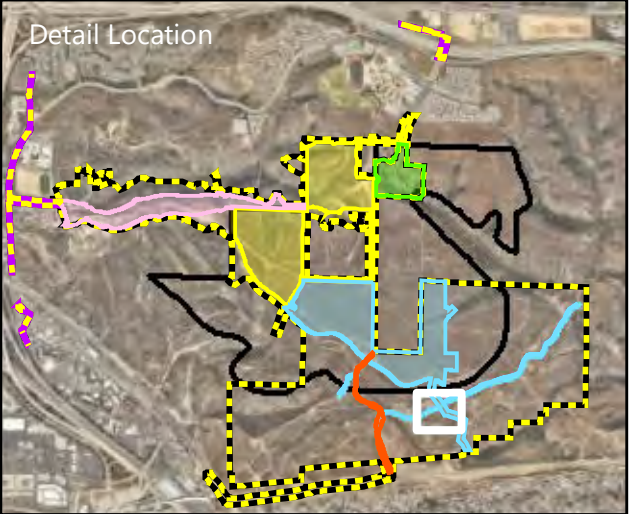


FIGURE 33.21  
City of San Diego Wetlands





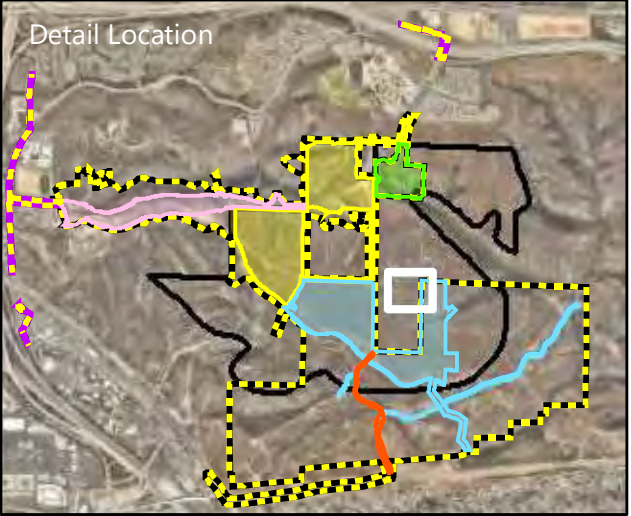
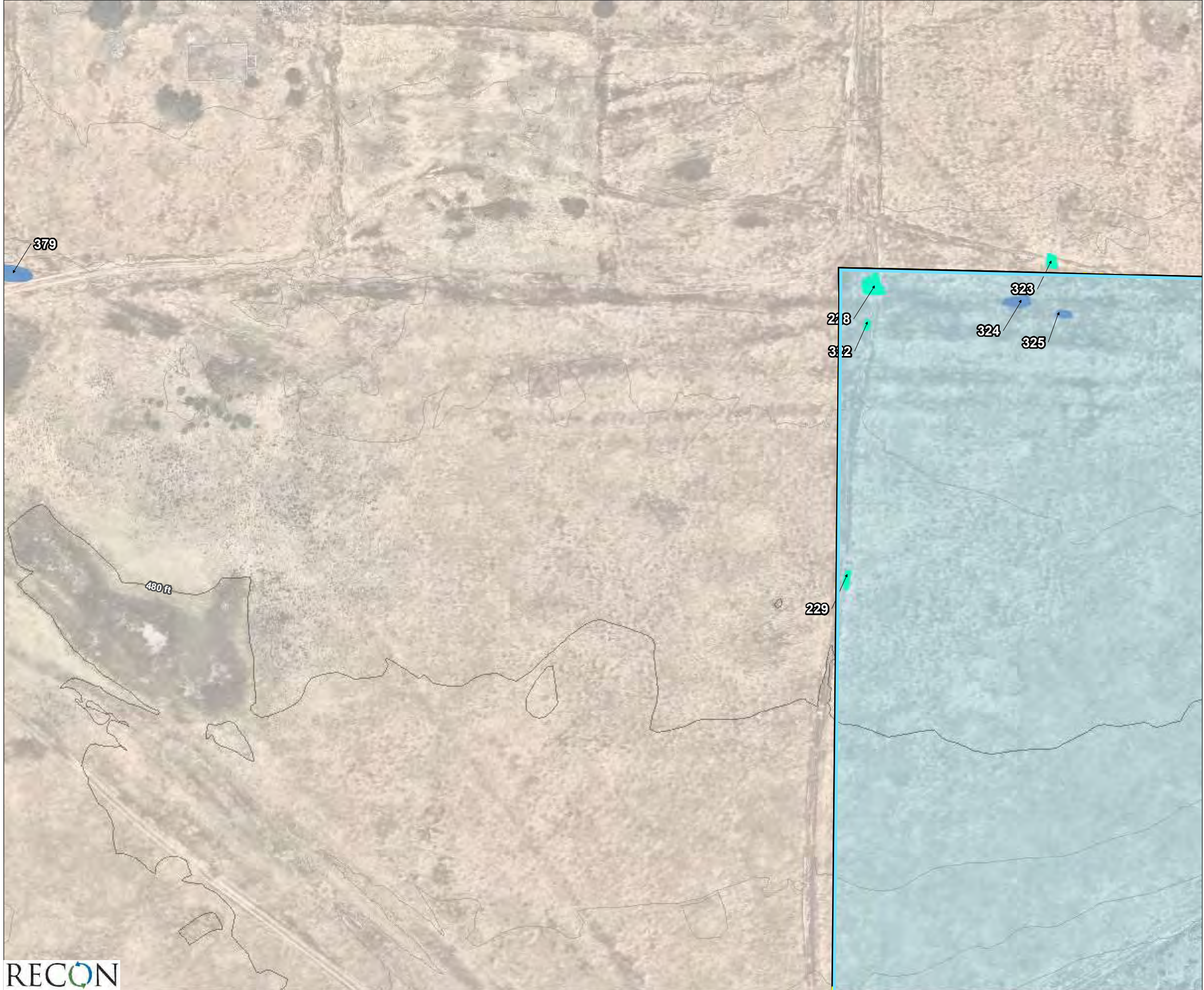
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
- Phase 1
- Phase 2
- Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements

0 Feet 70



FIGURE 33.22  
City of San Diego Wetlands





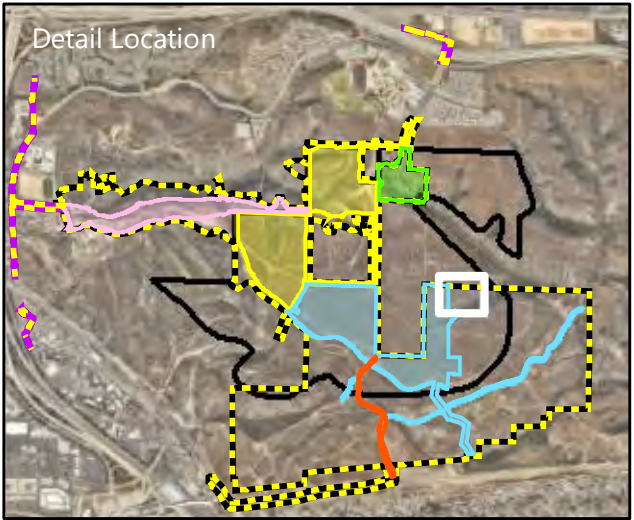
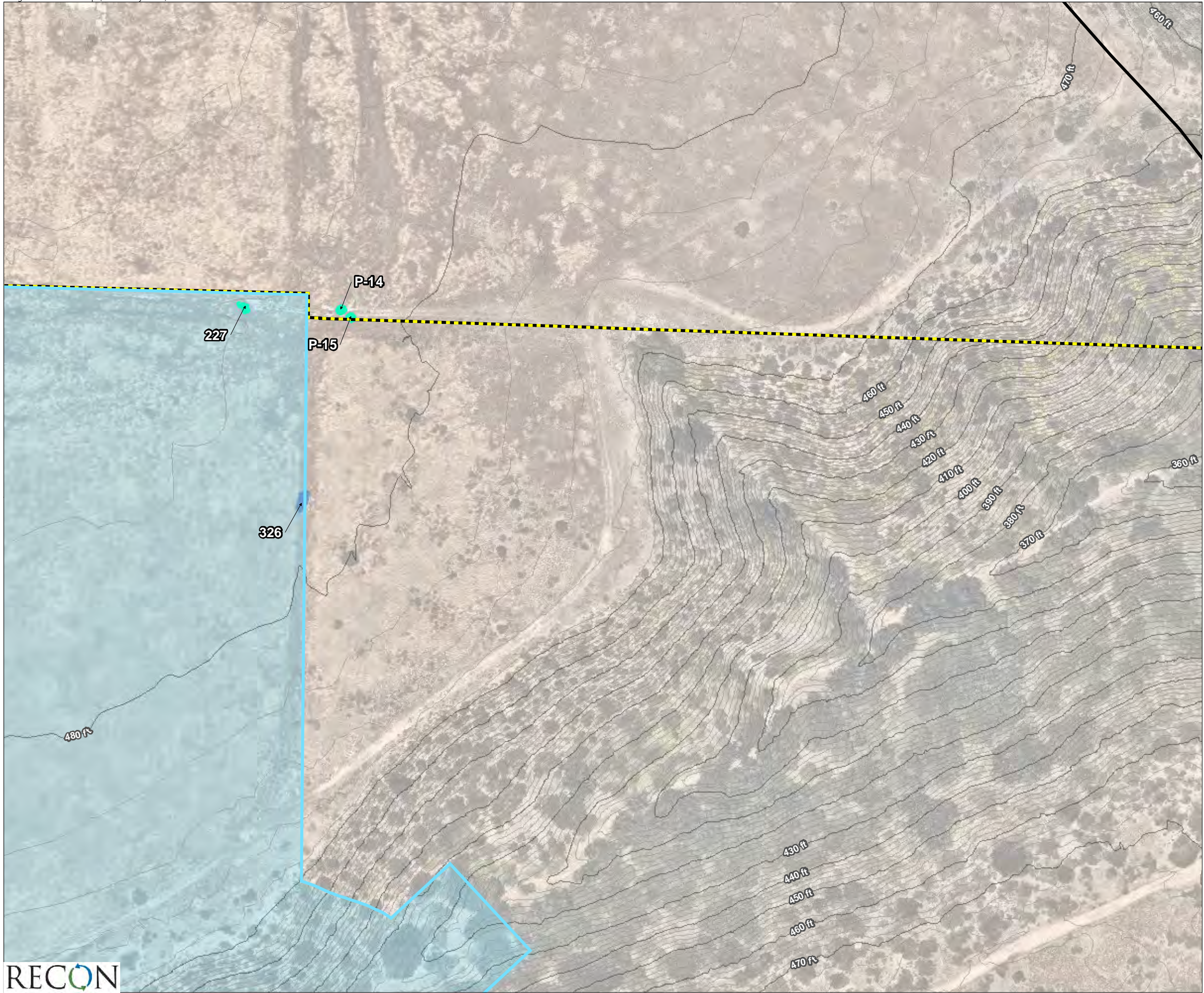
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

0 Feet 70



FIGURE 33.23  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)

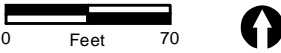
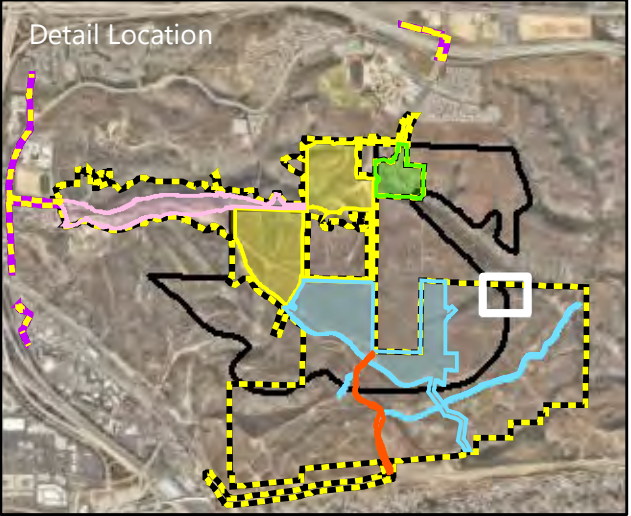
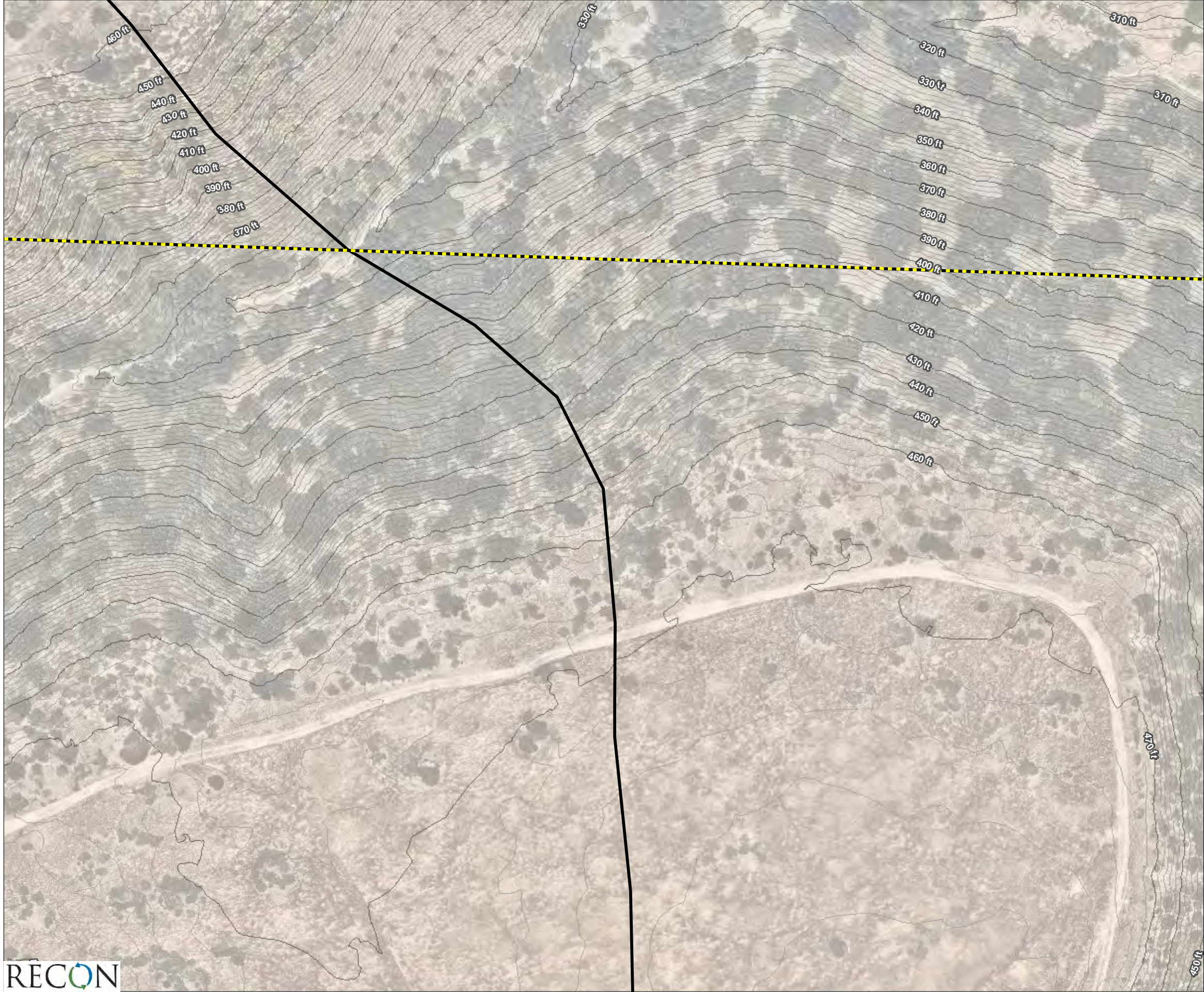


FIGURE 33.24  
City of San Diego Wetlands





- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements

0 Feet 70



FIGURE 33.25  
City of San Diego Wetlands



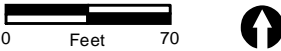
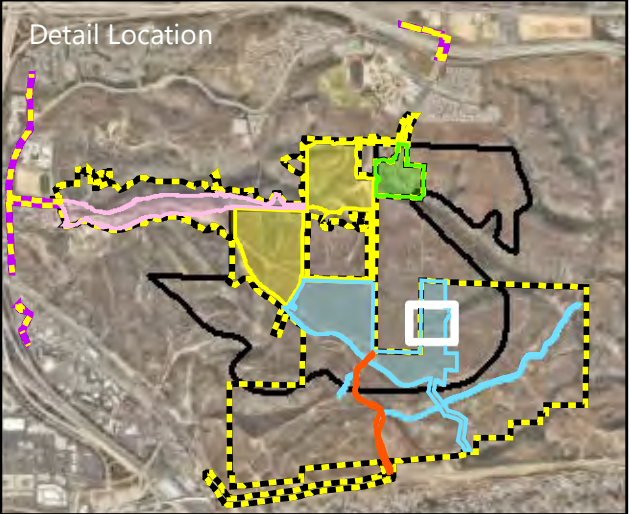
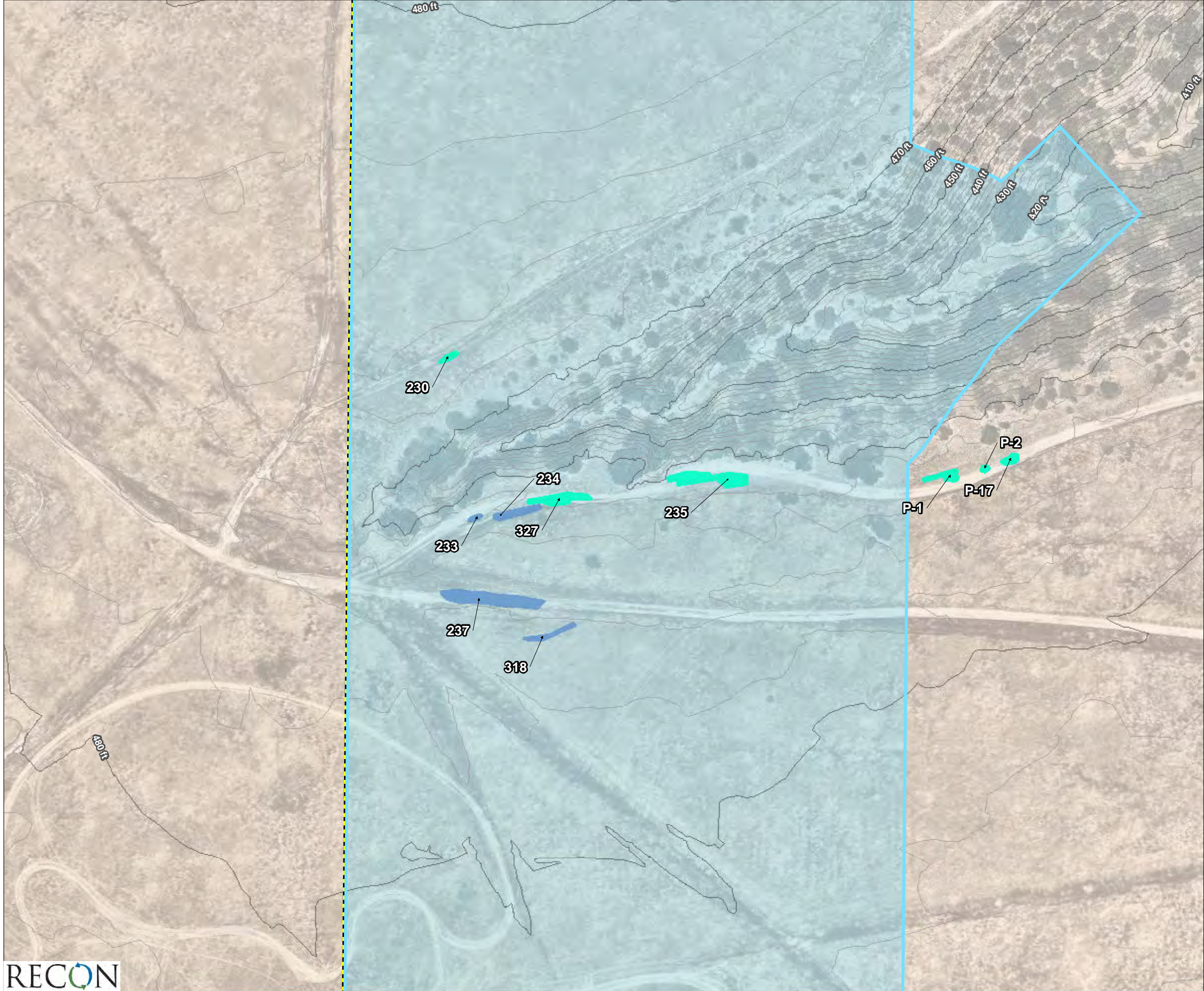
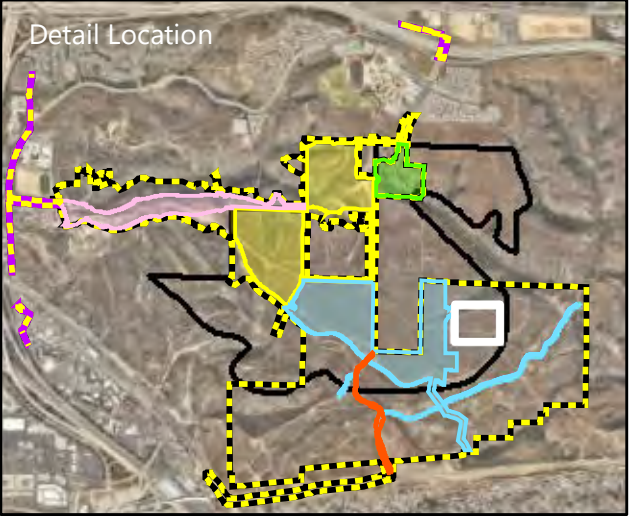


FIGURE 33.26  
City of San Diego Wetlands













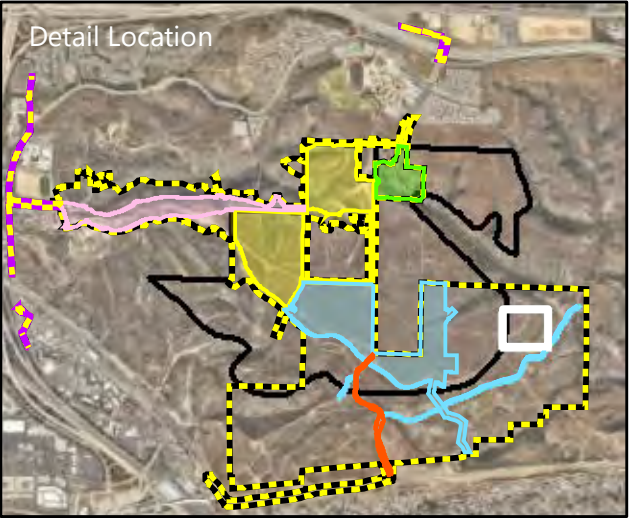
-  Specific Plan Boundary
-  Project-level Survey Area
- Project-level Phasing**
-  Phase 1
-  Phase 2
-  Phase 4
-  Beyer Boulevard
-  Emergency Vehicle Access
-  Off-site Improvements



FIGURE 33.27  
City of San Diego Wetlands



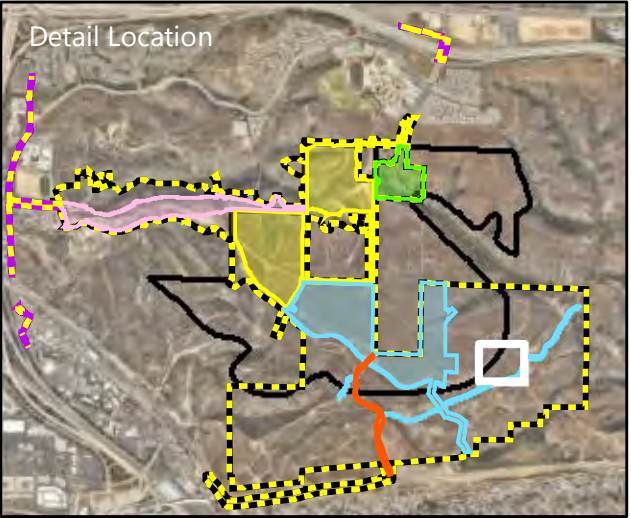


- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements



FIGURE 33.28  
City of San Diego Wetlands





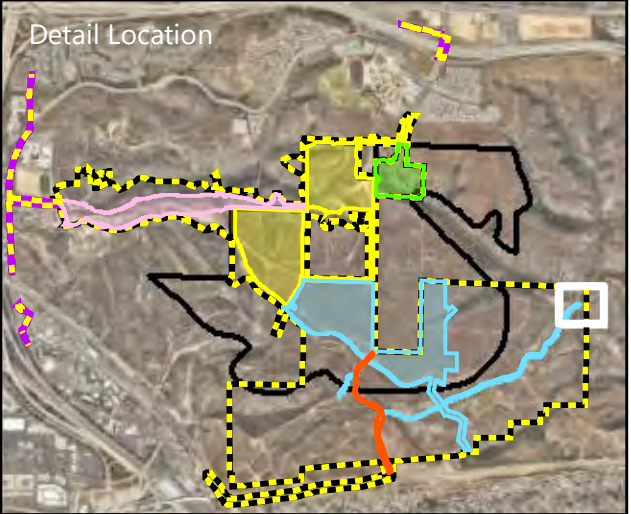
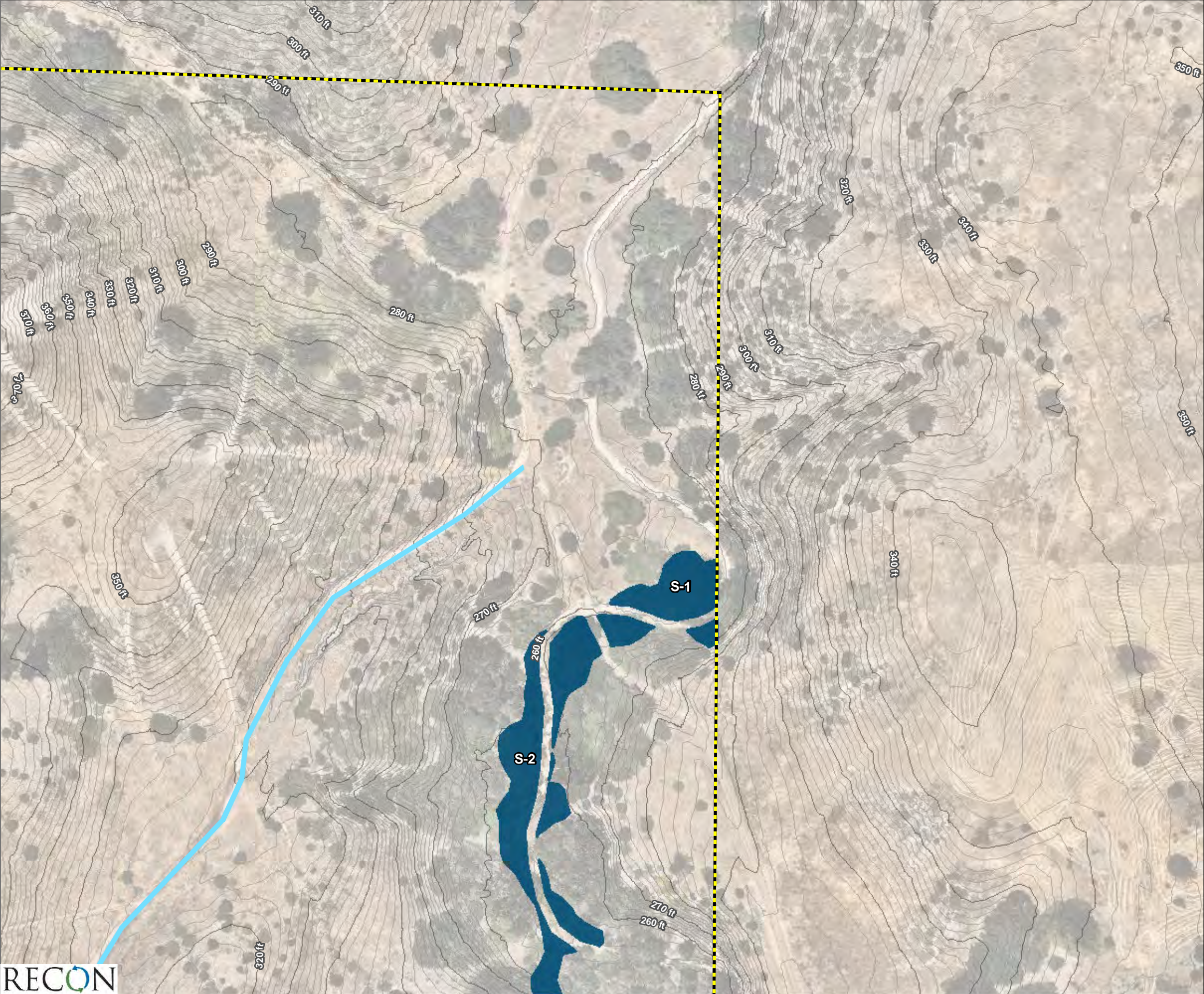
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Disturbed Wetland (Waters ID)

0 Feet 70



FIGURE 33.29  
City of San Diego Wetlands





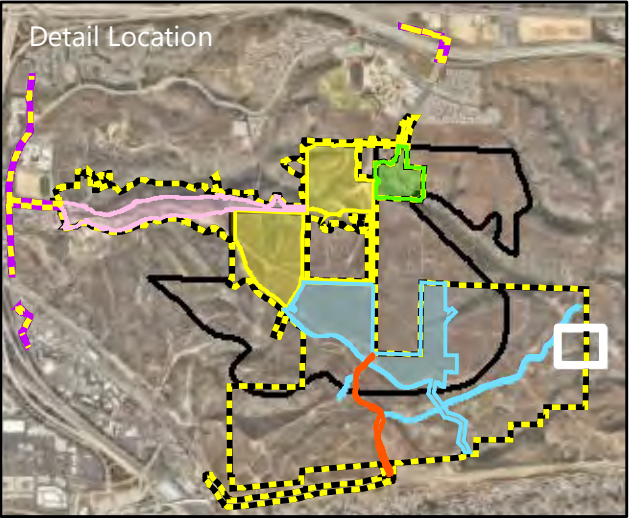
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- City of San Diego Wetlands**
  - Wetland (Waters ID)

0 Feet 70



FIGURE 33.30  
City of San Diego Wetlands





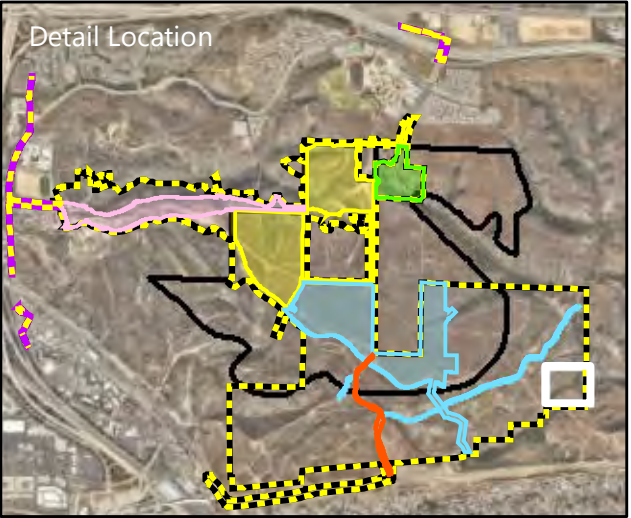
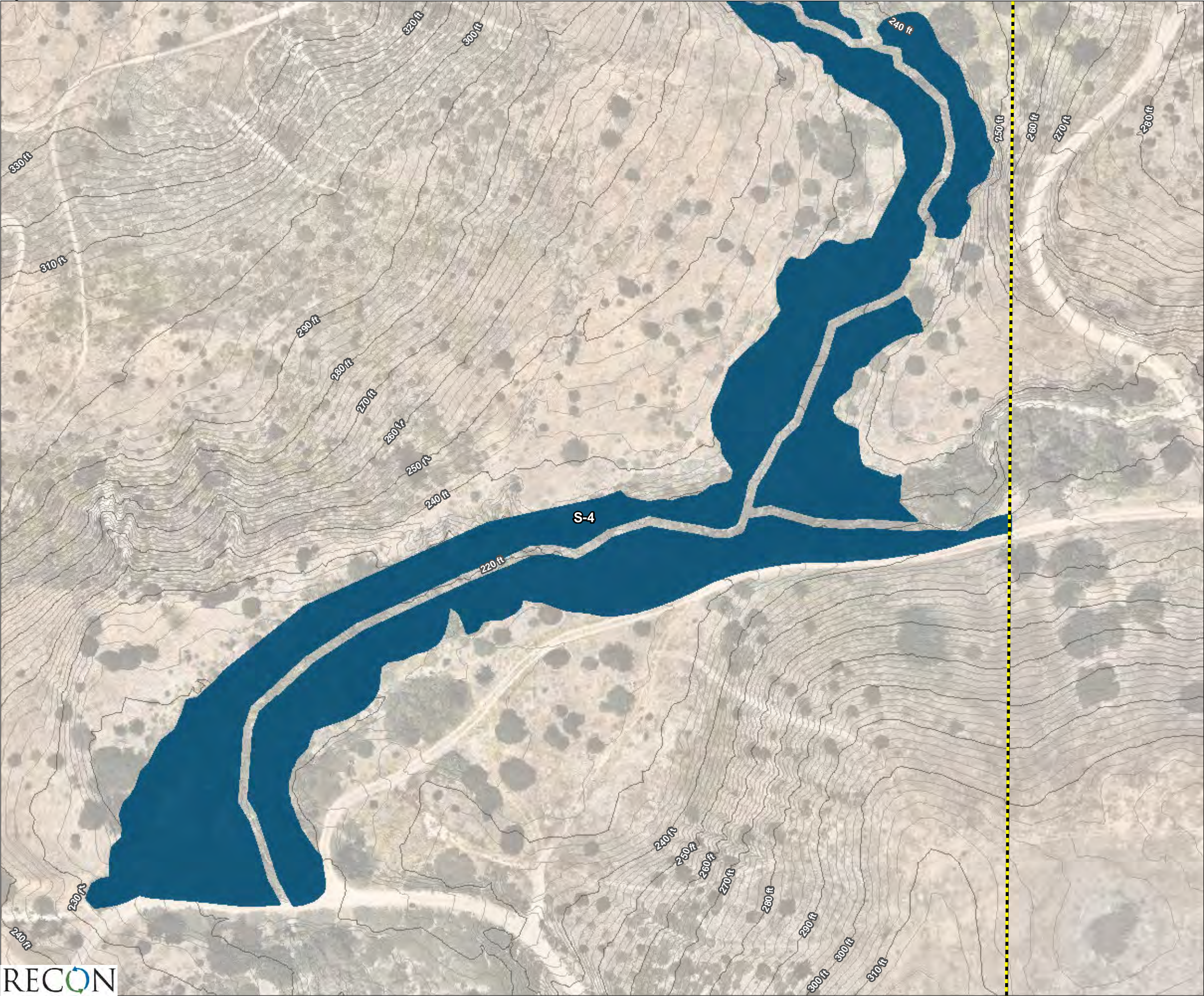
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Emergency Vehicle Access
  - Off-site Improvements
- City of San Diego Wetlands**
  - Wetland (Waters ID)

0 Feet 70



FIGURE 33.31  
City of San Diego Wetlands





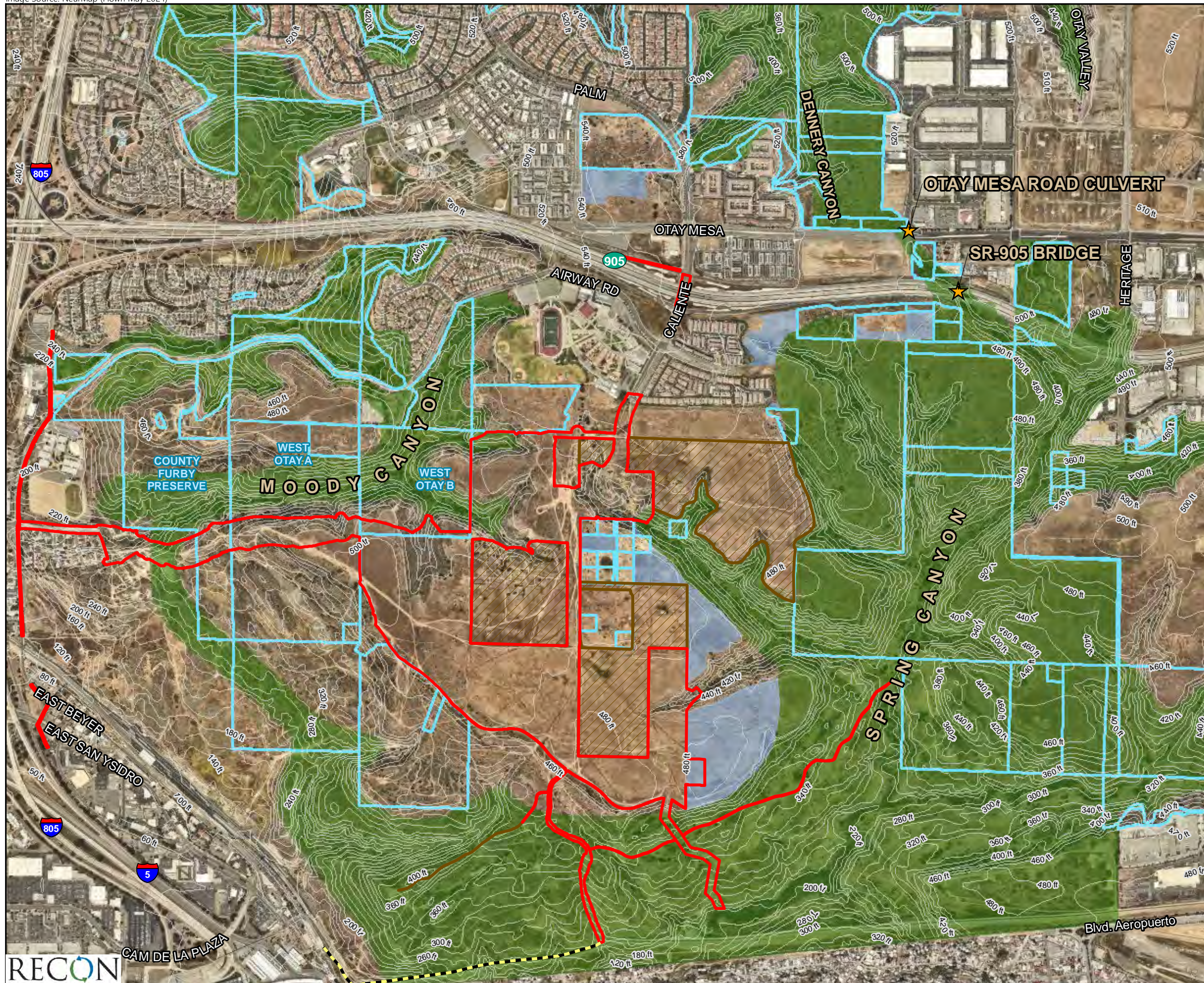
- Specific Plan Boundary
- Project-level Survey Area
- Project-level Phasing**
  - Phase 1
  - Phase 2
  - Phase 4
- Beyer Boulevard
- Emergency Vehicle Access
- Off-site Improvements
- City of San Diego Wetlands**
  - Wetland (Waters ID)

0 Feet 70



FIGURE 33.32  
City of San Diego Wetlands





- Project-level Analysis Area
- Project-level Analysis Trails
- Program-level Analysis Area
- Program-level Analysis Trails
- Emergency Vehicle Access Road - No Improvements Required (Existing Road)
- City of SD MHPA
- VPHCP MHPA
- Conserved Parcels
- 20-foot Contours

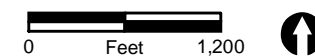
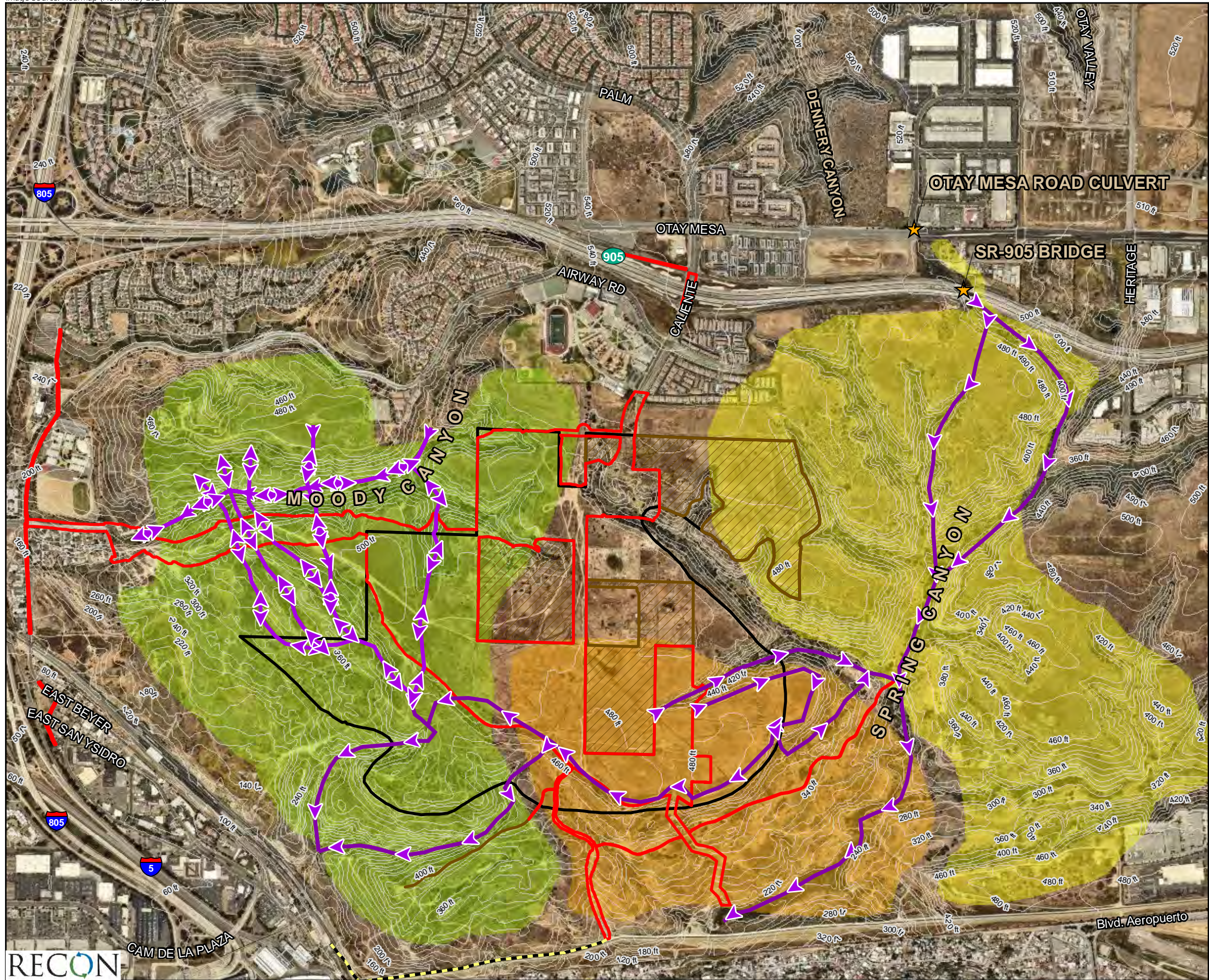


FIGURE 34  
Local Canyons and Culverts that  
Currently Support Wildlife Movement





- Direction of Wildlife Movement\*
- Project-level Analysis Area
- Project-level Analysis Trails
- Program-level Analysis Area
- Program-level Analysis Trails
- Emergency Vehicle Access Road - No Improvements Required (Existing Road)
- Specific Plan Boundary
- Survey Area A
- Survey Area B
- Survey Area C
- 20-foot Contours

\*This information is estimated and includes, but is not limited to, these paths (Wildlife Tracking Institute 2020)

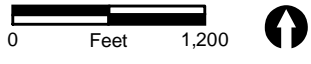


FIGURE 35  
Direction of Wildlife Movement



## 6.0 Compliance with the MSCP and VPHCP

One of the primary objectives of the MSCP was to identify and maintain a preserve system, which allows for animals and plants to exist at both the local and regional levels. The MSCP has identified large blocks of native habitat having the ability to support a diversity of plant and animal life known as "core biological resource areas." "Linkages" between these core areas provide for wildlife movement. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. The City adopted an MSCP Subarea Plan which implements the MSCP program and established the MHPA preserve system. Adoption of the VPHCP provides regional conservation planning for vernal pools and seven threatened and endangered species that do not have federal coverage under the City's MSCP Subarea Plan. The VPHCP hardline preserve (e.g., VPHCP/MHPA) expands the City's existing MHPA established in the MSCP Subarea Plan to conserve additional land for conservation of vernal pools and sensitive species associated with vernal pools. Input from responsible agencies and other interested participants resulted in creation of the City's MHPA and VPHCP. The MHPA and VPHCP/MHPA lands are collectively the area within which the permanent MSCP and VPHCP preserve would be assembled and managed for its biological resources. The MHPA and VPHCP/MHPA lands are considered by the City to be sensitive biological resources. Note that 100 percent conserved lands existed at the time of the VPHCP and are considered baseline conservation for that plan. Both the MSCP Subarea Plan and the VPHCP anticipated development of the Southwest Village Specific Plan and defined conservation areas. This future development area was taken into consideration for the overall configuration of the open space in this part of the Otay Mesa Community Planning area.

### 6.1 Program-level Consistency

Future development within the program-level analysis areas would require future analysis to verify consistency with the City's MSCP and VPHCP. While specific development plans are not known at this time for the program-level analysis areas, the following discussion provides a high-level consistency analysis based on anticipated development areas in relation to known MHPA and VPHCP resources.

#### 6.1.1 Multiple Species Conservation Plan

Program-level development areas would be located adjacent to the MHPA. The Specific Plan development concept (see Figure 8) has been planned to develop outside of MHPA lands. However, due to the adjacency of the program-level areas to MHPA, the project would have the potential to result in indirect impacts to surrounding MHPA lands. Future development proposed consistent with the Specific Plan would require a subsequent environmental review due to the presence of ESL. During subsequent site-specific environmental reviews, individual projects would be required to comply with applicable adjacency requirements of the MHPA, specifically the MHPA Land Use Adjacency Guidelines which is designed to protect MHPA lands from adjacent development. Additionally, future projects would be required to demonstrate consistency with Area Specific



Management Directives, General Management Directives, and Specific Management Directives for the Southern Otay Mesa Area.

All subsequent development projects adjacent to MHPA lands would be required to comply with the MSCP Land Use Adjacency Guidelines in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. Measures include, but are not limited to the following: sufficient buffers and design features, barriers (rocks, boulders, signage, fencing, and appropriate vegetation) where necessary, lighting directed away from the MHPA, and berms or walls adjacent to commercial or industrial areas and any other use that may introduce construction noise or noise from future development that could impact or interfere with wildlife utilization of the MHPA.

Subsequent environmental review would be required to determine project features required for compliance with the MSCP Land Use Adjacency Guidelines. Prior to approval of any subsequent development project in an area adjacent to a designated MHPA, the City shall identify specific conditions of approval in order to avoid or to reduce potential impacts to adjacent the MHPA.

## 6.1.2 Vernal Pool Habitat Conservation Plan

The VPHCP has played a critical role in the development Specific Plan, as the VPHCP has defined lands within the Specific Plan that are to be set aside for vernal pool conservation. Accordingly, the Specific Plan development concept (see Figure 8) identifies land that is constrained due to conservation for vernal pool resources as Conserved Open Space. As part of the VPHCP planning process, and in anticipation of the Southwest Village project, approximately 24.4 acres of Tri Pointe Homes-owned lands within the southeast portion of the Specific Plan area was incorporated into the VPHCP/MHPA lands for vernal pool conservation.

The VPHCP/MHPA lands within the Specific Plan area in addition to those parcels owned by the City for vernal pool conservation are depicted on Figure 7. The project requires a Major Amendment (MA) to the VPHCP to address impacts to 100 percent conserved lands. The Specific Plan proposes to designate Planning Area 23 as conserved open space to offset the loss of the 100 percent conserved lands (see Figure 8). Designation of Planning Area 23 as open space is part of the conservation strategy to address impacts associated with the MA and would extend the conservation of vernal pool resources beyond what was envisioned in the VPHCP. Specifically, Planning Area 23 supports the J13N and J13S South Otay 1 acre (Private) vernal pools which includes a total of 7 pools as reported in Table 2-6 of the City's VPHCP (see Area B inset on Figure 36.4). The project includes adding the land into the MHPA. The addition of this land to the MHPA is proposed to support the conservation strategy for the VPHCP MA by adding land that was not previously included as conserved land, thereby increasing the total number of conserved vernal pool complexes identified in the City's VPHCP in addition to adding additional land with potential to support conservation of vernal pool habitat that supports sensitive species. The MHPA addition of this area is considered in the VPHCP conservation analysis at the project-level discussed below in Section 6.2.2.1. Additionally, as a result, the Specific Plan expands on the total available vernal pool preserve areas within the Specific Plan area compared to what was originally envisioned with the VPHCP. Thus, the Specific Plan is consistent with the VPHCP.



As future projects are proposed within the program-level areas, each individual development would be reviewed for consistency with the VPHCP and development would be required to demonstrate consistency with surrounding vernal pool resources including avoidance of indirect impacts through implementation of avoidance and minimization measures described in VPHCP Section 5.2.1. Through required compliance with the VPHCP for development within program-level areas and required consistency with the Specific Plan development concept, future development within the program-level areas would be consistent with the VPHCP.

## 6.2 Project-level Consistency

### 6.2.1 Multiple Species Conservation Plan

#### 6.2.1.1 Multi-Habitat Planning Area Boundary Line Adjustment Analysis

The existing MHPA boundary is shown on Figure 36.1. Encroachments into the MHPA boundary would occur with implementation of the project-level areas specifically associated with the Phase 1, and Phase 4 residential development areas (see Areas A and D shown on Figure 36.2), the Spring Canyon drainage outfall associated with Phase 2 (see Area C shown on Figure 36.2), and an EVA road connecting to the southern boundary (see Area E on Figure 36.2). Area A deletions are needed to allow for Phase 1 residential development areas. Area D deletion is to allow for development of either a school or medium-density residential to occur within the adjacent Planning Area 7. Due to the location of the finger canyon in relation to Planning Area 7, some slope stabilization is required to support the adjacent development area. The MHPA deletion would be for slope grading that would ultimately be revegetated to native habitats after installation. The MHPA deletion for the Spring Canyon drainage outfall is required to support installation of a drainage pipe that would support overall Specific Plan drainage infrastructure. The MHPA deletion for the EVA road is proposed for fire access/emergency response.

Trails within the MHPA are not counted as MHPA deletion as they are proposed as primitive trails that are designed to be consistent with the MSCP guidelines and are a compatible use within the MHPA. Additionally, MHPA deletions would be required where the proposed Beyer Boulevard extension crosses the MHPA (see Area B in Figure 36.2); however, the MHPA deletion would be limited to the manufactured slopes surrounding the surface of roadway as City linear utility projects are an allowed use in the MHPA pursuant to the City's LDC Section 143.0111. The City's Biology Guidelines and ESL regulations are the implementing ordinances for the MSCP and VPHCP. As detailed in the City's ESL regulations, Section 143.0111(d), "outside the Coastal Overlay Zone, City linear utility projects are exempt from the development area regulations of the OR-1-2 zone in Section 131.0250(b) and the development area regulations for steep hillsides in Section 143.0142(a) and for sensitive biological resources in Section 143.0141(a)(5)". The developed portion of the roadway would contain public water, sewer and stormwater infrastructure to support the Specific Plan area and therefore would be classified as City linear utilities, exempt from the ESL regulations. The linear utility portion of the roadway that is exempt from ESL regulations and considered an MHPA compatible use supports 0.24 acre of disturbed habitat and 0.13 acre of disturbed maritime succulent scrub.



MHPA encroachments total 14.88 acres (Table 7a) and are associated with MHPA deletions within the proposed residential development areas, the Spring Canyon drainage outfall, the EVA road, and MHPA deletion associated with Beyer Boulevard slopes. Of this total, 12.82 acres are sensitive vegetation communities.

Table 7a Summary of Proposed MHPA BLA within the Project-level Areas (acres)					
Vegetation Communities/ Land Cover Types	Habitat Tier	MHPA Allowed Use	Proposed Encroachment (MHPA Deletion – see Figure 36.2)	Proposed MHPA Addition (Area A - see Figure 36.3)	Net Change of Proposed MHPA with BLA
<b>Upland Vegetation Communities</b>					
Maritime Succulent Scrub	I	-	-7.19	+7.59	+0.40 <sup>1</sup>
Disturbed Maritime Succulent Scrub	I	0.13	-0.44	+0.11	-0.33
Diegan Coastal Sage Scrub	II	-	-3.76	+7.34	+3.58
Disturbed Coastal Sage Scrub	II	-	-0.83	+0.34	-0.49
Non-native Grassland	IIIB	-	-0.50	+1.35	+0.85
<i>Subtotal Sensitive Upland Vegetation</i>		0.13	-12.73	+16.73	+4.01 <sup>1</sup>
<b>Wetland Vegetation Communities</b>					
Natural Flood Channel	-	-	-0.08	+0.07	-0.01
Tamarisk Scrub		-	-0.01	-	-0.01
Disturbed Wetland	-	-	-	+0.08 <sup>2</sup>	+0.08 <sup>2</sup>
Vernal Pool	-	-	-0.01	-	-0.01
Vernal Pool with fairy shrimp	-	-	-	-	-
<i>Subtotal Wetland Vegetation</i>		-	-0.09	+0.15	+0.05
<b>Total Sensitive Vegetation Communities</b>		<b>0.13</b>	<b>-12.82</b>	<b>+16.88</b>	<b>+4.06<sup>2,3</sup></b>
Disturbed Land <sup>3</sup>	IV	0.24	-2.02	+1.20	-0.82
Developed <sup>3</sup>	IV	-	-0.05	-	-0.05
<b>Total with Disturbed and Developed Land</b>		<b>0.37</b>	<b>-14.88</b>	<b>+18.08</b>	<b>+3.19</b>
NOTE: Totals may not add due to rounding.					
<sup>1</sup> 0.30 acre of disturbed lands within Area A (Figure 36.3) would be restored to maritime succulent scrub as part of the trails restoration (see Attachment 1) providing an additional 0.3 increase of Tier I vegetation communities after restoration.					
<sup>2</sup> 0.08 acre of disturbed wetland (0.07 acre of 0.08 acre contain fairy shrimp) being added to the MHPA would be enhanced to be vernal pools through weed removal and addition of common vernal pool plant species as part of the proposed trail restoration effort. This will ultimately result in the addition of a 0.08 acre vernal pool as part of the MHPA addition area.					
<sup>3</sup> The deletions and additions of disturbed and developed lands is not counted toward the MHPA BLA equivalency analysis but the addition of 1.20 acres of disturbed lands (0.30 acre of which would be restored) would ultimately be part of the MHPA addition area.					

Land proposed to be added into the MHPA following a BLA would include 16.88 acres of sensitive habitats comprising maritime succulent scrub, disturbed maritime succulent scrub, Diegan coastal sage scrub, disturbed coastal sage scrub, non-native grassland, natural flood channel, disturbed wetland, and vernal pool (see Table 7a and Figure 36.3). This represents a net gain of 4.06 acres of sensitive vegetation communities into the MHPA. Although not counted toward the total required



MHPA addition area for the BLA analysis, 1.20 acres of disturbed lands would be also included within the MHPA addition acreage. A 0.30-acre portion of these disturbed lands would be restored to maritime succulent scrub as part of the trails restoration effort (see Attachment 1).

Impacts to 100 percent conserved lands shown on Figure 36.4 are reported separately in Section 6.2.2.

### a. MHPA BLA Criteria

The overall MSCP policy for BLAs require that they must transfer equal or higher biological values of impacted species and habitats into the preserve. A comparison of the biological values of the impacted areas and land to be transferred into the preserve is presented below. This comparison is based on the six biological factors required by the MSCP for an MHPA BLA.

#### 1. *Effects on Significantly and Sufficiently Conserved Habitats*

The amount and distribution of habitats that are significantly and sufficiently conserved within the MHPA would be functionally equivalent in value compared to the impacted areas. As detailed in Figure 36.2, the areas proposed for MHPA deletion include two areas within Phase 1 that are the ends of two narrow finger canyons at the east end of Moody Canyon. Within Phase 2, MHPA deletion includes the location of a drainage outfall. Within Phase 4, a small area at the head of an adjacent canyon is proposed for deletion to accommodate adjacent residential development. In addition, there are deletions along the west end of the proposed Beyer Boulevard extension and within the footprint of the EVA road.

The BLA would result in a net gain of 4.06 acres of sensitive vegetation communities into the MHPA. Lands being added include 7.59 acres of maritime succulent scrub, 0.11 acre of disturbed maritime succulent scrub, 7.34 acres of Diegan coastal sage scrub, 0.34 acre of disturbed coastal sage scrub, 1.35 acres of non-native grassland, 0.07 acre of natural flood channel, and 0.08 acre of disturbed wetland. The 0.33-acre net reduction in disturbed maritime succulent scrub would be offset by the 0.40-acre excess of maritime succulent scrub being added to the MHPA, which would result in a 0.07-acre net increase of Tier I habitats (see Table 7a). There would also be a net increase of Diegan coastal sage scrub (3.58 acres) and non-native grassland (0.85 acre) (see Table 7a). The excess net increase in Tier II habitat will offset the 0.49-acre net decrease in disturbed coastal sage scrub. There is a net decrease in natural flood channel (0.01 acre), tamarisk scrub (0.01 acre), and vernal pool (0.01 acre); however, this would be offset by the net increase in disturbed wetland (0.08 acre), for a net increase of wetland communities of 0.05 acre. The disturbed wetlands (0.07 acre of 0.08 acre contain fairy shrimp) added to the MHPA would be enhanced to become vernal pool habitat through weed removal and addition of common vernal pool plant species as part of the proposed trail restoration effort. This will ultimately result in the addition of 0.08 acre of vernal pool as part of the MHPA addition area. In addition, the project includes the proposed restoration of 0.30 acre of disturbed lands to maritime succulent scrub within Area A (see Figure 36.3) as part of the trail restoration (see Attachment 1).

The location of MHPA BLA additions are depicted in Figure 36.3 as Area A. This additional area is adjacent to existing MHPA closing a gap in open space coverage between the southern boundary of the project development and existing MHPA lands.



## 2. *Effects to Covered Species*

The proposed MHPA addition consists of 16.88 acres of sensitive habitat, which a majority is large patches of maritime succulent scrub and Diegan coastal sage scrub. The land exchange is expected to maintain or increase the overall conservation of covered species, based on the configuration, location, composition, and size of the lands proposed to be added into the MHPA preserve. In addition, the project includes the proposed restoration of 0.30 acre of disturbed lands to maritime succulent scrub within Area A (see Figure 36.3) as part of the trail restoration (see Attachment 1). The addition of the sensitive vegetation communities within the lands to be added to the MHPA are expected to increase habitat for covered species that may occur in the vicinity of the project.

MSCP covered plant species observed within the deletion areas include Otay tarplant (Delete Area A), San Diego barrel cactus (Delete Areas A and C), and snake cholla (Delete Area A). Approximately 800 Otay tarplants are located in the deletion areas and none are present within the addition area. A total of 39 San Diego barrel cactus are present in the deletion areas and 4 were identified in the addition area. Eleven snake cholla were mapped in the deletion areas and none were found in the addition area. While this represents a deficit for each of these species in the BLA exchange; habitat restoration within the MHPA and salvage of individuals would offset these losses through project mitigation. Impacts to 1,900 Otay tarplant across the project impact areas would be mitigated through implementation of proposed restoration within an approximately 0.21-acre area Otay tarplant restoration area (see Attachment 15) located within MHPA lands contiguous to the MHPA addition areas. Impacts to both San Diego barrel cactus and snake cholla would be mitigated through salvage of individuals that would be impacted and translocating them into the Vernal Pool and Quino Checkerspot Butterfly and Coastal Cactus Wren restoration plans (see Attachments 13 and 14).

Covered wildlife species that occupy the MHPA deletion areas include coastal California gnatcatcher, southern California rufous-crowned sparrow, and northern harrier. Four coastal California gnatcatcher use areas consisting of one pair each were documented in the deletion areas labeled Area A in Figure 36.2 (RECON 2018e). In the lands being added to the MHPA two use areas were recorded. In addition, a number of coastal California gnatcatchers have been mapped adjacent to the EVA road footprint (see Figure 27). The net gain of 3.09 acres of Diegan coastal sage scrub habitat and 0.37 acre of maritime succulent scrub/disturbed maritime succulent scrub (including the proposed disturbed lands/trail restoration) would ensure suitable habitat for the species would continue to be supported within the MHPA. As discussed further below in Section 6.2.2, an additional four pairs of coastal California gnatcatchers were documented during the 2018 protocol surveys within MHPA addition lands that would be added as part of the VPHCP conservation strategy for deletion of 100 percent conserved lands from the VPHCP (RECON 2018f). In addition, the lands immediately adjacent to the EVA road support a large contiguous area of occupied gnatcatcher habitat which would remain unimpacted. Overall, through the BLA process, the addition of large blocks of habitat to the MHPA preserve would provide additional protection of habitat for this species.

Southern California rufous-crowned sparrow was also observed within the deletion areas within maritime succulent scrub mapped located within Area C as shown on Figure 36.2. The 7.70 acres of maritime succulent scrub/disturbed maritime succulent scrub habitats (plus the proposed 0.30 acre



disturbed lands/trail restoration) and the 7.68 acres of Diegan coastal sage habitats being added to the MHPA would offset the loss of habitat for this species. Additionally, the MHPA deletion area associated with the Spring Canyon drainage outfall would be revegetated after installation of the pipeline, returning the deletion area to functional habitat for the species. The maritime succulent scrub and Diegan coastal sage within the canyon between the existing VPHCP/MHPA areas, as well as the western addition lands, provide rocky slopes which are ideal for this species and this species was observed in these two addition areas (see Figures 27.4 and 27.8).

Northern harrier was detected in deletion Area A which is offset by the species being detected during surveys within the addition area. In addition, the net increase of 4.06 acres of sensitive vegetation communities would offset any loss of habitat for this species within the deletion areas.

The EVA road would impact a 0.02-acre vernal pool containing fairy shrimp and western spadefoot toad (refer to Figures 33.20 and 40.3). While this pool would be impacted, there are several disturbed wetland basins (0.08 acre) present in the lands being added as part of this BLA and there are a number of other occupied basins being added in lands proposed for VPHCP 100 percent conserved lands exchange (see Section 6.2.2). One burrowing owl was incidentally observed during a Quino checkerspot butterfly survey within maritime succulent scrub, which does not typically represent suitable burrowing owl habitat. The observation of this species within the maritime succulent scrub is considered an incidental sighting as no burrowing owls were detected during any of the burrowing owl protocol surveys conducted for this project. While the deletion areas would not affect suitable habitat for burrowing owls, it would affect potential burrowing owl foraging habitat. The addition areas more than offset the MHPA deletions, ensuring burrowing owl foraging opportunities are replaced within the addition lands. While not required, the project includes a design feature to install a berm that would include artificial burrows in proposed vernal pool preserve area. As the project would offset the MHPA foraging habitat loss, adverse effects to burrowing owls are not anticipated as a result of the MHPA deletions.

### ***3. Effects on Habitat Linkages and the Function of Preserve Areas***

The MHPA deletion areas are part of an MSCP designated core biological resource area for vernal pools, sensitive habitat, and the sensitive species these habitats may support, but is not located within a designated habitat linkage. However, while the impacts to MHPA along the western end of Beyer Boulevard are not considered an MHPA deletion, the roadway would obstruct habitat connectivity between conserved lands to the north and open space lands south of Beyer Boulevard which provides a connection to Spring Canyon to the east.

To offset potential impacts to habitat linkages, the design for Beyer Boulevard has incorporated a wildlife overcrossing for large animals in addition to three small animal culvert/undercrossings. Wildlife fencing would be installed to direct usage toward crossing locations. Small and large mammals, and reptiles would be able to use the crossing and culverts to cross Beyer Boulevard. The placements of the wildlife crossings were purposefully selected based on results from wildlife tracking studies and are intended to mimic the existing movement patterns. With the implementation of these crossings along Beyer Boulevard, wildlife would have continued opportunities to move north or south.



Additionally, lands proposed to be added to the MHPA would increase the area of conserved lands available for use by sensitive species. Proposed MHPA addition areas located on the east side of the Specific Plan (see Section 6.2.2) as part of the VPHCP conservation strategy would improve the function of the MHPA by providing a preserved habitat linkage between two existing VPHCP/MHPA areas, which would facilitate wildlife movement between these two areas.

The project would include improvements to an existing dirt roadway located south of the Specific Plan area so that it can be used as an EVA road by fire engines (refer to Section 1.3.2.3.e for details). This is an existing road within the MHPA and repurposing it as emergency access is not expected to affect the existing function of the adjacent preserve areas. The improvements are not anticipated to result in increased average daily use beyond existing conditions, as the typical use would be for ongoing border patrol use and ongoing land management similar to the existing conditions. The surfacing is not expected to affect border patrol usage considering they already use the existing dirt roadway with heavy-duty trucks and All-Terrain Vehicles. Similarly, this roadway is already used for surveys and land access by the owner, which would be replaced with use by land managers for access to the open space to conduct restoration and habitat management and maintenance activities with project implementation. In addition, all slope disturbance in areas that require grading would be restored to native habitats consistent with the surrounding area.

While the EVA road may be used in emergency situations for access, it is not expected that it would be used frequently. The area surrounding the EVA road would have signage installed to notify the public of the conservation status of the land and deter unauthorized entry and the northern boundary of the road will be gated to further prevent unauthorized and public use. Some pedestrian and bicycle access along the northern portion of the EVA road is anticipated to provide access to the primitive trail network (see Figure 12.3 for the existing utility road in relation to proposed primitive trails). The improvements to the EVA road would not affect habitat linkages or function of the MHPA since the level of vehicular usage is not anticipated to change. Public vehicular access to the road would be blocked by a gate accessible only by fire and emergency personnel. Pedestrian and bicycle access would be limited to users of the primitive trail network. Furthermore, the City as the anticipated long-term manager for the surrounding open space would monitor trespass and address any issues should they arise in accordance with standard MHPA monitoring and maintenance activities.

#### ***4. Effects on Preserve Configuration and Management***

The proposed modifications to the MHPA boundary would increase the biological value of the MHPA by extending existing conserved lands in Area A depicted on Figure 36.3, which would close a gap between the southern boundary of project development and the adjacent MHPA. Although the proposed Beyer Boulevard extension would impact a portion of the MHPA, Circulation Element roadways are considered a conditionally compatible use within the MHPA. The area needed within the roadway to accommodate linear utilities would remain in the MHPA and the manufactured slopes would be deleted from the MHPA. The manufactured slopes would be revegetated with native habitat compatible with the surrounding MHPA (see Section 1.3.2.2.a). Beyer Boulevard has been designed to accommodate wildlife movement by incorporating a wildlife overcrossing and three culvert crossings for small animal movement. The inclusion of wildlife features into the Beyer Boulevard extension would offset potential impacts to the preserve configuration by ensuring



wildlife movement can continue to use the open space lands north of the proposed Beyer Boulevard extension. Changes to the MHPA boundary would not conflict with conservation or management needs for the subarea or cause the need for additional management measures.

While the approximately 3.56-acre area shown as Area C on Figure 36.2 would be deleted from the MHPA, this area would be temporarily impacted for installation of a drainage pipe. After installation, this area would be restored to native habitats consistent with the surrounding area, ensuring both continuity of habitat and preserve function and retention of the biological values within the MHPA.

The proposed 2.59-acre portion of EVA road within the existing MHPA, shown as Area E on Figure 36.2, would also be deleted from the MHPA. The location of the EVA road is sited to follow an existing dirt road that is needed for border patrol and land management access. Of the total 2.59-acre deletion, 0.85 acre are existing disturbed land and 0.05 acre are urban/developed lands. While the MHPA deletion would remove approximately 1.69 acres of sensitive vegetation communities including 0.73 acre of maritime succulent scrub and 0.83 acre of disturbed coastal sage scrub, the impacted habitats would be associated with required slope grading and would be restored to native habitats after disturbance is complete. The deletion would not substantially change the existing preserve configuration. Additionally, the road improvements would allow for ongoing access for management of the surrounding open space and improve the effectiveness of fire response and ability to control wildfires.

## **5. *Effects on Ecotones or Other Conditions Affecting Species Diversity***

The proposed changes to the MHPA boundary would improve the extent of open space and local habitat linkages to the surrounding MHPA preserve lands by extending MHPA lands. Modifications to the MHPA would maintain the local topographic and structural diversity of the preserve while improving the connectivity of preserved habitat from the current preserve design in the portion of the MHPA south of Phase 2. Additionally, the edge effects on the MHPA lands would be reduced by adding in large blocks of habitat and deleting areas that are isolated at ends of narrow finger canyons.

## **6. *Effects to Species of Concern Not Covered under the MSCP***

The following non-MSCP covered species were either identified or had a moderate to high potential to occur within the project survey area: western spadefoot, yellow-breasted chat, yellow warbler, coastal whiptail, red diamond rattlesnake, two-striped garter snake, Coronado skink, San Diego woodrat, merlin, California horned lark, Bell's sage sparrow, loggerhead shrike, and grasshopper sparrow. Of these, only five of these are present within any of the MHPA lands proposed for deletion: western spadefoot (Deletion Area E), coastal whiptail and orange-throated whiptail (one each in Deletion Area A), California horned lark (one within Deletion Area C), and grasshopper sparrow (one within Deletion Area A). None of these non-covered species, with the exception of western spadefoot (discussed below), are present within any of the land proposed for MHPA addition (Addition Area A); however, none of these species were observed in more than a few locations across the entire project survey area. The proposed MHPA BLA would not significantly increase the likelihood that any species not covered under the MSCP would be listed under either the federal or state Endangered Species Act based on the fact that the lands proposed to be removed are small and scattered, whereas the lands proposed to be added would result in a net



gain of 4.01 acres of sensitive upland vegetation, primarily Tiers I and II habitats that is configured in large patches and expands on existing MHPA. With the addition of these sensitive native habitats, including an additional 0.30-acre conversion of disturbed trails to Tier I habitat within Addition Area A, an increase in the biological value of the MHPA preserve would occur.

The EVA road (Deletion Area E) would include removal of several basins that support western spadefoot for a total of 0.02 acre. There are four disturbed wetland basins (0.08 acre) present in the lands being added as part of this BLA that are also occupied by western spadefoot which would preserve the biological value with respect to this species (see Area A in Figure 36.3). Additionally, these 0.08-acre disturbed wetlands within the Addition Area A would be enhanced through invasive removal and adding common vernal pool plants, improving the quality of habitat for western spadefoot. Addition Area D (see Figure 36.4) includes two vernal pools that also support western spadefoot. This addition is proposed to help offset impacts to VPHCP 100 percent conserved lands.

No Quino checkerspot butterflies were detected in any of the deletion or addition areas; however, host and nectar plants were mapped in both Deletion Area A and Deletion Area C during several years of focused surveys conducted for the species (see Figure 29.1). The removal of host and nectar plants within the deletion areas are off-set by host and nectar resources to be added to the MHPA that are located within Addition Area A. Additionally, as detailed in the Vernal Pool and Quino Checkerspot Butterfly Plan (see Attachment 14), this restoration effort would provide replacement Quino Checkerspot Butterfly habitat within the MHPA as mitigation for impacts to this species.

None of the five Crotch's bumble bees that were detected were mapped in any of the deletion or addition areas; however, one observation was made just west of Addition Area A, within lands proposed to be added to the MHPA as part of the VPHCP consistency analysis. Suitable nectar resources are present in all deletion and addition areas with wide variability in cover of resources (see Figure 29.2). Deletion Area A supports nectar resources with low, moderate, and high cover; Deletion Area B and D supports low and high cover of nectar resources; Deletion Area C supports low, low-to-moderate, and moderate cover; and Deletion Area E supports low and moderate cover. Addition Area A supports low, low-to-moderate, and moderate cover. Overall, the Addition areas provide equivalent replacement habitat suitable to support Crotch's bumble bee. Additionally, various restoration efforts within the MHPA would enhance suitable habitat for Crotch's bumble bee including the proposed trail restoration (see Attachment 1), cactus wren restoration (see Attachment 13), vernal pool and Quino checkerspot butterfly restoration (see Attachment 14), Otay tarplant and native grassland restoration (see Attachment 15), and wetland restoration (see Attachment 18).

## **b. MHPA BLA Summary**

The proposed MHPA BLA would be beneficial to the overall MHPA preserve in this area due to an increase in Tiers I and II and wetlands habitats, including ephemeral drainages (natural flood channels) (see Table 7a). The project proposes MHPA additions above and beyond the required 1:1 replacement standard. The net gain of 4.06 acres of sensitive vegetation communities would more than offset MHPA deletion areas. The proposed MHPA addition, along with the additions proposed with the VPHCP conservation analysis (see Section 6.2.2) would expand the MHPA and provide equal or higher biological values of impacted species and habitats into the preserve. This conclusion



is based on the comparison of biological value provided by the evaluation of the six biological factors required by the MSCP for a MHPA BLA as discussed above. The proposed MHPA BLA received written concurrence by the USFWS and CDFW on January 31, 2025 (Attachment 10a).

### 6.2.1.2 MSCP Compliance

The MSCP contains general guidelines for the MHPA within the Otay Mesa and Otay River valley areas of the City. These guidelines include features that have been incorporated into the MHPA, and thus, were considered in the evaluation for species coverage and are required to be implemented for take of sensitive species. Compliance with Sections 1.2.1 (Southern Area), 1.4.1 (Compatible Land Uses), 1.4.2 (General Planning Policies and Design Guidelines), 1.4.3 (Land Use Adjacency Guidelines), 1.5.2 (General Management Directives), and 1.5.3 (Directives for the Southern Otay Mesa area) of the MSCP are further discussed below.

#### a. Southern Area

Section 1.2.1 of the MSCP provides specific guidelines for Otay Mesa and the Otay River valley as they relate to the MHPA. The relevant guideline is summarized and addressed as follows.

A7. Prior to any development impacts in this area, mitigation must include collecting and reseeded vernal pool species into other preserved Otay Mesa pools.

*Discussion:* Seed collection of vernal pool indicator species, including listed species, such as San Diego button-celery, would begin during the fall months before grading and all seed would be distributed to the proposed vernal pool restoration areas after the USFWS and City approve the grading of the vernal pool restoration areas and prior to the first rainy season.

#### b. Compatible Land Uses

The following land uses are considered conditionally compatible with the biological objectives of the MSCP; and thus, would be allowed within the City's MHPA:

1. Passive recreation:

*Discussion:* Public trails would be incorporated in the MHPA, south of Phase 2, as part of the buildout of the Specific Plan. Trails would be designed as primitive (maximum 4 feet wide), with natural dirt surfacing and would be for passive recreational use to ensure consistency with the surrounding habitat. Passive recreation would allow hiking, walking, and non-motorized bicycle only. Equestrian use and motorized bicycles (i.e. e-bikes) would be prohibited; however, where accessible, motorized wheelchairs would be permitted. Trails are sited to follow existing disturbed alignments and implementation of the mitigation measures detailed in Section 8.2 and identified within each restoration plan would ensure avoidance of jurisdictional resources and sensitive plant species during restoration implementation. As detailed in Section 1.3.2.6, the proposed trail establishment would include restoration of disturbed habitats surrounding the proposed trail corridor. This



restoration would serve to close unauthorized trail routes to limit trail users to the formal network. Refer to Attachment 1 for the proposed Trails Restoration Plan.

The project additionally includes an amendment to the OMCP, including removal of the conceptual trails that have not been analyzed for compatibility with MSCP conservation goals.

2. Utility lines and roads in compliance with policies in 1.4.2 below:

*Discussion:* A discussion of compliance with MSCP Section 1.4.2 policies and design guidelines is provided under c. below.

3. Limited water facilities and other essential public facilities:

*Discussion:* The area needed within Beyer Boulevard to accommodate utilities is considered a conditionally compatible use and would remain within the MHPA. The remainder of the alignment has been adjusted out and the encroachment into the MHPA offset at a 1:1 ratio. Additionally, a sewer pump station would be constructed within the vernal pool preserve within the southeastern corner of the project, which is a compatible activity with the VPHCP.

4. Limited low density residential uses:

*Discussion:* The development areas within the MHPA would be adjusted out and no residential development would occur within the MHPA.

5. Brush Management (Zone 2):

*Discussion:* Brush management zones are depicted on Figure 13.2. Where BMZ 2 is proposed outside of any graded slopes, it is considered impact neutral. BMZ 2 areas are not counted towards mitigation and are not proposed as part of the BLA additions. Conceptual BMZ 2 areas have been identified on Figure 13.3, adjacent to future development areas to ensure that all required brush management would not conflict with proposed mitigation lands. No mitigation is proposed within these conceptual BMZ 2 areas.

6. Limited agriculture:

*Discussion:* This land use type does not apply to the proposed project.

### c. General Planning Policies and Design Guidelines

Section 1.4.2 of the MSCP provides general planning and design guidelines for road and utility projects, as they relate to the MHPA and provides recommendations for fencing, lighting, and signage within the MHPA. The relevant guidelines are summarized and addressed as follows.

#### *Roads and Utilities*

5. All proposed utility lines should be designed to avoid or minimize intrusion into the MHPA.

*Discussion:* The project has been designed to minimize intrusion into the MHPA. This has been achieved by locating utilities (stormwater, water, and sewer lines) within the footprint



of the Beyer Boulevard roadway. The portion of the developed portion of the roadway would contain public water, sewer and stormwater infrastructure to support the Specific Plan area and therefore would be classified as City linear utilities, exempt from the ESL regulations. The linear utility portion of the roadway that is exempt from ESL regulations totals 0.37 acre and includes 0.24 acre of disturbed habitat and 0.13 acre of disturbed maritime succulent scrub. The remainder of the roadway footprint was adjusted out of the MHPA (see Section 6.2.1.2 (b)(3) above).

Regarding electrical utilities, based on initial coordination with SDG&E, electric utility service would follow existing utility alignments and would be undergrounded within the project's development footprint.

6. All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located and constructed to minimize environmental impacts.

*Discussion:* The proposed Beyer Boulevard extension would cross both MHPA and 100 percent conserved lands. Due to this roadway crossing sensitive resource areas including conserved lands, considerable planning went into designing the proposed Beyer Boulevard extension to ensure impacts would be reduced to the extent feasible. Refer to Attachment 11 for a detailed discussion of the Beyer Boulevard alternatives that were considered and a focused discussion of Beyer Boulevard compliance with MSCP and VPHCP policies. To minimize impacts, the road is proposed to narrow to 2 lanes from the originally planned 4-lane classification and retaining walls would be incorporated.

A major drainage outfall would extend southeast of the Specific Plan area, requiring an adjustment out of the MHPA, as detailed in Section 6.2.1.1. The drainage outfall is required to safely convey drainage away from the landslide formation located around the Specific Plan area as geotechnical investigations revealed that excessive stormwater infiltration into the landslide formation after development could undermine the stability of the landslide formation resulting in a safety risk. While the drainage outfall impacts would require a MHPA BLA, all impacts associated with installation of the drainage would be temporary and impacted areas would be restored with native vegetation after installation of the pipe, in accordance with the City's Landscape and Land Development Manual. The City requires a 25-month management and monitoring period of restored native habitat following successful completion of a 120-day plant establishment period to ensure success criteria are met.

An EVA road is also proposed to increase fire safety and response options in the event of an emergency. While this road crosses the MHPA, it has been designed to follow an existing disturbed alignment that is needed for ongoing border patrol access. Impacts to sensitive vegetation communities associated with the road improvements would be ultimately revegetated and mitigated, resulting in minimal environmental impacts.

7. Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable.

*Discussion:* All project construction areas and staging would occur within the project-level impact boundaries analyzed in this report. Access roads to the proposed restoration areas



within the mitigation lands would follow existing disturbed roadways and would not disturb existing habitat. The project does not include any roads or staging areas outside the assessed permanent impact footprints.

8. Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage.

*Discussion:* Local wildlife movement is anticipated to occur within and surrounding construction areas. However, construction would occur in phases, allowing wildlife to move around active construction areas. Additionally, since Beyer Boulevard would be implemented in phases, the proposed wildlife overcrossing and culverts would be installed at the time that portion of the roadway is installed, creating opportunities for wildlife movement as the road is constructed. Roads in the MHPA would be limited to those identified in Community Plan Circulation Elements, collector streets essential for area circulation, and necessary maintenance/emergency access roads.

9. Development of roads in canyon bottoms should be avoided whenever feasible.

*Discussion:* As detailed in Attachment 11, the proposed alignment for Beyer Boulevard was shifted south to avoid the canyon bottom of Moody Canyon. The proposed Beyer Boulevard is planned as a 2-lane constrained roadway where it crosses conserved lands, which has allowed the impact footprint of the roadway to be minimized to the maximum extent feasible. Compared to the original Beyer Boulevard design through conserved lands, the proposed road avoids the canyon bottom and reduces associated ephemeral drainage impacts by 36 percent compared to the original alignment. The width of the roadway has also been reduced by 48 feet.

10. Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas.

*Discussion:* The proposed Beyer Boulevard connection west of the Specific Plan area would cross MHPA and conserved lands. The Beyer Boulevard alignment was the subject of extensive coordination to reduce the roadway classification to the maximum extent to minimize impacts to conserved land along its alignment. Refer to Attachment 11 for a detailed discussion of the various alignments and cross-section designs that were considered for the segment of Beyer Boulevard that crosses MHPA and other conserved lands west of the Specific Plan area. As detailed on Figure 14.1, Beyer Boulevard is planned as a 4-lane Modified Urban Collector from Enright Drive to West Avenue; however, where the roadway traverses environmentally sensitive and conserved lands it would narrow to a two-lane road and retaining walls would be installed (see Figure 14.2). In order to further minimize habitat fragmentation and allow for ongoing wildlife usage of the area north and south of the roadway, three small animal under-crossings and a wildlife overcrossing have been incorporated into the roadway design (see Figure 14.2). Refer to Section 1.3.2.2.b for a discussion of the wildlife crossings and roadway features incorporated to ensure compatibility with wildlife. See also Section 7.3 for a discussion of how the Beyer Boulevard connection is designed to support wildlife movement. Impacts associated with the portion of Beyer Boulevard that crosses 100 percent conserved lands are addressed in the VPHCP



MA analysis below. Refer to Section 6.2.2.1 for analysis of impacts to 100 percent conserved lands and the conservation strategy to address those impacts.

The EVA road is not required to meet the City public road standards, as it would not be a public roadway. Considering the landslide complex conditions, constructing the EVA road to meet public road standards would require massive excavation to substantial depths that would be infeasible to implement. To minimize impacts to biological resources while providing improvements to support fire safety and emergency response, the roadway is designed narrower than City standards to avoid substantial disturbance to the surrounding MHPA open space.

11. For the most part, existing roads and utility lines are considered a compatible use within the MHPA and therefore will be maintained.

*Discussion:* While the existing utility road located south of the Specific Plan development area is currently a compatible use within the MHPA, improvements to the road for emergency access (EVA road) are proposed, the roadway and its slopes would be adjusted out of the MHPA as a deletion area (see Figure 16.3 and Figure 36.2, Area E). Additionally, SDG&E maintains existing utility lines within the open space within and surrounding the Specific Plan area that would remain. Some existing roads in the area are anticipated to continue to be used for USBP access. However, as detailed in the Trails Restoration Plan (see Attachment 1), some roads would be narrowed to a primitive trail as part of the proposed trail restoration effort.

### ***Fencing, Lighting, and Signage***

1. Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA.

*Discussion:* During construction, temporary orange fencing and silt fencing would be installed to prevent unauthorized encroachment into the adjacent MHPA. Following construction, temporary fencing would be removed. Wildlife fencing is also proposed surrounding the proposed Beyer Boulevard extension. The fencing will funnel animals away from the road and toward crossing locations so that they are able to cross safely. As detailed in Section 1.3.2.5, where jurisdictional resources or sensitive plant species are located adjacent to proposed primitive trail alignments in the MHPA, peeler pole fencing is proposed to ensure trail users do not disturb these features. Fencing is also proposed at the edge of the vernal pool restoration area to protect the vernal pool preserve from adjacent development. Sensitive species and jurisdictional resources mitigation measures associated with trail establishment are detailed in Attachment 1 and provided in Section 8.2. Signage would be installed around the boundary of the development area in selected locations based on accessibility, and along the EVA road and primitive trail network to inform residents of the sensitivity of surrounding resources and to identify prohibition on access into the surrounding open space.

2. Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low-sodium or similar lighting. Signage would be limited to access and litter control and educational purposes.



*Discussion:* All construction would occur during the day and would not require nighttime lighting. The project would include signage at the trail heads and where the project is adjacent to the MHPA for access control and/or educational purposes. Lighting associated with Beyer Boulevard where wildlife crossing is anticipated to occur would be shielded and directed downward away from open space areas.

#### d. Land Use Adjacency Guidelines

As stated in the MSCP Section 1.4.3 (City of San Diego 1997), land uses adjacent to the MHPA are to be managed to ensure minimal impacts to the MHPA. The MSCP establishes adjacency guidelines to be addressed on a project-by-project basis to minimize direct and indirect impacts and maintain the function of the MHPA. The Land Use Adjacency Guidelines would be incorporated as project conditions of approval, which would preclude indirect impacts to the MHPA. Note that MHPA adjacency guidelines would apply to both land within the MHPA and uplands of the VPHCP/MHPA; however, a separate discussion of the application of the land use adjacency guidelines as related to the VPHCP is provided in Section 6.2.2.2.d. MHPA Land Use Adjacency Guidelines are cited below, followed by a consistency discussion.

**Drainage.** All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

*Discussion:* As detailed in Section 1.3.2.4.b, the project drainage design involves on-site detention of stormwater in underground vaults to capture, treat and control stormwater flow volumes. A number of large underground storm water vaults have been accommodated within the development area to retain water onsite during large rain events and allow for controlled release of water through drainage facilities. The stormwater vaults have been sized to ensure that flows do not cause an increase in velocity or significantly change drainage patterns in the surrounding area. All runoff created by the development would be collected in a storm drain system on-site, treated, and stored for water quality treatment and then ultimately discharged. All of these design features and measures are intended to minimize the indirect impacts to the MHPA.

The on-site treatment and detention of stormwater would avoid release of pollutants into the MHPA. Drainage discharge points into surrounding open space are limited to three key areas. Drainage from the northern portion of the residential development area within Phase 1a would be treated on-site to remove any toxins and pollutants and would then flow to the west via two drainage discharge points that would discharge drainage at the bottom of a slope into rip rap to avoid erosion (see Figure 10.1). Drainage in these locations would ensure flows toward Moody Canyon and its drainages are maintained.



Two other drainage discharge points are planned. Drainage outfall 1 (as shown on Figure 10.1), is a long drainage conveyance pipe that would carry the project's drainage down to the bottom of Spring Canyon, avoiding the landslide complex which cannot support extensive water infiltration. Before discharge, water would be treated, and release volume and velocity would be controlled to avoid downstream erosive effects. Water from drainage outfall 1 would ultimately flow into Mexico via an existing drainage structure just downstream of the outfall daylight location. Drainage 2 (as shown on Figure 10.1) would pipe and release treated water and stormwater toward the bottom of the canyon. The discharge point is sited lower in the canyon to avoid erosion. All stormwater detention facilities would have maintenance requirements to ensure long-term functioning for the protection of downstream water quality.

**Toxins.** Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.

*Discussion:* The project is a residential development with a mixed-use component toward the center of the development area. Significant use of toxic chemicals is not anticipated; however, maintenance of yards and parks could be associated with chemical application to control pests. Additionally, runoff from roads could carry contaminated runoff. Portions of the project would drain into the MHPA; however, stormwater would be detained in underground drainage vaults and treated by modular wetlands, a form of biofiltration, to treat runoff and reduce the potential for toxins to enter the MHPA.

Maintenance of drainage facilities would occur to ensure the BMPs continue to function and treat runoff. Maintenance of drainage facilities would be the responsibility of a maintenance assessment district, except facilities in the public right-of-way which would be the responsibility of the City, as outlined in Section 7.14 of the Southwest Village Specific Plan.

**Lighting.** Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

*Discussion:* Lighting for the project would be responsive to the species in the area as well as the overall rural surroundings. The development design naturally provides some protection to surrounding open space due to the proposed manufactured slopes and primitive trails that are proposed to surround development areas. Similarly, any lighting associated with the proposed Beyer Boulevard extension would be buffered from the surrounding open space by manufactured slopes and lighting would be shielded downward. Lighting near the location of the proposed wildlife overcrossing would be coordinated with the City to ensure compatibility of the crossing with wildlife usage. Understanding that some species rely on darkness for shelter, feeding patterns, migrating, etc., the areas adjacent to



MHPA would be especially sensitive to light exposure in order to retain native characteristics. Additionally, no nighttime lighting is proposed during construction, and nighttime lighting for the pump station adjacent to the existing VPHCP/MHPA would be shielded and/or directed to avoid or minimize spillage into adjacent habitat areas.

Therefore, all lighting adjacent to the MHPA would be shielded and directed away from the MHPA to reduce the potential for light pollution of the adjacent conserved lands.

**Noise.** Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

*Discussion:* Due to the site's location within MHPA, construction noise will need to be avoided, if possible, during the breeding season of the coastal California gnatcatcher (March 1–August 15). Focused surveys were conducted and verified the presence of coastal California gnatcatcher in suitable Diegan coastal sage scrub and maritime succulent scrub habitats within the project-level area that are within and adjacent to the MHPA. As the habitat is occupied by coastal California gnatcatcher, noise reduction measures, such as noise barriers and noise monitoring may be required to attenuate the construction noise, if construction occurs during the breeding season. The requirement for noise monitoring and noise reduction measures are implemented through the City's Land Use Adjacency Guidelines and include the following City standard measures:

- I. Between March 1 and August 15, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and
- II. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(a) hourly average at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB (a) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the city manager at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or
- III. At least two weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(a) hourly average at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring\* shall be



conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB (a) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16).

\* construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB (a) hourly average or to the ambient noise level if it already exceeds 60 dB (a) hourly average. If not, other measures shall be implemented in consultation with the biologist and the city manager, as necessary, to reduce noise levels to below 60 dB(a) hourly average or to the ambient noise level if it already exceeds 60 dB(a) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

**Barriers/Access.** New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

*Discussion:* Along the proposed Beyer Boulevard extension, fencing is proposed to keep wildlife off of the roadway and direct them to crossing locations (see Section 1.3.2.3.b). This fencing would additionally help to keep people out of the surrounding open space. Pedestrian access along Beyer Boulevard is limited to the sidewalks along the roadway and no primitive trails are proposed that would provide human access to surrounding open space lands around Beyer Boulevard.

The residential development areas associated with Phase 1 would have rear yard fencing, and additionally, vegetated 2:1 slopes would be located between homes and the adjacent to the MHPA boundary. These design features would function as deterrents to pedestrian access into the MHPA.

The proposed trail network is located along an existing disturbed alignment. A number of unauthorized trail alignments cross the proposed primitive trail network. In order to close unauthorized trails that cross the proposed formal primitive trail network, all disturbed land within a 50-foot buffer (100 feet total) would be revegetated to deter entry and use of unauthorized trails. Similarly, signage would be installed around the boundary of the development area in selected locations based on accessibility, and along the EVA road and primitive trail network to inform residents of the sensitivity of surrounding resources and to identify prohibition on access into the surrounding open space.

**Invasives.** No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

*Discussion:* The plant palette for the project would not include any invasive or non-native plant species adjacent to the MHPA area. Refer to Figure 13.1 for the location of exterior slope areas that would be planted with a native landscape plant palette, as detailed in the project description Section 1.3.2.2.a. The Specific Plan Appendix A defines allowable plant



species adjacent to the MHPA and within BMZ 2. Additionally, according to City's standards for brush management, BMZ 2 only includes native plants.

**Brush Management.** New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate BMZ 1 areas on the development pad and outside of the MHPA. BMZ 2 may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA. BMZ 2 would be increased by 30 feet, except in areas with a low fire hazard severity rating where no BMZ 2 would be required. BMZs would not be greater in size than is currently required by the City's regulations. The amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, brush management in the BMZ 2 area would be the responsibility of a homeowners' association or other private party.

*Discussion:* Brush management is proposed along the southwestern portions of Phases 1a and 1b. Brush management consists of BMZ 1 and BMZ 2, which are shown on the Landscape Plans and Figure 13.2. With the proposed MHPA BLA, all BMZ 1 and 2 areas would be outside of the MHPA and not part of any MHPA additions. Vegetation clearing would be done consistent with City standards and would avoid/minimize impacts to covered species to the maximum extent possible. Brush management is required on all premises that are within 100 feet of a structure and contain native or naturalized land. Per the City's Brush Management Regulations, the BMZs have been tailored to be consistent with the proposed site design, and the allowance to increase BMZ 1 and reduce BMZ 2 has been employed. Where the 100-foot brush management cannot be achieved, due to constraints related to adjacency to open space preserves, alternative compliance measures would be implemented to avoid any disturbance to the MHPA (see Figure 13.2 for alternative compliance areas).

Interim brush management may be required where undeveloped land within the Specific Plan is located adjacent to development areas. As sensitive biological resources may be present within these adjacent parcels (e.g., vernal pools, federally listed plant species, etc.), timing for brush management within these areas shall be limited to late summer and fall months, once native plant species have set and dropped seed, to ensure that impacts are avoided to sensitive biological resources.

Conceptual locations of impact neutral BMZ 2 areas are shown on Figure 13.3. These areas provide a buffer between proposed MHPA addition areas and the grading footprint in anticipation of future brush management areas.

**Grading/Land Development.** Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

*Discussion:* The proposed manufactured slopes are considered part of the project impact areas. Additionally, all manufactured slopes adjacent to MHPA would be revegetated with native species consistent with a City-approved revegetation plan. Native plants installed adjacent to MHPA or in BMZ 2 areas within the grading limits would be irrigated using a



temporary aboveground irrigation system. The plants would be installed in late winter to early spring, as this is the optimal time for native plant growth and seed germination. A 120-day plant establishment period and a 24-month maintenance and monitoring period are necessary to ensure that the native plants establish successfully. Maintenance activities would involve control of non-native plant species, maintenance and ultimate removal of the temporary irrigation system, and replacement planting (if necessary). The site would be monitored by a biologist quarterly to evaluate site conditions and to recommend remedial actions, if needed.

## e. General Management Directives

General Management Directives outlined in Section 1.5.2 of the MSCP are outlined below, including a discussion of project compliance.

### *Mitigation*

Mitigation, when required as part of project approvals, shall be performed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines.

*Discussion:* This biological resources report is prepared in accordance with the City's ESL and Biology Guidelines. Mitigation for the project-level components is identified in Section 8.2.

### *Restoration*

Restoration or revegetation undertaken in the MHPA shall be performed in a manner acceptable to the City. Where covered species status identifies the need for reintroduction and/or increasing the population, the covered species will be included in restoration/revegetation plans, as appropriate. Restoration or revegetation proposals will be required to prepare a plan that includes elements addressing financial responsibility, site preparation, planting specifications, maintenance, monitoring and success criteria, and remediation and contingency measures. Wetland restoration/revegetation proposals are subject to permit authorization by federal and state agencies.

*Discussion:* The project proposes restoration and revegetation of habitats within the MHPA. While not proposed as mitigation, the project proposes to restore and enhance disturbed lands within the MHPA around proposed primitive trail alignments. A Trails Restoration Plan is included as Attachment 1. Direct impacts to San Diego barrel cactus and snake cholla would require salvage and translocation. The salvage and translocation requirements for these species are incorporated into the Coastal Cactus Wren Mitigation Plan (see Attachment 13) and the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14). Restoration is also proposed within Spring Canyon to restore and enhance wetland habitats). Revegetation plans relating to wetland habitats would be subject to permit authorization by federal and state agencies.

Species-specific mitigation for impacts to cactus wren habitat would occur through the habitat restoration within the disturbed maritime succulent scrub through salvage and translocation of other non MSCP-covered species such as coast cholla (*Cylindropuntia*



*prolifera*) from the impact site, liveforevers (*Dudleya* spp.), fish-hook cactus (*Mammillaria dioica*), coastal prickly pear (*Opuntia littoralis*), chaparral prickly pear (*Opuntia oricola*), our Lord's candle (*Yucca whipplei*), and Mojave yucca (*Yucca schidigera*) as detailed in the Coastal Cactus Wren Mitigation Plan (see Attachment 13; RECON 2024b).

An Otay Tarplant/Native Grassland Mitigation Plan is included as Attachment 15 which describes the proposed Otay tarplant mitigation within the MHPA. This will also provide a native grassland component to mitigate for the impacts to native grassland proposed as part of Phase 4 grading.

All restoration and revegetation plans include required elements including financial responsibility, site preparation, planting specifications, maintenance, monitoring, success criteria, and remediation and contingency measures. Additionally, each restoration plan identifies mitigation measures that would be implemented during restoration implementation to ensure avoidance of impacts to jurisdictional resources and sensitive species. These measures would be implemented during restoration implementation.

### ***Public Access, Trails, and Recreation***

Policies are summarized below followed by a consistency discussion.

1. Provide sufficient signage to clearly identify public access to the MHPA. Barriers, such as vegetation, rocks/boulders for fencing may be necessary to protect highly sensitive areas.

*Discussion:* Signage would be posted at appropriate locations such as trail heads and as trails enter the MHPA to identify limitations on public access and inform users of the sensitivity of the area. Appropriate barriers such as rocks/boulders, vegetation, or fencing (e.g., peeler pole or split rail) would be installed where necessary to prevent unauthorized access into sensitive resource areas.

2. Locate trails, view overlooks, and staging areas in the least sensitive areas of the MHPA. Locate trails along the edges of urban land uses adjacent to the MHPA, following existing dirt roads as much as possible rather than entering habitat or wildlife movement areas. Avoid locating trails between two different habitat types.

*Discussion:* These criteria have been taken into consideration with trail location and view overlooks/staging areas. Perimeter trails are proposed around the edges of the urban land uses adjacent to the MHPA. Primitive trails within the MHPA have been sited to follow existing disturbed alignments (see Figures 12.3 and 18).

3. In general, avoid paving trails unless management and monitoring evidence shows otherwise. Clearly demarcate and monitor trails for degradation and off-trail access and use. Provide trail repair/maintenance as needed. Undertake measures to counter the effects of trail erosion including the use of stone or wood cross-joints, edge plantings of native grasses, and mulching of the trail.

*Discussion:* All primitive trails within the MHPA would remain dirt and not be paved. Project-level trails proposed for implementation would incorporate measures to avoid trail erosion where necessary. Long-term management of the project-level trail network within the



MHPA would be conducted as part of the long-term open space/mitigation lands management to be undertaken by the City.

4. Minimize trail widths to reduce impacts to critical resources. For the most part, do not locate trails wider than 4 feet in core areas or wildlife corridors. Provide trail fences or other barriers at strategic locations when protection of sensitive resources is required.

*Discussion:* Perimeter trail width would be 4 feet wide or less within the MHPA. Implementation of revegetation within a 50-foot buffer (100-foot-wide corridor) along the edges of proposed trail alignment would eliminate areas of extensive disturbance and remove opportunities for trail users to use unauthorized trails that cross the proposed trail network. As detailed in Section 1.3.2.5, fencing is proposed in strategic locations to provide protection of sensitive resources such as vernal pools or sensitive plant species. Additionally, mitigation measures associated with trail establishment are detailed in Section 8.2 and within Attachment 1.

5. Limit the extent and location of equestrian trails to the less sensitive areas of the MHPA.

*Discussion:* Equestrian trails are not proposed as part of the Specific Plan or OMCP trail network. Signage would be installed in appropriate locations to inform trail users that trails are for passive recreational use only. This would avoid impacts to sensitive habitat communities such as riparian areas, maritime succulent scrub, and coastal sage scrub associated with equestrian use. Passive recreation would allow hiking, walking, and non-motorized bicycle only. Equestrian use and motorized bicycles (i.e., e-bikes) would be prohibited; however, where accessible, motorized wheelchairs would be permitted.

6. Off-road or cross-country vehicle activity is an incompatible use in the MHPA, except for law enforcement, preserve management or emergency purposes. Restore disturbed areas to native habitat where possible or critical, or allow to regenerate.

*Discussion:* Off-road activity has been an historic use within the open space surrounding the Specific Plan area. Development of the Specific Plan would help to stop unauthorized off-road activity with the open space by removing access. Signage would be posted at appropriate locations such as trail heads and as trails enter the MHPA informing the public that no off-road or cross-county vehicular activity is allowed within the MHPA. An existing utility road would be improved as an EVA road. The roadway and its slopes would be adjusted out of the MHPA as a deletion area (see Figure 16.3 and Figure 36.2, Area E). This road is currently used by the USBP, SDG&E, or other utility/service providers and would also allow fire engine access in the event of emergency after improvements are installed. As part of project planning, coordination has been conducted with the Border Control to inform them of the conservation goals for the area and to identify the roads that they would continue to access. As detailed in Section 1.3.2.5.a and 1.3.2.6.a, a main east-west roadway through the mitigation lands would be used to implement restoration activities, but after completion, the roadway is planned to be narrowed to a primitive trail alignment through restoration of disturbed land to native habitats. Attachment 1 includes the Trails Restoration Plan which would implement restoration within areas that have been subject to historic off-road use in the vicinity of trail alignments.

7. Limit recreational uses to passive uses such as birdwatching, photography and trail use. Locate developed picnic areas near MHPA edges or specific areas within the MHPA, in order



to minimize littering, feeding of wildlife, and attracting or increasing populations of exotic or nuisance wildlife (opossums, raccoons, skunks). Where permitted, restrain pets on leashes.

*Discussion:* Signage identifying allowed pedestrian uses such as walking, jogging, and hiking would be installed at appropriate locations such as trail heads and at the entrances of the MHPA. No picnic areas are proposed to be developed. Passive recreation would allow hiking, walking, and non-motorized bicycle only. Equestrian use and motorized bicycles (i.e., e-bikes) would be prohibited; however, where accessible, motorized wheelchairs would be permitted.

8. Remove homeless and itinerant worker camps in habitat areas as soon as found pursuant to existing enforcement procedures.

*Discussion:* Removal of any homeless encampments discovered would be coordinated with and conducted by the local police department.

9. Maintain equestrian trails on a regular basis to remove manure (and other pet feces) from the trails and preserve system in order to control cowbird invasion and predation. Design and maintain trails where possible to drain into a gravel bottom or vegetated (e.g., grass-lined) swale or basin to detain runoff and remove pollutants.

*Discussion:* Equestrian trails are not proposed as an allowed use within the Specific Plan or OMCP trail network. The proposed perimeter trail is designed on a topographic bench within the slope surrounding the development area and is designed to capture trail runoff within a swale to control runoff and pollutants into the MHPA.

### ***Litter/Trash and Materials Storage***

1. Remove litter and trash on a regular basis. Post signage to prevent and report littering in trail and road access areas. Provide and maintain trash cans and bins at trail access points.

*Discussion:* As detailed in Section 1.3.2.5.a, trash cans would be maintained at trail access points into the MHPA. The HOA would be responsible for all trash removal within HOA lots including the manufactured slopes and perimeter trail areas. The long term manager of the open space would be responsible for litter and trash removal associated with primitive trails.

2. Impose penalties for littering and dumping. Fines should be sufficient to prevent recurrence and also cover reimbursement of costs to remove and dispose of debris, restore the area if needed, and to pay for enforcement staff time.

*Discussion:* The long-term manager of the open space where primitive trails are proposed would be responsible for enforcing penalties, in the form of fines, for littering and dumping.

3. Prohibit permanent storage of materials (e.g., hazardous and toxic chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, due to potential leakage.

*Discussion:* No permanent storage of materials (e.g., hazardous and toxic chemicals, equipment) is proposed within the MHPA.



4. Keep wildlife corridor undercrossings free of debris, trash, homeless encampments, and all other obstructions to wildlife movement

*Discussion:* Wildlife crossings would be kept free of debris, trash, homeless encampments, and all other obstructions to wildlife. If dumping reoccurs in the same place, barriers would be installed. The City is anticipated to take ownership and management of the slopes around Beyer Boulevard where proposed wildlife crossings are proposed. A long-term management plan for the Beyer Boulevard wildlife features has been prepared which details the long-term management obligations for these features (Attachment 16). Management of the wildlife crossings would be the responsibility of the City.

### ***Adjacency Management Issues***

1. Enforce, prevent and remove illegal intrusions into the MHPA (e.g., orchards, decks, etc.) on an annual basis, in addition to complaint basis.

*Discussion:* It is not anticipated that any illegal intrusions would occur within the adjacent MHPA as a manufactured slope and perimeter trail would be installed between the backside of the residential lots and the MHPA, preventing encroachment of accessory structures into the MHPA. The HOA would be responsible for maintenance of the perimeter trail and BMZ 1 areas located adjacent to the MHPA. As part of their maintenance, potential intrusions would be monitored and corrected if encountered. Additionally, the HOA would be responsible for educating homeowners about the conservation values and protections associated with the surrounding MHPA lands.

2. Disseminate educational information to residents adjacent to and inside the MHPA to heighten environmental awareness, and inform residents of access, appropriate plantings, construction or disturbance within MHPA boundaries, pet intrusion, fire management, and other adjacency issues.

*Discussion:* Educational information would be made available to residents adjacent to the MHPA to heighten environmental awareness, and inform residents of access, appropriate plantings, construction or disturbance within the MHPA boundaries, pet intrusion, fire management, and other adjacency issues. Education would include materials about the conservation goals of the MSCP that would be provided to residents through homeowners association disclosures and education.

3. Install barriers (fencing, rocks/boulders, vegetation) and/or signage where necessary to direct public access to appropriate locations.

*Discussion:* Signage and barriers would be installed at trail heads, along the EVA road, as necessary, to ensure that public access is limited to primitive trail alignments. Additionally, the trail restoration effort would serve to close public access to unauthorized trail alignments through revegetation and placement of other barriers where necessary.

### ***Invasive Exotics Control and Removal***

1. Do not introduce invasive non-native species into the MHPA. Provide information on invasive plants and animals harmful to the MHPA, and prevention methods, to visitors and



adjacent residents. Encourage residents to voluntarily remove invasive exotics from their landscaping.

*Discussion:* All landscaping adjacent to the MHPA and open space areas will not include invasive, non-native species, or species that easily hybridize with native species in the adjacent MHPA. The Specific Plan landscape palette includes allowable plant species adjacent to the MHPA and within BMZ 2 areas. Refer to Section 1.3.2.2 for details of the proposed native landscape palette for areas adjacent to open space. Education about appropriate landscaping and avoiding exotic species would be provided to residents through homeowners association disclosures and education. Additionally, certain species are identified on the landscape plans as prohibited within 100 feet of open space.

2. Remove giant reed, tamarisk, pampas grass, castor bean, artichoke thistle, and other exotic invasive species from creek and river systems, canyons and slopes, and elsewhere within the MHPA as funding or other assistance becomes available.

*Discussion:* Prior to turnover of mitigation lands for long-term management by the City, highly invasive plant species, as referenced in the City's Landscape Standards Manual would be removed (City of San Diego 2016). These species include tree of heaven (*Ailanthus altissima*), giant reed (*Arundo donax*), paper mulberry (*Broussonetia papyrifera*), pampas grass (*Cortaderia selloana*), tree tobacco (*Nicotiana glauca*), fountain grass (*Pennisetum setaceum*), Spanish broom (*Spartium junceum*), tamarisk (*Tamarix* sp.), and castor bean (*Ricinus communis*). Additionally, as part of the proposed trails restoration for the project specific analysis areas, invasive and non-native species within a 50-foot buffer of primitive trails (100 feet total) would be removed and revegetated with native species. The wetland restoration effort detailed in Attachment 18 would also include removal of invasive and non-native species in Spring Canyon and upstream portions of the drainage. Any vegetation removal would occur outside of the least Bell's vireo breeding season where their habitat is present, or presence/absence surveys would be conducted and avoidance measures implemented if within the breeding season.

3. If funding permits, initiate a baseline survey with regular follow-up monitoring to assess invasion or re-invasion by exotics, and to schedule removal.

*Discussion:* Baseline surveys of the MHPA areas within the mitigation lands have been conducted as part of the project analysis. Long term management of the MHPA would be the responsibility of the City.

4. Conduct an assessment of the need for brown-headed cowbird trapping in each area of the MHPA where cattle, horse, and other animals are kept.

*Discussion:* No cattle, horse or similar animals would be present in the MHPA surrounding the Specific Plan area.

5. If eucalyptus trees die or are removed from the MHPA area, replace with appropriate native species. Ensure that eucalyptus trees do not spread into new areas, nor increase substantially in numbers over the years. Eventual replacement by native species is preferred.

*Discussion:* Long-term management of the MHPA would be the responsibility of the City.

6. On a case-by-case basis some limited trapping of non-native predators may be necessary.



*Discussion:* Long-term management of the MHPA would be the responsibility of the City.

### ***Flood Control***

1. Perform standard maintenance, such as clearing and dredging of existing flood channels, during the non-breeding or nesting season of sensitive bird or wildlife species utilizing the riparian habitat. For the least Bell's vireo, the non-breeding season generally includes mid-September through mid-March.

*Discussion:* With appropriate wetland permits in hand and consultation with the resource agencies, standard maintenance would be performed, such as clearing and dredging of existing channels, during the non-breeding season of sensitive avian species, such as the least Bell's vireo (September 16-March 14). Long-term management of the MHPA and flood control channels (if present) would be the responsibility of the City.

2. Review existing flood control channels within the MHPA periodically (every five to ten years) to determine the need for their retention and maintenance, and to assess alternatives, such as restoration of natural rivers and floodplains.

*Discussion:* Long-term management of the MHPA and flood control channels (if present) would be the responsibility of the City.

### **f. Specific Management Directives for the Southern Otay Mesa area**

As detailed in Section 1.5.3 of the City's MSCP plan, the City envisions the Otay Mesa area to consist of open areas and undisturbed canyons which provide habitat and movement capability for wildlife. Integrated into the canyon network would be recreational trails and USBP access roads.

The specific management directives for the southern Otay Mesa area are detailed below followed by a discussion of project compliance:

1. Continuous coordination with the border patrol will be necessary to ensure continued awareness of the MHPA and cooperation in maintenance. The presence of the border patrol in this area should help to make the MHPA safer for visitors. If possible, improve coordination with the border patrol to aid in the identification and prevention of vandalism, off-road-vehicle use, dumping, and other disturbances to habitat.

*Discussion:* The applicant team has coordinated with USBP staff to identify access routes they would need to maintain open for vehicular use into the future. Additionally, USBP is informed of development plans in the area and planned conservation of habitats and restoration activities. Ongoing coordination would be required through project implementation.

2. Install barriers and signage along Spring Canyon where agriculture or development abuts the MHPA.

*Discussion:* The residential development areas associated with Phases 1a and 1b would not be located adjacent to Spring Canyon; however, where development abuts the MHPA, vegetated 2:1 slopes are proposed between homes and the adjacent to the MHPA boundary which would deter access. Additional signage along trailheads is proposed. These design



features would function as deterrents to pedestrian access into the MHPA outside of developed trails.

3. Provide educational materials and training on the MSCP and on native wildlife to border patrol agents and other public agency personnel working in the Otay Mesa border area to encourage sensitive behavior towards wildlife and its habitat, and to discourage unnecessary off-road vehicle use in sensitive areas.

*Discussion:* Long-term management of the project's mitigation lands would be the responsibility of the City including coordination and education of USBP agents and public agency personnel working in the area.

4. Ensure that the night lighting along the border intrudes as little as possible on lands in the interior of the MHPA.

*Discussion:* All project lighting adjacent to the MHPA would be shielded and directed away from the MHPA to reduce the potential for light pollution of the adjacent conserved lands.

5. Assess and prioritize the Spring Canyon area for restoration of disturbed areas. Include existing roads and those determined not to be needed for border patrol activities in the restoration assessment. Burned areas should not need restoration, but off-road use and other disturbed areas should either be restored or other steps taken to encourage regeneration. This could offer potential research opportunities

*Discussion:* The project proposes restoration and revegetation of disturbed habitats within the MHPA. While not proposed as mitigation, the project proposes to restore and enhance disturbed lands within the MHPA around proposed primitive trail alignments. A Trails Restoration Plan is included as Attachment 1. Coordination with USBP was conducted to identify access roads required for their continued use

## **g. Area Specific Management Directives**

Measures to protect the MHPA lands and sensitive species within the MHPA, called area specific management directives (ASMDs), include guidelines for managing and monitoring covered species and their habitats, including following BMPs. Implementation of ASMDs would also be included as conditions of project approval (e.g., Site Development Permit conditions).

Edge effects may include (but are not limited to) trampling, dumping, vehicular traffic, competition with invasive species, parasitism by brown-headed cowbirds, predation by domestic animals, noise, collecting, recreational activities, and other human intrusion (City of San Diego 1997).

MSCP-covered species observed or that have a high-to-moderate potential to occur within the limits of disturbance include coast horned lizard, least Bell's vireo, orange-throated whiptail, Cooper's hawk, southern California rufous-crowned sparrow, northern harrier, coastal California gnatcatcher, burrowing owl, coastal cactus wren, and southern mule deer (*Odocoileus hemionus fuliginata*). All of these species were observed in project-level analysis areas and all but southern mule deer have designated ASMDs and are discussed in detail below.



The conditions of coverage for coast horned lizard require ASMDs to maintain native ant species, discourage the invasive Argentine ant, and protect against detrimental edge effects to this species.

*Discussion:* To protect against detrimental edge effects related to the Argentine ant (*Linepithema humile*), an inspection of native container stock scheduled to be placed on or adjacent to MHPA slopes would be made by the project biologist (preferably off-site prior to shipment to the site). The biologist shall inspect all specimens and reject any that show presence or evidence of non-native ants. Additionally, all restoration/revegetation areas within BMZs abutting the MHPA and ESL shall avoid the use of chemicals which would impact or kill native ant species (i.e., herbicides/pesticides).

The conditions of coverage for least Bell's vireo require ASMDs to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, and protection against detrimental edge effects to this species. Any clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the breeding period) (City of San Diego 1997).

*Discussion:* Through the implementation of proper BMPs during construction, the project would not cause any detrimental edge effects to the adjacent transitional habitats that may support least Bell's vireo within Moody Canyon, adjacent to the project or the upland buffers around this habitat. Specifically, disturbances to habitat that supports least Bell's vireo such as construction-related runoff, ground disturbance, and the introduction of invasive non-native species in adjacent off-site habitat would be minimized through the implementation of erosion control devices, silt fencing, and the containment and proper disposal of invasive non-natives, respectively. In addition, the project is not expected to affect the condition of any habitat adjacent to the project area that would make it more favorable for cowbirds. Restrictions on clearing of occupied habitat between September 15 and March 15 are included as project mitigation discussed further in Section 8.2.4.4.

The conditions of coverage for orange-throated whiptail require ASMDs to address edge effects.

*Discussion:* To address edge effects all of the project-level analysis area shall be located outside of the MHPA (after the BLA) and fencing and signage shall be installed along the project boundary limits to discourage entry into the MHPA. Acceptable fencing or barriers to direct public access, per the MSCP, include natural rocks/boulders or peeler pole or split rail fencing. In addition, disturbed areas adjacent to primitive trails would be restored to native habitat, further improving the habitat and reducing edge effects.

The conditions of coverage for Cooper's hawk require ASMD to include a 300-foot impact avoidance area around active nests, and minimization of disturbance in oak woodlands and oak riparian forests.

*Discussion:* Should an active Cooper's hawk, or raptor nest be detected within the MHPA during the pre-grading survey, an appropriate construction setback of 300 feet would be implemented until the fledglings are independent of the nest.

The conditions of coverage for southern California rufous-crowned sparrow require ASMDs that maintains open phases of coastal sage scrub with herbaceous plant components, through maintenance of dynamic processes, such as fire.



*Discussion:* While all brush management is designed to be outside of the MHPA (after adjustment), the project would not preclude the City's maintenance of adjacent MHPA for fire management that may benefit the southern California rufous-crowned sparrow.

The conditions of coverage for northern harrier require ASMD to include management of disturbed lands (which become part of the preserve) within four miles of nesting habitat to provide foraging habitat and include an impact avoidance area (900 feet or maximum possible within the MHPA) around active nests. The preserve management coordination group shall coordinate efforts to manage for wintering northern harriers' foraging habitat within the MSCP preserves.

*Discussion:* MHPA areas south of the development area includes a network of disturbance from past off-road activity and other unauthorized uses. As part of the project-level implementation, habitat restoration within disturbed lands in a 100-foot corridor around proposed trail networks would be implemented. This standard for restoration around the Specific Plan trail network will additionally be implemented as a requirement of the Specific Plan. Restoration of native habitat as described will support expansion of foraging habitat. Additionally, should a northern harrier nest be known to occur or detected during construction, a 900-foot construction avoidance buffer would be placed around the nest and will remain in place until the fledglings have left the nest.

The conditions of coverage for coastal California gnatcatchers require ASMDs to include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. No clearing of occupied habitat within the City's MHPAs may occur during this species' breeding season between March 1 and August 15.

*Discussion:* If construction activities are to be conducted during the gnatcatcher breeding season, then noise attenuation and monitoring would be required within the off-site MHPA that is immediately adjacent to the project as coastal California gnatcatchers are present. No edge effects due to invasive plant species are anticipated as the project landscaping would not contain invasive species. No clearing of occupied habitat within the MHPA will occur during the breeding season.

The conditions of coverage for burrowing owl require ASMD to include the enhancement of known, historical and potential burrowing owl habitat; and management for ground squirrel, the primary excavator of burrowing owl burrows. Enhancement measures may include creation of artificial burrows and vegetation management to enhance foraging habitat. Management plans must also include monitoring of burrowing owl nest sites to determine use and nesting success; predator control; and establishing a 300-foot-wide impact avoidance area around occupied burrows within the preserve.

*Discussion:* One burrowing owl was detected incidentally during a Quino checkerspot butterfly protocol survey, but no active burrows were observed. Pre-construction burrowing owl surveys would be required to identify if burrowing owls are nesting within the construction area and if present, translocation and the creation of artificial burrows would be required within the MHPA, with approval of the Wildlife Agencies, MSCP, and EAS.



Although the project would not directly impact any active or occupied burrows, based on several focused surveys with negative results, a project design feature has been incorporated to install an earthen berm that could provide burrowing owl nesting opportunities within the project's mitigation lands within the MHPA at a location agreed upon with the City as detailed in Section 1.3.2.6.b. The earthen berm would be installed in the proposed vernal pool preserve to provide consistency with the ASMDs and OMCP policies related to burrowing owl (see Section 3.3.5). Pilot holes would be installed within the berm to encourage burrowing owl nesting. Additionally, the area surrounding the berm would be restored with species that would encourage burrowing owls. Refer to Attachment 14 for details of the burrowing owl design features. Restoration of disturbed habitat associated with trail alignments and mitigation for burrowing owl foraging lands through in-kind habitat-based preservation would support preservation of BUOW foraging habitat.

The conditions of coverage for coastal cactus wren require ASMDs to restore maritime succulent scrub habitat, including propagation of cactus patches, active/adaptive management of cactus wren habitat, monitoring of populations within preserves, and reduction or elimination of detrimental edge effects. No clearing of occupied habitat may occur during the species' breeding season of February 15 through August 15.

*Discussion:* As coastal cactus wrens are presumed to be present within the project-level analysis area, north of the western segment of the Beyer Boulevard alignment both within the City's Beyer Park parcel and within the Furby North Preserve, no clearing of occupied habitat would occur within their breeding season of February 15 to August 15 unless avoidance measures are implemented. A Coastal Cactus Wren Mitigation Plan was prepared (see Attachment 13; RECON 2024b) which includes the restoration of cholla-dominated maritime succulent scrub within existing disturbed maritime succulent scrub habitat. The establishment effort would involve salvage and translocation of cholla, removal of non-native species, and thinning overgrown species to increase suitability of the site for cactus wren. No existing native species would be removed, avoiding any impacts to existing maritime succulent scrub habitats. The mitigation would occur within a highly disturbed portion of maritime succulent scrub within the Furby North Preserve that largely does not support cholla. Portions of the mitigation site that currently support cholla would be enhanced through thinning as the existing maritime succulent scrub habitat is not suitable for cactus wren due to it being overgrown. The restoration of cholla-dominated maritime succulent scrub suitable for cactus wren combined with enhancement of existing overgrown maritime succulent scrub would both replace impacted habitat and enhance the existing habitat to better support the species. Additionally, the mitigation effort in the Furby North Preserve would provide funding for long-term management of the mitigation site, which would support ongoing management and implementation of species-specific measures to increase suitability of the habitat for coastal cactus wren.

The MSCP does not list any specific conditions of coverage for southern mule deer as this species is not considered sensitive, although it is still an MSCP-covered species.



## 6.2.2 Vernal Pool Habitat Conservation Plan

### 6.2.2.1 VPHCP Conservation Analysis

As detailed in Section 4.1.4 of the VPHCP, development of new roads needed to accommodate existing and planned land use consistent with the circulation/mobility element of the City's General Plan and the corresponding Community Plans were identified as covered projects because they are considered conditionally compatible with the MHPA. As detailed in VPHCP Table 4-1:

New roads may not impact vernal pools within the MHPA unless no other feasible alternative exists. If avoidance is not feasible, the project must demonstrate that impacts have been minimized to the maximum extent practicable. The project must evaluate the need for the road expansion pursuant to the Community Plan and evaluate alternate development proposals (e.g., reduced medians, reduction in road width/classification). The City would document all of these steps as part of its determination of consistency with the VPHCP. Mitigation consistent with the VPHCP and project approval through the City's discretionary process would be required for all unavoidable impacts.

As detailed in Section 4.2.1 of the VPHCP, covered activities include land use and public infrastructure activities, as well as conservation activities, which are subject to the City's jurisdiction that may result in incidental take of covered species by impacting potential vernal pool species and/or occupied habitat. The VPHCP will extend necessary incidental take coverage for these species in accordance with and subject to the requirements of the plan and Incidental Take Permit (ITP). The potential impacts to vernal pool species and habitat from the covered activities must either be avoided or minimized and mitigated as required under the VPHCP.

The proposed Beyer Boulevard extension would require impacts to 100 percent conserved lands, specifically associated with impacts to West Otay Mesa A, West Otay Mesa B, and the Furby North Preserve (see Figure 36.1). Implementation of the VPHCP was developed assuming existing 100 percent conserved areas would remain in conservation to support the overall goals of the plan. A MA to the VPHCP is proposed to address impacts to 100 percent conserved lands and the assumption that no development would be permitted within 100 percent conserved lands. The need for an MA is discussed further below. The analysis provided herein demonstrates that impacts to 100 percent conservation land would be offset through mitigation for impacts associated with the road (with an additional 1:1 ratio added to address the mitigation status of the land consistent with the OMCP FEIR) in addition to providing replacement land with equivalent biological value consistent with the VPHCP.

Two of the 100 percent conservation parcels (West Otay Mesa A and West Otay Mesa B) that would be impacted by Beyer Boulevard are subject to CDFW conservation easements. CDFW acquired the West Otay Mesa A and West Otay Mesa B conservation easements from TET in 2009. Attached as Exhibit C to the recorded CDFW conservation easement is a joint letter on behalf of both CDFW and USFWS to the City of San Diego confirming that all of the TET conservation properties are to be managed by the City consistent with the MSCP (see Attachment 19 for a copy of the recorded



easement). The Furby North Preserve is not protected by a conservation easement but is considered 100 percent conserved under the VPHCP.

Impacts through these 100 percent conserved lands have been known for some time both through early correspondence between the applicant and USFWS (USFWS 2007c) and its disclosure in the OMCP FEIR (Figure 5.4-5 of the OMCP FEIR; SCH No. 2004051076). The Wildlife Agencies have requested a MA to the VPHCP to specifically address the removal of 100 percent conserved lands associated with the Beyer Boulevard alignment (e.g., West Otay Mesa A, West Otay Mesa B, and the Furby North Preserve). The conservation strategy proposed to offset the impacts from the proposed Beyer Boulevard extension includes the conservation proposed in the VPHCP consistency analysis that follows as well as additional conservation outlined in Attachment 10b which is anticipated to include conservation of approximately 95.29 acres owned by Tri Pointe Homes south of the Specific Plan area that goes beyond City mitigation requirements, in addition to restoration and long-term management of a 2.13-acre mesa top area that would be restored to create high-quality vernal pool habitat on an existing degraded mesa top on the City's West Otay Mesa B property (see Figure 19).

Implementation of the proposed Beyer Boulevard extension, a planned circulation element roadway, would require impacts to 19.36 acres of 100 percent conserved lands as detailed in Table 7b, including 17.48 acres of sensitive upland vegetation communities and 0.06 acre of wetland vegetation communities, totaling 17.54 acres. Impacts to land identified as 100 percent conserved lands in the VPHCP require both mitigation consistent with the Biology Guidelines and replacement MHPA lands (e.g., non-MHPA lands to be added to the MHPA) of greater or equivalent value to be provided consistent with the VPHCP. As detailed in the excerpted text above, new roads through the MHPA require an alternatives analysis and impact minimization to the extent feasible. In addition to these requirements, impacts to lands protected by conservation easements (i.e., West Otay Mesa A and West Otay Mesa B) require additional conservation offsets. Refer to Section 1.3.2.5.b for the details of the various CDFW requirements associated with Beyer Boulevard impacts to conservation easements.

The proposed Beyer Boulevard extension has been the subject of extensive review including evaluation of both alternative project locations and design changes to minimize road width and associated impacts. The current roadway design reflects a two-lane constrained roadway where the roadway would cross 100 percent conserved lands. Documentation of the need for the roadway, the various alternatives considered, and the design reductions that have been provided are detailed in Attachment 11.



**Table 7b**  
**Summary of Proposed VPHCP Conservation Analysis within the Project level Areas**  
(acres)

Vegetation Communities/ Land Cover Types	Habitat Tier	Total Proposed Encroachment <sup>1</sup> (100 Percent Conservation)	MHPA Addition Areas					Net Change Proposed MHPA Addition
			Area B <sup>2</sup>	Area C	Area D	Area E	Subtotal MHCP Additions	
Upland Vegetation Communities								
Maritime Succulent Scrub	I	-11.15	-	+1.32	+6.68	+1.06	+9.06	-2.09 <sup>3</sup>
Disturbed Maritime Succulent Scrub	I	-0.64	-	-	+0.12	+0.14	+0.26	-0.38
Diegan Coastal Sage Scrub	II	-3.09	-	+8.58	+0.20	-	+8.78	+5.69
Disturbed Diegan Coastal Sage Scrub	II	-0.12	-	-	-	-	-	-0.12
Non-native Grassland	IIIB	-2.48	+8.73	+0.20	+0.17	-	+9.09	+6.61 <sup>3</sup>
Subtotal Sensitive Upland Vegetation		-17.48	+8.73	+10.10	+7.17	+1.20	+27.20	+9.72
Wetland Vegetation Communities								
Natural Flood Channel	-	-0.03	-	+0.09	-	-	+0.09	+0.06
Disturbed Wetland <sup>4</sup>	-	-0.01	+0.03	-	-	-	+0.03	+0.02
Vernal pool <sup>4</sup>	-	-0.03	+0.04	-	-	-	+0.04	+0.01
Vernal pool with fairy shrimp <sup>4</sup>	-	-0.01	-	+<0.01	+0.01	-	+0.01	-
Subtotal Wetland Vegetation		-0.06	+0.07	+0.09	+0.01	-	+0.17	+0.09
Total Sensitive Vegetation Communities		-17.54	+8.80	+10.19	+7.18	+1.20	+27.37	+9.83
Disturbed Land	IV	-1.82	-	+0.08	+0.49	+0.10	+0.66	-1.16 <sup>3</sup>
Total with Disturbed Lands		-19.36	+8.80	+10.27	+7.67	+1.30	+28.03	+8.67 <sup>3</sup>

NOTE: Totals may not add due to rounding.

<sup>1</sup>1.66 acres of non-native grassland would be impacted for installation of a pump station within the VPHCP/MHPA in the southeastern portion of the Specific Plan area; however, the pump station is an allowed use within the VPHCP and is not required to be included as a deletion from the VPHCP.

<sup>2</sup>The 8.73 acres of MHPA addition shown as the Area B inset in Figure 36.4 is mapped as non-native grassland; 0.07 acre of aquatic resources are reported based on City VPHCP data. Reported vernal pools and disturbed wetlands may contain fairy shrimp and sensitive species but data was not available to confirm presence. This addition area would provide replacement function and values for impacted mesa top areas due to its potential for vernal pool restoration.

<sup>3</sup>7.83 acres of disturbed and non-native grassland would be restored to maritime succulent scrub within the MHPA as part of the trail restoration effort, resulting in a net increase in Tier 1 habitats within the MHPA.

<sup>4</sup>Impacts to aquatic resources within the 100 percent conservation lands include a total of five vernal pools and two disturbed wetlands totaling 0.03 acre based on the aquatic resource delineations. Of the vernal pool resources, one 0.006-acre pool within the Furby North Preserve contains fairy shrimp. Refer to Figure 33.2 and 33.3 for details of the aquatic resources within the 100 percent conservation deletion area.



As shown in Figure 36.4 (see Area A) and detailed in Table 7b, the deletion of 100 percent conserved lands associated with Beyer Boulevard would include 11.79 acres of maritime succulent scrub and disturbed maritime succulent scrub, 3.21 acres of Diegan coastal sage scrub and disturbed coastal sage scrub, 2.48 acres of non-native grassland, 0.03 acre of natural flood channel (ephemeral drainage), 0.01 acre of disturbed wetland, 0.03 acre of vernal pool and 0.01 acre of vernal pool with fairy shrimp. As required by the VPHCP, replacement land is proposed to be added to the MHPA to account for the removal of 19.36 acres of 100 percent conserved lands. Land proposed to be added into the MHPA in exchange for impacts to VPHCP conserved lands would include 27.37 acres of sensitive vegetation communities comprising 9.32 acres of maritime succulent scrub and disturbed maritime succulent scrub, 8.78 acres of Diegan coastal sage scrub, 9.09 acre of non-native grassland, 0.09 acre of natural flood channel (ephemeral drainage), 0.03 acre of disturbed wetlands, 0.04 acre of vernal pool, and 0.01 acre of vernal pools with fairy shrimp (see Table 7b; see Figure 36.4, Areas B through E). Non-native grassland addition areas include 8.80 acres of mesa top land within Planning Area 23 (Area B on Figure 36.4) that would provide replacement function and values for the approximate 3.8-acre area of impacted mesa top land within West Otay Mesa A and West Otay Mesa B. The addition of mesa top land within Planning Area 23 is significant due to this area expanding the City's hardline VPHCP preserve within an area previously contemplated for development. This area supports part of the J13 north and J13 south vernal pool complexes that were previously considered as part of the unadopted Expanded Conservation Alternative in the VPHCP EIR/EIS. This MHPA addition would result in additional conservation of portions of the Otay Mesa J13 north and J13 south vernal pool complexes where currently the level of conservation is zero. In addition, 7.83 acres of disturbed and non-native grassland in the addition areas would be restored to maritime succulent scrub within the MHPA as part of the trails restoration effort, resulting in a net increase in Tier 1 habitats within the MHPA.

Impacts to 100 percent conserved lands require non-MHPA replacement lands to be conserved that provide functional equivalency. The VPHCP equivalency analysis and conservation strategy are provided below.

Impacts associated with construction of a two-acre sewer pump station within the existing VPHCP/MHPA area within the southeast portion of the Specific Plan area is an allowed use within the VPHCP and is not included as a deletion from the VPHCP for purposes of the analysis.

#### **a. VPHCP Conservation Analysis Criteria**

As detailed in Section 4.1.4 of the VPHCP, certain types of projects are permitted under the VPHCP subject to consistency with the ESL regulations and the VPHCP, including development of new roads. Table 4-1 of the VPHCP specifically identifies development of new Community Plan roads as covered road projects. Further, as specified in the VPHCP Section 4.1.3, current and future development projects not included on the covered projects list provided in VPHCP Section 4.1.2 would be required to analyze their impacts and conservation compared to the requirements and conditions of the VPHCP (see VPHCP Chapter 5). The conservation analysis evaluating the proposed impacts and conservation is provided below. The conservation analysis is based on an evaluation of the VPHCP conservation strategy in VPHCP Chapter 5 in addition to the criteria for determining the biological value of a proposed boundary line adjustment in accordance with the MSCP Plan Section 5.4.2.



### *VPHCP Chapter 5 Conservation Strategy*

As detailed in VPHCP Chapter 5, the VPHCP's overall conservation strategy for the covered species is to allow impacts to degraded vernal pools with low long-term conservation value in exchange for restoration, enhancement, preservation, and long-term management and monitoring of vernal pools with long-term conservation value in the MHPA. The conservation strategy builds on the existing conservation (i.e., baseline conservation) of the seven vernal pool species and habitat that has occurred under the City's MSCP Subarea Plan that includes most (84 percent) of the extant vernal pools in the City.

The biological goal of the VPHCP is to contribute to the recovery of the VPHCP covered species and ensure continued persistence of the covered vernal pool species populations identified in the VPHCP and the City's existing Natural Community Conservation Plan. This goal would be achieved by implementing the VPHCP conservation strategy, which includes both habitat-based (vernal pool) and species-specific objectives (VPHCP Table 5-1) and has been designed to meet or exceed existing MSCP requirements. The habitat-based objectives identify the number of specific vernal pools and complexes that will be conserved, managed, and/or restored through implementation of the VPHCP. The species-specific objectives include conservation, management, and/or restoration and enhancement actions for covered species.

VPHCP Table 5-1 identifies more detailed objectives of the VPHCP. It includes specific objectives for vernal pools, specifically vernal pool complexes identified for conservation in the plan and species-specific objectives addressing the seven covered species in the VPHCP. Impacts along Beyer Boulevard would not impact any of the vernal pool complexes assumed for conservation under the VPHCP. More specifically, Table 5-2 of the VPHCP identifies the VPHCP increase in conservation from baseline conditions. Due to West Otay Mesa A and West Otay Mesa B having been under conservation easements prior to adoption of the VPHCP, as well as establishment of the Furby North preserve prior to adoption of the VPHCP, these areas were considered 100 percent conserved lands. While these parcels are identified as 100 percent conserved in the VPHCP, the conservation analysis does not identify any resources within the proposed Beyer Boulevard impact area that would require conservation in order to achieve the conservation goals of the VPHCP. Specifically, the VPHCP Vernal Pool Management and Monitoring Program Table C-1 identifies the J32 pools located in West Otay Mesa A and West Otay Mesa B as the complexes assumed for conservation under the VPHCP. These pools are located north of Moody Canyon, physically separated from the impact area for Beyer Boulevard.

Similarly, Section 5.2.3 of the VPHCP addresses species protection. The conservation analysis identified in this section addresses VPHCP covered species that would be protected by conservation of vernal pool complexes specified in the plan. The project includes an evaluation of each of the seven VPHCP covered species in Section 7.1.2.2 and 7.1.2.3, demonstrating that the project would be consistent with the requirements of the VPHCP regarding implementation of avoidance and minimization measures. Impacts to vernal pools and vernal pool covered species in the conservation area includes a total of five vernal pools and two disturbed wetlands totaling 0.03 acre. Of the vernal pool resources, one 0.006-acre pool within the Furby North Preserve contains fairy shrimp. These are isolated resources within previously disturbed areas and not associated with any vernal pool complex in the VPHCP conservation analysis. Further, these impacts are proposed to be mitigated



as part of the project's overall vernal pool restoration effort which would occur within a 33.71-acre vernal pool restoration area. This restoration effort is proposed within an area that historically supported vernal pools and is located in the VPHCP preserve. In addition to mitigation for impacts to resources consistent with the VPHCP, the project would provide replacement conservation land that contains equivalent or greater resources including 0.03 acre of disturbed wetlands and 0.04 acre of vernal pool resources.

The addition of Area B (Planning Area 23) to the MHPA includes an 8.80-acre area of mesa top land that would expand the VPHCP preserve and would conserve the J13 north South Otay 1 acre (Private) complex that was evaluated in the VPHCP but not conserved. The conservation of this area would increase conservation potential for VPHCP covered species in an area that was not conserved under the VPHCP.

### *MSCP Section 5.4.2 Criteria*

#### **1. Effects on Significantly and Sufficiently Conserved Habitats**

The amount and distribution of habitats considered significantly and sufficiently conserved within the VPHCP will be functionally equivalent and expand in total area after MHPA addition lands are provided due to a net increase in acreage of Diegan coastal sage scrub, non-native grassland, and jurisdictional resources including vernal pools, as detailed in Table 7b. While the exchange lands have a deficit of 2.47 acres of Tier I vegetation communities, the project includes restoration within the MHPA as part of the trails restoration effort that would convert 7.1 acres of disturbed and non-native grassland to maritime succulent scrub (see Attachment 1). Approximately 0.5 acre of this restoration total is located within the MHPA Area A Tier I habitat within the MHPA. Additionally, considering the overall proposed MHPA additions, as part of the MHPA BLA and the VPHCP replacement conservation, there would be a net increase of 14.19 acres of sensitive vegetation communities provided (Table 7c). Additional jurisdictional resources would also be included within the addition areas including natural drainages (natural flood channel), a disturbed wetland and vernal pool resources.

Although five vernal pools and two disturbed wetlands totaling 0.03 acre located within a dirt roadway would be included in the deletion areas, the addition areas would more than replace these resources.



**Table 7c**  
**Summary of Proposed MHPA and VPHCP BLA within the Project level Areas**  
**(acres)**

Vegetation Communities/ Land Cover Types	Habitat Tier	Deletions			Additions			NET CHANGE
		Proposed Encroachment (MHPA Deletion)	Total Proposed Encroachment (100 Percent Conservation) <sup>1</sup>	Total Deletions	Proposed MHPA Addition to offset MHPA Deletion	Proposed MHPA addition to offset VPHCP 100% Conservation Deletion <sup>2</sup>	Total Proposed MHPA with MHPA BLA and VPHCP Replacement Additions	
Upland Vegetation Communities								
Maritime Succulent Scrub	I	-7.19	-11.15	-18.33	+7.59 <sup>3</sup>	+9.06	+16.65 <sup>3</sup>	-1.68 <sup>3</sup>
Disturbed Maritime Succulent Scrub	I	-0.44	-0.64	-1.08	+0.11	+0.26	+0.38	-0.70
Diegan Coastal Sage Scrub	II	-3.76	-3.09	-6.85	+7.34	+8.78	+16.12	+9.27
Disturbed Diegan Coastal Sage Scrub	II	-0.83	-0.12	-0.96	+0.34	-	+0.34	-0.62
Non-native Grassland	IIIB	-0.50	-2.48	-2.98	+1.35	+9.09 <sup>4,5</sup>	+10.44 <sup>4,5</sup>	+7.46 <sup>4,5</sup>
Subtotal Sensitive Upland Vegetation		-12.73	-17.48	-30.21	+16.73 <sup>3</sup>	+27.20 <sup>4,5</sup>	+43.93 <sup>3,4,5</sup>	+13.72 <sup>3,4,5</sup>
Wetland Vegetation Communities								
Natural Flood Channel	-	-0.08	-0.03	-0.10	+0.07	+0.09	+0.16	+0.06
Tamarisk Scrub		-0.01		-0.01	-	-	-	-0.01
Disturbed Wetland <sup>6</sup>	-	-	- <0.01	- <0.01	+0.08	+0.03	+0.11	+0.11
Vernal Pool <sup>6</sup>	-	-0.01	-0.03	-0.03	-	+0.04	+0.04	+0.01
Vernal Pool with Fairy Shrimp <sup>6</sup>	-	-	-0.01	-0.01		+0.01	+0.01	-
Subtotal Wetland Vegetation		-0.09	-0.06	-0.16	+0.15	+0.17	+0.32	+0.16
Total Sensitive Vegetation Communities		-12.82	-17.54	-30.36	+16.88 <sup>3</sup>	+27.37 <sup>4,5</sup>	+44.25 <sup>3,4,5</sup>	+13.89 <sup>3,4,5</sup>
Total Encroachments / Additions		- 30.36			+44.25 <sup>3,4,5</sup>			+13.89 <sup>3,4,5</sup>
Disturbed Land <sup>7</sup>	IV	-2.02	-1.82	-3.84	+1.20 <sup>3</sup>	+0.66 <sup>5</sup>	+1.86 <sup>3,5</sup>	-1.98 <sup>3,5,7</sup>
Developed	-	-0.05	-	-0.05	-	-	-	-0.05

NOTE: Totals may not add due to rounding.

<sup>1</sup>1.66 acres of non-native grassland and 0.02 acre of disturbed land would be impacted for installation of a pump station within the western portion of the vernal pool restoration area; however, this was identified as an allowed use within the VPHCP and is not included as a deletion from the VPHCP for purposes of the BLA.

<sup>2</sup>Impacts to 100% conservation parcels require non-MHPA replacement lands to serve vernal pool resources for functional equivalency.

<sup>3</sup>0.30 acre of disturbed lands within Area A (Figure 36.3) would be restored to maritime succulent scrub as part of the trail restoration (Attachment 1); not included in the totals for the MHPA BLA.

<sup>4</sup>Non-native grassland addition areas include 8.80 acres of mesa top land within Planning Area 23 that would provide replacement function and values due to the potential for vernal pool restoration on these lands. These additional areas off-set the approximate 3.8-acre area of impacted mesa top land within West Otay Mesa A and B in excess of City requirements.

<sup>5</sup>7.83 acres of disturbed and non-native grassland within the VPHCP Addition Areas would be restored to maritime succulent scrub within the MHPA as part of the trail restoration effort; not included in the totals.

<sup>6</sup>Impacts to aquatic resources within the 100 percent conservation lands include a total of five vernal pools and two disturbed wetlands totaling 0.03 acre based on the aquatic resource delineations. Of the vernal pool resources, one 0.006-acre pool within the Furby North Preserve contains fairy shrimp. Refer to Figure 33.2 and 33.3 for details of the aquatic resources within the 100 percent conservation deletion area. Aquatic resources deletions would be offset by the addition of an 0.08 acre disturbed wetland (0.07 acre of 0.08 acre contains fairy shrimp) which would be enhanced to be vernal pools through weed removal and addition of common vernal pool plant species as part of the proposed trail restoration effort (see Attachment 1 for the trail restoration plan) This will result in the addition of a 0.08-acre vernal pool as part of the VPHCP addition area which would offset the removal of 0.03 acre of vernal pool resources and vernal pool with fairy shrimp.

<sup>7</sup>Disturbed lands are not counted in the addition equivalency analysis. Note that some disturbed trails are proposed for restoration to maritime succulent scrub (see footnotes 3 and 5).



The areas proposed for MHPA addition (Areas B through E on Figure 36.4) would be adjacent to other blocks of MHPA after the MHPA BLA and would add 27.37 acres of native habitat and non-native grasslands in excess of the amount of native habitat deleted. Additionally, restoration of 8.73 acres of disturbed and non-native grassland to maritime succulent scrub within the MHPA as part of the trails restoration effort would result in increases in the area of significantly conserved Tier I and II habitats within the MSCP subarea (see Table 7b). The lands proposed as VPHCP additions total 28.03 acres and would be functionally similar to the proposed deletion areas in that the lands are largely comprised of native uplands and mesa top land that would be suitable for vernal pool restoration. Thus, the proposed habitat exchange would maintain and slightly improve the conservation of significantly or sufficiently conserved habitats within this portion of the MHPA due to the increase of native habitats and non-native grassland area on the mesa top, functionally expanding the vernal pool preserve. The proposed habitat exchange is consistent with long anticipated expectations that Beyer Boulevard would require mitigation consistent with the MSCP including providing replacement mitigation with a site containing the same biological functions (USFWS 2007c).

## 2. Effects to Covered Species

Covered species under the VPHCP include San Diego fairy shrimp, Riverside fairy shrimp, San Diego button-celery, spreading navarretia, San Diego Mesa mint, California Orcutt grass, and Otay Mesa mint. These are all species associated with vernal pools; therefore, equivalent conservation of vernal pools and surrounding pool watersheds supporting these species would ensure no adverse effects to covered species.

As part of the proposed land exchange, the addition areas would increase total acreage of vernal pools by 0.01 acre. Therefore, the proposed exchange would have no adverse effect to covered species.

The addition of maritime succulent scrub and coastal sage scrub within the lands to be added to the MHPA may also increase potential habitat for additional covered species that may occur in the vicinity of the project (e.g., coastal California gnatcatcher). Through the VPHCP land exchange process, large blocks of maritime succulent scrub and Diegan coastal sage scrub habitat totaling 18.10 acres within the mitigation lands would be added to the MHPA preserve to provide additional suitable habitat for this species. The BLA is also anticipated to increase the amount of occupied habitat based on use areas identified during focused surveys. During the 2020 protocol surveys, one gnatcatcher use area was documented within the Furby North Preserve, which would be removed from the VPHCP/MHPA (RECON 2020a). This would be offset by the addition of occupied habitat to the MHPA containing four gnatcatcher use areas (pairs) based on protocol surveys conducted in 2018 and 2020 (RECON 2018f, 2020b).

The 8.80-acre addition areas in Area B (see Figure 36.4), supporting non-native grassland and disturbed wetlands and vernal pools, would offset the loss of approximately 3.8 acres of mesa top land within West Otay Mesa A and West Otay Mesa B. While 0.01 acre of vernal pool with fairy shrimp was identified within the deletion areas, the 8.80-acre area of mesa top addition within Planning Area 23 (Area B) would provide replacement habitat that contains vernal pools and isolated disturbed wetlands in addition to other land with capacity to be restored to support vernal pools, expanding habitat for VPHCP covered species.



### 3. Effects on Habitat Linkages and the Function of Preserve Areas

As part of the project-level implementation, the proposed Beyer Boulevard extension would run parallel and south of Moody Canyon, crossing 100 percent conserved lands. Although the Beyer Boulevard extension would bisect open space, it is not anticipated to have an effect on vernal pool preserve areas. Although no vernal pool complexes identified within the VPHCP exist within the deletion areas, there are approximately 4.33 acres of flat mesa top land within West Otay Mesa A and West Otay Mesa B proposed for removal from the preserve that would be suitable for vernal pool restoration. To offset impacts to these mesa top areas, an 8.80-acre area is proposed to be added to the MHPA which would extend the vernal pool preserve acreage within the Specific Plan area. This addition includes non-native grassland mesa top land in Area B (see Figure 36.4). This expansion of the vernal pool preserve would have a benefit on habitat linkages and function of the vernal pool preserve as the Area B addition areas would expand areas already planned for preserve, to the north. The mesa top area to be removed are isolated areas, not adjacent to any planned vernal pool preserve or restoration area.

The Area B addition area corresponds to Planning Area 23. In order to provide necessary fire access and utilities, an emergency only fire access road would be identified as an allowed use in the MHPA between Planning Areas 23 and the area to the north (see Figure 8 for the location of the road). By gating this road and limiting its width and accessibility, the function of the preserve can be maintained.

Vernal pool preserve areas located north of the proposed Beyer Boulevard and south of Old Otay Mesa Road (J32 vernal pool complex) would not be affected by the deletion as no watersheds of vernal pools identified for conservation in the VPHCP would be affected. Impacts to habitat linkages and the function of preserve areas for wildlife to the proposed Beyer Boulevard extension is addressed under 6.2.1.1.

### 4. Effects on Preserve Configuration and Management

The proposed modifications do not decrease the total area of the MHPA. The proposed changes would expand on the existing MHPA and would not conflict with any of the previously identified conservation or management needs for the subarea or cause the need for additional measures. In addition, the trails restoration program will convert 7.83 acres of disturbed and non-native grassland to maritime succulent scrub (see Attachment 1). Approximately 0.5 acre of this total is located within the non-MHPA Area A proposed as an exchange in the MHPA BLA. This effort would support preserve configuration and management by closing unauthorized trails through restoration, supporting trail closures and habitat recovery in areas not intended for trail use.

Areas D and E shown on Figure 36.4 provide additions of maritime succulent scrub habitats, expanding on existing MHPA lands. The proposed habitat addition to the MHPA along the central east edge of the Specific Plan area, in between the existing VPHCP/MHPA areas (shown as Area C on Figure 36.4), would fill in a gap between the baseline MHPA and VPHCP conserved lands; therefore, increasing the size and connectivity of the preserve and the resources they were set aside to protect, and reduce edge effects in these areas. Thus, the proposed habitat exchange would improve the conservation, configuration, and area of significantly or sufficiently conserved habitats within this portion of the MHPA.



## 5. Effects on Ecotones or Other Conditions Affecting Species Diversity

The proposed modifications to the MHPA will maintain the structural diversity of the preserve while maintaining wildlife movement across Beyer Boulevard through incorporation of several wildlife movement crossings. The impacts to the vernal pools are compensated with similar features being preserved within the MHPA; and therefore, do not reduce the benefits made to the open space and local habitat linkages. Habitats and changes in topography are similar in the deletion and addition areas.

## 6. Effects to Species of Concern Not Covered under the VPHCP

The following non-MSCP/VPHCP covered species were either identified or had a moderate to high potential to occur within the project survey area: western spadefoot, yellow-breasted chat, yellow warbler, coastal whiptail, red diamond rattlesnake, two-striped garter snake, Coronado skink, San Diego woodrat, merlin, California horned lark, Bell's sage sparrow, loggerhead shrike, and grasshopper sparrow. Of these, only one of these are present within any of the VPHCP or 100 percent conserved lands proposed for deletion: western spadefoot (eggs within a vernal pool and disturbed wetland within Deletion Area A, Figure 36.4). Impacts to one basin supporting western spadefoot would be replaced by two additional basins within Addition Area B that support western spadefoot which would replace the biological value with respect to this species.

The proposed modifications to 100 percent conserved lands would not significantly increase the likelihood of the other non-covered species listed in Attachments 7 and 8 to be listed under either the federal or state endangered species acts based on the equivalency of the replacement lands provided.

### b. VPHCP Conservation Summary

As stated in Section 8.4.2 of the VPHCP, exchange of conserved lands within the VPHCP Plan Area may be made without the need for a Major Amendment to the VPHCP in cases where the new boundary results in an area of equivalent or higher biological value in the MHPA. An equivalency analysis will be required to evaluate the change in conservation levels and the change in impacts to vernal pools and covered species that would occur with the adjustment.

In addition to lands mapped as MHPA, the VPHCP includes 100 percent conserved lands (Furby North Preserve and the West Otay Mesa A and West Otay Mesa B parcels; see Figure 7) that are in addition to the MHPA hardline preserve. As described in Section 1.2.3, the proposed alignment for Beyer Boulevard crosses these 100 percent conserved lands. The proposed VPHCP exchange of conserved lands includes the deletion of 100 percent conserved lands including 0.03 acre of vernal pools and 0.006 acre of vernal pools with fairy shrimp (see Table 7b). The total areas of sensitive habitat proposed for addition would include 18.57 acres of sensitive vegetation communities within Areas C through E, and 8.80 acres of mesa top land suitable for vernal pool restoration within Area B (see Figure 36.4). The total addition would provide 9.83 acres of sensitive vegetation communities in excess of the amount of land deleted, resulting in increases in the area of significantly conserved Tier II and IIIb habitats (Table 7b). In addition, 7.83 acres of disturbed and non-native grassland in the addition areas would be restored to maritime succulent scrub within the MHPA as part of the trails restoration effort, resulting in a net increase in Tier 1 habitats within the MHPA. The VPHCP



conservation strategy identified herein is the result of extensive City and Wildlife Agency coordination and exceeds the City's requirements under the MSCP Subarea Plan, VPHCP, and Biology Guidelines.

Lands to be added to the MHPA with potential to support vernal pools (e.g., 8.80 acres of mesa top land) would exceed the requirement to compensate for the loss of 0.04 acre of vernal pools and also offer opportunities for future vernal pool restoration. In addition to proposed replacement lands and proposed disturbed wetland enhancements, the project would additionally mitigate all impact to vernal pool resources consistent with the VPHCP by restoring 33.71 acres with vernal pools within the MHPA, providing higher quality vernal pools (all inoculated with San Diego fairy shrimp) than those being impacted by the project.

### 6.2.2.2 VPHCP Compliance

The VPHCP provides coverage for threatened and endangered vernal pool species that do not have federal coverage under the City's MSCP Subarea Plan. Implementation of the project-level areas would result in take of VPHCP-covered species (San Diego button-celery, San Diego fairy shrimp, and Riverside fairy shrimp). While the authorized take of species would be allowed, enhancement and restoration efforts that would add to and improve the quality of preserved vernal pool habitat and promote recovery of covered species populations would be required. Therefore, the short-term adverse result of the take would be offset by the long-term benefit of increased preservation and recovery of these species and natural resources. Due to the presence of ESL, compliance with the VPHCP Section 5.2.1, 5.3.2, and Chapter 7, as well as the Land Use Adjacency Guidelines in MSCP Subarea Plan Section 1.4.3 would be required, as detailed below.

#### a. Avoidance and Minimization Measures

To remain in compliance with Section 5.2.1 of the VPHCP, the general avoidance and minimization measures required include:

1. Any development adjacent to the MHPA shall be constructed to slope away from the extant pools to be avoided, to ensure that runoff from the project does not flow into the pools.

*Discussion:* Development adjacent to 100 percent conserved lands would drain away from the MHPA and conserved lands, ensuring development runoff into any pools is avoided. Temporary fencing (with silt barriers) at the limits of project impacts (including construction staging areas and access routes) are required to prevent additional vernal pool impacts and prevent the spread of silt from the construction zone into adjacent vernal pools. Fencing shall be installed in a manner that does not impact habitats to be avoided. Final construction plans shall include illustrations that show the fenced limits of impact and all areas of vernal pools to be impacted and avoided. If work inadvertently occurs beyond the fenced or demarcated limits of impact, all work shall cease until the problem has been remedied to the satisfaction of the City. Temporary construction fencing shall be removed upon project completion.



2. Covered projects shall require temporary fencing (with silt barriers) of the limits of project impacts (including construction staging areas and access routes) to prevent additional vernal pool impacts and prevent the spread of silt from the construction zone into adjacent vernal pools. Fencing shall be installed in a manner that does not impact habitats to be avoided. Final construction plans shall include photographs that show the fenced limits of impact and all areas of vernal pools to be impacted or avoided. If work inadvertently occurs beyond the fenced or demarcated limits of impact, all work shall cease until the problem has been remedied to the satisfaction of the City. Temporary construction fencing shall be removed upon project completion.

*Discussion:* Construction plans shall provide the locations of silt fencing to ensure areas outside of the impact footprint are protected. All locations of vernal pools to be impacted or avoided shall be shown. The required biological monitor will provide photographs of the fenced limits and resource areas as required.

3. Impacts from fugitive dust that may occur during construction grading shall be avoided and minimized through watering and other appropriate measures.

*Discussion:* Standard construction measures including watering would be employed to avoid/minimize fugitive dust consistent with San Diego Air Pollution Control District Rule 55.

4. A qualified monitoring biologist that has been approved by the City shall be present during project construction activities to ensure compliance with all mitigation measures identified in the CEQA environmental document. The biologist shall be knowledgeable of vernal pool species biology and ecology. The biologist shall perform the following duties:
  - a. Oversee installation of and inspect the fencing and erosion control measures within or upslope of vernal pool restoration and/or preservation areas a minimum of once per week and daily during all rain events to ensure that any breaks in the fence or erosion control measures are repaired immediately.
  - b. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.
  - c. Train all contractors and construction personnel on the biological resources associated with this project and ensure that training is implemented by construction personnel. At a minimum, training shall include (1) the purpose for resource protection; (2) a description of the vernal pool species and their habitat(s); (3) the conservation measures that must be implemented during project construction to conserve the vernal pool species, including strictly limiting activities, vehicles, equipment, and construction materials to the fenced project footprint to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the project-level analysis area by fencing); (4) environmentally responsible construction practices as outlined in Measures 5, 6, and 7 below; (5) the protocol to resolve conflicts that may arise at any time during the construction process; and (6) the general provisions of the project's mitigation monitoring and reporting program, the need to adhere to the provisions of federal Endangered Species Act (FESA), and the penalties associated with violating FESA.



- d. Halt work, if necessary, and confer with the City to ensure the proper implementation of species and habitat protection measures. The biologist shall report any violation to the City within 24 hours of its occurrence.
- e. Submit regular (e.g., weekly) letter reports to the City during project construction and a final report following completion of construction. The final report shall include as-built construction drawings with an overlay of habitat that was impacted and avoided, photographs of habitat areas that were avoided, and other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with all conservation measures was achieved.

*Discussion:* The City requires a biological monitor to carry out these measures as standard conditions of approval.

5. The following conditions shall be implemented during project construction:
  - a. Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint.
  - b. The project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.
  - c. Disposal or temporary placement of excess fill, brush, or other debris shall be limited to areas within the fenced project footprint.

*Discussion:* These conditions would be documented on construction plans and implemented during project construction.

6. All equipment maintenance, staging, parking, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas within the fenced project impact limits. These designated areas shall be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering the vernal pools or their watersheds and shall be shown on the construction plans. Fueling of equipment shall take place within existing paved areas greater than 100 feet from the vernal pools or their watersheds. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary. A spill kit for each piece of construction equipment shall be available and must be used in the event of a spill. "No fueling zones" shall be designated on construction plans.

*Discussion:* These conditions would be documented on construction plans and implemented during project construction.

7. Grading activities immediately adjacent to vernal pools shall be timed to avoid wet weather to minimize potential impacts (e.g., siltation) to the vernal pools unless the area to be graded is at an elevation below the pools. To achieve this goal, grading adjacent to avoided pools shall comply with the following:



- a. Grading shall occur only when the soil is dry to the touch both at the surface and 1 inch below. A visual check for color differences (i.e., darker soil indicating moisture) in the soil between the surface and 1 inch below indicates the soil is dry.
- b. After a rain of greater than 0.2-inch, grading shall occur only after the soil surface has dried sufficiently as described above, and no sooner than 2 days (48 hours) after the rain event ends.
- c. To prevent erosion and siltation from storm water runoff due to unexpected rains, BMPs (e.g., silt fences) shall be implemented as needed during grading.
- d. If rain occurs during grading, work shall stop and resume only after soils are dry, as described above.
- e. Grading shall be done in a manner to prevent runoff from entering preserved vernal pools.
- f. If necessary, water spraying will be conducted at a level sufficient to control fugitive dust but not to cause runoff into vernal pools.
- g. If mechanized grading is necessary, grading will be performed in a manner to minimize soil compaction (i.e., use the smallest type of equipment needed to feasibly accomplish the work).

*Discussion:* These measures would be documented on construction plans and implemented during construction.

8. Prior to project construction, topsoil shall be salvaged from the impacted vernal pools or road ruts with fairy shrimp consistent with the requirements of the approved mitigation plan (e.g., free of versatile fairy shrimp). Vernal pool soil (inoculum) shall be collected when dry to avoid damaging or destroying fairy shrimp cysts and plant seeds. Hand tools (e.g., shovels and trowels) shall be used to remove the first 2 inches of soil from the pools. Whenever possible, the trowel shall be used to pry up intact chunks of soil, rather than loosening the soil by raking and shoveling, which can damage the cysts. The soil from each pool shall be stored individually in labeled boxes that are adequately ventilated and kept out of direct sunlight in order to prevent the occurrence of fungus or excessive heating of the soil, and stored off-site at an appropriate facility for vernal pool inoculum. Inoculum from different source pools shall not be mixed for seeding any restored pools, unless otherwise approved by the City and Wildlife Agencies. The collected soils shall be spread out and raked into the bottoms of the restored pools. Topsoil and plant materials salvaged from the upland habitat areas to be impacted shall be transplanted to, and/or used as a seed/cutting source for, the upland habitat restoration/creation areas to the maximum extent practicable as approved by the City.

*Discussion:* Refer to the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) for details on proposed restoration methods.



9. Permanent protective fencing shall be used along any interface with developed areas and/or other measures approved by the City to deter human and pet entrance into on- or off-site habitat shall be installed. Fencing shall be shown on the development plans and should have no gates (except to allow access for maintenance and monitoring of the biological conservation easement areas) and be designed to prevent intrusion by pets. Signage for the biological conservation easement area shall be posted and maintained at conspicuous locations. The requirement for fencing and/or other preventative measures shall be included in the project's mitigation program.

*Discussion:* Refer to the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) for details on proposed fencing and signage around the vernal pool preserve.

## **b. General Conditions for Compensatory Mitigation**

Section 5.3.2 of the VPHCP addresses general conditions for compensatory mitigation and requires project specific vernal pool restoration, enhancement, and preservation plans consistent with these guidelines. The three general conditions and how the project is consistent with the VPHCP are listed below.

1. The project proponent shall submit a vernal pool restoration/enhancement/preservation plan to the City (Development Services Environmental Analysis Section and Planning Department MSCP Staff) and Wildlife Agencies for approval as part of the development review process and the plan shall be included as an attachment to the project's CEQA document. The restoration plan shall be consistent (as applicable) with the restoration plan outline included in Attachment B of the City's Land Development Manual Biology Guidelines. The plan must be approved and implemented prior to or concurrent with project impacts.

*Discussion:* A Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan has been prepared for this project, which is consistent with both the VPHCP and the City's Biology Guidelines (Attachment 17; RECON 2024c). Additional detailed information about VPHCP consistency is provided in this mitigation plan.

2. The project proponent shall ensure the long-term management of the on-site areas shall occur in perpetuity (see Section 7). Each project proponent shall implement a perpetual management, maintenance, and monitoring plan (e.g., Habitat Management Plan) for their respective biological conservation easement areas. The plan, which shall be approved by the City and Wildlife Agencies and funding source must be established prior to, or concurrent with, impacts. The plan should include, but not be limited to, the following: method of protecting the resources in perpetuity (i.e., covenant of easement dedication to the City, or a deed restriction or other conservation mechanism consistent with California Civil Code Section 815, et seq. and/or Government Code Section 65870 and acceptable to the Wildlife Agencies; monitoring schedule; measures to prevent human and exotic species encroachment; funding mechanism; and contingency measures should problems occur. In addition, the plan shall include the proposed land manager's name, qualifications, business



address, and contact information. The project proponent shall also establish a nonwasting endowment or similar secure funding method in an amount approved by the City and the Wildlife Agencies based on a Property Analysis Record (PAR; Center for Natural Lands Management ©1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the biological conservation easement area by an agency, nonprofit organization, or other entity approved by the City and the Wildlife Agencies.

*Discussion:* A Vernal Pool Habitat Management Plan has been prepared for this project (see Attachment 16). A non-wasting endowment would be provided for the long-term management of the 33.71-acre vernal pool restoration areas and long-term management would begin after the 5 years of maintenance and monitoring have been signed off by the City and Wildlife Agencies. The non-wasting endowment would be provided prior to initiation of long-term management. Long-term management of the vernal pool restoration areas would be the responsibility of the City's Park and Recreation Open Space Division.

3. In the event that a new occurrence of a covered species is identified (i.e., previously undocumented) within an area to be impacted by a covered project or covered activity, mitigation shall be required in the form of salvage and restoration for the impact to the new occurrence. Mitigation shall occur consistent with Conditions 1 and 2 above, as well as the City's Land Development Manual Biology Guidelines.

*Discussion:* Although it is unlikely that new, undocumented sensitive species would be discovered within the project-level analysis areas due to the extensive level of surveys for the project, if a new species is found, all efforts would be made to salvage this species and proper mitigation would take place, consistent with Conditions 1 and 2 listed above.

### c. Vernal Pool Management and Monitoring Plan

Chapter 7 of the VPHCP addresses the management and monitoring strategy including site specific management and monitoring actions for vernal pool complexes to be managed to achieve VPHCP objectives. Consistent with the requirements of the VPHCP, the project has prepared a site-specific Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14; RECON 2023). Refer to Attachment 17 for details on the long-term management approach consistent with Chapter 7 of the VPHCP.

### d. Land Use Adjacency Guidelines

Section 5.2 of the VPHCP requires indirect impacts to conserved vernal pools to be minimized by requiring development projects adjacent to the hard line preserve to comply with Section 1.4.3 of the MSCP, Land Use Adjacency Guidelines. Development adjacent to VPHCP preserve areas would occur in the southeast portion of the project-level areas where future residential development and the proposed sewer pump station would interface with vernal pool preserve areas. The approximately 2-acre pump station is an allowed use within the VPCHP preserve, but would be subject to MSCP land use adjacency requirements. The Land Use Adjacency Guidelines are cited



below, followed by a consistency discussion, specific to land use adjacent to VPHCP conserved lands.

**Drainage.** All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

*Discussion:* Drainage from the residential areas and planned pump station located adjacent to the vernal pool preserve would be designed to drain away from the vernal pool preserve. Drainage would be detained on-site within underground vaults and treated to remove pollutants prior to release as detailed in Section 1.3.2.3.c. Drainage would flow toward the drainage outfall to the south, avoiding the vernal pool preserve. Site-specific drainage details for this area would be provided at the time a future site-specific development plan is proposed in this area.

**Toxins.** Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.

*Discussion:* Construction BMPs, such as monitoring, flagging, staking or silt/bio fencing around sensitive areas would be used to ensure toxins from construction and project implementation would not impact the VPHCP preserve.

**Lighting.** Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

*Discussion:* The project has been designed in conformance with this guideline. No night-time lighting is proposed during construction, and night-time lighting adjacent to the vernal pool preserve would be shielded and/or directed to avoid or minimize spillage into adjacent habitat areas.

**Noise.** Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction



measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

*Discussion:* While direct impacts associated with construction of the pump station are addressed as part of the project-level analysis, the pump station would be constructed as part of Phase 2 and detailed site planning for the pump station is not available at this time. Therefore, future implementation of the pump station would require subsequent environmental review related to indirect impacts to ensure that noise producing equipment does not adversely impact surrounding habitat. Most of the pump station equipment is anticipated to be enclosed within a building, with only an emergency generator located outside. When the details of the pump station layout are proposed as part of a future phase of the Specific Plan and separate entitlement, a site-specific noise evaluation would be completed to identify required attenuation needed to avoid or mitigate for noise impacts.

**Barriers/Access.** New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

*Discussion:* The pump station area would be fenced to preclude access to the adjacent existing VPHCP/MHPA areas. Additionally, a fire-rated wall would be installed to prohibit entry into this area and protect adjacent resources from fire management impacts.

**Invasives.** No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

*Discussion:* The plant palette for the project would not include any invasive or non-native plant species adjacent to the vernal pool preserve area. The Specific Plan Appendix A defines allowable plant species adjacent to the MHPA and within BMZ 2. Additionally, according to City's standards for brush management, BMZ 2 only includes native plants.

**Brush Management.** New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate BMZ 1 areas on the development pad and outside of the MHPA. BMZ 2 may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA. BMZ 2 would be increased by 30 feet, except in areas with a low fire hazard severity rating where no BMZ 2 would be required. BMZs would not be greater in size that is currently required by the City's regulations. The amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the BMZ 2 area would be the responsibility of a homeowners' association or other private party.

*Discussion:* A fire-rated wall and brush management would occur within the project-level impact boundary adjacent to the 100 percent conserved lands. At the time development is proposed adjacent to the vernal pool preserve, brush management zones would need to be identified and/or an evaluation of alternative compliance if reduced brush management zones are proposed. It should be noted that the Vernal Pool and Quino Checkerspot



Butterfly Mitigation Plan (see Attachment 14) identify fire safe native plantings compatible with the mitigation effort along the western edge of the preserve in order to increase fire safety. While fire safe features are incorporated into the mitigation plan, it is understood that brush management zones cannot overlap with mitigation lands.

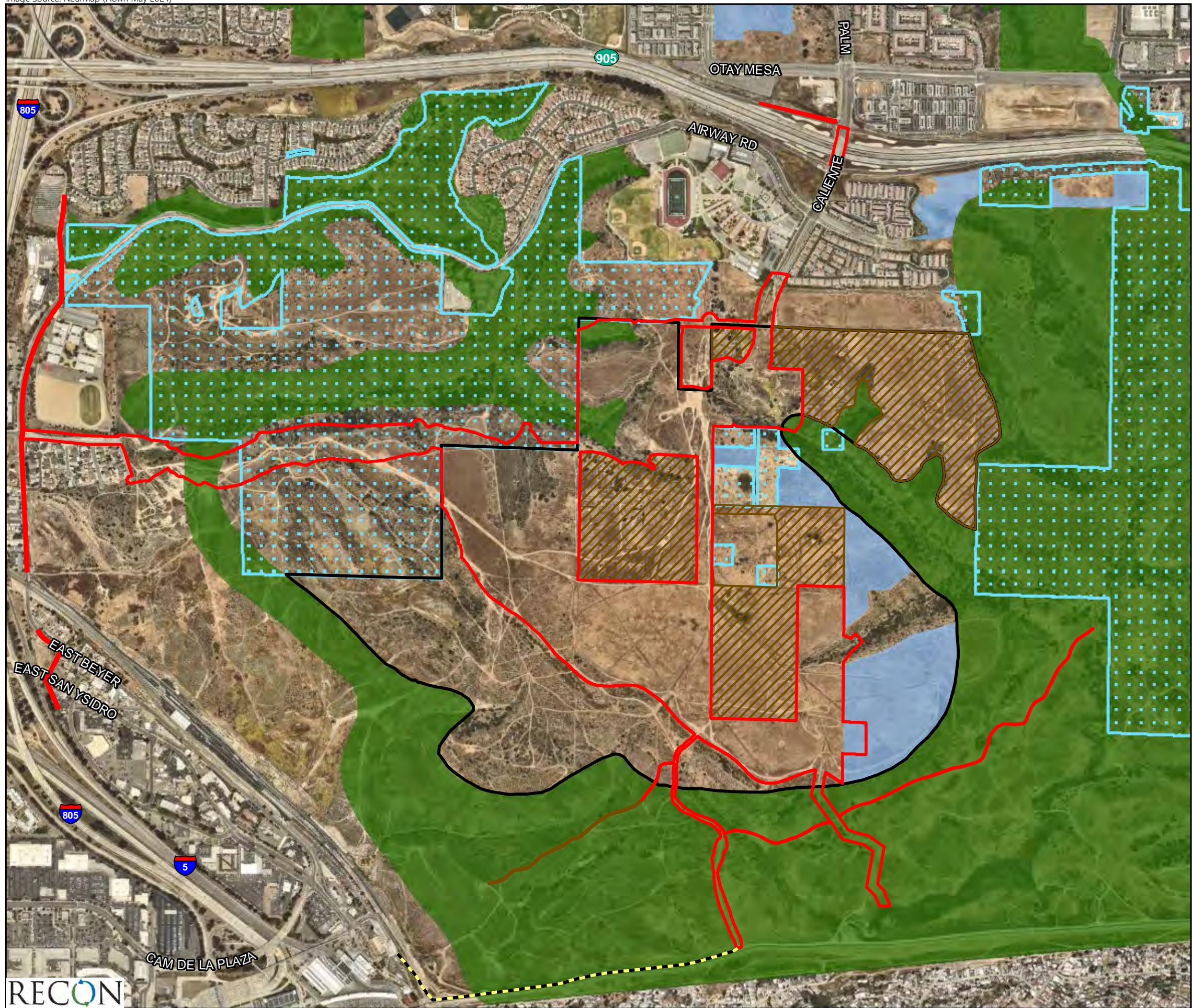
**Grading/Land Development.** Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

*Discussion:* The project has been designed in conformance with this guideline. All grading and manufactured slopes are included in the project impact area and addressed as impacts in this report.

### 6.2.3 MSCP and VPHCP Consistency Summary

Table 7c provides a summary of the deletions from the MHPA and VPHCP 100 percent conserved lands and MHPA additions for both the MHPA BLA analysis and VPHCP conservation analysis, and strategy with an overall accounting of the net MHPA additions. As detailed in Table 7c, MHPA and VPHCP 100 percent conserved land deletions of sensitive vegetation communities would total 30.36 acres, while overall MHPA additions of sensitive vegetation communities would total 44.35 acres, based on the MHPA BLA and BSO concurrence and pending adoption of the VPHCP MA. This would result in a net increase of 14.19 acres of sensitive vegetation communities. There is a slight decrease in Tier I vegetation from the exchange of lands; however, in total, the MHPA would increase by 14.19 acres of sensitive vegetation communities. In addition, the trails restoration program would convert 7.83 acres of disturbed and non-native grassland to maritime succulent scrub (see Attachment 1), resulting in an overall increase in Tier I communities in the MHPA. Approximately 0.5 acre of the restoration would be located within the MHPA Area A addition proposed as an exchange in the MHPA BLA (see Figure 36.3). The addition areas combined with restoration of maritime succulent scrub would serve to ensure there is an excess of Tier I habitat provided as a result of project activities. Overall, the MHPA additions combined would result in a net increase of 8.65 acres of Diegan coastal sage scrub, and a net increase of 7.46 acres of non-native grassland areas suitable for vernal pool restoration. The conservation strategy identified herein is proposed as a result of Wildlife Agency coordination and exceeds the City's requirements under the MSCP Subarea Plan, VPHCP, and Biology Guidelines. Overall, wetland vegetation community acreages would increase after the additions, including enhancement of disturbed wetlands to create vernal pools and increase the quality of wetland resources within the addition areas. Figure 36.5 depicts the post-project MHPA and VPHCP/MHPA boundary after BLA and VPHCP land replacement. As shown, the configuration of the MHPA would result in expansion of existing blocks of MHPA and VPHCP preserve areas, ensuring functional equivalency of the exchange lands.



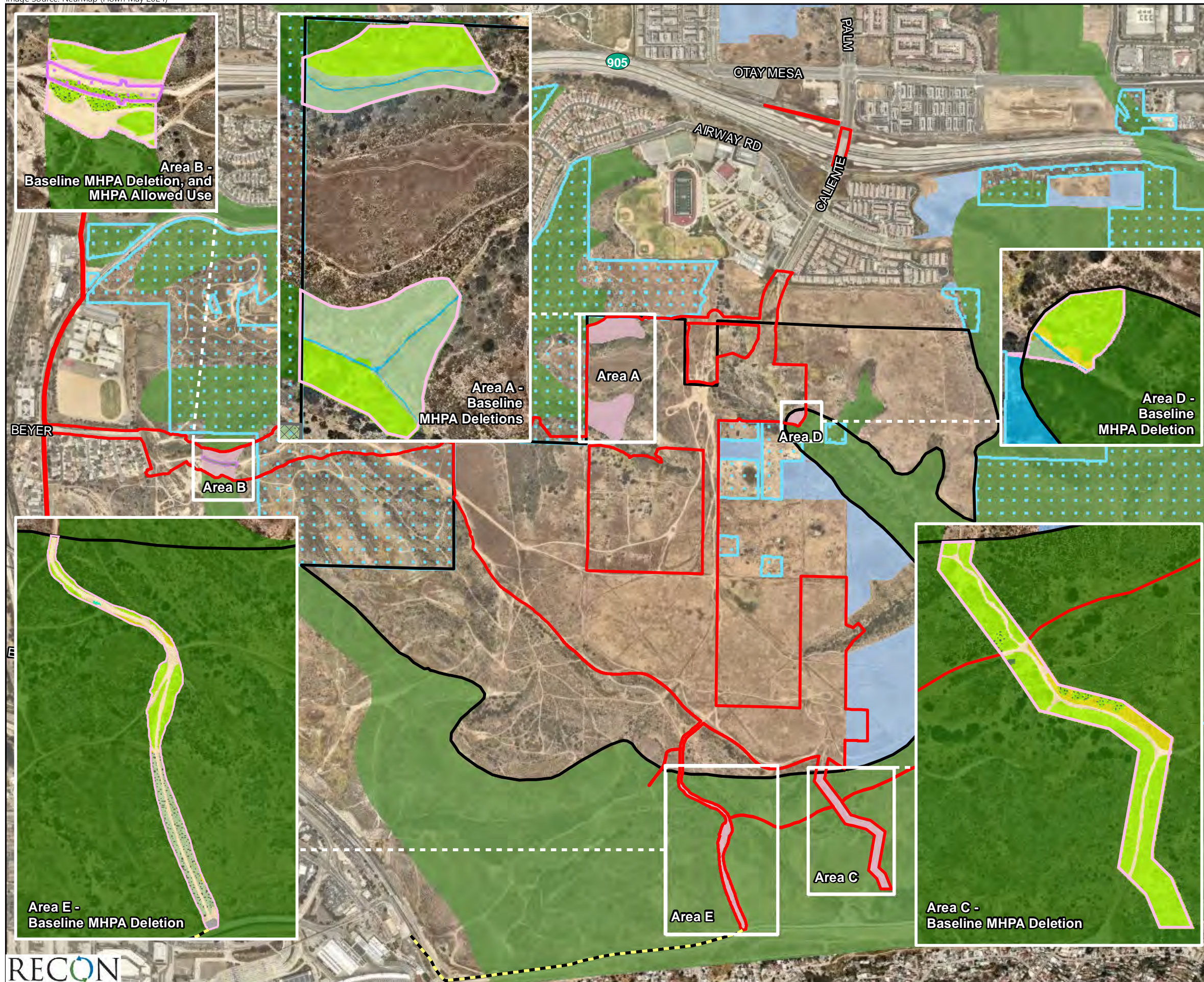


- Project-level Analysis Area
- Program-level Analysis Area
- Specific Plan Boundary
- Baseline MHPA
- Existing VPHCP/MHPA
- 100% Conservation
- Emergency Vehicle Access Road -  
No Improvements Required (Existing Road)



FIGURE 36.1  
Pre-Project MHPA and VPHCP/MHPA Boundary





- Project-level Analysis Area
  - Baseline MHPA Deletion
  - MHPA Allowed Use\*
  - Specific Plan Boundary
  - Baseline MHPA
  - Existing VPHCP/MHPA
  - 100% Conservation
  - Emergency Vehicle Access Road - No Improvements Required (Existing Road)
- Vegetation Communities**
- Diegan Coastal Sage Scrub
  - Disturbed Diegan Coastal Sage Scrub
  - Maritime Succulent Scrub
  - Disturbed Maritime Succulent Scrub
  - Tamarisk Scrub
  - Native Grassland
  - Non-native Grassland
  - Vernal Pool
  - Natural Flood Channel
  - Disturbed Land
  - Developed Land

\*Linear utilities are exempt from the requirement for MHPA deletions pursuant to Land Development Code Section 143.0111(d); therefore, the areas within Beyer Boulevard supporting water, sewer, and stormwater linear utilities are not subject to a Boundary Line Adjustment

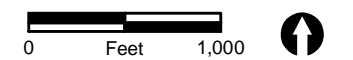


FIGURE 36.2  
Project-Level Baseline MHPA Deletions



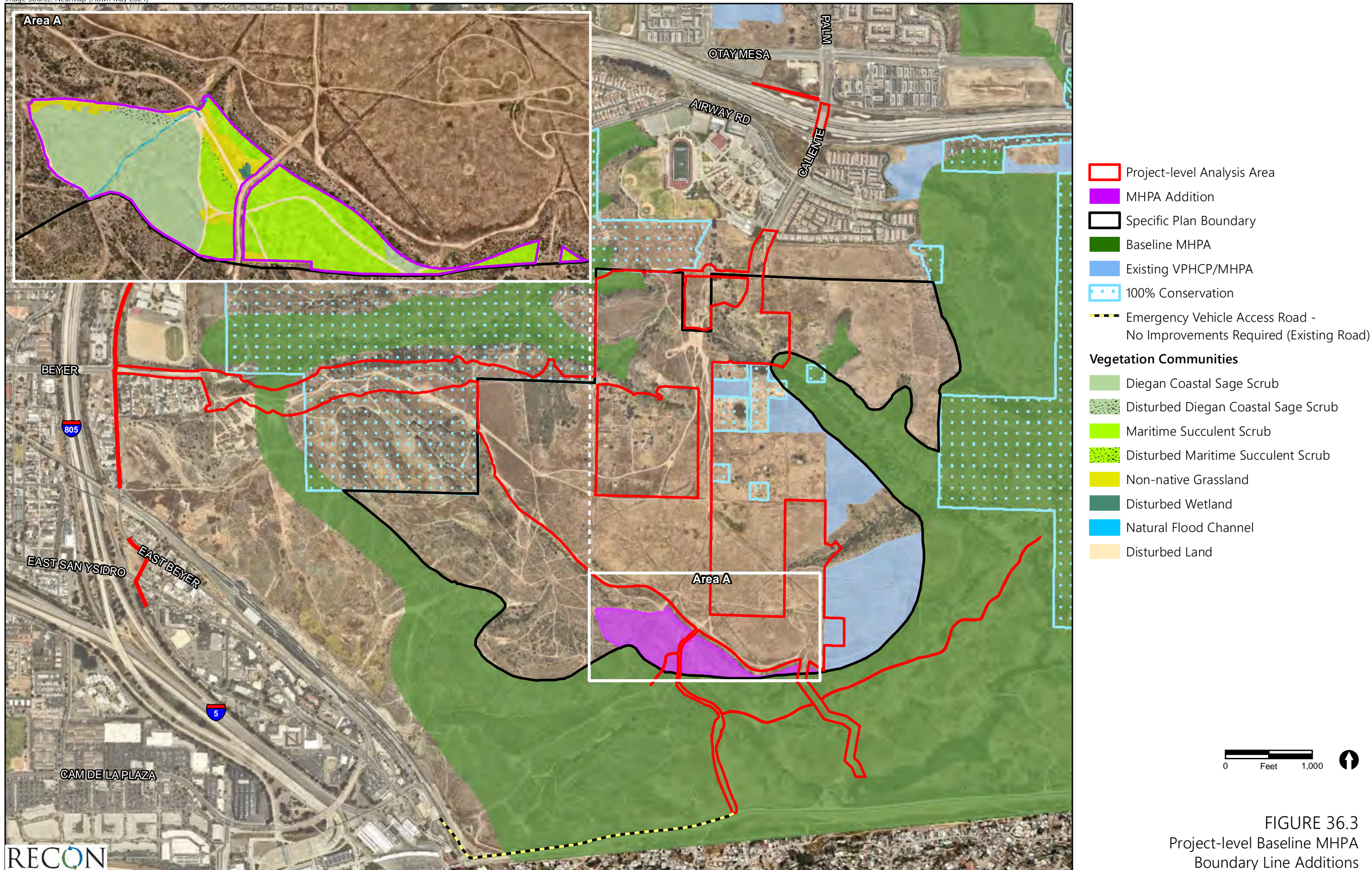
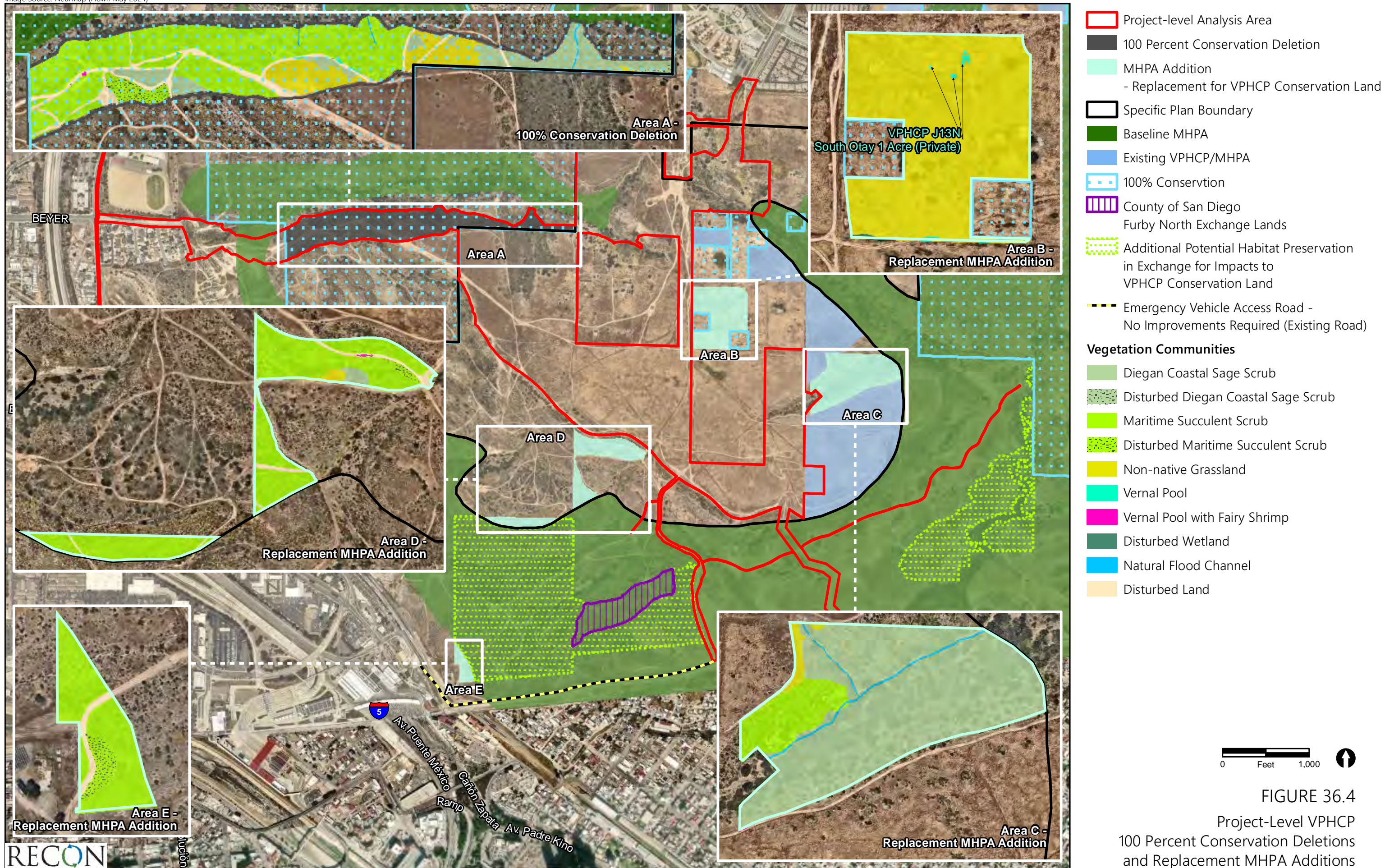


FIGURE 36.3  
Project-level Baseline MHPA  
Boundary Line Additions







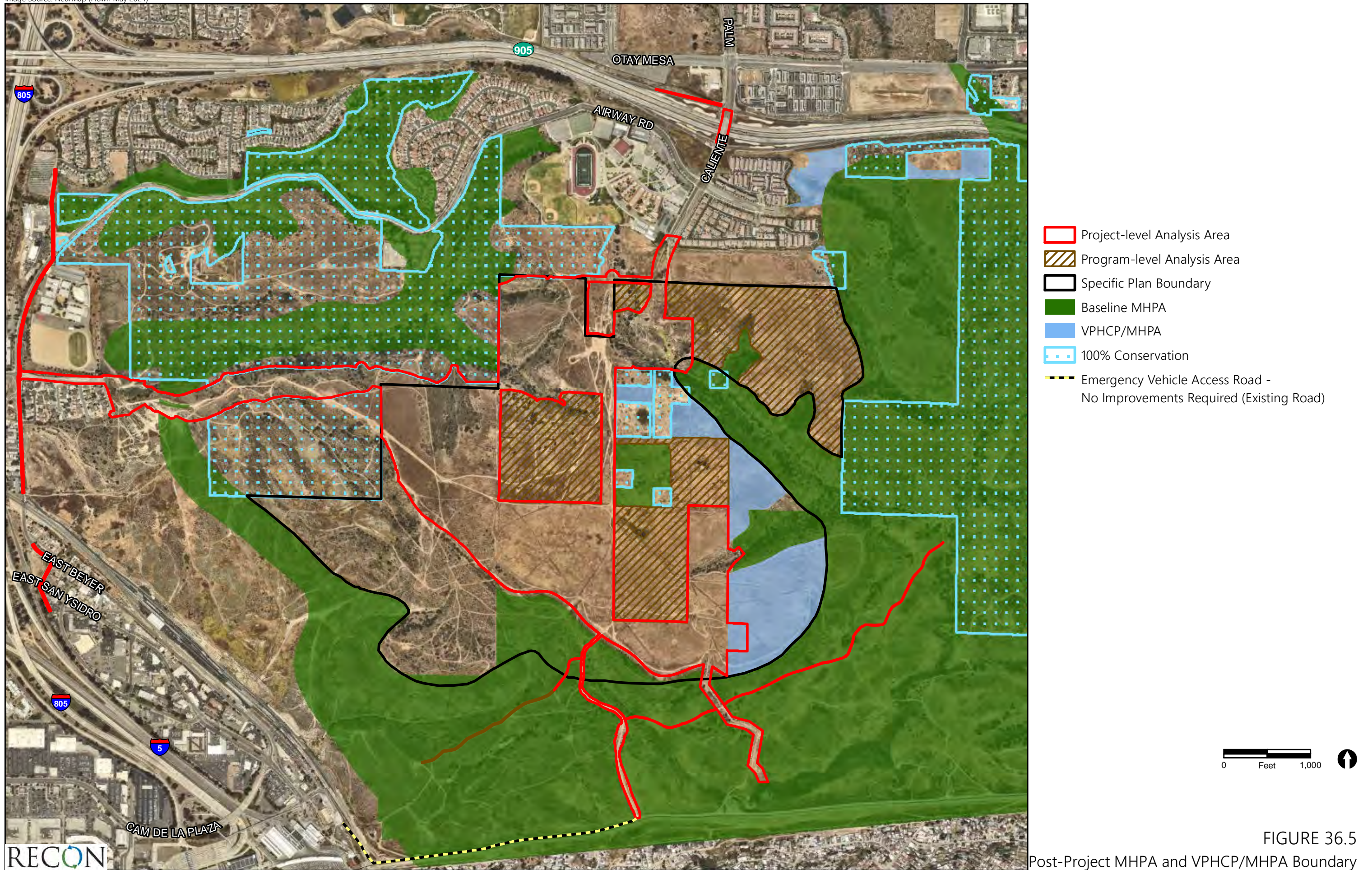


FIGURE 36.5  
Post-Project MHPA and VPHCP/MHPA Boundary



## 7.0 Impact Analysis

The impact analysis addresses direct and indirect impacts to vegetation/land cover types, sensitive plant and wildlife and jurisdictional resources. Impacts to wildlife corridors and cumulative impacts are also addressed. The analysis of consistency with the MSCP and VPHCP is provided in Section 6.0. For each issue, analysis is provided for program-level and project-level areas. Additionally, within the project-level areas, impacts are broken down by phase (see Figure 10.1).

### 7.1 Direct Impacts

#### 7.1.1 Program-level Impacts

Program-level areas are shown in Figures 10 and 11 and include future residential development areas within the Specific Plan in addition to a program-level trail located outside of the Specific Plan boundary.

##### 7.1.1.1 Impacts to Vegetation Communities/Land Cover Types

Future development within the program-level areas would result in impacts to sensitive vegetation communities detailed in Table 2a. Although project-level vegetation surveys have not been done for these areas, it is estimated that the 58 acres of mapped extensive agriculture would likely be mapped as non-native grassland, a sensitive vegetation community. Based on this assumption and the generalized vegetation data, implementation of the program-level areas may impact approximately 97 acres of sensitive habitats predominated by non-native grasslands and Diegan coastal sage scrub. While site-specific surveys have not been completed due to the program-level analysis, anticipated vegetation communities are shown on Figure 22.1. Impacts to Tier I, II and IIIB sensitive vegetation communities would be significant and future development within the program-level areas would require site-specific evaluation and surveys consistent with the City's Biology Guidelines and the OMCP FEIR Mitigation Framework BIO-1 to identify project specific impacts to sensitive vegetation communities.

##### 7.1.1.2 Impacts to Sensitive Plants and Wildlife

Future development would have potentially significant impacts to sensitive plant and animal species known to occur or with a moderate to high potential to occur on-site. Sensitive plant and wildlife occurrences available from CNDDDB and other public sources are shown on Figure 37 and include ashy spike-moss, San Diego County viguiera, San Diego fairy shrimp, western spadefoot, grasshopper sparrow, orange-throated whiptail. Species with a moderate to high potential to occur on-site are detailed in Section 5.3 and 5.4 and include the following:

**Sensitive plants** - bobtail barley, California adolphia, California box-thorn, California Orcutt grass, cliff spurge, decumbent goldenbush, golden-ray pentachaeta, graceful tarplant, Orcutt's bird-beak, Otay tarplant, Plamer's grapplinghook, snake cholla, San Diego goldenstar, San Diego barrel cactus, San Diego bur-sage, San Diego button-celery, small-flowered microseris, San Diego needlegrass,



seaside, cistanthe, south coast saltscale, spreading navarretia, thread-leaved brodiaea, variegated dudleya, and western dichondra.

**Sensitive wildlife** - Crotch's bumble bee, Riverside fairy shrimp, Quino checkerspot butterfly, coastal whiptail, red diamond rattlesnake, coast horned lizard, Coronado skink, two-striped gartersnake, Cooper's hawk, Bell's sage sparrow, burrowing owl, southern California rufous-crowned sparrow, coastal cactus wren, northern harrier, white-tailed kite, California horned lark, merlin, bald eagle, yellow-breasted chat, loggerhead shrike, coastal California gnatcatcher, yellow-warbler, least Bell's vireo, San Diego desert woodrat, and southern mule deer.

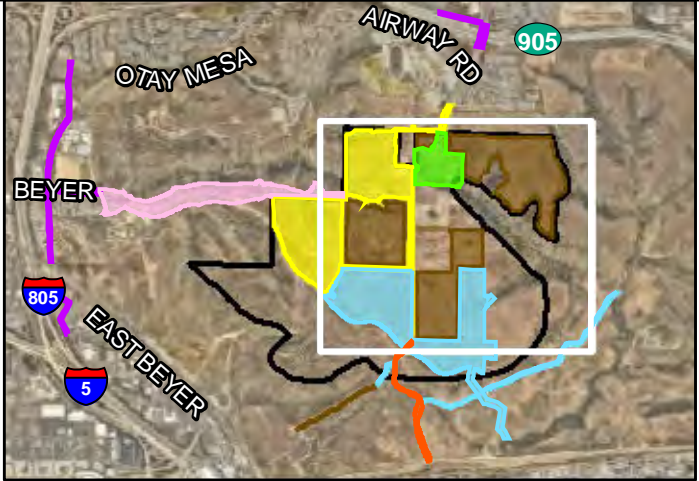
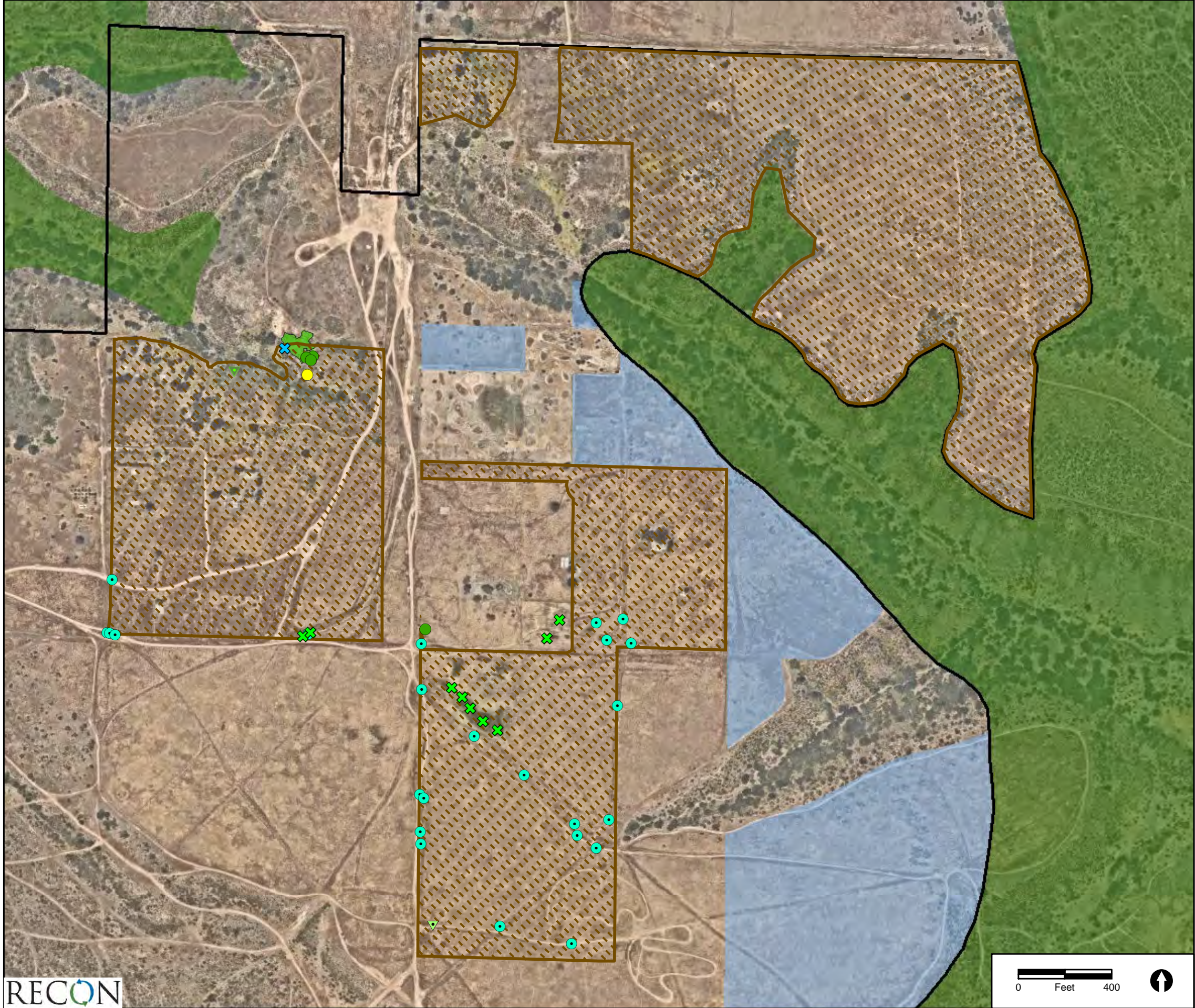
Mapping of sensitive species within the program-level areas has not been completed as part of this current effort; therefore, additional species may be encountered during site-specific surveys. Sensitive plants and wildlife within the program-level areas are reasonably expected to be similar to those species identified as part of the project-level analysis as depicted in Figures 26.1 through 26.11 and 27.1 through 27.11 and discussed in Chapter 5.

Consistent with the OMCP FEIR Mitigation Framework BIO-1 future site-specific surveys would be required and future project would be required to demonstrate compliance with the City's Biology Guidelines, ESL regulations, and associated MSCP and VPHCP requirements and to identify feasible mitigation measures. Impacts to sensitive wildlife and plant species associated with future development within the program-level areas would be significant.

### 7.1.1.3 Impacts to Jurisdictional Resources

Implementation of future development areas within the Specific Plan are likely to include direct impacts to jurisdictional resources. Although jurisdictional resource delineations have not been completed for program-level areas, vernal pool resources are known to exist on the mesa within areas planned for future development. Jurisdictional resources such as drainages, wetlands, and seasonal basins may occur within the program-level areas. Consistent with the OMCP FEIR Mitigation Framework BIO-4, future development would be required to address compliance with the City's ESL regulations including requirements for wetland deviations. Program-level impacts to jurisdictional resources would be significant. Restoration of disturbed jurisdictional resources that occur within 50 feet of future trails would also be implemented and mitigation measures detailed in Section 8.2 and Attachment 1 would be implemented concurrent with restoration to ensure avoidance of impacts to sensitive species and jurisdictional resources.





- Project-level Phasing**
- Phase 1
  - Phase 2
  - Phase 4
  - Beyer Boulevard
  - Off-site Improvements
  - Emergency Vehicle Access Road
  - Program-level Phases 3-7

- Specific Plan Boundary**
- City of SD MHPA
  - VPHCP MHPA

**Program-level Impacts**

- Phases 3-7

**Sensitive Plants**

- Ashy Spike-moss (*Selaginella cinerascens*)
- San Diego County Vigiera (*Bahiopsis laciniata*)

**Sensitive Animals**

- Grasshopper Sparrow (*Ammodramus savannarum*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Western Spadefoot\*\* (*Spea hammondi*)
- San Diego Fairy Shrimp\* (*Branchinecta sandiegonensis*)

\*RECON and USFWS Observations

\*\*RECON and SanBIOS Observations

FIGURE 37  
Program-level Impacts to Biological Resources -  
Sensitive Plant and Animal Species



## 7.1.2 Project-level Impacts

### 7.1.2.1 Impacts to Vegetation Communities/Land Cover Type Impacts

As discussed in Section 1.3 and depicted on Figure 10.1, the project-level analysis area would be built out in phases; therefore, the impacts have been analyzed comprehensively by phase. Overall project-level impacts to vegetation communities/land cover types are summarized in Table 8a and shown on Figures 38.1 through 38.6. While portions of the project-level impacts would occur inside the MHPA, approval of the proposed BLA would ultimately result in all of the project-level impact areas being outside of the MHPA. As detailed in Table 8a, the project-level areas would impact a total of 218.60 acres of the overall 611.99-acre survey area. Specifically, a total of 81.76 acres of Tier I and Tier II vegetation communities, 105.84 acres of Tier IIIB non-native grasslands, and 2.46 acre of wetland vegetation communities would be impacted. Impacts to these resources would be significant.

Specific impacts by phase are discussed in the subsections that follow.

#### a. Phase 1 Impacts

Phase 1 includes grading required to accommodate construction of the first 920 homes. The impact analysis for Phase 1 assumes that all impacts would occur outside of the MHPA in conjunction with an approved BLA. As detailed in Table 8b, Phase 1 would impact 9.87 acres of Tier I and 32.38 of Tier II vegetation communities (see Figure 38.2). The majority of impacts (42.14 acres) comprises non-native grasslands which is a Tier IIIB community. Impacts to maritime succulent scrub, Diegan coastal sage scrub, disturbed coastal sage scrub, and non-native grassland would be significant. Impacts to eucalyptus woodland, disturbed land, and urban/developed lands are not significant and do not require mitigation.

The project would also result in impacts to 1.62 acres of potential vernal pools, wetlands (including mule fat scrub, southern willow scrub, disturbed riparian and disturbed wetlands), and natural flood channels. Of this, 0.76 acre of jurisdictional resources are located within the Candlelight project area and are covered within the certified Candlelight Environmental Impact Report (Project No. 40329; SCH No. 2013101036) and associated agency permits. The remaining wetland impacts are significant. Certain jurisdictional resources require a wetland deviation, as addressed in Section 7.1.2.4.

As discussed above, Phase 1 includes two nearby projects (Candlelight and Southwind) proposed by other applicants. Phase 1 requires roadway access improvements associated with the construction of Caliente Avenue located north of Central Avenue, which travel through these two nearby projects. Impacts within the Candlelight and Southwind project areas (see Figure 20) are reported separately in Table 8b since the first project to proceed would result in those impacts and would be required to provide the associated mitigation.



**Table 8a**  
**Direct Impacts to Vegetation Communities/Land Cover Types within the Project level Survey Areas Assuming an MHPA BLA**  
**(acres)**

Vegetation Communities/ Land Cover Types	City of San Diego Tier	Phase 1	Phase 2	Beyer Boulevard	Phase 4	Emergency Vehicle Access Road	Off-site Improvements	Total Acres
<b>Upland Vegetation Communities</b>								
Maritime Succulent Scrub	I	4.72	6.51	13.88	2.38	0.87	-	28.35
Disturbed Maritime Succulent Scrub	I	5.15	1.58	1.85	0.53	-	-	9.12
Native Grassland	I	-	-	-	0.12	-	-	0.12
Diegan Coastal Sage Scrub	II	24.19	1.62	3.17	4.25	0.01	-	33.24
Disturbed Coastal Sage Scrub	II	8.19	-	0.62	1.29	0.83	-	10.93
Non-native Grassland	IIIB	42.14	57.26	2.48	3.81	0.16	-	105.84
<i>Subtotal</i>		<i>84.38</i>	<i>66.97</i>	<i>21.99</i>	<i>12.38</i>	<i>1.87</i>	<i>-</i>	<i>187.59</i>
<b>Wetland Vegetation Communities</b>								
Natural Flood Channel <sup>1</sup>	-	0.14	0.05	0.08	0.18	-	-	0.46
Mule Fat Scrub	-	0.02	-	0.30	0.01	-	-	0.33
Southern Willow Scrub	-	0.32	-	-	<0.01	-	-	0.33
Tamarisk Scrub	-	-	0.01	-	-	-	-	0.01
Disturbed Riparian	-	0.12	-	-	-	-	-	0.12
Disturbed Wetland	-	0.30	0.04	<0.01	-	-	-	0.34
Vernal Pool	-	0.15	0.07	0.03	-	0.01	-	0.26
Vernal Pool with Fairy Shrimp	-	0.56	0.05	0.01	<0.01	-	-	0.62
<i>Subtotal</i>		<i>1.62</i>	<i>0.23</i>	<i>0.41</i>	<i>0.20</i>	<i>0.01</i>	<i>-</i>	<i>2.46</i>
<b>Disturbed/Developed Vegetation Communities</b>								
Eucalyptus Woodland	IV	0.13	-	-	-	-	-	0.13
Disturbed Land	IV	8.48	5.61	5.49	1.90	1.23	0.51	23.22
Urban/Developed Land	-	0.30	-	0.12	-	0.05	4.73	5.20
<i>Subtotal</i>		<i>8.92</i>	<i>5.61</i>	<i>5.61</i>	<i>1.90</i>	<i>1.28</i>	<i>5.23</i>	<i>28.55</i>
<b>Total</b>		<b>94.92</b>	<b>72.80</b>	<b>28.01</b>	<b>14.48</b>	<b>3.16</b>	<b>5.23</b>	<b>218.60</b>

NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.

<sup>1</sup>Although ephemeral drainages are not considered a vegetation community, they are captured within the City's designation of "natural flood channel." Note that these are non-wetland waters not regulated by the City of San Diego.



Table 8b Direct Impacts to Vegetation Communities/Land Cover Types within the Phase 1 Project Level Areas Assuming an MHPA BLA (acres)					
Vegetation Community/ Land Cover Type					Total
<b>Upland Vegetation Communities</b>					
Maritime Succulent Scrub	I	-	0.05	4.67	4.72
Disturbed Maritime Succulent Scrub	I	-	-	5.15	5.15
Diegan Coastal Sage Scrub	II	-	-	24.19	24.19
Disturbed Coastal Sage Scrub	II	-	0.12	8.07	8.19
Non-native Grassland	IIIB	1.81	0.34	39.98	42.14
<i>Subtotal</i>		<i>1.81</i>	<i>0.50</i>	<i>82.07</i>	<i>84.38</i>
<b>Wetland Vegetation Communities</b>					
Natural Flood Channel <sup>2</sup>	-	0.02	-	0.12	0.14
Mule Fat Scrub	-	0.02	-	-	0.02
Southern Willow Scrub	-	0.32	-	-	0.32
Disturbed Riparian	-	0.12	-	-	0.12
Disturbed Wetland	-	0.23	-	0.07	0.30
Vernal Pool	-	-	0.03	0.13	0.15
Vernal Pool with Fairy Shrimp	-	0.04	0.01	0.51	0.56
<i>Subtotal</i>		<i>0.76</i>	<i>0.04</i>	<i>0.83</i>	<i>1.62</i>
<b>Disturbed/Developed Vegetation Communities</b>					
Eucalyptus Woodland	IV	0.03	-	0.10	0.13
Disturbed Land	IV	0.77	0.26	7.46	8.48
Urban/Developed	IV	0.30	-	-	0.30
<i>Subtotal</i>		<i>1.10</i>	<i>0.26</i>	<i>7.56</i>	<i>8.92</i>
<b>Phase 1 Total</b>		<b>3.68</b>	<b>0.80</b>	<b>90.45</b>	<b>94.92</b>
<p>NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.</p> <p><sup>1</sup>Refer to Figure 22 for the location of the Candlelight and Southwind Project areas located within Phase 1. These areas are reported separately in the event development of these areas proceeds independent of the project, these impacts would be mitigated by other parties. Impacts within the Candlelight project area are addressed in the certified Candlelight Environmental Impact Report (Project No. 40329; SCH No. 2013101036) and associated agency permits.</p> <p><sup>2</sup>Natural flood channel are non-wetland waters not regulated by the City of San Diego.</p>					



## b. Phase 2 Impacts

Phase 2 includes Planning Areas 15-20, the two drainage outfalls, a pump station within the VPHCP preserve area, and implementation of project-level trails including trail restoration efforts within the 100-foot trail buffer as detailed in Section 1.3.2.6.a. As detailed in Table 8c, grading Phase 2 would impact 8.09 acres of Tier I, 6.86 acres of Tier II, and 57.26 acres of Tier IIIB, which would be a significant impact (see Figures 38.2 through 38.4). Impacts to 5.61 acres of disturbed land would not be significant.

This phase would also result in impacts to 0.23 acre of potential vernal pools, tamarisk scrub, and natural flood channels. Wetland impacts are significant and may require a wetland deviation addressed in Section 7.1.2.4.

Phase 2 impacts associated with the pump station are within the VPHCP/MHPA. Impacts within this area would be significant, but this is identified as an allowed use within the VPHCP; therefore, this area would not be deleted from the VPHCP/MHPA as part of the BLA (see Section 6.2.2 for additional discussion of VPHCP consistency).

Table 8c presents the impacts by the project-level trails. Approximately 0.96 linear feet of primitive trail improvements are proposed as part of the Phase 2 project-level implementation (see Figures 11 and 12.3). However, all trail establishment would occur within existing disturbed lands (0.46 acre), avoiding significant impacts to sensitive vegetation communities. Figure 18.1 through 18.7 depicts the project-level trail restoration effort that would be proposed around the primitive trail alignments. As detailed in the Trails Restoration Plan (see Attachment 1), restoration activities would occur within disturbed lands and non-native grasslands habitats. According to the City's Biology Guidelines, impacts to non-native grassland habitats are not significant when they are impacted for restoration purposes. Additionally, restoration and enhancement efforts are proposed within disturbed Diegan coastal sage scrub, disturbed maritime succulent scrub, and within disturbed wetlands and vernal pools; however, restoration efforts would be limited to removal of invasive plant species, and no impacts would occur to native plant species associated with restoration or enhancement efforts. Avoidance measures and protocols to be implemented during implementation of the restoration effort, as detailed in Attachment 1, would ensure adverse impacts to sensitive vegetation communities are avoided during trail restoration efforts.

## c. Beyer Boulevard Impacts

Construction of the Beyer Boulevard extension is required to provide access to the Specific Plan area from San Ysidro as detailed in Section 1.3.2.3.b. As detailed in Table 8d, Beyer Boulevard would impact 15.73 acres of Tier I and 3.79 acres of Tier II vegetation communities and 2.48 acres of Tier IIIB nonnative grasslands which would be significant (see Figures 38.1 and 38.2). Impacts to 5.61 acres of disturbed land and urban/development lands would not be significant. A 0.37-acre developed portion of the roadway that runs through the Beyer Park property would be classified as City linear utilities, which is exempt from ESL regulations and considered an MHPA allowed use. This includes 0.24 acre of disturbed habitat and 0.13 acre of disturbed maritime succulent scrub.



**Table 8c**  
**Direct Impacts to Vegetation Communities and Land Cover Types within the Phase 2 Project level Areas Assuming an MHPA BLA**  
**(acres)**

Vegetation Community/ Land Cover Type	Total					
Upland Vegetation Communities						
Maritime Succulent Scrub	I	3.55	-	-	2.95	6.51
Disturbed Maritime Succulent Scrub	I	1.43	-	-	0.16	1.58
Diegan Coastal Sage Scrub	II	1.62	-	-	-	1.62
Disturbed Coastal Sage Scrub	II	-	-	-	-	5.24
Non-native Grassland	IIIB	55.26	1.66	<0.01	0.34	57.26
Subtotal		61.86	1.66	<0.01	3.45	66.97
Wetland Vegetation Communities						
Natural Flood Channel <sup>3</sup>	-	0.06	-	-	-	0.06
Tamarisk Scrub	-	-	-	-	0.01	0.01
Disturbed Wetland	-	0.04	-	-	-	0.04
Vernal Pool	-	0.07	-	-	-	0.07
Vernal Pool with Fairy Shrimp	-	0.05	-	-	-	0.05
Subtotal		0.22	-	-	0.01	0.23
Disturbed/Developed Vegetation Communities						
Disturbed Land	IV	4.69	-	0.46	0.46	5.61
Subtotal		4.69	-	0.46	0.46	5.61
Phase 2 Total		66.76	1.66	0.46	3.92	72.80

NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.

<sup>1</sup>The 1.66-acre area associated with the Pump Station is identified as an allowed use within the VPHCP Preserve, therefore is considered an impact within the MHPA.

<sup>2</sup>Although considered a permanent impact, drainage outfall impacts would be revegetated with native vegetation after installation.

<sup>3</sup>Natural flood channel are non-wetland waters not regulated by the City of San Diego.



**Table 8d**  
**Direct Impacts to Vegetation Communities/Land Cover Types within the Beyer Boulevard Project level Areas Assuming an MHPA BLA<sup>1</sup>**  
**(acres)**

Vegetation Community/ Land Cover Type	City of San Diego Tier	Beyer Boulevard <sup>2</sup>	Beyer Park <sup>3</sup>	Furby North Preserve	West Otay Mesa A	West Otay Mesa B	Total
<b>Upland Vegetation Communities</b>							
Maritime Succulent Scrub	I	0.03	2.70	3.12	8.03	<0.01	13.88
Disturbed Maritime Succulent Scrub	I	0.01	1.19	0.04	0.61		1.85
Diegan Coastal Sage Scrub	II	-	0.08	-	0.91	2.18	3.17
Disturbed Coastal Sage Scrub	II	-	0.50	-	-	0.12	0.62
Non-native Grassland	IIIB	-	-	-	1.38	1.09	2.48
<i>Subtotal</i>		<i>0.05</i>	<i>4.47</i>	<i>3.16</i>	<i>10.92</i>	<i>3.40</i>	<i>21.99</i>
<b>Wetland Vegetation Communities</b>							
Natural Flood Channel	-	-	0.05	-	0.01	0.02	0.08
Mule Fat Scrub	-	-	0.30	-	-	-	0.30
Disturbed Wetland		-	-	<0.01	<0.01	-	<0.01
Vernal Pool	-	-	-	0.01	0.02	-	0.03
Vernal Pool w/fairy shrimp	-	-	-	0.01	-	-	0.01
<i>Subtotal</i>			<i>0.34</i>	<i>0.07</i>	<i>0.03</i>	<i>0.02</i>	<i>0.47</i>
<b>Disturbed/Developed Vegetation Communities</b>							
Disturbed Land	IV	0.09	3.57	0.56	1.16	0.11	5.49
Urban/Developed	IV	0.07	0.05	-	-	-	0.12
<i>Subtotal</i>		<i>0.15</i>	<i>3.63</i>	<i>0.56</i>	<i>1.16</i>	<i>0.11</i>	<i>5.61</i>
<b>Beyer Boulevard Total</b>	-	<b>0.20</b>	<b>8.44</b>	<b>3.72</b>	<b>12.11</b>	<b>3.53</b>	<b>28.01</b>

NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.

<sup>1</sup>This area includes only the portions of Beyer Boulevard located outside of the Specific Plan. Other portions of Beyer Boulevard are located within the Specific Plan and are addressed as part of the overall development footprint.

<sup>2</sup>This portion includes impacts within the San Ysidro School District parcel located north of the City's Beyer Park parcel.

<sup>3</sup>The 0.37-acre developed portion of the roadway that runs through the Beyer Park property would be classified as City linear utilities, which is exempt from ESL regulations and considered an MHPA allowed use. This includes 0.24 acre of disturbed land and 0.13 acre of disturbed maritime succulent scrub.



Beyer Boulevard would also result in impacts to 0.41 acre of potential vernal pools, wetlands (including mule fat scrub and disturbed wetlands), and natural flood channels. Wetland impacts are significant and require a wetland deviation addressed in Section 7.1.2.4.

Impacts within the Furby North Preserve, West Otay Mesa A, and West Otay Mesa B associated with Beyer Boulevard are reported separately in Table 8c due to their conservation status and/or history as mitigation parcels. Impacts on these parcels would be significant and would provide mitigation consistent with the City's Biology Guidelines. Impacts associated with West Otay Mesa A and West Otay Mesa B require additional coordination with CDFW to address existing conservation easements. Associated CDFW requirements associated with impacts to conservation easements are part of the project and are described in Section 1.3.2.5.b.

#### **d. Phase 4 Impacts**

Phase 4 (see Figure 9) includes construction of parts of Planning Areas 1 and 7 and the extension of Caliente Avenue south of Central Avenue. As detailed in Table 8e, Phase 4 would impact 3.03 acres of Tier I and 5.54 acres of Tier II vegetation communities and 3.81 acres of Tier IIIB non-native grasslands which would be significant (see Figure 38.2). Impacts to 1.90 acres of disturbed land would not be significant.

Phase 4 would also result in impacts to 0.20 acre of potential vernal pools, wetlands (including mule fat scrub and southern willow scrub), and natural flood channels. Wetland impacts are significant and require a wetland deviation addressed in Section 7.1.2.4.

#### **e. Emergency Vehicle Access Road**

Construction of a EVA road is proposed to provide emergency access from the south along an existing dirt road (see Section 1.3.2.3.e). As detailed in Table 8f, the EVA road would impact 0.87 acre of Tier I, 0.84 acre of Tier II, and 0.16 acre of Tier IIIB vegetation communities which would be significant (see Figure 38.3). Impacts to 1.28 acres of disturbed land and urban/developed would not be significant.

The EVA road is proposed in an area of an ancient landslide complex. To address concerns that the proposed EVA road improvements could destabilize the landslide complex that exists in the area, a geotechnical evaluation was conducted by Geocon, Inc. (Attachment 12) which identified the hillside has a slope stability factor of safety of 1.24 in the existing condition. Improvements to the road would not exacerbate this risk and would slightly increase stability due to grading, increasing the factor of safety to 1.25. Additionally, due to the factor of safety being above 1.0, future movement of the landslide in general is not expected to occur within the lifetime of the roadway under existing and proposed conditions. Refer to Attachment 12 for additional information regarding landslide risk and stability.



<b>Table 8e</b> <b>Direct Impacts to Vegetation Communities/Land Cover Types within the</b> <b>Phase 4 Project Survey Areas Assuming an MHPA BLA</b> <b>(acres)</b>		
Vegetation Community/Land Cover Type	City of San Diego Tier	Development Footprint
<b>Upland Vegetation Communities</b>		
Maritime Succulent Scrub	I	2.38
Disturbed Maritime Succulent Scrub	I	0.53
Native Grassland	I	0.12
Diegan Coastal Sage Scrub	II	4.25
Disturbed Diegan Coastal Sage Scrub	II	1.29
Non-native Grassland	IIIB	3.81
<i>Subtotal</i>		<i>12.38</i>
<b>Wetland Vegetation Communities</b>		
Natural Flood Channel	-	0.18
Mule Fat Scrub	-	0.01
Southern Willow Scrub	-	<0.01
Vernal Pool with Fairy Shrimp	-	<0.01
<i>Subtotal</i>		<i>0.20</i>
<b>Disturbed/Developed Vegetation Communities</b>		
Disturbed Land	IV	1.90
<i>Subtotal</i>		<i>1.90</i>
<b>Phase 4 Total</b>		<b>14.48</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.		



<b>Table 8f</b> <b>Direct Impacts to Vegetation Communities/Land Cover Types within the</b> <b>Emergency Vehicle Access Survey Areas Assuming an MHPA BLA</b> <b>(acres)</b>		
Vegetation Community/Land Cover Type	City of San Diego Tier	Emergency Vehicle Access Road
<b>Upland Vegetation Communities</b>		
Maritime Succulent Scrub	I	0.87
Diegan Coastal Sage Scrub	II	0.01
Disturbed Diegan Coastal Sage Scrub	II	0.83
Non-native Grassland	IIIB	0.16
<i>Subtotal</i>		<i>1.87</i>
<b>Wetland Vegetation Communities</b>		
Vernal Pool	-	0.01
<i>Subtotal</i>		<i>0.01</i>
<b>Disturbed/Developed Vegetation Communities</b>		
Disturbed Land	IV	1.23
Urban/Developed	IV	0.05
<i>Subtotal</i>		<i>1.28</i>
<b>EVA Road Total</b>		<b>3.16</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.		



The EVA road would be gated and locked at the edge of development to prohibit all but emergency vehicular access; however, pedestrian and non-motorized bicycles would be permitted along the EVA road to allow connection to the proposed primitive trail network. Public access beyond the EVA road and trail access points would be prohibited with signage notifying the public to stay only on designated trails. Signage would also be provided along the edges of the EVA road to provide public notice that access to the surrounding open space is prohibited, with the exception of access to formal primitive trails.

Construction of the EVA road would also result in impacts to 0.01 acre of potential vernal pools. Wetland impacts are significant and require a wetland deviation addressed in Section 7.1.2.4.

#### **f. Off-site Improvements Impacts**

The off-site improvements include widening of the existing Beyer Boulevard between Enright Drive and East Beyer Boulevard (see Figure 15.1 through 15.3) and improvements to the SR-905 and Caliente Avenue westbound on-ramp (see Figure 16.1 and 16.2). The widening of the Beyer Boulevard segment between Enright Drive and East Beyer Boulevard would impact a disturbed portion of the existing manufactured slope and would not affect sensitive vegetation communities (Table 8g). Additionally, off-site improvements required to install water and sewer infrastructure would occur within existing disturbed roadway segments (see Figure 17). While no sensitive resources are associated within these off-site improvement areas; portions of the utility line improvements along Otay Mesa Place are located adjacent to MHPA and all construction would be required to comply with the MHPA Land Use Adjacency Guidelines. Therefore, direct and indirect impacts to sensitive vegetation communities due to these off-site improvements would be less than significant.

#### **g. Restoration Activities**

Minor grading associated with the implementation of the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan would be required within the vernal pool restoration areas to provide micro-recontouring for creation of the new vernal pools, Quino checkerspot butterfly habitat, and an artificial earthen berm for burrowing owl habitat (see Attachment 14). The recontouring would result in impacts to 26.13 acres of non-native grassland, which are not significant pursuant to the City's Biology Guidelines, as these areas would be impacted via mitigation for the creation of vernal pool habitat. The mitigation footprint was designed to avoid all other native vegetation communities (see Attachment 14).

Additionally, 1.0 acre of non-native grassland would be impacted for the implementation of the Otay tarplant and native grassland mitigation (see Attachment 15). These impacts would also be less than significant pursuant to the City's Biology Guidelines due to the impact occurring for restoration purposes.



Table 8g  
Direct Impacts to Vegetation Communities/ Land Cover Types within the Off Site Improvements Survey Areas Assuming an MHPA BLA  
(acres)

[illegible]



The proposed Wetland Plan (see Attachment 18) would involve conversion of non-native grassland and non-sensitive land cover types, and removal of non-native, invasive species within Spring Canyon. The City's Biology Guidelines state "Mitigation is not required for impacts to non-native grassland habitat when impacted for the purpose of wetland or other native habitat creation." Thus, these impacts to habitat would be less than significant as impacts would be limited to removal of invasive species and non-native grassland.

Impacts associated with restoration and enhancement of coastal cactus wren habitat would be less than significant because restoration and enhancement efforts would avoid impacts to native vegetation. The coastal cactus wren habitat mitigation includes restoration through the removal of non-native species and salvage and installation of coast cholla to establish coastal cactus wren habitat within disturbed maritime succulent scrub. Additional mitigation includes habitat enhancement through non-native species control and shrub thinning within existing maritime succulent scrub. Refer to Attachment 13 for details of this restoration effort including measures to ensure impact avoidance during implementation.

A Trails Restoration Plan is included as Attachment 1 which describes proposed restoration of disturbed and non-native grassland habitats. Impacts to non-native grassland are not significant pursuant to the City's Biology Guidelines when impacted for restoration purposes. The trail restoration effort would additionally enhance disturbed coastal sage scrub and disturbed maritime succulent scrub habitats; however, enhancement would be limited to removal of non-native and invasive species and no native species would be impacted. Enhancement within vernal pools and disturbed wetlands within 50 feet of the trails is also proposed. Measures to ensure avoidance of impacts to sensitive vegetation communities and jurisdictional resources are addressed in the Trails Restoration Plan. A 2.13-acre vernal pool restoration area within West Otay Mesa B is assessed as part of the project as described in Section 1.3.2.5.b. Micro-recontouring for creation of the new vernal pools would result in impacts to 2.13 acres of non-native grassland, which are not significant pursuant to the City's Biology Guidelines, as these areas would be impacted for the creation of vernal pool habitat.

#### **h. Brush Management Zone 2 Outside of the Impact Footprint**

An additional 4.74 acres of habitat comprised of 4.05 acres of maritime succulent scrub, 0.01 acre of disturbed maritime succulent scrub, 0.40 acre of Diegan coastal sage scrub, 0.06 acre of non-native grassland, 0.21 acre of disturbed land and 0.01 acre of natural flood channel would be affected due to implementation of BMZ 2 outside of the proposed grading areas. BMZ 2 located outside of the graded footprint is impact neutral pursuant to the City's Biology Guidelines (City of San Diego 2018a) and does not require mitigation. These BMZ 2 areas are shown on Figure 13.3.



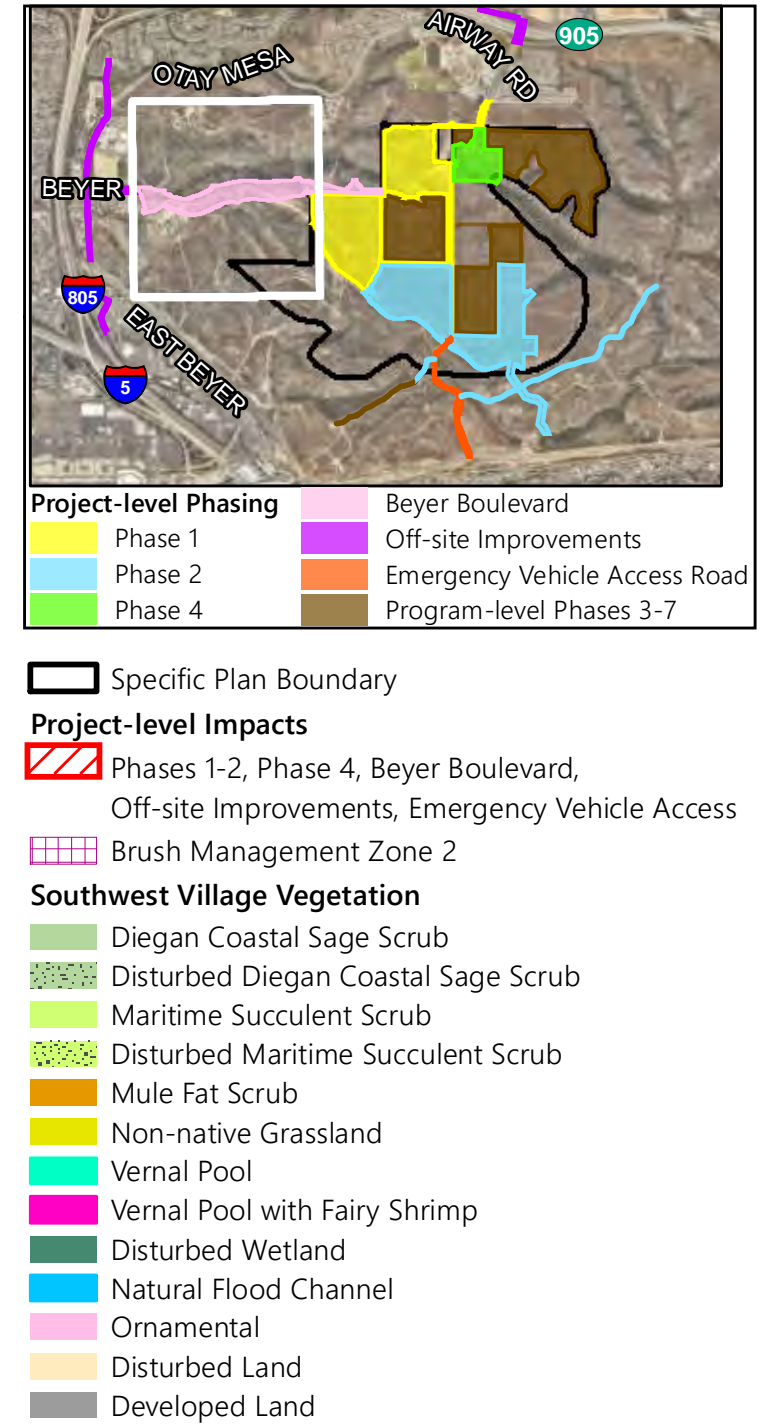
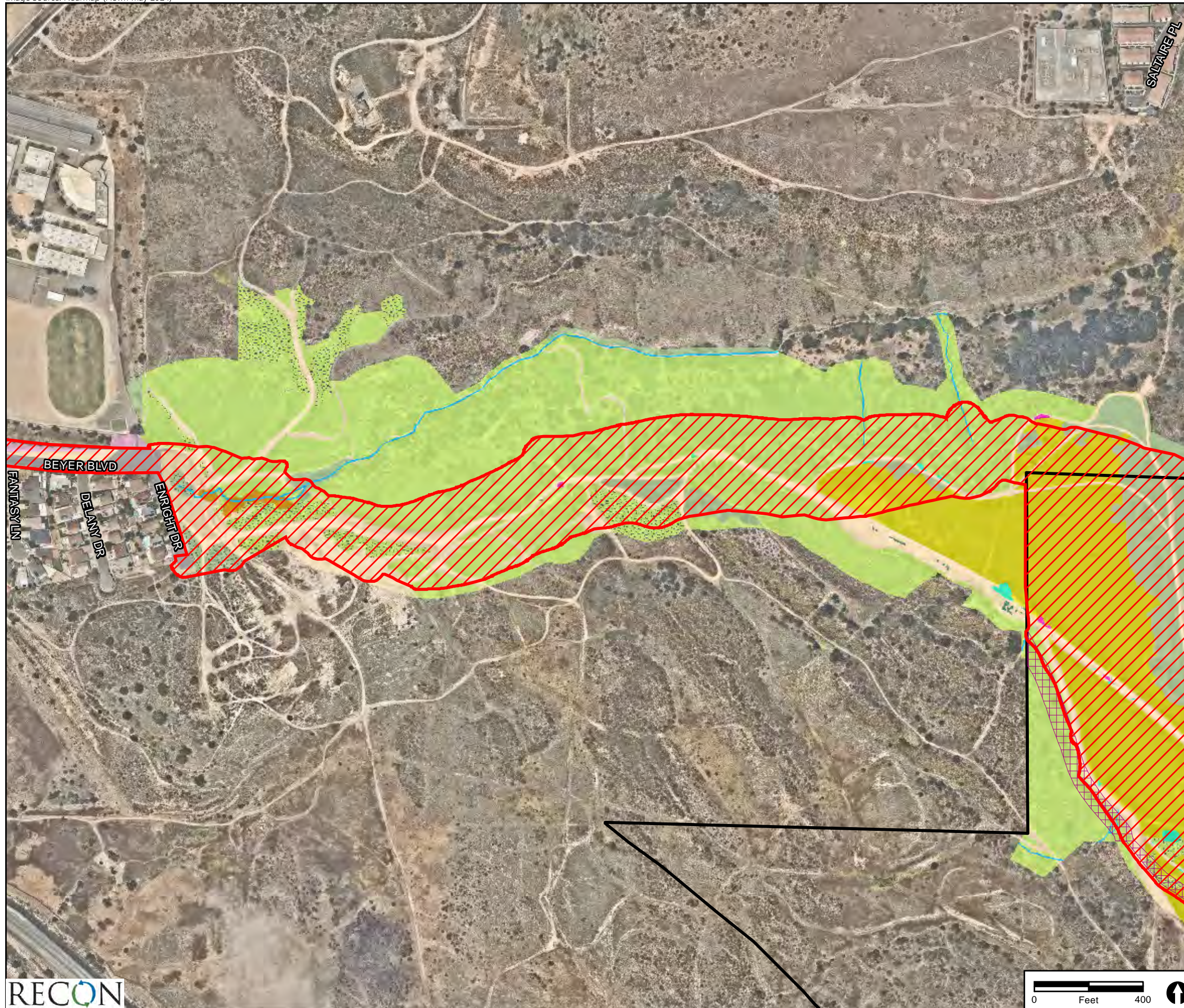


FIGURE 38.1  
Impacts to Biological Resources -  
Vegetation Communities/Land Cover Types



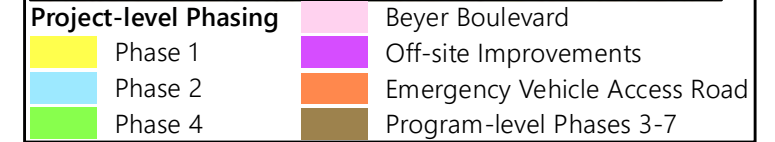
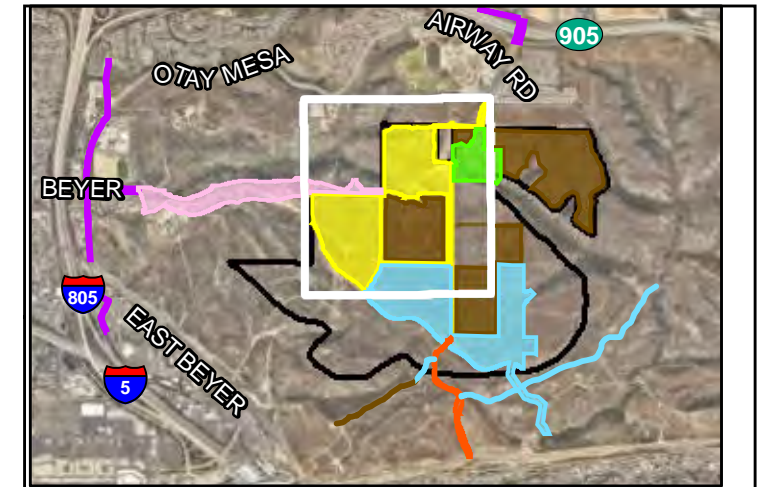
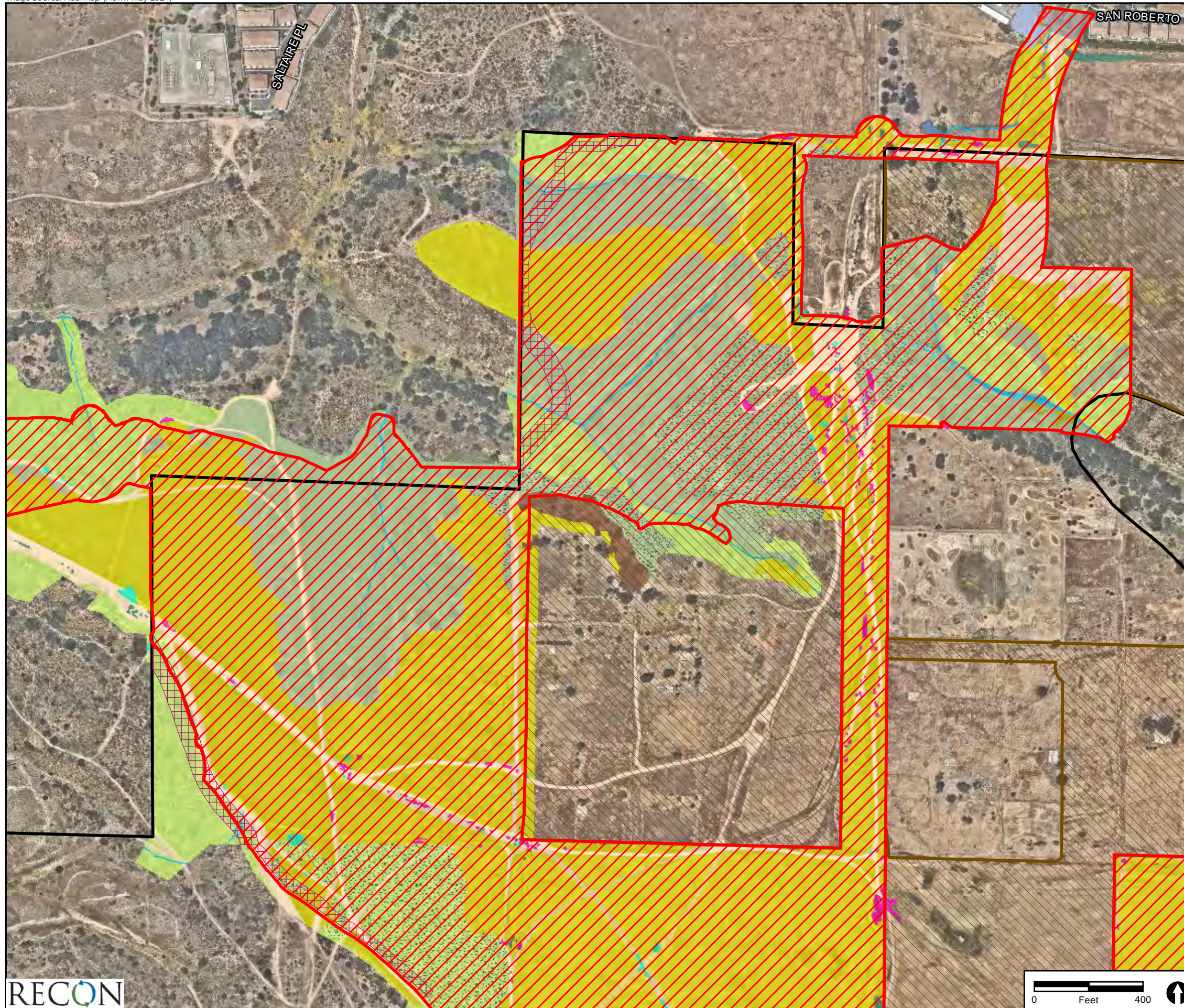
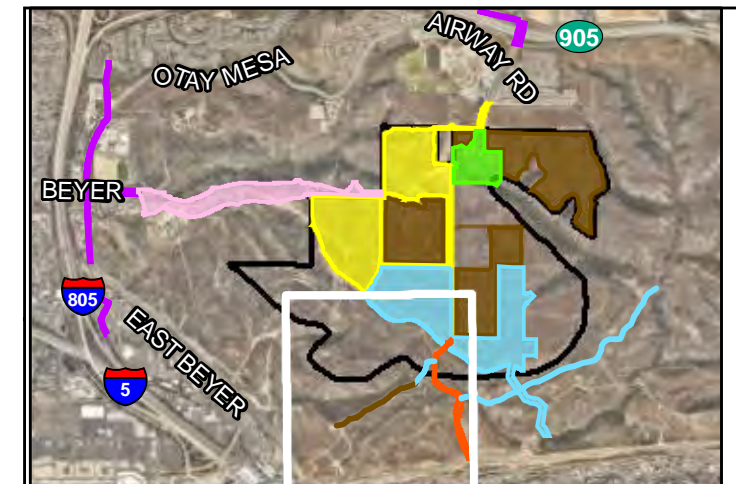
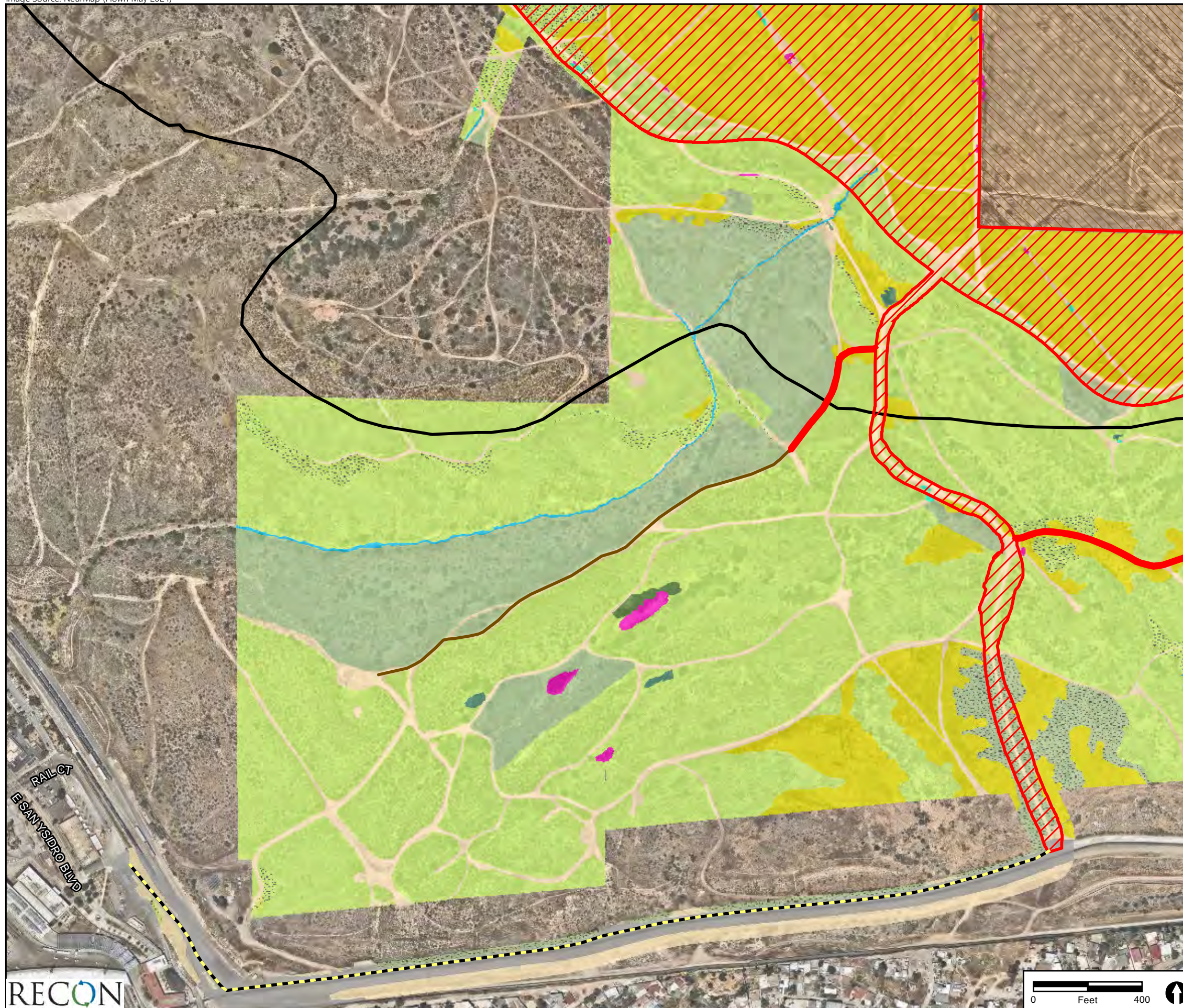


FIGURE 38.2  
Impacts to Biological Resources -  
Vegetation Communities/Land Cover Types





Project-level Phasing	
Phase 1	Beyer Boulevard
Phase 2	Off-site Improvements
Phase 4	Emergency Vehicle Access Road
	Program-level Phases 3-7

Specific Plan Boundary

#### Project-level Impacts

- Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access
- Brush Management Zone 2
- Emergency Vehicle Access Road - No Improvements Required (Existing Road)

#### Program-level Impacts

- Phases 3-7

#### Southwest Village Vegetation

- Diegan Coastal Sage Scrub
- Disturbed Diegan Coastal Sage Scrub
- Maritime Succulent Scrub
- Disturbed Maritime Succulent Scrub
- Tamarisk Scrub
- Non-native Grassland
- Vernal Pool
- Vernal Pool with Fairy Shrimp
- Disturbed Wetland
- Natural Flood Channel
- Disturbed Land
- Developed Land

FIGURE 38.3  
Impacts to Biological Resources -  
Vegetation Communities/Land Cover Types



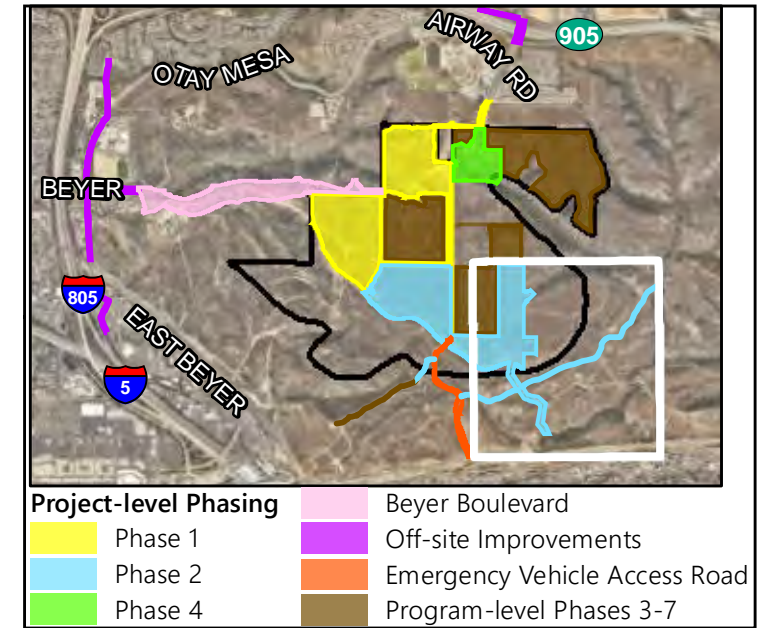
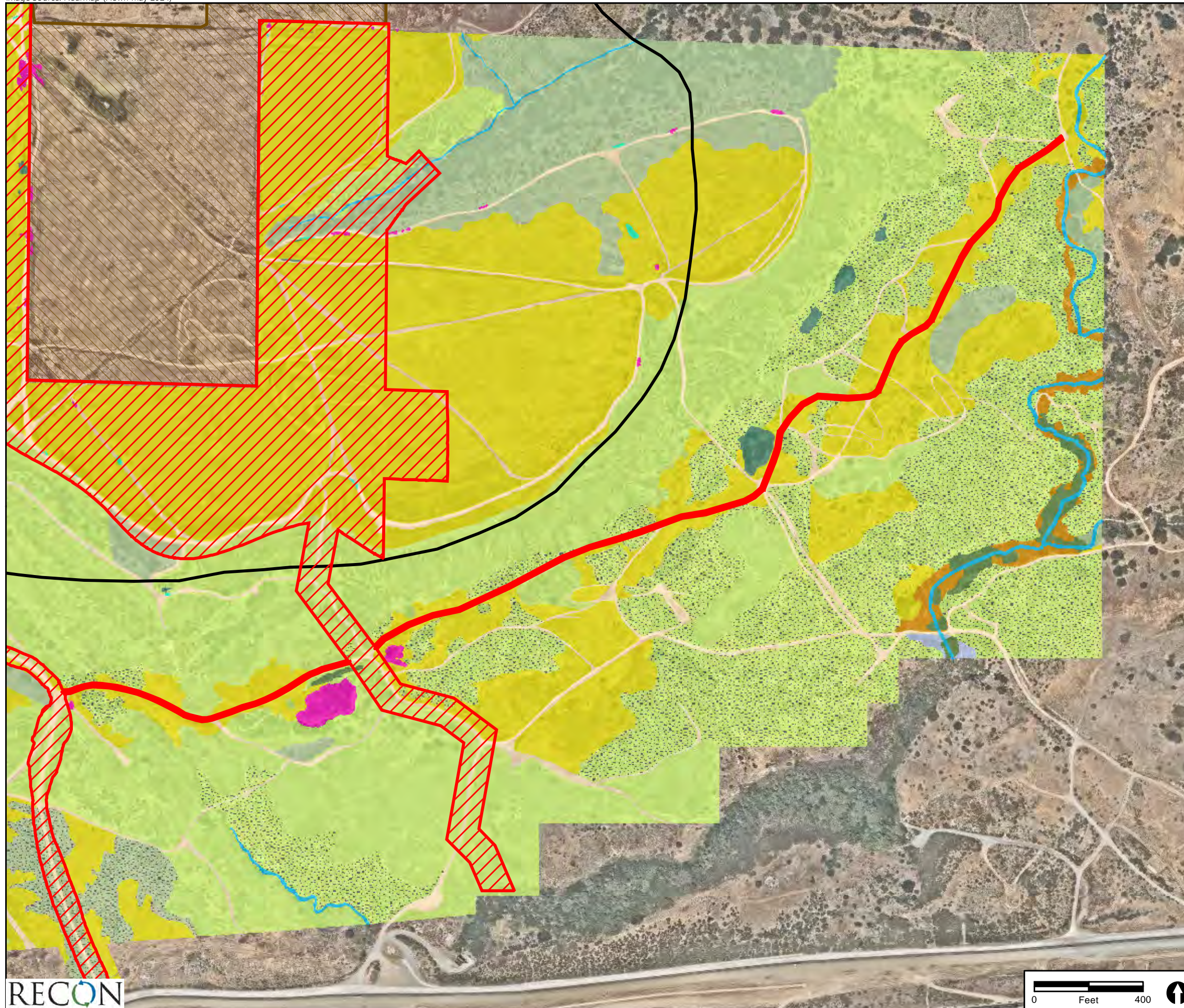


FIGURE 38.4  
Impacts to Biological Resources -  
Vegetation Communities/Land Cover Types



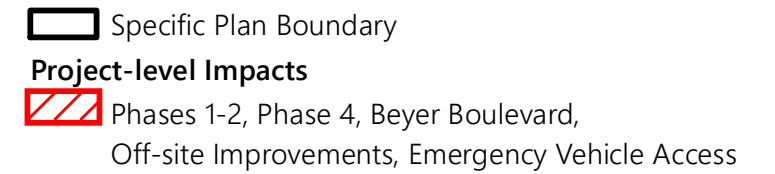
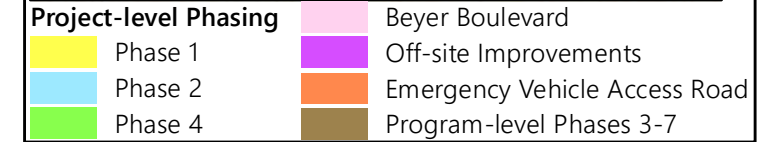
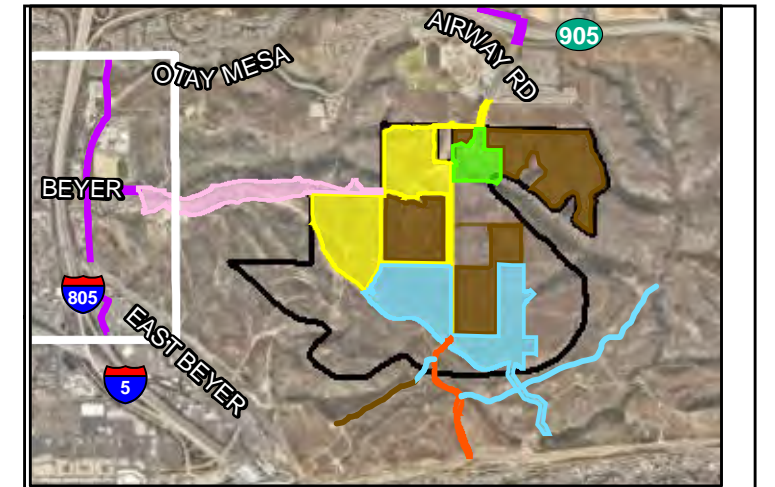
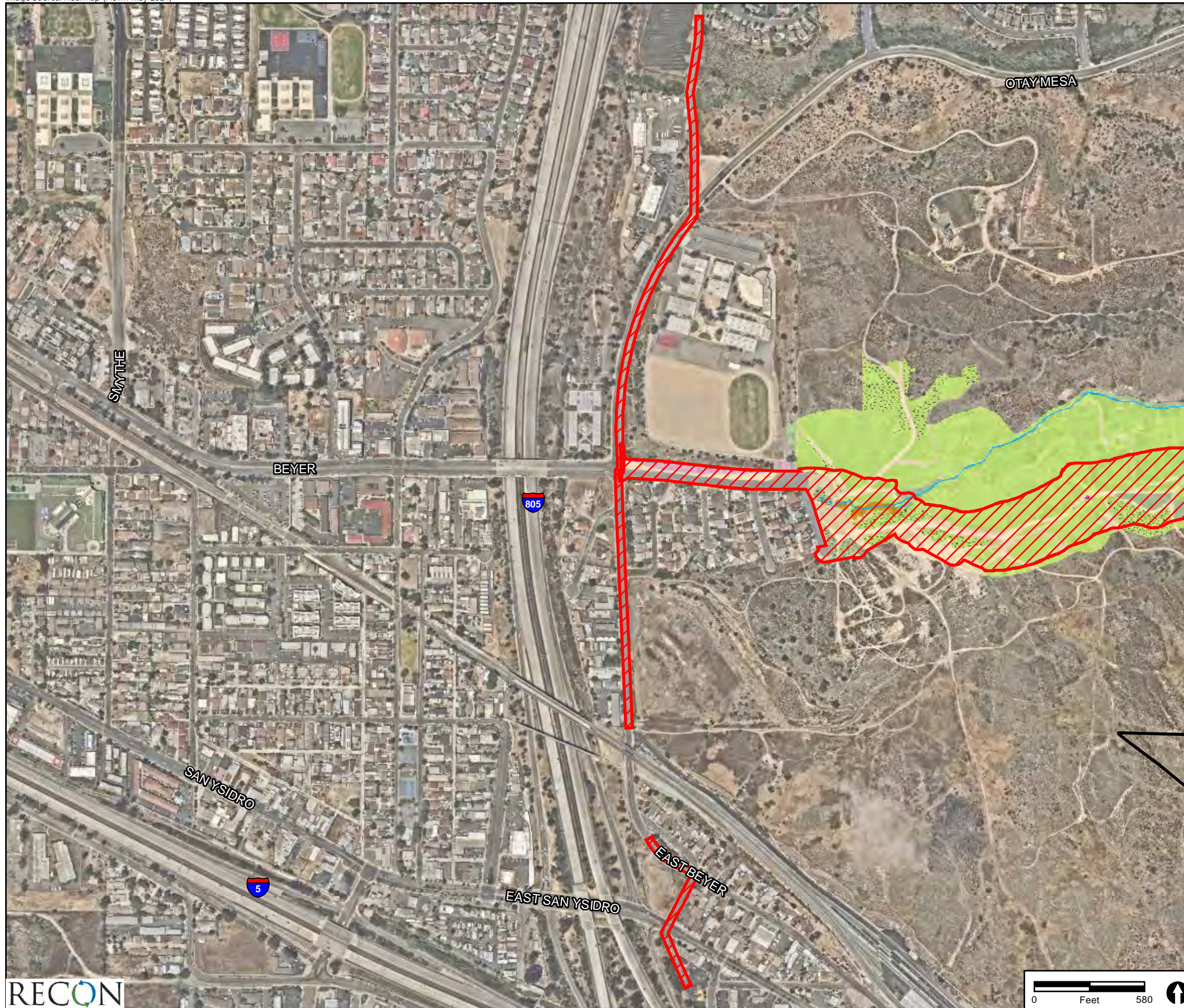


FIGURE 38.5  
Impacts to Biological Resources -  
Vegetation Communities/Land Cover Types



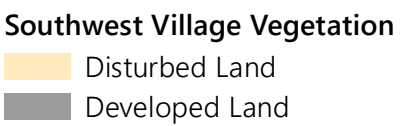
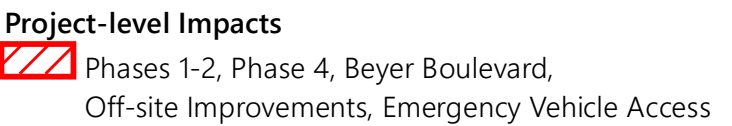
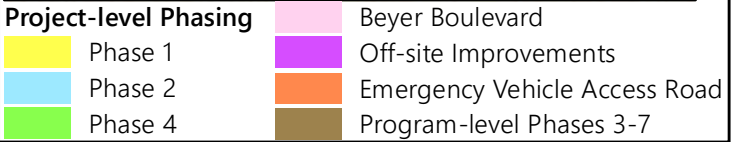
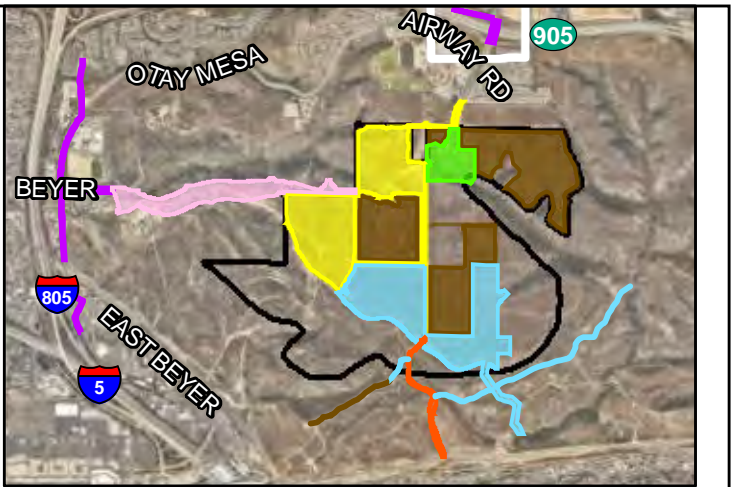


FIGURE 38.6  
Impacts to Biological Resources -  
Vegetation Communities/Land Cover Types



### 7.1.2.2 Impacts to Sensitive Plants

Rare plant surveys were conducted throughout the project-level areas to identify the presence of sensitive plant species. Nineteen sensitive plant species were detected within the survey area including California adolphia, San Diego bur-sage, south coast saltscall, San Diego County viguiera, seaside cistanthe, western dichondra, Otay tarplant, variegated dudleya, San Diego button-celery, cliff spurge, snake cholla, San Diego barrel cactus, Palmer's grapplinghook, bobtail barley, decumbent goldenbush, California box-thorn, golden-ray pentachaeta, ashy spike-moss, and San Diego needlegrass (Figure 39.1 through 39.6).

In addition to those observed, there are five sensitive plant species with a moderate to high potential to occur, including graceful tarplant, Orcutt's bird's-beak, San Diego goldenstar, thread-leaved brodiaea, and small-flowered microseris.

A discussion of impacts to all sensitive plant species detected or with a moderate or high potential to occur within the project-level impact area is provided below.

#### a. Direct Impacts to Federally and State Listed Plant Species

##### *Otay Tarplant*

Direct impacts to Otay tarplant are anticipated based on observations of these species within the project-level impacts areas. This species is both federally and state listed as endangered and an MSCP narrow endemic.

Otay tarplant impacts would be associated with the proposed Beyer Boulevard alignment (see Figure 39.2) within the Beyer Park parcel and the Furby North Preserve on north-facing slopes in areas mapped as maritime succulent scrub and disturbed land. Approximately 1,900 individuals (0.21 acre) were mapped within the proposed Beyer Boulevard improvement area. This population total was calculated by counting individuals where they occurred in small numbers and by estimating the number of individuals where they occurred in large groups. For large groups, the number of individuals was calculated by estimating the density within an area and extrapolating that density to larger areas. Survey updates for Otay tarplant were completed in June 2023. The survey found populations of Otay tarplant were reduced compared to the originally observed plant density; however, the impact analysis assumes the highest observed population estimates since this annual species is influenced by rainfall and weather conditions and populations may fluctuate year to year. The reduced populations in 2023 may be related to two drought years (2021 and 2022) and the plants being outcompeted by invasive species such as crown daisy and tocalote (*Centaurea melitensis*). Therefore, the original calculations of 0.21 acre and 1,900 individuals are assumed impacted. This impact would be significant.

##### *San Diego Button-Celery*

Direct impacts to San Diego button-celery are anticipated based on observations of these species within the project-level impacts areas. This species is both federally and state listed as endangered and an MSCP narrow endemic.



Implementation of the project would result in direct impacts to 28 San Diego button-celery located in two vernal pools at the northeastern side of Phase 1 (see Figure 39.2). This impact would be significant.

### *Thread-leaved Brodiaea*

While not detected during rare plant surveys, a moderate potential remains for this plant to occur on-site and impacts, if present, would be significant. This species is both federally and state listed as endangered and an MSCP narrow endemic.

## **b. Direct Impacts to MSCP-Covered Plant Species**

### *San Diego Barrel Cactus*

Impacts to MSCP-covered San Diego barrel cactus located within Phases 1, 2, and 4 and Beyer Boulevard are anticipated. These impacts would be significant.

### *Snake Cholla*

Impacts to snake cholla, an MSCP-covered and narrow endemic species, are anticipated. These impacts would be significant.

### *Orcutt's Bird's-beak*

Orcutt's bird's beak is an MSCP-covered species and all four known populations within the MSCP boundary are being conserved (City of San Diego 1997). The observation within the vicinity of the project occurs within a City parcel which is also being conserved. In addition, the loss of suitable habitat within the project impact area comprises a small portion of the suitable habitat available to these species on a local level and on a regional scale; therefore, this loss of habitat outside the MHPA is not expected to impact the regional long-term survival of this species and would therefore not be significant.

### *San Diego Goldenstar*

San Diego goldenstar is an MSCP-covered species. Coverage was based on the fact that over 70 percent of the major populations, over 80 percent of the known occurrences, and 38 percent of the grasslands would be conserved and that the City would avoid any populations within the 25 percent MHPA encroachment areas (County of San Diego 1998a). Species-specific conditions are related only to monitoring of a specific transplanted population and protection against edge effects within the preserved areas (County of San Diego 1998a). No San Diego goldenstar was observed in the project-level area during the rare plant survey or update 2023 rare plant survey conducted on the site. Based on this level of MSCP coverage, current known occurrences of this species within southern California (Jepson Flora Project 2023), and that the loss of suitable habitat within the project impact area comprises a small portion of the suitable habitat available to this species on a local level and on a regional scale; this loss of habitat outside the MHPA would not be a significant impact for these species. Therefore, the project is not expected to impact the regional long-term survival of this species and would therefore not be significant.



### *Variegated Dudleya*

No direct impacts to variegated dudleya, an MSCP-covered and narrow endemic species, would occur, as the species is not located within the project-level impact area and is not expected to occur based on the level of rare plant survey efforts conducted.

No narrow endemic plant species other than those discussed above were observed within the project-level areas; therefore, no additional impacts to narrow endemic species are anticipated due to project implementation, including BMZ 2 activities.

### **c. Direct Impacts to Sensitive Non-MSCP Covered Plant Species**

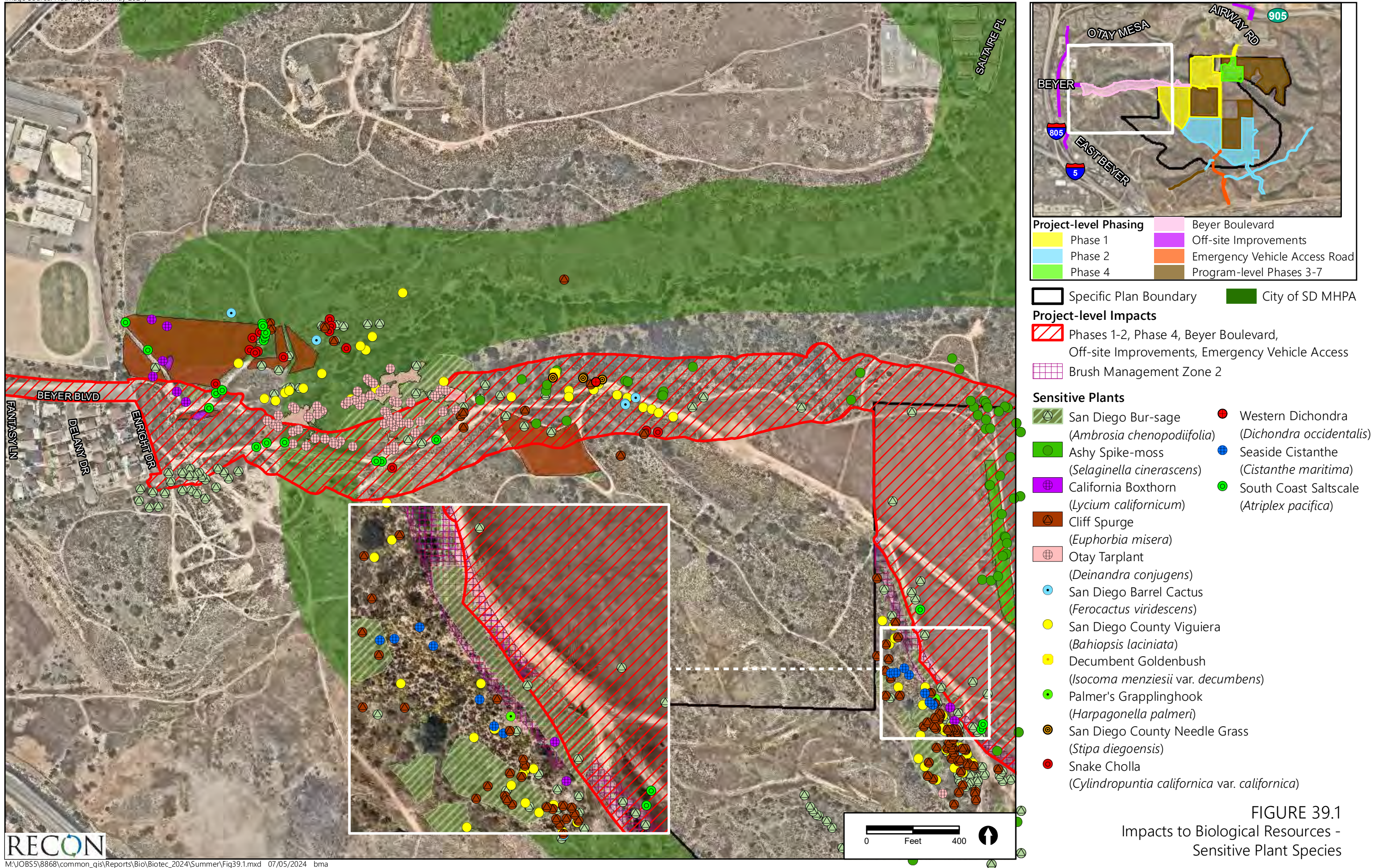
The following sensitive plants not covered by the MSCP were observed during surveys: California adolphia, San Diego bur-sage, south coast saltscale, San Diego County viguiera, seaside cistanthe, western dichondra, cliff spurge, Palmer's grapplinghook, bobtail barley, decumbent goldenbush, California box-thorn, ashy spike-moss, and San Diego needlegrass. These would be impacted within project-level areas as detailed on Figures 39.1 through 39.4.

California adolphia, San Diego bur-sage, San Diego County viguiera, seaside cistanthe, cliff spurge, Palmer's grapplinghook, bobtail barley, California box-thorn, ashy spike-moss, and San Diego needlegrass were detected both within the impact area and within the survey area outside of the project-level impact limits, demonstrating that these species are abundant locally and would continue to persist in the area after impacts occur. Only south coast saltscale, western dichondra, and decumbent goldenbush were not detected within the survey area outside of the project-level impact limits. However, all of these species including south coast saltscale, western dichondra, and decumbent goldenbush are represented abundantly within the southern coastal California on eFlora (Jepson Flora Project 2023). In addition, the loss of suitable habitat within the project impact area comprises a small portion of the suitable habitat available to these species on a local level and on a regional scale; therefore, this loss of habitat outside the MHPA would not be a significant impact for these species. Therefore, the project is not expected to reduce the populations to below self-sustaining levels or not significantly increase the likelihood of any uncovered species to be listed under either the federal or state endangered species act; therefore, direct impacts are less than significant.

Graceful tarplant and small-flowered microseris were not observed but have a moderate to high potential to occur; however, these species are represented abundantly within the southern coastal California on eFlora (Jepson Flora Project 2023). In addition, the loss of suitable habitat within the project impact area comprises a small portion of the suitable habitat available to these species on a local level and on a regional scale; therefore, this loss would not be a significant impact for these species. Therefore, the project is not expected to reduce the populations of graceful tarplant and small-flowered microseris to below self-sustaining levels or not significantly increase the likelihood of any uncovered species to be listed under either the federal or state endangered species act; therefore, impacts to these species are less than significant.

No direct impacts to golden-ray pentachaeta would occur, as it is not located or expected to occur within the project-level impact area.







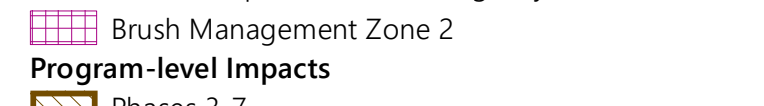
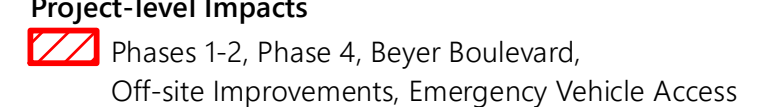
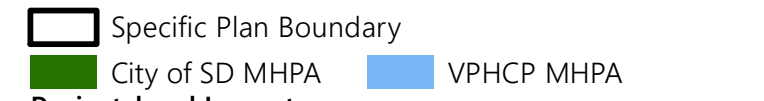
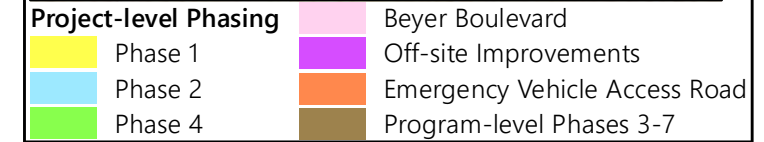
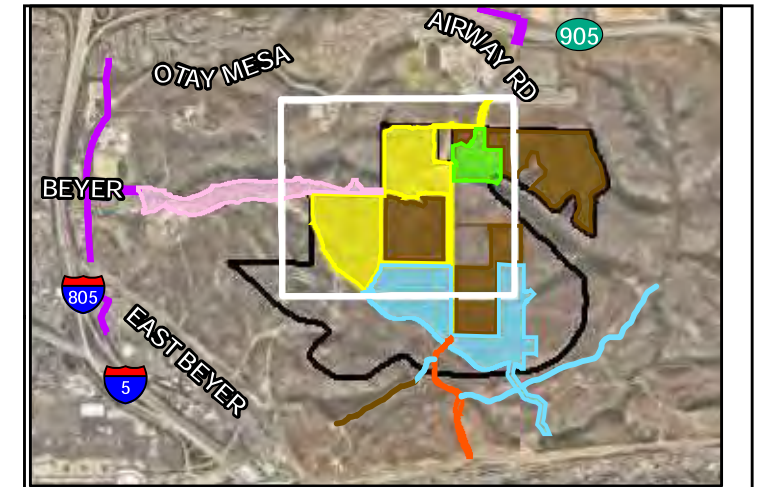
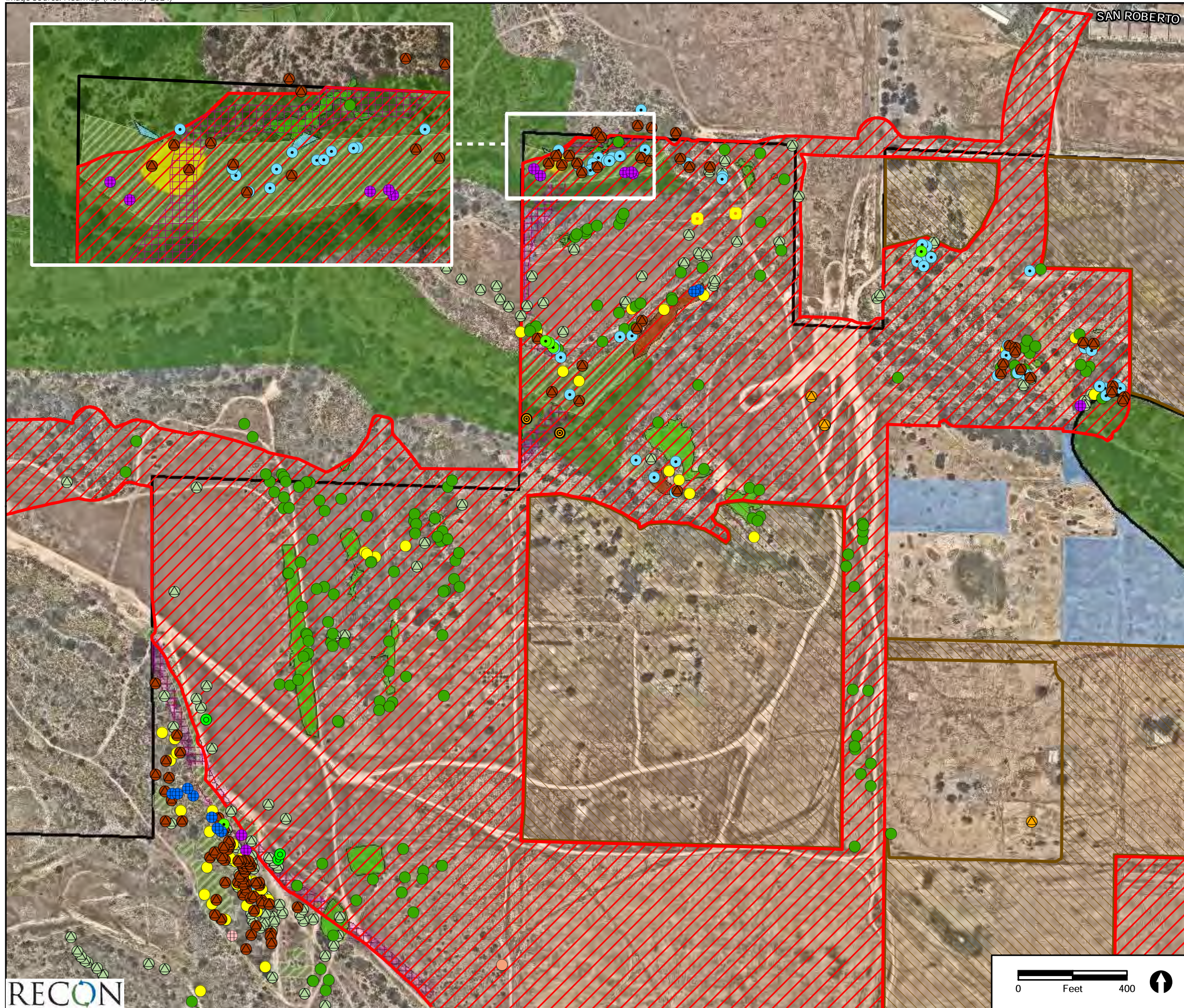
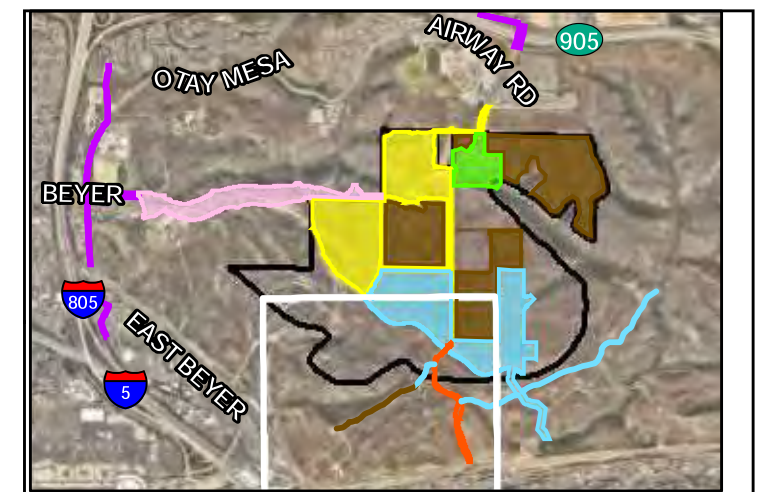
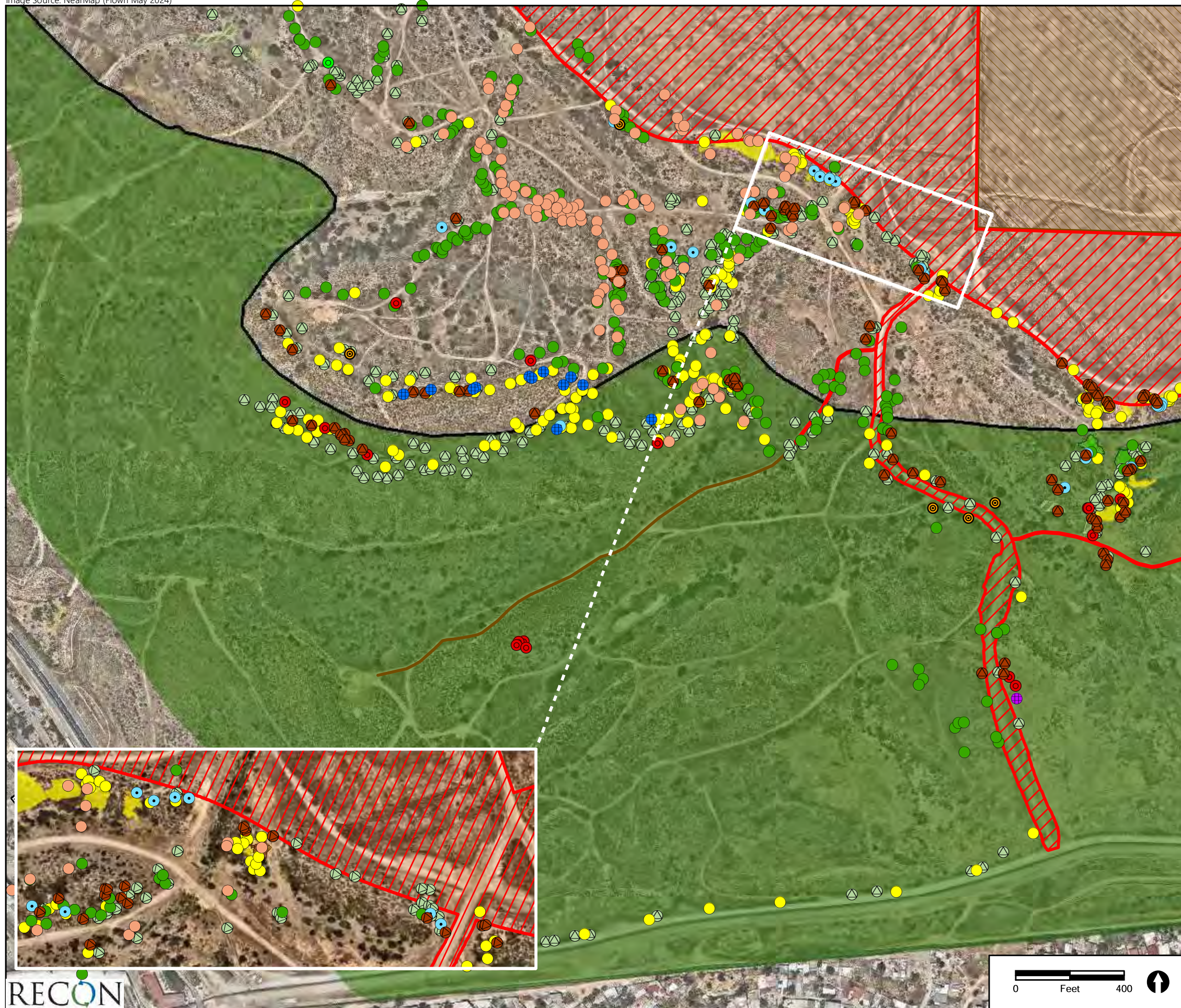


FIGURE 39.2  
Impacts to Biological Resources -  
Sensitive Plant Species





Project-level Phasing	
Phase 1	Beyer Boulevard
Phase 2	Off-site Improvements
Phase 4	Emergency Vehicle Access Road
	Program-level Phases 3-7

Specific Plan Boundary City of SD MHPA

**Project-level Impacts**  
 Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access  
 Brush Management Zone 2

**Program-level Impacts**  
 Phases 3-7

Sensitive Plants	
San Diego Bur-sage ( <i>Ambrosia chenopodiifolia</i> )	California Adolphia ( <i>Adolphia californica</i> )
Ashy Spike-moss ( <i>Selaginella cinerascens</i> )	Seaside Cistanthe ( <i>Cistanthe maritima</i> )
California Boxthorn ( <i>Lycium californicum</i> )	South Coast Saltscale ( <i>Atriplex pacifica</i> )
Cliff Spurge ( <i>Euphorbia misera</i> )	
San Diego Barrel Cactus ( <i>Ferocactus viridescens</i> )	
San Diego County Vigiera ( <i>Bahiopsis laciniata</i> )	
San Diego County Needle Grass ( <i>Stipa diegoensis</i> )	
Snake Cholla ( <i>Cylindropuntia californica</i> var. <i>californica</i> )	

FIGURE 39.3  
 Impacts to Biological Resources -  
 Sensitive Plant Species



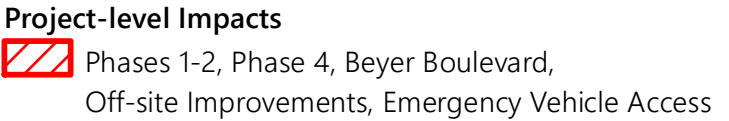
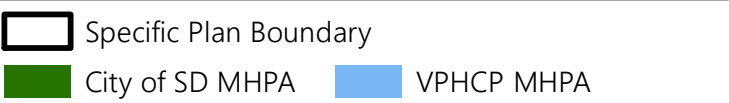
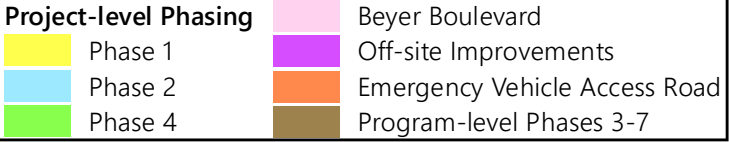
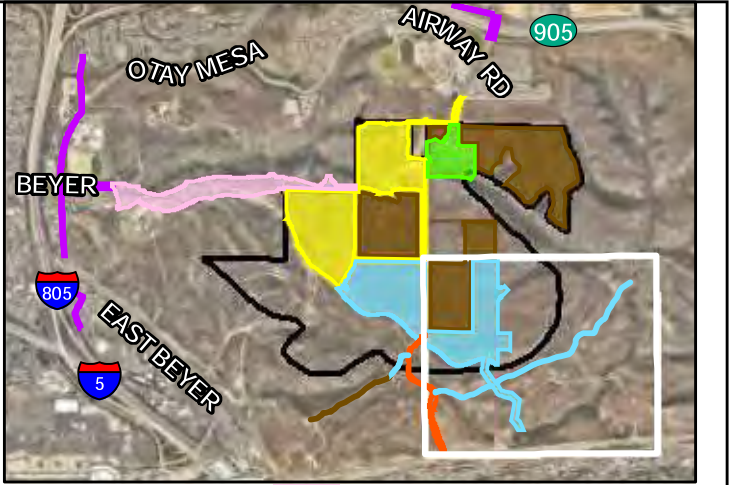
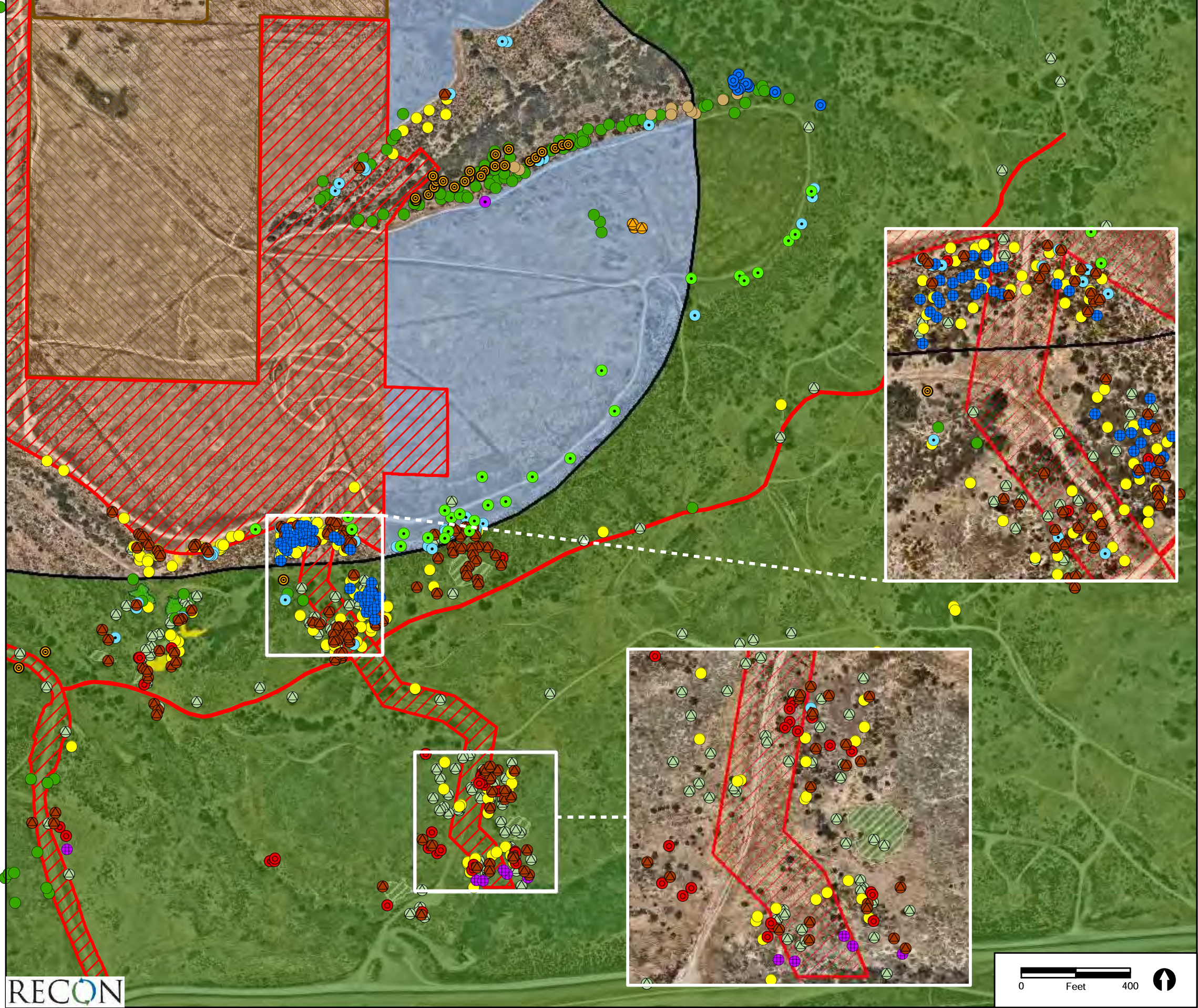
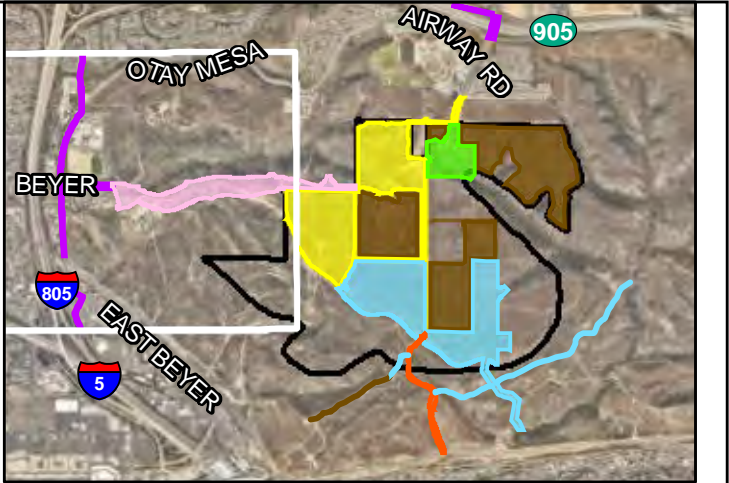


FIGURE 39.4  
Impacts to Biological Resources -  
Sensitive Plant Species





Project-level Phasing	
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<span style="background-color: lightgreen; border: 1px solid black;"> </span> Phase 4	<span style="background-color: orange; border: 1px solid black;"> </span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black;"> </span> Program-level Phases 3-7

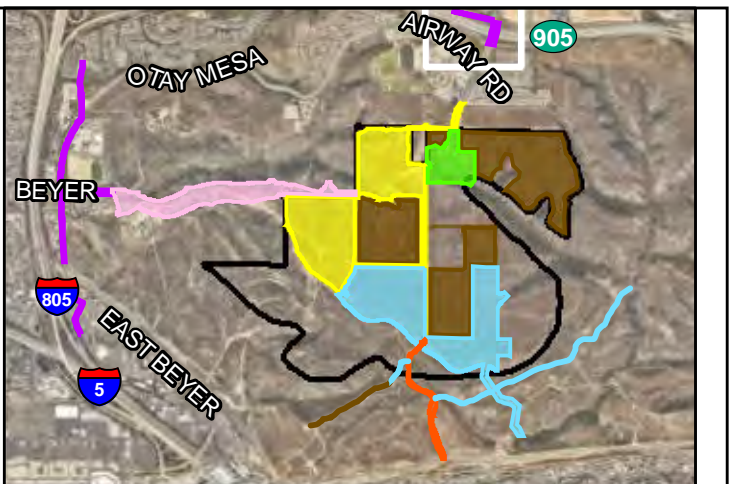
<span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Specific Plan Boundary	<span style="background-color: green; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> City of SD MHPA
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Project-level Impacts	
<span style="border: 2px solid red; border-style: dashed; display: inline-block; width: 10px; height: 10px;"></span> Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access	
<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Brush Management Zone 2	

Sensitive Plants (SanBIOS)	
<span style="color: purple;">●</span> California Box Thorn ( <i>Lycium californicum</i> )	
<span style="color: blue;">●</span> Coast Barrel Cactus ( <i>Ferocactus viridescens</i> )	

FIGURE 39.5  
Impacts to Biological Resources -  
Sensitive Plant Species





Project-level Phasing	
Phase 1	Beyer Boulevard
Phase 2	Off-site Improvements
Phase 4	Emergency Vehicle Access Road
	Program-level Phases 3-7

**Project-level Impacts**


 Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access

FIGURE 39.6  
Impacts to Biological Resources -  
Sensitive Plant Species



### 7.1.2.3 Impacts to Sensitive Wildlife

As described in Section 5.4.2, twenty-five sensitive wildlife species were detected within the project-level analysis area including Quino checkerspot butterfly, San Diego fairy shrimp, Riverside fairy shrimp, Crotch's bumble bee, western spadefoot, coastal California gnatcatcher, orange-throated whiptail, coast horned lizard, coastal whiptail, burrowing owl, red diamond rattlesnake, two-striped gartersnake, Cooper's hawk, northern harrier, white-tailed kite, merlin, bald eagle, golden eagle, California horned lark, least Bell's vireo, yellow-breasted chat, yellow warbler, southern California rufous-crowned sparrow, grasshopper sparrow, and San Diego desert woodrat (Figure 40.1 through 40.6). Although not observed, coastal cactus wren is assumed present within the areas along the western portion of the Beyer Boulevard alignment based on previous detections during the surveys conducted for the Beyer Park Project (RECON 2019c). Additionally, the following species were not observed but are considered to have a moderate potential to occur: Coronado skink, Bell's sage sparrow, loggerhead shrike, and southern mule deer. Potential project impacts to each of these species from construction and restoration activities are addressed below.

#### a. Direct Impacts to Federally Listed Wildlife Species

##### *Quino Checkerspot Butterfly*

Direct impacts to Quino checkerspot butterfly during construction grading would occur as a result of the removal of host and nectar plants (0.93 acre) within the project-level areas (see Figure 29.1). Impacts to these suitable habitat areas would be significant. Direct impacts to Quino checkerspot habitat during implementation of proposed restoration activities would be significant and would be mitigated through measures designed to map and avoid removing host and nectar plants (see Section 8.2.4.2 and Attachment 14).

##### *San Diego and Riverside Fairy Shrimp*

Impacts to San Diego and Riverside fairy shrimp within the project-level survey area are significant. All ponding basins within the project-level survey area were surveyed for fairy shrimp between the years 2018 and 2020, including wet and dry season surveys. Jurisdictional resources found to contain fairy shrimp based on focused surveys are detailed in Table 9. As shown, a total of 0.90 acre with Candlelight area impacts and 0.63 acre without Candlelight area impacts of vernal pool and disturbed wetland surface area was found to contain fairy shrimp based on survey results. Of the 0.90-acre occupied ponding basins, all support San Diego fairy shrimp and two basins totaling 0.20 acre supports both San Diego and Riverside fairy shrimp. For purposes of this analysis and due to the age of surveys, all ponding basins are assumed to contain San Diego fairy shrimp. There is a low likelihood of Riverside fairy shrimp to be present in additional project-level ponding basins due to the longer ponding requirements for this species; thus, the direct impact to this species is assumed to be limited to the 0.20 acre of vernal pool surface area. Therefore, assuming occupancy of all basins with San Diego fairy shrimp, the project-level areas would result in a significant direct impact to 1.21 acres with Candlelight area impacts or 0.94 acre without Candlelight area impacts of San Diego fairy shrimp, of which 0.20 acre also supports Riverside fairy shrimp. Whichever project proceeds first (i.e., Southwest Village or Candlelight) would result in the impacts to the Candlelight



area, and would therefore be responsible for mitigating the impact to San Diego and Riverside fairy shrimp in that area.

Direct impacts to San Diego fairy shrimp could occur during trail restoration and vernal pool mitigation activities, which would be significant.

Table 9 Resources within the Project-level Areas Containing Fairy Shrimp Based on Survey Results					
Area	Disturbed Wetland		Vernal Pools		Total
	With Fairy Shrimp	Without Fairy Shrimp	With Fairy Shrimp	Without Fairy Shrimp	
Phase 1					
Candlelight <sup>1</sup>	0.23	-	0.04	-	0.27
Southwind <sup>1</sup>	-	-	0.01	0.02	0.04
Development	0.03	0.04	0.51 <sup>2</sup>	0.12	0.70
<i>Subtotal Phase 1</i>	<i>0.26</i>	<i>0.04</i>	<i>0.56</i>	<i>0.15</i>	<i>1.00</i>
Phase 2 Development	-	0.04	0.05	0.07	0.16
Beyer Boulevard					
Furby North	<0.01	-	0.01	-	0.01
West Otay Mesa A	-	<0.01	-	0.02	0.02
<i>Subtotal Beyer Boulevard</i>	<i>&lt;0.01</i>	<i>&lt;0.01</i>	<i>0.01</i>	<i>0.02</i>	<i>0.03</i>
Phase 4	-	-	<0.01	-	<0.01
EVA Road	-	-	0.02	-	0.02
Total Direct Impacts with Candlelight	0.26	0.08	0.64	0.23	1.21
Total Direct Impacts without Candlelight <sup>1</sup>	0.03	0.08	0.60	0.23	0.94
NOTE: Totals may not add due to rounding.					
<sup>1</sup> Whichever project proceeds first (i.e., Southwest Village or Candlelight) would result in the impacts to the Candlelight area, and would therefore be responsible for mitigating the impact to San Diego and Riverside fairy shrimp in that area.					
<sup>2</sup> Two basins in Phase 1 contains both Riverside fairy shrimp and San Diego fairy shrimp totaling 0.20 acre. All other resources with shrimp contained San Diego fairy shrimp only.					

### ***Bald Eagle and Golden Eagle***

One bald eagle was observed passing through the site. No direct impacts to bald eagle are anticipated as the project-level area lacks suitable nesting habitat for this species (tall trees and cliffs), and potential foraging habitat surrounding the project-level area will be conserved.

One golden eagle juvenile was observed incidentally during a Quino checkerspot butterfly survey in April 2022. This lone bird was observed flying over the disturbed land and non-native grassland within Phase 1 and has not been observed in subsequent surveys. No direct impacts to golden eagle are anticipated as the project-level area lacks suitable nesting habitat for this species (tall trees and cliffs), and potential foraging habitat surrounding the project-level area will be conserved.

### ***Least Bell's Vireo***

Impacts to federally and state listed endangered, MSCP-covered least Bell's vireo would occur within the western portion of the proposed Beyer Boulevard extension in the area of mule fat scrub habitat if construction were to occur near a nesting site. Direct impacts to least Bell's vireo individuals during



construction would be significant and would require implementation of ASMDs detailed in Section 6.2.1.2.g and mitigation as described in Section 8.2.4.4. Significant direct impacts would also result from removal of approximately 0.28 acre of available foraging and nesting habitat outside of the MHPA for which habitat-based compensatory mitigation would be required as described in Section 8.2.5.

Least Bell's vireo was also detected by vocalization within the mule fat scrub within and surrounding Spring Canyon, outside of the project impact limits, where restoration activities are proposed. Direct impacts to least Bell's vireo individuals during any restoration activities would be significant and would require mitigation. Mitigation measures are provided in Section 8.2.4.4 and included in the Wetland Plan (see Attachment 18). Specifically, the mitigation measure and Wetland Plan require that any removal of habitat that supports active nests in the mitigation area should occur outside the breeding season (February 1 to September 15) for identified as a listed, candidate, sensitive, or special status species in the MSCP.

### *Coastal California Gnatcatcher*

Impacts to nesting and foraging habitat for the coastal California gnatcatcher would result from the removal of coastal sage scrub and maritime succulent scrubs habitats as part of project grading. Significant direct impacts would result from removal of approximately 27.25 acres of available foraging and nesting habitat within the MHPA (including 100% conservation and VPHCP lands) for which habitat-based compensatory mitigation would be required. Habitat-based compensatory mitigation is described in Section 8.2.2. In addition, implementation of ASMDs would be required as detailed in Section 6.2.1.2.g.

Direct impacts to coastal California gnatcatcher individuals outside of the MHPA are covered by MSCP and do not require specific avoidance or minimization measures during construction. Direct impacts to coastal California gnatcatcher individuals within MHPA are subject to breeding season restrictions as described in Section 6.2.1.2.d.

## **b. Direct Impacts to California Fully Protected Wildlife Species**

### *White-Tailed kite*

White-tailed kite has a potential to nest within the trees found in mule fat scrub, southern willow scrub, tamarisk woodland, disturbed riparian, and eucalyptus woodland. Direct impacts to nesting individuals would be significant. Significant impacts to California fully protected white-tailed kite would also result from the removal of 190 acres of foraging habitat within the project-level survey area. Habitat-based preservation and nesting avoidance would mitigate project impacts, as specified in Sections 8.2.2 and 8.2.4.9. Any loss of non-native grassland through restoration activities such as in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species.



### c. Direct Impacts to CDFW Candidate for Listing Species

#### *Crotch's Bumble Bee*

Crotch's bumble bee is a State candidate for listing as endangered and was observed within the mitigation lands in the southern portion of the project-level survey areas during habitat assessments conducted during the spring of 2024 (see Figure 29.2). Crotch's bumble bee is a generalist species and much of the project-level analysis area is potentially suitable for foraging and nesting. Approximately 190 acres of suitable nesting and foraging habitat is present within the project-level analysis area, 42 acres of which supports moderate to high cover of nectar resources. Direct impacts to this species and foraging and nesting habitat from construction and restoration activities would be significant and require mitigation, as specified in Section 8.2.4.8.

#### *Burrowing Owl*

One incidental sighting of burrowing owl occurred during focused Quino checkerspot butterfly surveys; however, no burrows suitable for nesting or ground squirrel activity were observed within the project-level survey areas during subsequent focused survey efforts and the project site is not currently occupied by burrowing owls. The site has a moderate potential to support burrowing owl.

Due to the moderate potential for burrowing owl to colonize and nest at the site prior to construction, direct impacts to burrowing owl could occur during construction if burrowing owl were to take up residence, resulting in a significant impact to this species. Pre-construction burrowing owl surveys would be required consistent with the OMCP FEIR Mitigation Framework BIO-2, as further specified in Section 8.2.4.6. If detected, a translocation plan will be required for any owls discovered within the impact area prior to or during construction, with coordination and the approval of the Wildlife Agencies, EAS, and MSCP.

Additionally, although the project would not result in impacts to known burrows, the project includes the incorporation of a berm with artificial burrows as a project design feature within the vernal pool and Quino checkerspot butterfly restoration areas as detailed in Section 1.3.2.6.b and Attachment 14.

Grading and development would remove non-native grassland that is potentially utilized as foraging habitat by burrowing owl. Impacts to burrowing owl related to loss of 103.77 acres of potential foraging habitat are significant and would be mitigated via habitat-based mitigation as described in Section 8.2.2. Any loss of non-native grassland through restoration activities such as in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species. In addition, implementation of ASMDs would be required as detailed in Section 6.2.1.2.g.

### d. Direct Impacts to MSCP-Covered Wildlife Species

#### *Coastal Cactus Wren*

Direct impacts to coastal cactus wren individuals are possible as this species is assumed present along the western portion of Beyer Boulevard. Although the cactus wren habitat in the area of



impact is overgrown which reduces suitability for the species, coastal cactus wren was assumed to have a high potential to nest in the maritime succulent scrub within the western extent of the Beyer Boulevard phase due to the presence of large cholla thickets and the previous observations made in 2017 (RECON 2019c). Direct impacts to nesting individuals would be significant. The project would impact 0.63 acre of maritime succulent scrub habitat dominated by large coast cholla. Impacts to any individual wrens and their habitat would be a significant impact to the species. The project would provide habitat restoration mitigation as described in Section 8.2.4.7 and Attachment 13. In addition, implementation of ASMDs would be required as detailed in Section 6.2.1.2.g.

The project also would impact potential foraging habitat for this species, consisting of approximately 20 acres of coastal sage scrub and maritime succulent scrub in the vicinity of the Beyer Boulevard project component, which would be significant. Habitat-based mitigation would be provided, as detailed in Section 8.2.2.

### *Orange-Throated Whiptail and Coast Horned Lizard*

Direct impacts to orange-throated whiptail and coast horned lizard are anticipated through potential incidental mortality during construction and removal of suitable habitat within the project impact areas within all phases and restoration. However, these are mobile species and likely occur on-site in low numbers, and the project would be expected to result in the loss of very few individuals, if any. These species are also adequately covered by the MSCP with habitat conserved in the MHPA. Suitable habitat within the project impact area comprises a small fraction of the habitat available to this species both at a local level and on a regional scale. In addition, implementation of ASMDs would be required as detailed in Section 6.2.1.2.g. Therefore, the potential loss of these individuals would not reduce their populations to less than self-sustaining and would not be significant.

### *Cooper's Hawk*

Cooper's hawk has a moderate potential to nest within the eucalyptus woodland, southern willow scrub, and mule fat scrub within the Phase 1 and Phase 4 project impact areas. Direct impact to nesting individuals would be significant. Establishment of the 300-foot impact avoidance area identified within the MSCP ASMDs as detailed in Section 6.2.1.2.g would be required as a project condition of approval.

Cooper's hawk also has potential to forage within approximately 190 acres of the impacted project-level area, consisting of maritime succulent scrub, Diegan coastal sage scrub, non-native grassland, mule fat scrub, southern willow scrub, tamarisk scrub, disturbed riparian, and disturbed land. Project impacts to approximately 190 acres of sensitive Cooper's hawk foraging habitat would be significant. The project would provide habitat-based mitigation as described in Section 8.2.2.

Any loss of foraging habitat through restoration activities such as in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species.



### *Northern Harrier*

Northern harrier has a high potential to nest within the non-native grassland within the project-level analysis area. Direct impact to nesting individuals would be significant. Establishment of the 900-foot impact avoidance area identified within the MSCP ASMDs as detailed in Section 6.2.1.2.g would be required as a project condition of approval.

Northern harrier also has potential to forage within approximately 190 acres of the impacted project-level area, consisting of maritime succulent scrub, Diegan coastal sage scrub, non-native grassland, mule fat scrub, southern willow scrub, tamarisk scrub, disturbed riparian, and disturbed land. Project impacts to approximately 190 acres of northern harrier sensitive foraging would be significant. The project would provide habitat-based mitigation as described in Section 8.2.2. Any loss of foraging habitat through restoration activities such as in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species.

### *Other MSCP Covered Species*

Southern California rufous-crowned sparrow has a high potential to nest and forage within the non-native grassland, maritime succulent scrub, and Diegan coastal sage scrub in project-level impact areas. Direct impact to nesting individuals and approximately 190 acres of foraging habitat would be significant. The project would be providing habitat-based compensatory mitigation is described in Section 8.2.2. Any loss of foraging habitat through restoration activities such as in the vernal pool preserve or conservation easement replacement lands would be less than significant considering the habitat would continue to provide foraging opportunities for this species.

Southern mule deer have a moderate potential to occur within the project areas, based on presence of suitable habitat; however, no sign of this species has been made during surveys conducted, including the wildlife movement study (see Attachment 2). Suitable habitat within the project impact area comprises a small fraction of the habitat available to this species both at a local level and on a regional scale. Therefore, any potential impact, if present, would not reduce their populations to less than self-sustaining and would not be significant.

## **e. Direct Impacts to Sensitive Non-Covered Wildlife Species**

### *Western Spadefoot*

Direct impacts to western spadefoot toad are anticipated through potential incidental mortality of adults and/or larvae (tadpoles) during construction activities due to the presence of suitable breeding habitat. Assuming that all disturbed wetlands and vernal pools proposed for direct and indirect impact support this species, there is a potential impact to 1.33 acres of habitat for this species. Impacts to this species would be significant.

Restoration and enhancement efforts within the vernal pool restoration area and within the trail restoration buffer could result in direct impacts to western spadefoot which would be significant. Mitigation as noted in Section 8.2.4.3 includes a monitoring component for the species during construction and restoration.



*Yellow-Breasted Chat and Yellow Warbler*

Yellow-breasted chat and yellow warbler were observed within the survey area, but not within the project impact area. These species have moderate potential to nest within the southern willow scrub and mule fat scrub habitats of the project impact area within the Beyer Boulevard and Caliente Avenue footprints. The project impacts to approximately 0.77 acre of yellow-breasted chat and yellow warbler habitat and nesting would be potentially significant. The project would be providing habitat-based compensatory mitigation is described in Section 8.2.5. Additionally, compliance with MBTA and California Fish and Game Codes 3503 and 3503.3 would ensure none of these species are directly impacted during grading, restoration, or construction activities.

*Coastal whiptail, Red Diamond Rattlesnake, Two-Striped Garter Snake, Coronado Skink, and San Diego Desert Woodrat*

Direct impacts to coastal whiptail, red diamond rattlesnake, two-striped garter snake, Coronado skink, and San Diego desert woodrat through incidental mortality during construction and restoration activities and removal of suitable habitat are anticipated. However, these are mobile species and likely occur within the project-level area in low numbers, resulting in the loss of very few individuals, if any. Therefore, the potential loss of these individuals would not be significant. Impacts to approximately 190 acres of suitable habitat within the project-level impact area consisting of maritime succulent scrub, disturbed maritime scrub, Diego coastal sage scrub, disturbed coastal sage scrub, non-native grassland, and vernal pool habitats comprises a small fraction of the habitat available to these species on a regional scale. Additionally, as detailed in Table 10, 169.94 acres of habitat mitigation (which includes upland, wetland, and disturbed lands) in addition to approximately 36 acres of land associated with the Otay tarplant/native grassland, vernal pool and Quino checkerspot butterfly, and wetland plans, would be dedicated to the City for long-term management in areas south and southeast of the impact location, ensuring adequate habitat availability for these species. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for these species. Any loss of habitat through restoration activities such as in the vernal pool preserve would be less than significant considering the restored habitat would continue to provide foraging opportunities for this species. Therefore, loss of habitat within the project-level area would be less than significant for these species.

*Merlin, California Horned Lark, Bell's Sage Sparrow, Loggerhead Shrike, and Grasshopper Sparrow*

These species either occur or have a potential to occur within various habitats within the project-level areas. Direct impacts to nesting individuals would be significant.

Foraging habitat for all of these species would be impacted. Suitable habitat within the project impact area comprises a small fraction of the habitat available to this species both at a local level and on a regional scale. Therefore, the loss of foraging habitat would not reduce any of their populations to less than self-sustaining and would be less than significant for these species.



## **f. Restoration Activity Impacts to Sensitive Wildlife Species**

Potential impacts to individual species from restoration activities are discussed above. Potential use of each of the proposed restoration and mitigation areas as foraging habitat for avian/raptor, invertebrate, amphibians, reptile, and mammal species, would be ongoing after completion of the restoration activities, and therefore impacts on foraging habitat from restoration activities would be less than significant.

### **7.1.2.4 Impacts to Jurisdictional Resources with Potential to be Jurisdictional**

#### **a. Jurisdictional Resources**

USACE, CDFW, RWQCB, and City jurisdictional resources are regulated by the federal, state, and local governments under a no-net-loss policy, and all impacts are significant and need to be avoided to the greatest extent possible. Direct impacts to the potential wetlands (mule fat scrub, southern willow scrub, disturbed southern willow scrub, disturbed riparian and disturbed wetlands), vernal pools, and natural flood channels (non-wetland waters/streambed), within the project-level areas are reported in Tables 11a–11f and the location of impacts are presented in Figures 41.1 through 43.7. Direct impacts to jurisdictional resources would be addressed through applicable permitting through USACE, CDFW, and RWQCB.

As detailed in Section 2.2, the project-level area includes portions of the previously entitled Candlelight project and the planned Southwind project. As the timing of project implementation is not known, the project-level analysis evaluates jurisdictional impacts within those project sites. The first project to proceed would implement required mitigation. The location of the Candlelight, Southwind, and overlapping areas of the project-level analysis areas in relation to jurisdictional resources is depicted on Figure 44.



**Table 10**  
**Mitigation and Project Design Feature Summary<sup>1</sup>**

Vegetation Communities	Cactus Wren Restoration Area	Upland Mitigation <sup>2</sup>	Otay Tarplant/ Native Grassland Restoration Area	Vernal Pool/ Quino Checkerspot Butterfly Restoration Area	Wetland Plan Mitigation <sup>3</sup>	Wetland Plan Project Design Features <sup>5</sup>	Additional Potential Habitat Preservation (Project Design)	Trail Restoration Area (Project Design) <sup>4</sup>	Furby North Replacement Land	Total
Maritime Succulent Scrub	0.72	89.94	-	0.94	-	-	43.35	2.18	7.80	144.93
Disturbed Maritime Succulent Scrub	1.82	24.82	-	-	-	0.76	24.59	1.86	-	53.85
Diegan Coastal Sage Scrub	-	24.93	-	4.52	-	0.03	13.66	0.41	-	43.55
Disturbed Coastal Sage Scrub	-	2.36	-	-	-	-	0.92	-	-	3.28
Non-native Grassland	-	18.89	0.93	26.13	0.75	0.44	6.16	6.02	-	59.32
Mule Fat Scrub	-	-	-	-	-	1.93	-	-	-	1.93
Natural Flood Channel	-	0.34	-	-	0.14	0.63	0.20	-	-	1.31
Southern Willow Scrub	-	-	-	-	-	0.21	-	-	-	0.21
Tamarisk Scrub	-	0.46	-	-	0.53	0.64	-	0.08	-	1.71
Disturbed Wetland	-	0.30	-	-	-	-	0.07	0.44	0.06	0.87
Vernal Pool	-	0.02	-	0.03	-	-	-	-	-	0.05
Vernal Pool with Fairy Shrimp	-	0.76	-	0.03	-	-	0.16	0.09	-	1.04
Disturbed Land	-	7.12	0.03	2.06	0.02	0.03	6.19	1.10	0.11	16.66
<b>Total</b>	<b>2.54</b>	<b>169.94</b>	<b>0.96</b>	<b>33.71</b>	<b>1.45</b>	<b>4.66</b>	<b>95.29</b>	<b>12.18</b>	<b>7.98</b>	<b>328.71</b>

NOTE: Totals may not add due to rounding; Refer to Figure 51

<sup>1</sup>All areas detailed above would be dedicated to the City of San Diego for long-term management except the Cactus Wren Mitigation Area would remain in County of San Diego ownership and would be managed by the County of San Diego. The Furby North Replacement Lands would be conveyed to the County in fee title and managed by the City consistent with the City's MSCP Subarea Plan (see Figure 52).

<sup>2</sup>The upland mitigation acreage reported includes disturbed land and wetland vegetation communities not proposed as uplands mitigation. Of the 169.94-acre upland mitigation area, a total of 153.23 acres of upland mitigation is provided to meet the mitigation requirements for impacts to sensitive upland vegetation communities (refer to Table 15a).

<sup>3</sup>Total proposed wetland mitigation as presented in the Southwest Village Wetland Plan is reported here (see Table 3 in Attachment 18). A portion of the Southwest Village wetland creation mitigation requirements will be implemented within the Nakano Wetland Plan (RECON 2024f). The Southwest Village Wetland Plan would require implementation of the 3.46-acre Nakano Plan area prior to implementation of the Southwest Village Plan area due to its upstream location. The first project to proceed would implement all components of the Nakano Plan.

<sup>4</sup>Disturbed land, non-native grasslands and disturbed uplands habitats within the Trail Restoration Area would be restored to Diegan coastal sage scrub or maritime succulent scrub habitat to support trail closures.

<sup>5</sup>Total proposed project design components as presented in the Southwest Village Wetland Plan is reported here (see Table 3 in Attachment 18). This includes an approximate 1.20 acre area of weed control and an additional 3.46-acre area associated with the Nakano Wetland Plan. The Southwest Village Wetland Plan would require implementation of the 3.46-acre Nakano Plan area prior to implementation of the Southwest Village Plan area due to its upstream location. The first project to proceed would implement all components of the Nakano Plan.



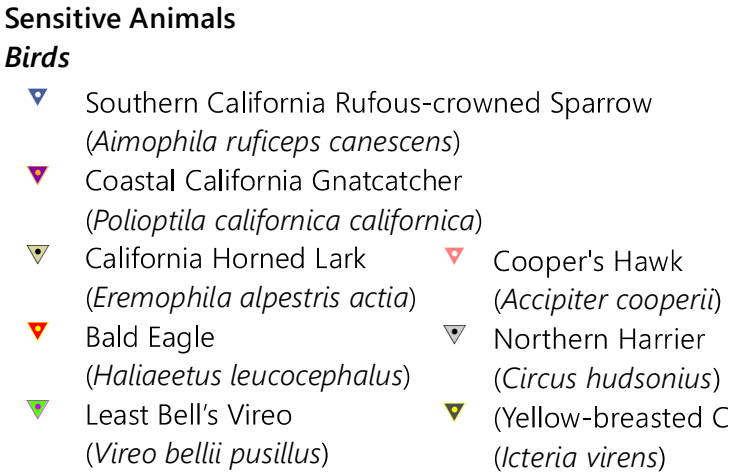
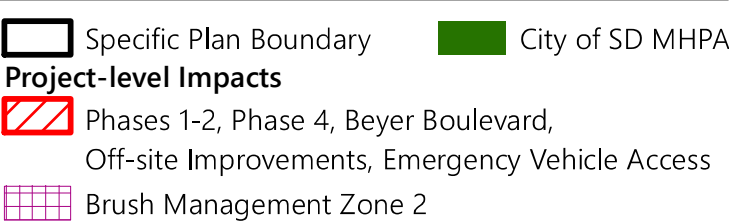
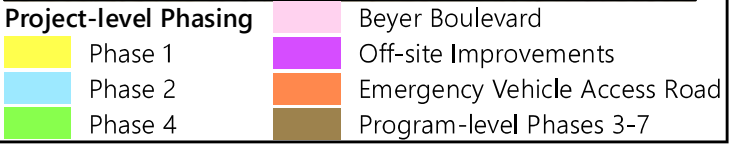
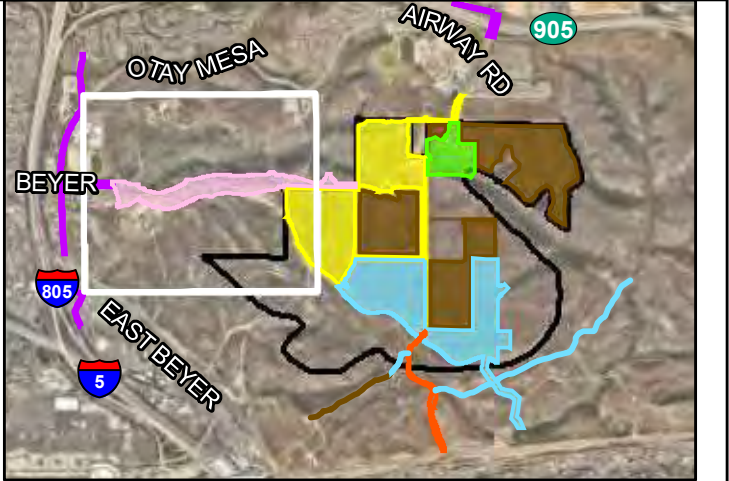
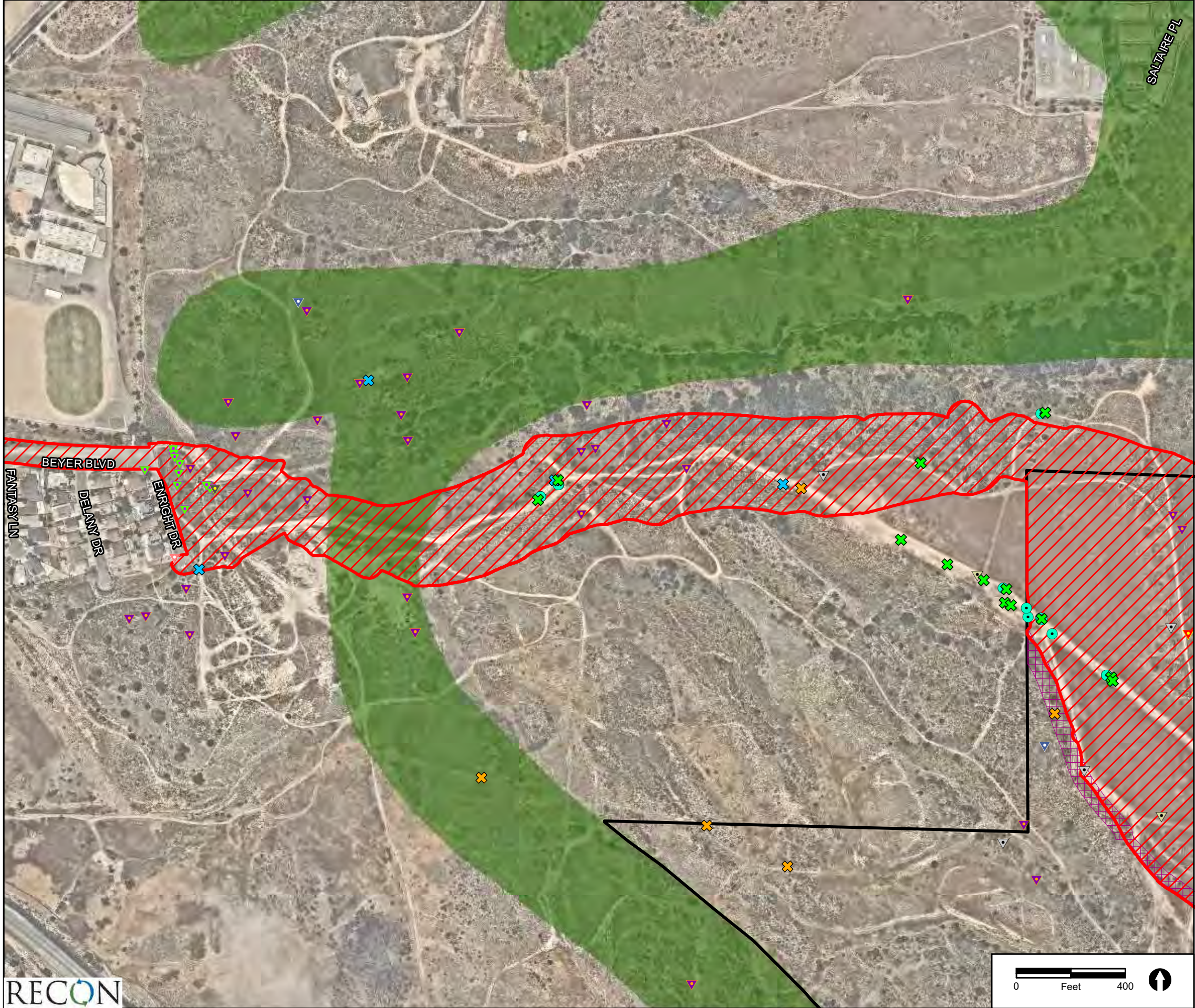


FIGURE 40.1  
Impacts to Biological Resources -  
Sensitive Animal Species



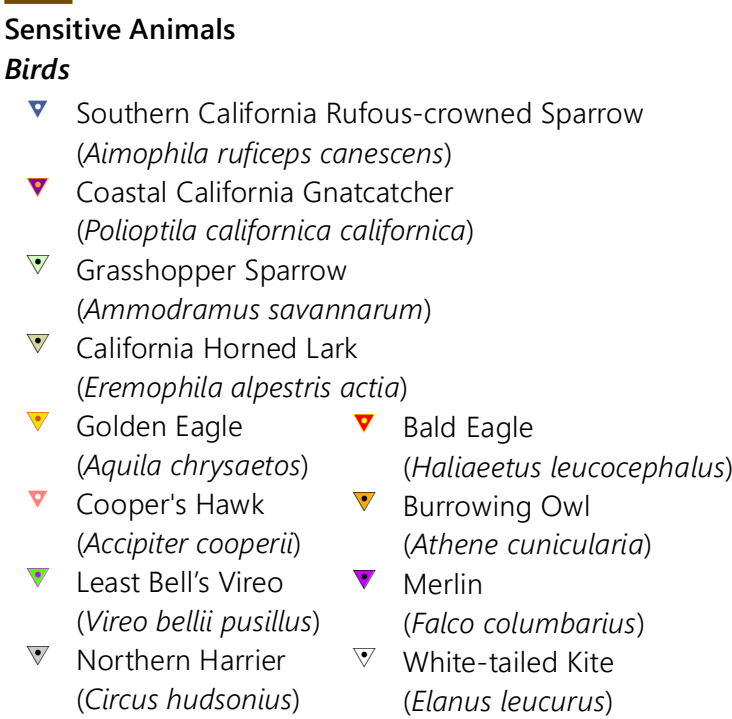
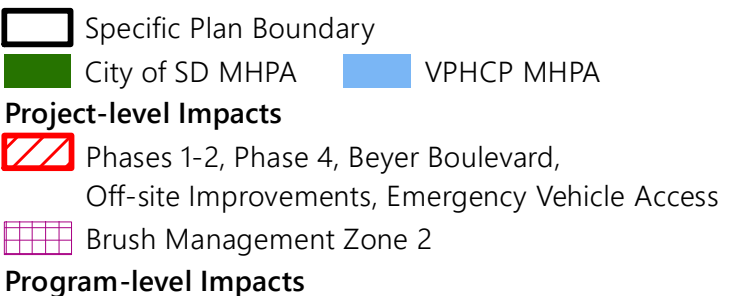
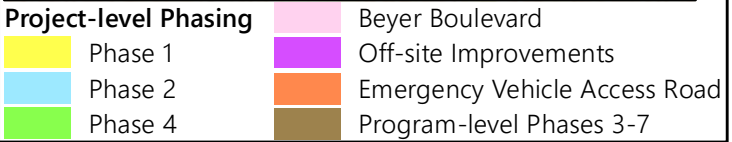
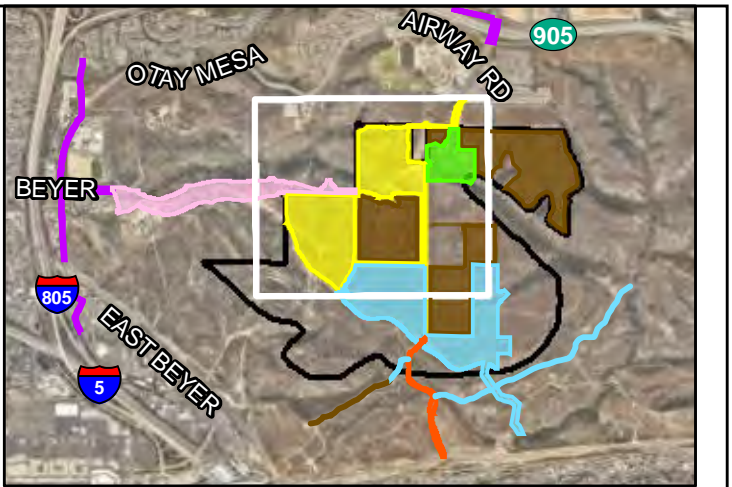
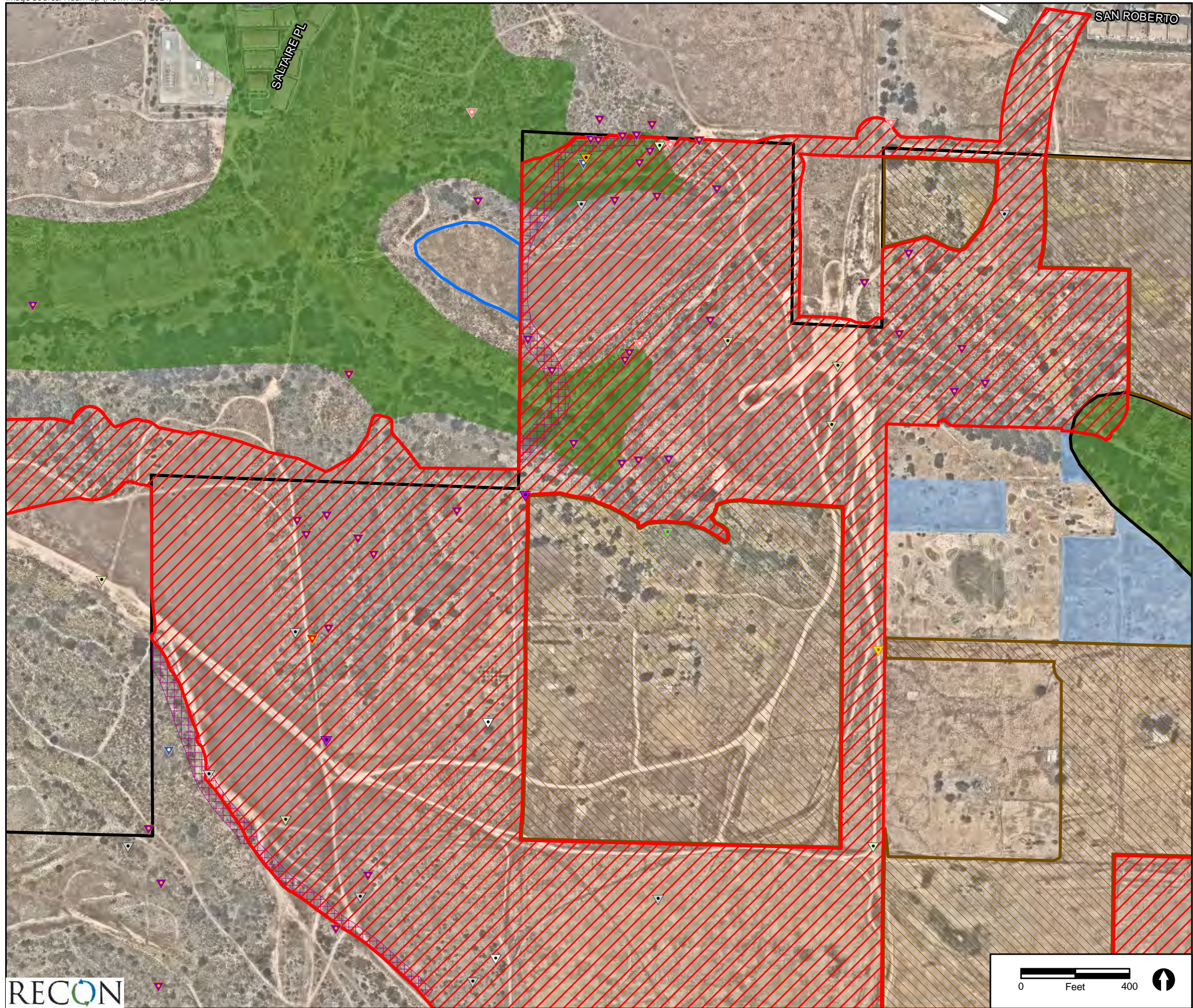


FIGURE 40.2.1  
Impacts to Biological Resources -  
Sensitive Animal Species



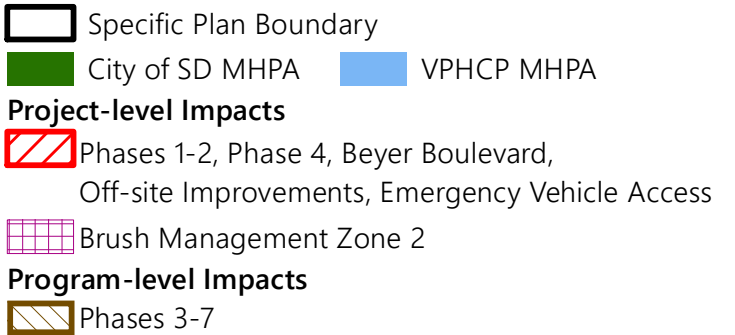
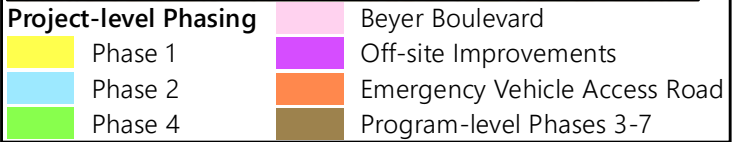
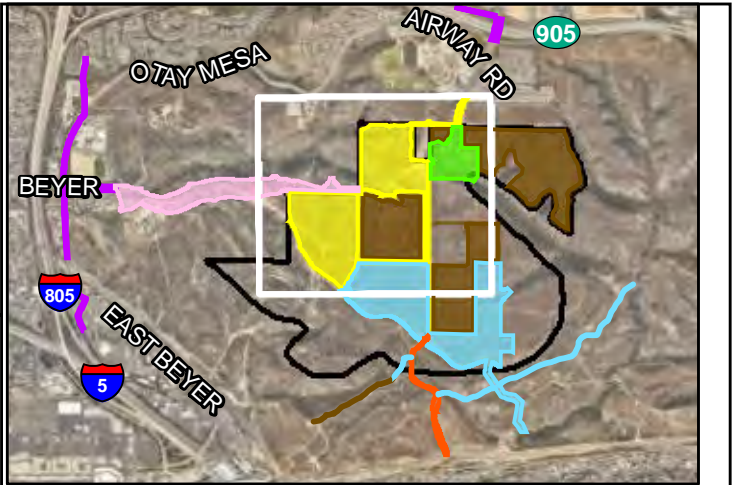
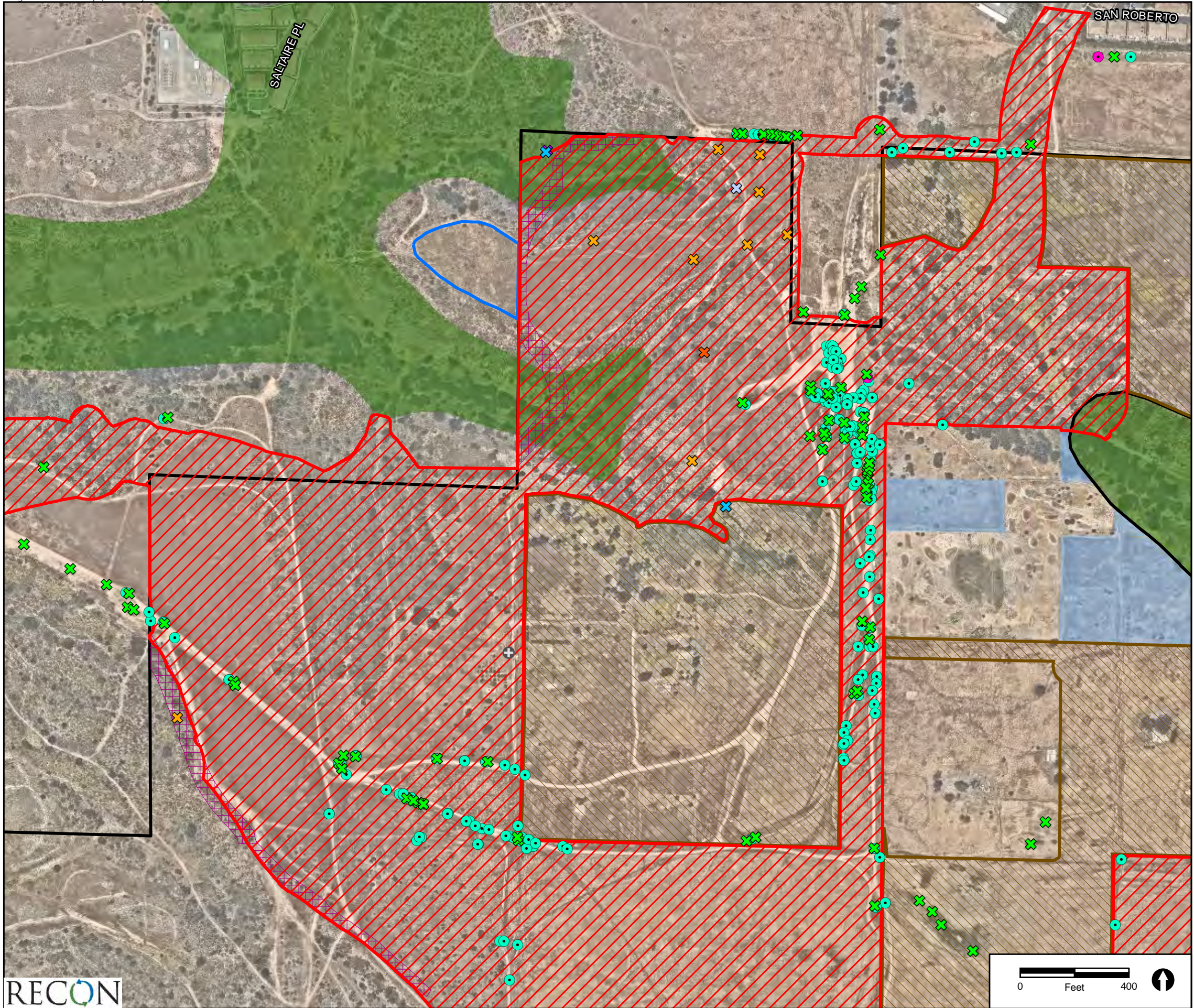
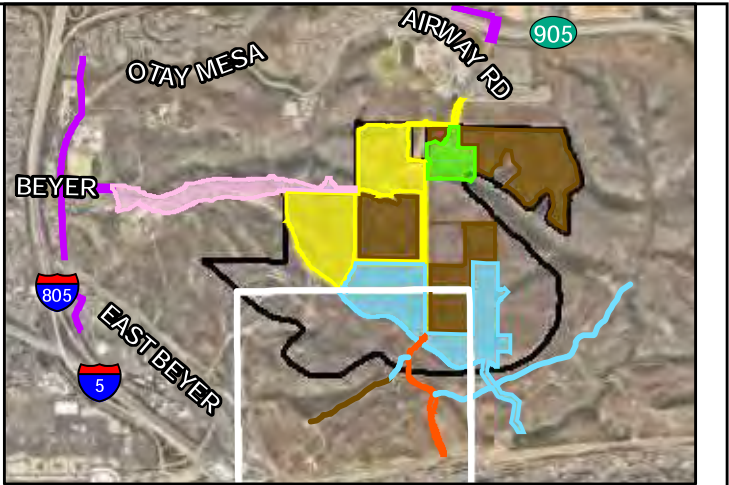
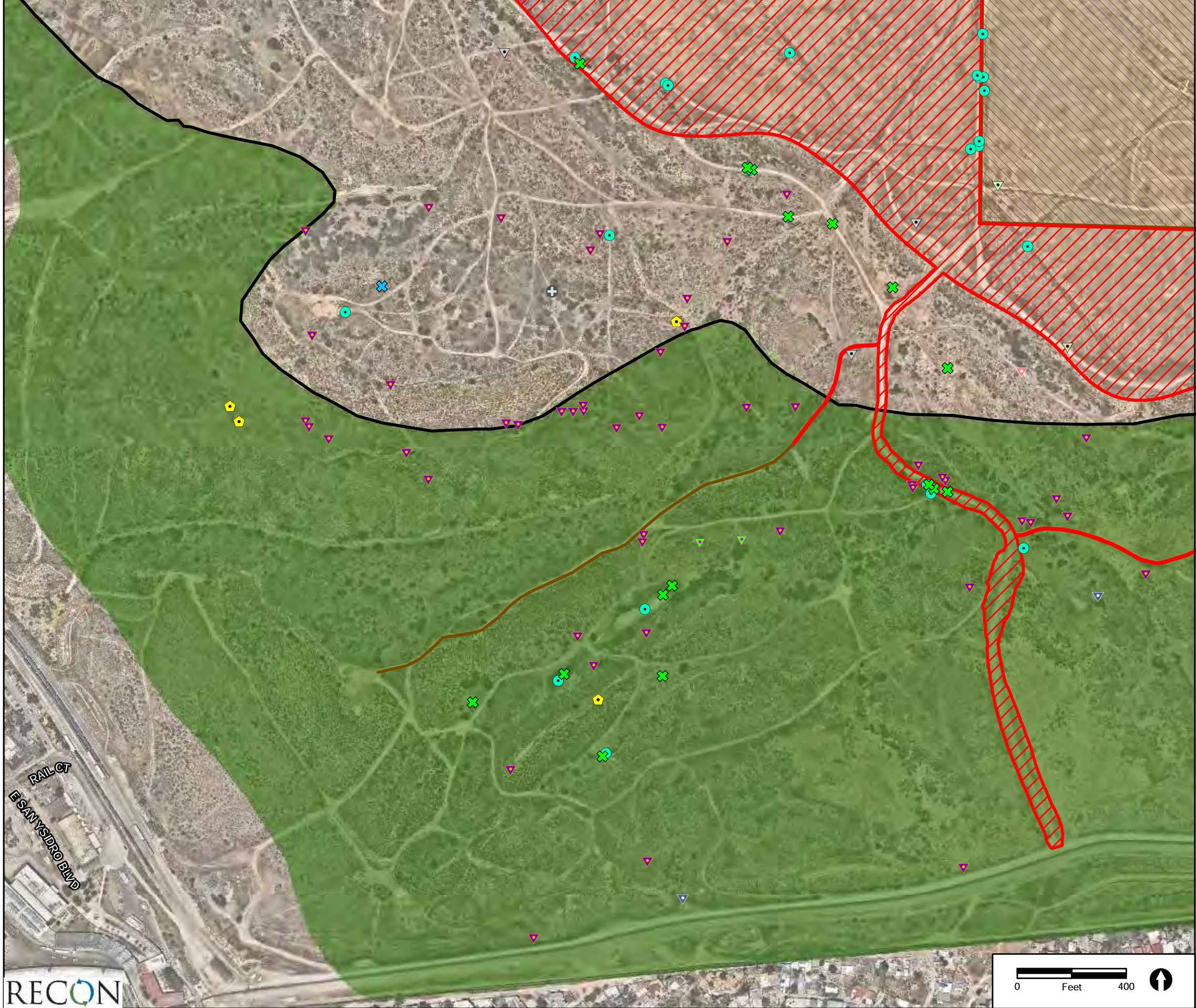


FIGURE 40.2.2  
Impacts to Biological Resources -  
Sensitive Animal Species





Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black;"> </span> Phase 1	<span style="background-color: pink; border: 1px solid black;"> </span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black;"> </span> Phase 2	<span style="background-color: purple; border: 1px solid black;"> </span> Off-site Improvements
<span style="background-color: lightgreen; border: 1px solid black;"> </span> Phase 4	<span style="background-color: orange; border: 1px solid black;"> </span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black;"> </span> Program-level Phases 3-7

Specific Plan Boundary  City of SD MHPA

**Project-level Impacts**  
 Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access

Brush Management Zone 2

**Program-level Impacts**  
 Phases 3-7

**Sensitive Animals**

**Birds**

- |  |  |
|--|--|
| <span style="color: blue;">▼</span> Southern California Rufous-crowned Sparrow ( <i>Aimophila ruficeps canescens</i> ) | <span style="color: red;">▼</span> Cooper's Hawk ( <i>Accipiter cooperii</i> )           |
| <span style="color: purple;">▼</span> Coastal California Gnatcatcher ( <i>Poliophtila californica californica</i> )    | <span style="color: green;">▼</span> Least Bell's Vireo ( <i>Vireo bellii pusillus</i> ) |
| <span style="color: green;">▼</span> Grasshopper Sparrow ( <i>Ammodramus savannarum</i> )                              | <span style="color: brown;">▼</span> Northern Harrier ( <i>Circus hudsonius</i> )        |
| <span style="color: brown;">▼</span> California Horned Lark ( <i>Eremophila alpestris actia</i> )                      |  |

**Mammals**

- + San Diego Desert Woodrat (*Neotoma lepida intermedia*)

**Reptiles and Amphibians**

- |   |   |
|---|---|
| <span style="color: blue;">×</span> Orange-throated Whiptail ( <i>Aspidoscelis hyperythra</i> ) | <span style="color: green;">×</span> Western Spadefoot ( <i>Spea hammondi</i> ) |
|---|---|

**Insects**

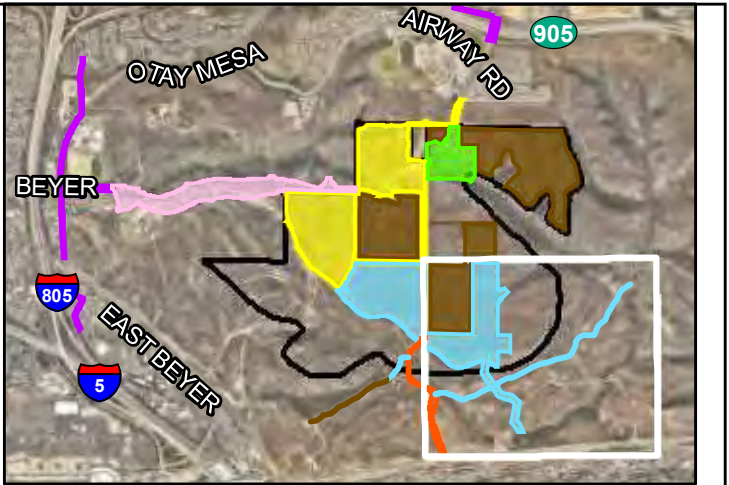
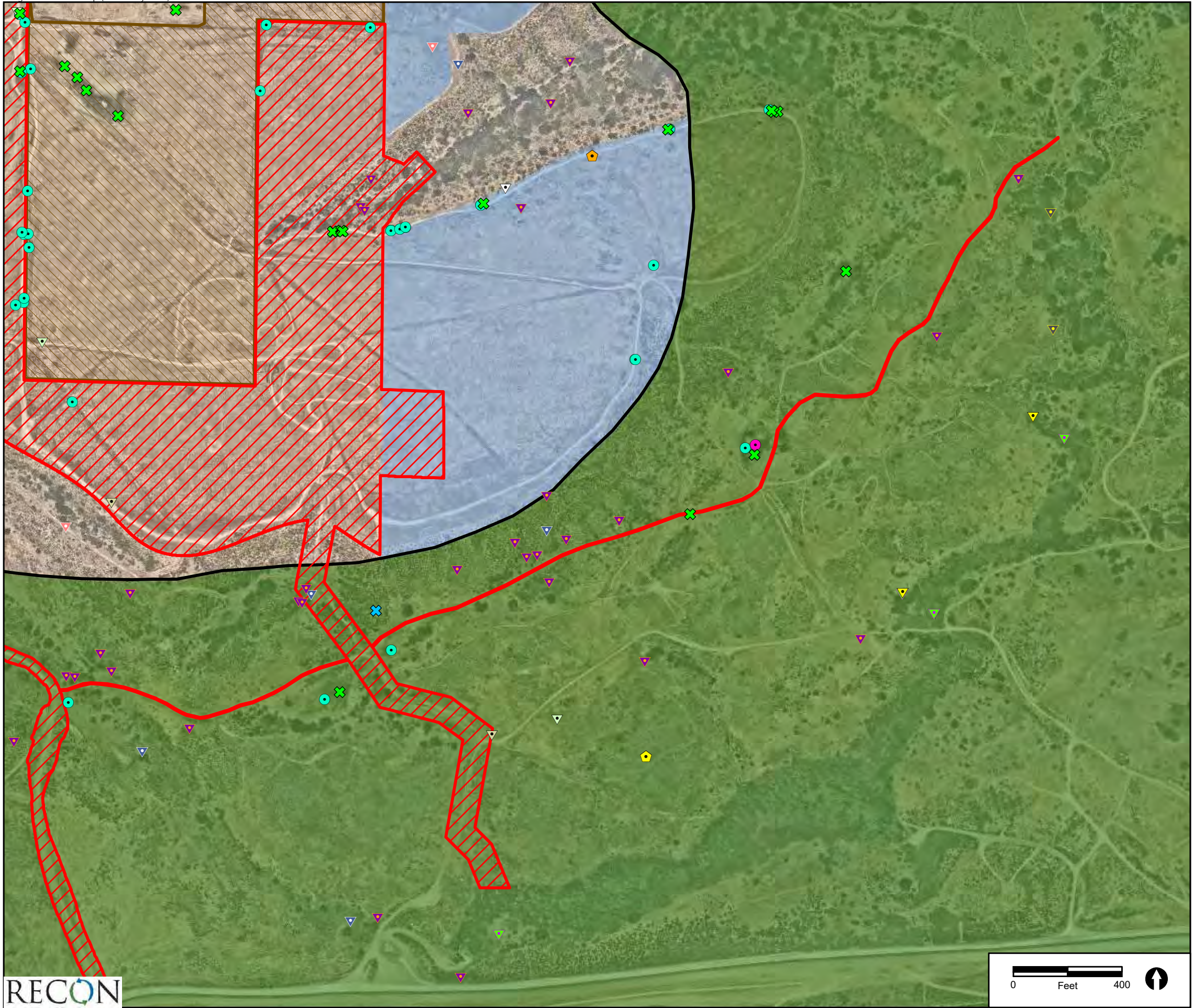
- ♦ Crotch's Bumble Bee (*Bombus crotchii*)

**Crustaceans**

- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)

FIGURE 40.3  
Impacts to Biological Resources -  
Sensitive Animal Species





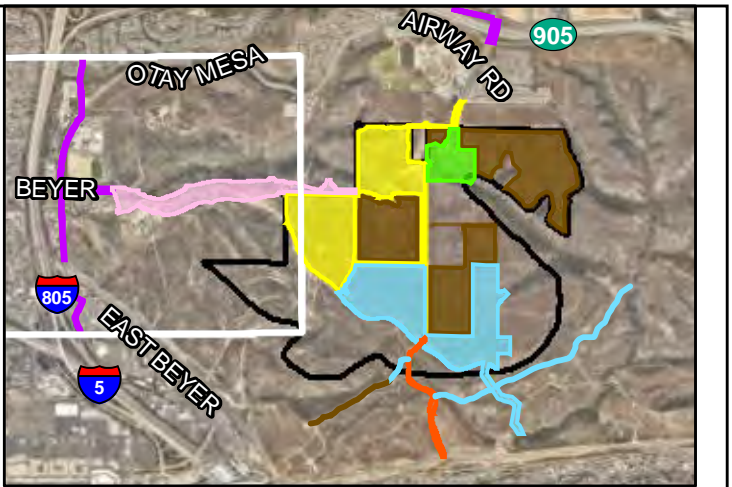
Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black;"> </span> Phase 1	<span style="background-color: purple; border: 1px solid black;"> </span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black;"> </span> Phase 2	<span style="background-color: orange; border: 1px solid black;"> </span> Off-site Improvements
<span style="background-color: lightgreen; border: 1px solid black;"> </span> Phase 4	<span style="background-color: brown; border: 1px solid black;"> </span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black;"> </span> Program-level Phases 3-7

- Specific Plan Boundary
- City of SD MHPA     VPHCP MHPA
- Project-level Impacts**
- Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access
- Program-level Impacts**
- Phases 3-7
- Sensitive Animals**

- Birds**
- |  |   |
|--|---|
| <span style="color: blue;">▼</span> Southern California Rufous-crowned Sparrow ( <i>Aimophila ruficeps canescens</i> ) | <span style="color: red;">▼</span> Cooper's Hawk ( <i>Accipiter cooperii</i> )        |
| <span style="color: purple;">▼</span> Coastal California Gnatcatcher ( <i>Polioptila californica californica</i> )     | <span style="color: red;">▼</span> White-tailed Kite ( <i>Elanus leucurus</i> )       |
| <span style="color: green;">▼</span> Grasshopper Sparrow ( <i>Ammodramus savannarum</i> )                              | <span style="color: yellow;">▼</span> Yellow Warbler ( <i>Setophaga petechia</i> )    |
| <span style="color: green;">▼</span> California Horned Lark ( <i>Eremophila alpestris actia</i> )                      | <span style="color: yellow;">▼</span> (Yellow-breasted Chat ( <i>Icteria virens</i> ) |
| <span style="color: green;">▼</span> Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )                               |   |
- Reptiles and Amphibians**
- |   |   |
|---|---|
| <span style="color: blue;">✕</span> Orange-throated Whiptail ( <i>Aspiloscelis hyperythra</i> ) | <span style="color: green;">✕</span> Western Spadefoot ( <i>Spea hammondi</i> ) |
|---|---|
- Insects**
- |  |  |
|--|--|
| <span style="color: yellow;">⬠</span> Crotch's Bumble Bee ( <i>Bombus crotchii</i> ) | <span style="color: orange;">⬠</span> Quino Checkerspot Butterfly ( <i>Euphydryas editha quino</i> ) |
|--|--|
- Crustaceans**
- |   |
|---|
| <span style="color: magenta;">●</span> Riverside Fairy Shrimp ( <i>Streptocephalus woottoni</i> ) |
| <span style="color: cyan;">●</span> San Diego Fairy Shrimp ( <i>Branchinecta sandiegonensis</i> ) |

FIGURE 40.4  
Impacts to Biological Resources -  
Sensitive Animal Species





Project-level Phasing	
<span style="background-color: yellow;"> </span> Phase 1	<span style="background-color: pink;"> </span> Beyer Boulevard
<span style="background-color: lightblue;"> </span> Phase 2	<span style="background-color: purple;"> </span> Off-site Improvements
<span style="background-color: lightgreen;"> </span> Phase 4	<span style="background-color: orange;"> </span> Emergency Vehicle Access Road
	<span style="background-color: brown;"> </span> Program-level Phases 3-7

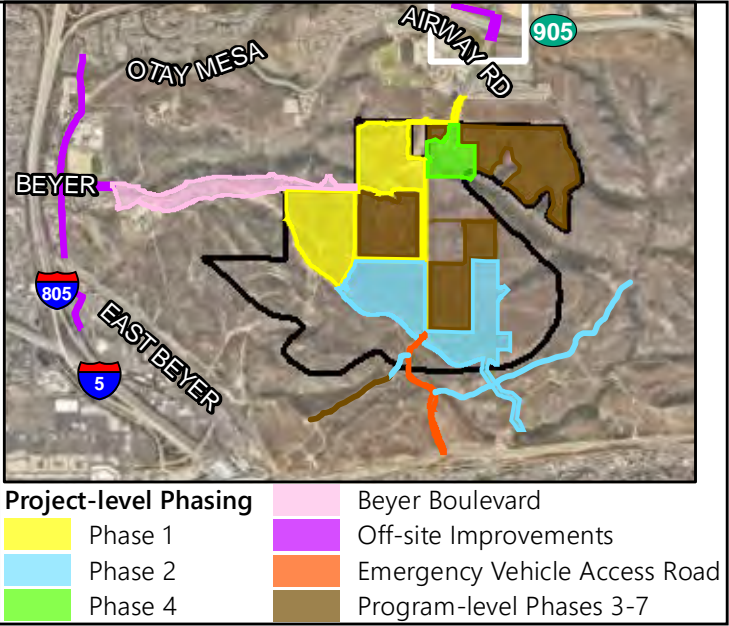
Specific Plan Boundary  City of SD MHPA

**Project-level Impacts**  
 Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access  
 Brush Management Zone 2

- Sensitive Animals (SanBIOS)**
- ▼ California Gnatcatcher (*Polioptila californica*)
  - ▼ San Diego Cactus Wren (*Campylorhynchus brunneicapillus sandiegensis*)
  - ▼ White Tailed Kite (*Elanus leucurus majusculus*)
  - ▼ Yellow-breasted Chat (*Icteria virens*)

FIGURE 40.5  
Impacts to Biological Resources -  
Sensitive Animal Species





**Project-level Impacts**  
Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access

FIGURE 40.6  
Impacts to Biological Resources - Sensitive Animal Species



Table 11a Summary of Impacts to Potential Jurisdictional Resources within the Project-level Survey Areas (acres)						
Jurisdictional Resource	Phase 1 <sup>1</sup>	Phase 2	Beyer Boulevard	Phase 4	Emergency Vehicle Access Road	Total Impacts
<b>Waters of the U.S. – USACE</b>						
<i>Non-wetland Waters</i>						
Ephemeral Stream Channel (Non-vegetated Channel)	0.14	0.06	0.07	0.17	-	0.44
<i>Subtotal Non-wetland Waters</i>	<i>0.14</i>	<i>0.06</i>	<i>0.07</i>	<i>0.17</i>	<i>-</i>	<i>0.44</i>
<i>Wetland Waters</i>						
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.50	0.04	<0.01 (19 sq ft)	-	-	0.54
Vernal Pools	0.15	0.07	0.02	-	-	0.23
Vernal Pools with Fairy Shrimp	0.56	0.05	0.01	<0.01 (35 sq ft)	0.02	0.64
<i>Subtotal Wetland Waters</i>	<i>1.21</i>	<i>0.16</i>	<i>0.03</i>	<i>&lt;0.01</i>	<i>0.02</i>	<i>1.41</i>
<b>Total Potentially Jurisdictional Area</b>	<b>1.35</b>	<b>0.21</b>	<b>0.10</b>	<b>0.17</b>	<b>0.02</b>	<b>1.85</b>
<b>Waters of the U.S. – CDFW</b>						
<i>Non-wetland Waters/Streambed</i>						
Ephemeral Stream Channel (Non-vegetated Channel)	0.14	0.06	0.08	0.17	-	0.45
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.14</i>	<i>0.06</i>	<i>0.08</i>	<i>0.17</i>	<i>-</i>	<i>0.45</i>
<i>Wetland or Riparian Areas</i>						
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.46	-	0.35	0.01	-	0.82
Vernal Pools <sup>2</sup>	0.01	-	-	-	-	0.01
<i>Subtotal Wetland/Riparian</i>	<i>0.47</i>	<i>-</i>	<i>0.35</i>	<i>0.01</i>	<i>-</i>	<i>0.83</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.61</b>	<b>0.06</b>	<b>0.43</b>	<b>0.19</b>	<b>-</b>	<b>1.29</b>
<b>Waters of the U.S. – RWQCB</b>						
<i>Non-wetland Waters</i>						
Ephemeral Stream Channel (Non-vegetated Channel)	0.14	0.06	0.08	0.17	-	0.45
<i>Subtotal Non-wetland Waters</i>	<i>0.14</i>	<i>0.06</i>	<i>0.08</i>	<i>0.17</i>	<i>-</i>	<i>0.45</i>
<i>Wetland or Riparian Areas</i>						
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.50	0.04	<0.01 (19 sq ft)	-	-	0.54
Vernal Pools	0.15	0.07	0.02	-	-	0.23
Vernal Pools with Fairy Shrimp	0.56	0.05	0.01	<0.01 (35 sq ft)	0.02	0.64
Seasonal Basins	0.26	<0.01 (179 sq ft)	<0.01 (54 sq ft)	-	-	0.26
<i>Subtotal Wetland/Riparian</i>	<i>1.47</i>	<i>0.16</i>	<i>0.03</i>	<i>&lt;0.01 (35 sq ft)</i>	<i>0.02</i>	<i>1.67</i>
<b>Total Potentially Jurisdictional Area</b>	<b>1.61</b>	<b>0.22</b>	<b>0.11</b>	<b>0.17</b>	<b>0.02</b>	<b>2.12</b>



Table 11a Summary of Impacts to Potential Jurisdictional Resources within the Project-level Survey Areas (acres)						
Jurisdictional Resource	Phase 1 <sup>1</sup>	Phase 2	Beyer Boulevard	Phase 4	Emergency Vehicle Access Road	Total Impacts
<b>City of San Diego Wetlands</b>						
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-	-	0.35	0.01	-	0.36
Disturbed Wetlands	0.07	0.04	<0.01 (73 sq ft)	-	-	0.11
Vernal Pools	0.68 <sup>2</sup>	0.12	0.03 (1,111 sq ft)	<0.01 (35 sq ft)	0.02	0.85
<b>Total Potentially Jurisdictional Area</b>	<b>0.75</b>	<b>0.16</b>	<b>0.38</b>	<b>0.01</b>	<b>0.02</b>	<b>1.32</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1. <sup>1</sup> A portion of Phase 1 impacts are located in the Southwind project area. Within this area, the first project to proceed (i.e., Southwind or Southwest Village) would result in impacts and would be responsible for mitigation. <sup>2</sup> Includes the two vernal pools (0.01 acre) that support a state-listed endangered plant species, San Diego button-celery.						



Table 11b Summary of Impacts to Potential Jurisdictional Resources within the Phase 1 Project-level Survey Areas (acres)				
Jurisdictional Resource	Phase 1	Phase 1 – Candlelight <sup>1</sup>	Phase 1 – Southwind	Total Acres
<b>Waters of the U.S. – USACE</b>				
<i>Non-wetland Waters</i>				
Ephemeral Stream Channel (Non-vegetated Channel)	0.12	0.02	-	0.14
<i>Subtotal Non-wetland Waters</i>	<i>0.12</i>	<i>0.02</i>	<i>-</i>	<i>0.14</i>
<i>Wetland Waters</i>				
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.04	0.46	-	0.50
Vernal Pools	0.12	-	0.02	0.15
Vernal Pools with Fairy Shrimp	0.52	0.03	0.01	0.56
<i>Subtotal Wetland Waters</i>	<i>0.68</i>	<i>0.49</i>	<i>0.04</i>	<i>1.21</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.81</b>	<b>0.51</b>	<b>0.04</b>	<b>1.35</b>
<b>Waters of the U.S. – CDFW</b>				
<i>Non-wetland Waters/Streambed</i>				
Ephemeral Stream Channel (Non-vegetated Channel)	0.12	0.02	-	0.14
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.12</i>	<i>0.02</i>	<i>-</i>	<i>0.14</i>
<i>Wetland or Riparian Areas</i>				
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-	0.46	-	0.46
Vernal Pools	0.01	-	-	0.01
<i>Subtotal Wetland/Riparian</i>	<i>0.01</i>	<i>0.46</i>	<i>-</i>	<i>0.47</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.13</b>	<b>0.46</b>	<b>-</b>	<b>0.61</b>
<b>Waters of the U.S. – RWQCB</b>				
<i>Non-wetland Waters</i>				
Ephemeral Stream Channel (Non-vegetated Channel)	0.12	0.02	-	0.14
<i>Subtotal Non-wetland Waters</i>	<i>0.12</i>	<i>0.02</i>	<i>-</i>	<i>0.14</i>
<i>Wetland or Riparian Areas</i>				
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.04	0.46	-	0.50
Vernal Pools	0.12	-	0.02	0.15
Vernal Pools with Fairy Shrimp	0.52	0.03	0.01	0.56
Seasonal Basins	0.03	0.23	-	0.26
<i>Subtotal Wetland/Riparian</i>	<i>0.71</i>	<i>0.72</i>	<i>0.04</i>	<i>1.47</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.83</b>	<b>0.74</b>	<b>0.04</b>	<b>1.61</b>
<b>City of San Diego Wetlands</b>				
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-	-	-	-
Disturbed Wetlands	0.07	-	-	0.07
Vernal Pools	0.64	-	0.04	0.68
<b>Total Potentially Jurisdictional Area</b>	<b>0.71</b>	<b>-</b>	<b>0.04</b>	<b>0.75</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1. <sup>1</sup> A portion of Phase 1 is within the Candlelight and Southwind project areas (see Figure 22). In these areas, the first project to proceed (i.e., Candlelight/Southwind or Southwest Village) would result in impacts and would be responsible for mitigation.				



Table 11c Summary of Impacts to Potential Jurisdictional Resources within the Phase 2 Project-level Survey Areas (acres)	
Jurisdictional Resource	Phase 2 Development Area <sup>1</sup>
<b>Waters of the U.S. – USACE</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.06
<i>Subtotal Non-wetland Waters</i>	<i>0.06</i>
<i>Wetland Waters</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.04
Vernal Pools	0.07
Vernal Pools with Fairy Shrimp	0.05
<i>Subtotal Wetland Waters</i>	<i>0.16</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.21</b>
<b>Waters of the U.S. – CDFW</b>	
<i>Non-wetland Waters/Streambed</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.06
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.06</i>
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-
Vernal Pools	-
<i>Subtotal Wetland/Riparian</i>	<i>0.06</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.06</b>
<b>Waters of the U.S. – RWQCB</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.06
<i>Subtotal Non-wetland Waters</i>	<i>0.06</i>
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	0.04
Vernal Pools	0.07
Vernal Pools with Fairy Shrimp	0.05
Seasonal Basins	<0.01 (179 sq ft)
<i>Subtotal Wetland/Riparian</i>	<i>0.16</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.22</b>
<b>City of San Diego Wetlands</b>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-
Disturbed Wetlands	0.04
Vernal Pools	0.12
<b>Total Potentially Jurisdictional Area</b>	<b>0.16</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.	
<sup>1</sup> Includes the project level trails and south drainage outfall	



Table 11d Summary of Impacts to Potential Jurisdictional Resources within the Beyer Boulevard Project-level Survey Areas (acres)					
Jurisdictional Resource	Beyer Park	Furby North	West Otay Mesa A	West Otay Mesa B	Total Acres
<b>Waters of the U.S. – USACE</b>					
<i>Non-wetland Waters</i>					
Ephemeral Stream Channel (Non-vegetated Channel)	0.05	-	-	0.02	0.07
<i>Subtotal Non-wetland Waters</i>	<i>0.05</i>	<i>-</i>	<i>-</i>	<i>0.02</i>	<i>0.07</i>
<i>Wetland Waters</i>					
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-	-	<0.01 (19 sq ft)	-	<0.01 (19 sq ft)
Vernal Pools	-	-	0.02	-	0.02
Vernal Pools with Fairy Shrimp	-	0.01	-	-	0.01
<i>Subtotal Wetland Waters</i>	<i>-</i>	<i>0.01</i>	<i>0.02</i>	<i>-</i>	<i>0.03</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.05</b>	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.10</b>
<b>Waters of the U.S. – CDFW</b>					
<i>Non-wetland Waters/Streambed</i>					
Ephemeral Stream Channel (Non-vegetated Channel)	0.05	-	0.01	0.02	0.08
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.05</i>	<i>-</i>	<i>0.01</i>	<i>0.02</i>	<i>0.08</i>
<i>Wetland or Riparian Areas</i>					
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.35	-	-	-	0.35
Vernal Pools	-	-	-	-	-
<i>Subtotal Wetland/Riparian</i>	<i>0.35</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>0.35</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.40</b>	<b>-</b>	<b>0.01</b>	<b>0.02</b>	<b>0.43</b>
<b>Waters of the U.S. – RWQCB</b>					
<i>Non-wetland Waters</i>					
Ephemeral Stream Channel (Non-vegetated Channel)	0.05	-	0.01	0.02	0.08
<i>Subtotal Non-wetland Waters</i>	<i>0.05</i>	<i>-</i>	<i>0.01</i>	<i>0.02</i>	<i>0.08</i>
<i>Wetland or Riparian Areas</i>					
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-	-	<0.01 (19 sq ft)	-	<0.01 (19 sq ft)
Vernal Pools	-	-	0.02	-	0.02
Vernal Pools with Fairy Shrimp	-	0.01	-	-	0.01
Seasonal Basins	-	<0.01 (54 sq ft)	-	-	<0.01 (54 sq ft)
<i>Subtotal Wetland/Riparian</i>	<i>-</i>	<i>0.01</i>	<i>0.02</i>	<i>-</i>	<i>0.03</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.05</b>	<b>0.01</b>	<b>0.03</b>	<b>0.02</b>	<b>0.11</b>
<b>City of San Diego Wetlands</b>					
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.35	-	-	-	0.35
Disturbed Wetlands	-	<0.01 (54 sq ft)	<0.01 (19 sq ft)	-	<0.01 (73 sq ft)
Vernal Pools	-	0.01 (264 sq ft)	0.02 (847 sq ft)	-	0.03 (1,111 sq ft)
<b>Total Potentially Jurisdictional Area</b>	<b>0.35</b>	<b>0.01</b>	<b>0.02</b>	<b>-</b>	<b>0.38</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.					



Table 11e Summary of Impacts to Potential Jurisdictional Resources within the Phase 4 Project-level Survey Areas (acres)	
Jurisdictional Resource	Phase 4 Development Area
<b>Waters of the U.S. – USACE</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.17
<i>Subtotal Non-wetland Waters</i>	<i>0.17</i>
<i>Wetland Waters</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-
Vernal Pools	-
Vernal Pools with Fairy Shrimp	<0.01 (35 sq ft)
<i>Subtotal Wetland Waters</i>	<i>0.17</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.17</b>
<b>Waters of the U.S. – CDFW</b>	
<i>Non-wetland Waters/Streambed</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.17
<i>Subtotal Non-wetland Waters/Streambed</i>	<i>0.17</i>
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.01
Vernal Pools	-
<i>Subtotal Wetland/Riparian</i>	<i>0.01</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.19</b>
<b>Waters of the U.S. – RWQCB</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	0.17
<i>Subtotal Non-wetland Waters</i>	<i>0.17</i>
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-
Vernal Pools	-
Vernal Pools with Fairy Shrimp	<0.01 (35 sq ft)
Seasonal Basins	-
<i>Subtotal Wetland/Riparian</i>	<i>&lt;0.01 (35 sq ft)</i>
<b>Total Potentially Jurisdictional Area</b>	<b>0.17</b>
<b>City of San Diego Wetlands</b>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	0.01
Disturbed Wetlands	-
Vernal Pools	<0.01 (35 sq ft)
<b>Total Potentially Jurisdictional Area</b>	<b>0.01</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.	



<b>Table 11f</b> <b>Summary of Impacts to Potential Jurisdictional Resources within the Emergency Vehicle Access Road</b> <b>Project-level Survey Areas</b> <b>(acres)</b>	
Jurisdictional Resource	EVA Road
<b>Waters of the U.S. – USACE</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	-
<i>Subtotal Non-wetland Waters</i>	-
<i>Wetland Waters</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-
Vernal Pools	-
Vernal Pools with Fairy Shrimp	0.02
<i>Subtotal Wetland Waters</i>	0.02
<b>Total Potentially Jurisdictional Area</b>	<b>0.02</b>
<b>Waters of the U.S. – CDFW</b>	
<i>Non-wetland Waters/Streambed</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	-
<i>Subtotal Non-wetland Waters/Streambed</i>	-
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-
Vernal Pools	-
<i>Subtotal Wetland/Riparian</i>	-
<b>Total Potentially Jurisdictional Area</b>	<b>-</b>
<b>Waters of the U.S. – RWQCB</b>	
<i>Non-wetland Waters</i>	
Ephemeral Stream Channel (Non-vegetated Channel)	-
<i>Subtotal Non-wetland Waters</i>	-
<i>Wetland or Riparian Areas</i>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Wetlands, Disturbed Riparian)	-
Vernal Pools	-
Vernal Pools with Fairy Shrimp	0.02
Seasonal Basins	-
<i>Subtotal Wetland/Riparian</i>	0.02
<b>Total Potentially Jurisdictional Area</b>	<b>0.02</b>
<b>City of San Diego Wetlands</b>	
Wetland (Mule Fat Scrub, Southern Willow Scrub, Disturbed Riparian)	-
Disturbed Wetlands	-
Vernal Pools	0.02
<b>Total Potentially Jurisdictional Area</b>	<b>0.02</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.	

## b. City of San Diego Wetlands Outside of the Coastal Overlay Zone

For projects in the City, outside of the coastal overlay zone, impacts to wetlands require a deviation from the ESL wetland regulations (City of San Diego 2018a). Impacts to vernal pools outside of the MHPA do not require a deviation from the wetland regulations as all impacts would be mitigated consistent with the VPHCP. Deviations from the wetland regulations shall not be granted unless the development qualifies to be processed as one or more of the following three options: Essential Public Projects Option, Economic Viability Option, and BSO. Although Tables 11a-11f identify wetland



impacts per phase, the wetland deviation analysis that follows combines all phases and evaluates all City wetlands subject to a deviation within the project-level analysis area as a whole, as impacts within phases would need to be approved in order for the wetland deviation to be processed.

As detailed in Table 12 and shown on Figure 45.1, the project-level areas would result in impacts to 0.52 acre of City wetlands subject to evaluation through the wetland deviation. Impacts to wetlands within the Beyer Boulevard and Caliente Avenue alignments would be processed under the Essential Public Projects Option (Figure 45.2 and 45.3) due to these roadways being City Mobility Element roadways with regional function. All other wetland impacts would be addressed under the BSO (Figure 45.4 and 45.5). The respective analyses for each option is provided below and requires City and the Wildlife Agency concurrence. Two vernal pools within and immediately adjacent to the EVA Road are included in the BSO analysis because they are located within the MHPA and subject to the Wetland Deviation process.

Table 12 City of San Diego Wetlands Subject to a Wetland Deviation				
Wetland Vegetation Community	EPP		BSO	Total Acres Subject to Wetland Deviation
	Caliente Avenue, South of Central Avenue	Beyer Boulevard	Remainder of Project-level Area	
Wetland (disturbed riparian, mule fat scrub, southern willow scrub, tamarisk scrub)	0.01 (<0.01 acre of mule fat scrub and <0.01 acre southern willow scrub)	0.35 (mule fat scrub)	<0.01 (mule fat scrub)	0.36
Disturbed Wetland <sup>1</sup>	0.01	-	0.12	0.13
Vernal Pool <sup>2</sup>	-	-	0.03	0.03
<b>Total</b>	<b>0.02</b>	<b>0.35</b>	<b>0.15</b>	<b>0.52</b>
NOTE: total may not add due to rounding; EPP = Essential Public Projects Option; BSO = Biologically Superior Option <sup>1</sup> Disturbed wetlands in the project-level areas are isolated wetlands and are reported separately as they would be mitigated as vernal pools. None of these pools support any state endangered species and thus are not considered jurisdictional under CDFW. <sup>2</sup> Only vernal pools within the MHPA are subject to a wetland deviation. The 0.03-acre vernal pool is associated with the EVA road and represents three basins, one directly impacted and the other two partially or indirectly impacted. Given that any impact to vernal pools, direct or indirect, would affect the entire basin, the 0.03 acre is the total area of all three vernal pools.				

### *Essential Public Projects Option*

A wetland deviation consistent with the Essential Public Projects Option is requested for impacts to City wetland areas located within the proposed Beyer Boulevard and Caliente Avenue extension, south of Central Avenue (see Figure 45.2 and 45.3). These roadways are City Mobility Element roadways identified in the Otay Mesa Community Plan. Per the City's Biology Guidelines, a deviation to the ESL wetland regulations under the Essential Public Projects Option may be granted provided the project serves the community at large and not just a development project or property. To meet the definition of an Essential Public Project, it must be essential in both location and need. To qualify under this option, the project must be:



1. Any public project identified in an adopted land use plan or implementing document and identified on the Essential Public Projects List per Appendix III of the Biology Guidelines; or
2. A linear infrastructure, including but not limited to major roads and land use plan circulation element roads and facilities including bike lanes, water and sewer pipelines including appurtenances, and stormwater conveyance systems including appurtenances; or
3. Maintenance of existing public infrastructure; or
4. State and federally mandated projects.

Both Caliente Avenue and Beyer Boulevard are linear infrastructure identified as Mobility Element roadways in the adopted Otay Mesa Community Plan, which meets qualifications 1 and 2 above. These roadways additionally include bicycle facilities and water and sewer infrastructure that will serve the entirety of the Specific Plan area. Therefore, they qualify as Essential Public Projects. A deviation under this option is only allowed where no feasible alternative exists that would avoid impacts to wetlands. Additionally, a deviation is only allowed where there are no feasible measures to further minimize impacts to ESL and the proposed deviation is the minimum necessary to afford relief from special circumstances or conditions applicable to the land and not of the applicant's making.

Biological alternatives to these roadway alignments are analyzed including the: (1) a no project alternative; (2) a wetlands avoidance alternative, including an analysis of alternative sites irrespective of ownership; and (3) an appropriate range of substantive wetland impact minimization alternatives. Substantial consideration was given to the proposed alignment of Beyer Boulevard, including an extensive alternatives analysis provided in Attachment 11. This alternatives analysis informs and supports the wetland deviation analysis demonstrating that no feasible alternative exists that would completely avoid impacts to wetlands. Each biological alternative is discussed below:

#### ***No Project Alternative***

The wetland deviation Essential Public Project option includes 0.02 acre of wetland impacts located within Caliente Avenue south of Central Avenue (see Figure 45.3). Under the no project alternative, Caliente Avenue south of Central Avenue would not be constructed and 0.1 acre of wetlands and 0.01 acre of disturbed wetlands would not be impacted under the No Project Alternative.

The segment of Caliente Avenue south of Central Avenue includes impacts to 0.01 acre of City wetlands, specifically the resources labeled as G-1 and G-2 as shown on Figure 45.3. An additional 0.01 acre of disturbed wetlands (isolated ponding features) would be impacted along the southern extent of the Caliente extension where it meets the proposed Beyer Boulevard, as shown on Figure 45.3. In the no project alternative, the disturbed wetlands (isolated pond features) at the southern extent of the Caliente Avenue alignment would be avoided. However, they would also continue to be subject to disturbance by unauthorized entry. Additionally, without the project, the proposed vernal pool and Quino checkerspot butterfly restoration effort would not be undertaken. Compared to the low-quality isolated ponding features (disturbed wetlands lacking vernal pool indicator species) to be impacted, the vernal pool restoration effort would provide a large-scale restoration project that would ultimately support vernal pools containing sensitive plants and vernal pool



indicator species, surrounded by native habitats and plant species. Biologically, the proposed mitigation for impacts to these wetland features would be superior. Additionally, the proposed vernal pool restoration area would be protected from disturbance and would have funding for long term management. Refer to Attachment 14 for details of the proposed Vernal Pool and Quino Checkerspot Mitigation Plan. Additionally, refer to Attachment 17 for the Vernal Pool and Quino Checkerspot Habitat Management Plan which demonstrates the biological quality of the proposed mitigation lands.

Similarly, impacts to the wetland features within Beyer Boulevard would be avoided under the no project alternative. The 0.35 acre of wetlands (primarily mule fat scrub) located at the western end of Beyer Boulevard would be avoided if the proposed Beyer Boulevard extension were not constructed (see Figure 45.2). Without the project, these resources would continue to exist in their current condition, being potentially subject to ongoing disturbance from off-road vehicular activity.

The isolated wetlands would continue to provide the same low level of biological function in relation to the surrounding landscape, with the wetland resources located at the western end of Beyer Boulevard being subject to extensive disturbance from unauthorized trespass. The existing wetland features were created due to the adjacent development blocking flows from Moody Canyon, which allowed wetland species to thrive. Without the project, these conditions would persist. Additionally, without the project, the proposed wetland restoration effort in Spring Canyon (see Attachment 18) would not be implemented. Spring Canyon is a large regional drainage located within a wildlife corridor surrounded by protected open space lands. The restoration effort would substantially improve the existing conditions along that drainage by removing invasive species and restoring disturbed areas with wetland species. Non-native removals in upstream areas of the drainage are also proposed. Without the project, the improvements within Spring Canyon would not occur and the drainage would continue to support non-native and invasive species and disturbed areas.

A no project alternative for Caliente Avenue south of Central Avenue would also be infeasible due to the fact that the northern segment of Caliente north of Central Avenue is already entitled as part of the Candlelight Tentative Map 114999; PTS 633633. Additionally, from a planning perspective, without these roadways, the Specific Plan area could not be developed as access to the site would not be available. This alternative would conflict with City General Plan and OMCP goals as discussed below in the Biological Superior Option — No Project Alternative.

### ***Wetlands Avoidance Alternatives***

Various alternative locations and alternative alignments have been considered for the location of Beyer Boulevard which are documented in Attachment 11. Compared to the original proposed Beyer Boulevard alignment, the proposed Beyer Boulevard would reduce wetland impacts by 32 percent. As detailed in Attachment 11, the current Beyer Boulevard alignment was determined to be the only feasible alignment due to landslide constraints, circulation, and access needs for the overall Otay Mesa and San Ysidro communities, in addition to fire and emergency response needs.

Although elimination of Beyer Boulevard and Caliente Avenue south of Central Avenue, would avoid 0.36 acres of City wetlands (mule fat and southern willow scrub), and 0.01 acre of an isolated disturbed wetland, the roadway is necessary to both serve the development and provide circulation for the broader San Ysidro and Otay Mesa communities. Due to the scattered nature of the



disturbed, isolated wetlands along the Beyer Boulevard extension, no feasible alternative is available that would completely avoid wetlands. Additionally, the disturbed wetlands and vernal pools are located within roadways and subject to ongoing disturbance. The City wetlands (see O-1, O-2 and O-3 on Figure 45.2) are located immediately east of the current terminus of Beyer Boulevard, which would make accommodating an extension of the roadway with complete avoidance of these resources infeasible.

An alternative Beyer Boulevard alignment was originally proposed that was shifted further north; however, that alignment resulted in greater impacts to natural flood channel within MHPA, due to a larger grading footprint resulting from grading in the landslide complex, in addition to impacts to associated wetlands and natural flood channel within the Moody Canyon bottom which is required in any alternative in order to meet the terminus of the existing Beyer Boulevard. As detailed in Attachment 11, an alternative alignment was also considered that would rely on Old Otay Mesa Road with a bridge spanning Moody Canyon. With this alternative, Beyer Boulevard would still have to be retained for fire access only, which would not result in additional avoidance of City wetlands. Furthermore, this alternative was found infeasible as it would impact three schools, four single-family homes, a San Diego Gas and Electric substation, and three multi-family buildings, would not meet circulation needs for the area, and would create safety risks due to inadequate fire and emergency access routes for surrounding communities.

A wetland avoidance alternative for Caliente Avenue south of Central Avenue would also be infeasible due to the fact that the northern segment of Caliente north of Central Avenue is already entitled and planned in its current location. Shifting the southern segment of the roadway to avoid the 0.01 acre of wetlands (mule fat scrub and southern willow scrub) and the 0.01 acre of disturbed isolated wetlands would not be feasible considering City VPHCP 100 percent conserved lands are located immediately south of Caliente Avenue where it bends to the west. There is no other location that the roadway extension could be located while still serving the Specific Plan area and avoiding the wetlands.

### ***Wetland Impact Minimization Alternatives***

As detailed above, a deviation is only allowed where there are no feasible measures to further minimize impacts to ESL and the proposed deviation is the minimum necessary to afford relief from special circumstances or conditions applicable to the land and not of the applicant's making. Significant changes to the Beyer Boulevard design have been incorporated into the project to minimize adverse impacts to wetland resources to the maximum extent practicable, considering all technical and regulatory constraints of the area. The proposed alignment and design of Beyer Boulevard represents the maximum potential wetland avoidance alternative as documented in Attachment 11. Lands north and south of Beyer Boulevard are part of a landslide complex. Locating the road in its current position has resulted in significant reductions in grading footprint which has reduced wetland impacts compared to earlier alignments considered. Avoiding construction in the landslide complex minimizes the need for significant grading that would be required to stabilize the ground within this landform. Originally the road was shifted further north resulting in impacts to the bottom of Moody Canyon and associated drainages. The roadway was shifted south, avoiding canyon bottoms and staying largely outside of the San Ysidro landslide complex which allowed



grading buttresses to be reduced. A detailed discussion of the various Beyer Boulevard alternatives, including documentation of wetland impact minimization is provided in Attachment 11.

Through significant coordination with the Wildlife Agencies and City staff, a reduction in the roadway width along Beyer Boulevard was accepted by the City Planning, Engineering and Mobility Departments. The ultimate roadway width through the conserved lands west of the Specific Plan area was substantially narrowed from the originally planned 4-lane major arterial roadway per the OMCP. For the portion of the roadway crossing conserved lands, the road would narrow to two lanes to minimize impacts to the greatest degree feasible. The Specific Plan identifies a reduced roadway classification for the extension of Beyer Boulevard west of the Specific Plan as a constrained segment modified 4-lane Urban Collector. However, the Specific Plan notes that this segment would be built with two lanes due to environmental constraints as this portion of the roadway traverses environmentally sensitive and conserved lands. Within these conserved areas, Beyer Boulevard would narrow to a two-lane road as detailed in Figure 5. All manufactured slopes surrounding Beyer Boulevard would be revegetated with native plant species consistent with the surrounding habitats.

The proposed cross section for Beyer Boulevard west of the Specific Plan area is shown in Attachment 11. As shown, the constrained portion of the roadway would be constructed with two lanes and minimal mobility features. Total roadway right-of-way would be 53 feet including a 4-foot sidewalk on the south side of the street for pedestrians and two on-street bike lanes.

Additionally, Beyer Boulevard is designed to provide roadway permeability for large and small animal movement through incorporation of three culverts, a wildlife overcrossing, wildlife fencing, and native habitat revegetation along manufactured slopes as detailed further in the project description Section 1.3.2.3 Proposed culverts would also maintain hydrologic function within the area.

City wetlands (0.35 acre) dominated by mule fat scrub are located at the western end of the Beyer Boulevard alignment, near the current terminus of Beyer Boulevard in San Ysidro (see Photograph 6 and Figure 45.2). The 0.35 acre of City wetlands labeled as O-1, O-2 and O-3 are the result of upstream impoundments that have allowed the drainage waters from Moody Canyon to collect and develop as wetlands. The areas immediate west of these wetlands are disturbed, largely barren land. Maritime succulent scrub and disturbed maritime succulent scrub are also present in the vicinity of these wetlands. Impacts to these wetlands cannot be avoided because of their location in relation to the existing terminus of Beyer Boulevard and need for the road to extend from the existing terminus of Beyer Boulevard. Shifting the alignment to the north could potentially avoid the wetland, but this option was not found to be feasible because of required roadway geometries; this shift would result in significantly greater impacts within Moody Canyon and drainages within the canyon. Shifting the road south is not an option due to the location of the City's planned Beyer Park. Furthermore, acceptable roadway geometries could not be achieved with an alignment that would avoid wetland resources. The project was designed to avoid and minimize impacts to wetlands to the extent feasible and further avoidance is not feasible. Wetland mitigation options were explored in the vicinity of the existing wetland impacts, specifically within Moody Canyon just northeast of the impact area or within the moody canyon drainage that is visible within MHPA lands on Figure 45.2. After field verifications, it was determined that the habitats upstream of this area are relatively intact and there were no opportunities for wetland restoration in this area. An opportunity



for wetland mitigation was identified in Spring Canyon, southwest of the Specific Plan area, which would offset these marginal quality wetland impacts with restoration to create a higher quality wetland resource in an appropriate location that would be preserved in perpetuity.

The width and design of Caliente Avenue north of Central Avenue was approved as part of the Candlelight Tentative Map 114999; PTS 633633; and the associated impacts are expected to occur regardless of the proposed project. Therefore, in light of existing approvals, there are no feasible wetland minimization alternatives that the project could implement with respect to this portion of the Caliente Avenue.

The design and alignment of Caliente Avenue south of Central Avenue is a Modified 4-Lane Urban Collector with bike lanes. This segment of Caliente Avenue includes impacts to 0.01 acre of City wetlands, specifically the resources labeled as G-1 and G-2 as shown on Figure 45.3. An additional 0.01 acre of disturbed wetlands (isolated ponding features) would be impacted along the southern extent of the Caliente extension where it meets the proposed Beyer Boulevard, as shown on Figure 45.3. The portion of Caliente Avenue south of Central Avenue would impact a canyon and an associated wetland (mule fat scrub and <0.01-acre southern willow scrub); impact minimization is not feasible due to the required connection to existing Caliente Avenue and due to the fact that the roadway follows a land use and circulation plan previously approved by the City in the OMCP. Additionally, as discussed above, the roadway must curve to the west, south of the Central Avenue, in order to avoid the City's VPHCP 100 percent conserved lands. Removal of the road would render the Specific Plan development area infeasible and would make development of the previously entitled Candlelight project infeasible.

### ***Biologically Superior Option***

In order to qualify for the BSO, a project deviating from wetland regulations must: (1) fully describe and analyze a no project alternative, a wetlands avoidance alternative, and a biologically superior alternative (the proposed project) demonstrating that the proposed project would result in the conservation of a biologically superior resource compared to strict compliance with the provisions of the ESL; (2) demonstrate that the wetland resources being impacted by the project shall be limited to wetlands of low biological quality; (3) demonstrate that the project and associated mitigation conform to the requirements for this option that include avoidance, minimization, and compensatory measures which would result in a biologically superior net gain in overall function and values of the type of wetland resource being impacted and/or the biological resources to be conserved; and (4) obtain concurrence from the USFWS and the CDFW (Wildlife Agencies). These four criteria are described below.

As detailed in Table 12 and depicted on Figures 45.4 and 45.5, the wetlands subject to the BSO include less than 0.01 of City wetlands (mule fat scrub), 0.12 acre of isolated disturbed wetlands, and 0.03 acre of vernal pool. A discussion of the total project impacts to wetland resources is provided in Section 7.1.2.4.a above with mitigation presented in Section 8.2.5.1. The analysis presented below focuses on those wetland resources subject to a wetland deviation under the BSO.



*Criteria 1**No Project Alternative*

Under the no project alternative, the project would not be constructed and the resources subject to the BSO analysis (less than 0.01 of wetlands [mule fat scrub], 0.12 acre of disturbed wetlands, and 0.03 of vernal pool) would be avoided.

The disturbed wetlands are isolated ponding features which are primarily located along disturbed roadways and the vernal pools would be impacted through the construction of the EVA road. The less than 0.01 acre of mule fat scrub is near the future Caliente Alignment south of Central Avenue. The site and thus these features would remain undeveloped; however, the area would likely continue to undergo regular human disturbance through off-road activity on the mesa in the central portion of the site and along the trail that is proposed to be converted into the EVA road. All of the disturbed wetlands and vernal pools proposed to be impacted are planned to be mitigated through vernal pool creation within a 33.71-acre vernal pool restoration area (see Attachment 14). Under the no project alternative, the proposed vernal pool restoration effort would not occur and the biological values of this restoration effort would not be realized. Without the project, the existing conditions, including unauthorized trespass and disturbance of these ponding features would persist.

Additionally, the <0.01-acre wetland (see G-3 on Figure 45.4) would be mitigated through restoration in Spring Canyon. Without the project, the proposed wetland restoration effort in Spring Canyon (see Attachment 18) would not be implemented. Spring Canyon is a large regional drainage located within a wildlife corridor surrounded by protected open space lands. The restoration effort would substantially improve the existing conditions along that drainage by removing invasive species and restoring disturbed areas with wetland species. Non-native removals in upstream areas of the drainage are also proposed. Without the project, the improvements within Spring Canyon would not occur and the drainage would continue to support non-native and invasive species and disturbed areas.

*Wetlands Avoidance Alternative*

Under the wetlands avoidance alternative, the project would be designed to avoid all City wetlands comprising the isolated disturbed wetlands, vernal pools, and the <0.01 acre wetland shown on Figures 45.4 and 45.5.5. Due to the scattered nature of the isolated disturbed wetlands and vernal pools being located along disturbed roadways, complete avoidance of these wetland resources would not be feasible. For example, three disturbed wetlands are located just west of the proposed Caliente Avenue extension. As discussed above, this roadway location cannot be shifted. Avoiding disturbed wetlands adjacent to a major circulation element roadway would not be beneficial from a biological perspective as these resources would be subject to disturbance after installation of the roadway.

While portions of the mesa top could be developed without impacting disturbed wetlands, it would not be feasible to both develop areas without these features and preserve them in a way that would provide biological value. In the existing condition, the disturbed wetlands are largely disturbed, low-value ponding basins that lack vernal pool indicator plants. Without a restoration and long-term management effort, these resources would not provide substantial biological function. Therefore,



even with an avoidance alternative that places homes around these features, the resources would not be viable in the long term without a comprehensive restoration effort. Additionally, scattered residential development with pockets of avoided disturbed wetlands would be associated with substantial edge effects, reducing the biological viability of a wetlands avoidance alternative.

*Demonstration of the Proposed Project as a Biologically Superior Option (the Proposed Project)*

Under the BSO, impacts to wetlands may be considered if the resources are of a low quality and through project design and/or mitigation, a biologically superior project would result. The impacted disturbed wetlands (0.12 acre) are of low quality; however, they are characteristic of vernal pools and are assumed to support San Diego fairy shrimp, but lack vernal pool indicator plant species required to designate them as such. The impacted disturbed wetland resources are scattered across the mesa top in areas that have not been designated for conservation in the City's VPHCP. The vernal pools proposed to be impacted (0.03 acre) are located within and adjacent to an existing dirt road that is subject to regular disturbance from border patrol vehicles and other maintenance vehicles. These vernal pools are included in the BSO due to their location within the MHPA; however, this area would be adjusted out of the MHPA with the approval of the BLA. The resources scattered throughout the Specific Plan area are primarily on or near disturbed roadways. Refer to Figure 45.4 and 45.5 for the location of these disturbed wetlands and vernal pools in relation to the City's VPHCP and MHPA.

The ponding features also do not provide typical riparian function, with the exception of a <0.01 acre of mule fat scrub habitat shown on Figure 45.4. The <0.01 acre of mule fat scrub is associated with 0.01 acre of adjacent mule fat and southern riparian scrub (evaluated under the EPP). These resources are located within a canyon area that would be impacted by the project. The total wetland resource in this canyon occupies a 0.02-acre area which offers limited wetland functions and values considering their isolated nature and small size.

The resources to be impacted under the BSO include <0.01 acre of mule fat scrub, 0.03 acre of vernal pool, and 0.12 acre of disturbed wetland, and is proposed to be mitigated at a 2:1 ratio, as required by the City. The proposed wetland mitigation effort would include two components; vernal pool restoration and wetland restoration.

All disturbed wetlands (isolated pond features lacking vernal pool indicator plant species) to be impacted would be mitigated as vernal pools. This approach is proposed due to the nature of these isolated ponding basins being more similar to vernal pools, despite the lack of vernal pool indicator plants. Impacts to 0.12 acre of disturbed wetlands and 0.03 acre of vernal pool, subject to the BSO analysis, would require a total of 0.30 acre of vernal pool mitigation. The project-level mitigation for vernal pools and disturbed wetlands would include restoration of a 33.71-acre vernal pool restoration area that would establish 3.86 acres of vernal pool basins and enhance 0.05 acre of existing vernal pool basins that will mitigate for the vernal pool and disturbed wetlands subject to the BSO analysis as well as the rest of the vernal pools not subject to the wetland deviation regulations (see Section 8.2.5.1-Table 18c below and Attachment 14, Table 1).

The vernal pool restoration effort would provide a large-scale restoration project that would ultimately support vernal pools containing sensitive plants and vernal pool indicator species, surrounded by native habitats and plant species. Additionally, the proposed vernal pool restoration



area would be protected from disturbance and would have funding for long term management. Refer to Attachment 14 for details of the proposed Vernal Pool and Quino Checkerspot Mitigation Plan and Attachment 17 for the Vernal Pool and Quino Checkerspot Habitat Management Plan. The created vernal pools proposed as mitigation would additionally be surrounded by protected native upland habitats on three sides, increasing the biological value of the vernal pool preserve area in relation to the scattered and degraded features that would be impacted.

The impacts to the <0.01 acre (90 square feet) of mule fat scrub will be mitigated at a 2:1 ratio for a total of <0.01 acre (180 square feet). The project would implement a wetland mitigation effort in Spring Canyon (see Attachment 18), including 0.36 acre of wetland creation (establishment) and 0.62 acre of wetland enhancement (rehabilitation) within an overall 2.18-acre Wetland Plan area within Spring Canyon (see Attachment 18, Figure 10.2), which will satisfy the mitigation required to cover these impacts to BSO wetlands as well as the remaining impacts to wetlands not subject to the BSO analysis. This wetland mitigation effort as detailed in Attachment 18 would uplift the functions and values of the Spring Canyon to increase functionality for wildlife species. Spring Canyon is a large regional drainage located within a wildlife corridor surrounded by protected open space lands. Implementation of the Wetland Plan would substantially improve the existing conditions along that drainage by removing invasive species, enhancing existing wetland vegetation, and creating wetland habitats in existing disturbed and non-native grassland areas. Removal of non-native and invasive species in upstream areas of the drainage (outside of the applicant's property) is also proposed, but is not required for the success of the restoration efforts or as mitigation.

The vernal pool restoration efforts additionally include seeding of Otay Mesa mint, a state and federally listed endangered species, spreading navarretia, a federally listed threatened species, and California Orcutt grass, a state and federally listed endangered species, as well as San Diego button-celery, would be planted within the proposed 3.86 acres of vernal pool surface area creation. All of the created pools and existing pools to be enhanced would be inoculated with San Diego fairy shrimp and/or Riverside fairy shrimp. Spreading navarretia would also be introduced to re-establish habitat for this species.

The proposed vernal pool mitigation would also increase suitable habitat for Quino checkerspot butterfly through restoration efforts within the vernal pool preserve which includes preservation and enhancement of 0.96 acre of Quino habitat and 0.70 acre of Quino habitat restoration for a total of 1.89 acres of Quino checkerspot butterfly habitat preservation. Within the interspaces of the vernal pools upland habitat restoration would be implemented, supporting vernal pool function and water quality. In contrast to the low-quality disturbed wetlands and vernal pools that would be impacted that lack supporting upland vegetation supporting them due to ongoing disturbances and the location of impacted resources being within dirt roads.

The proposed vernal pool mitigation would also increase suitable habitat for western spadefoot. A total of 66 basins (0.62 acre) that were observed to support western spadefoot, including eight of the disturbed wetlands subject to the BSO analysis. However, for purposes of the analysis, all ponding basins are assumed to support the species resulting in an estimated impact to 0.15 acre of habitat for this species within the BSO wetland resources. As noted above, a total of 3.86 acres of vernal pool basins would be established which would provide suitable replacement habitat for



western spadefoot. Additionally, western spadefoot was detected in 23 basins covering 1.96 acres within parts of the survey area proposed to be preserved as a part of habitat-based mitigation (see Figures 40.2 through 40.4), located within the MHPA. Therefore, the project's 3.86-acre vernal pool restoration effort combined with preservation of existing western spadefoot habitat would ensure sufficient conservation of the species and its habitats.

The vernal pool restoration area has been designed to ensure adequate buffering is provided between vernal pools and future development areas. A fire-rated wall would be provided between the development area and the vernal pool preserve to ensure avoidance of brush management impacts. Figure 46 shows the buffers ranging from 10.83 feet to 129.28 feet between the proposed and existing vernal pools and the anticipated location of the fire-rated wall as part of the vernal pool mitigation design. The vernal pool hydraulic analysis (included in Attachment 14) demonstrates adequate watersheds available to support hydraulic function for all vernal pools within the vernal pool preserve. As stated in Section 6.2.2.2, compliance with the VPHCP's general avoidance and minimization measures including but not limited to temporary fencing, grading techniques, monitoring, and topsoil salvage would preclude any construction impacts to vernal pool (wetland) restoration areas and ensure a biologically superior design.

Based on the BSO analysis provided above, the proposed mitigation would provide substantially greater biological values and functions compared to the degraded, scattered resources that would be impacted. The proposed mitigation would restore a substantial mesa top area, increasing the biological function of the habitat and wetland features and supporting vernal pool conservation within an area that has been designated for protection under the VPHCP.

## ***Criteria 2***

### ***Demonstration That the Wetland Resources Being Impacted Are of Low Biological Quality***

The wetland resources subject to the BSO would include less than 0.01 acre of mule fat scrub, 0.03 acre of vernal pool, and 0.12 acre of disturbed, isolated wetlands. The guidelines specify that the biological quality of all wetlands is assessed using the criteria listed below. Corresponding project details follow each criterion below.

- I. Criteria to determine biological quality of all wetland types include, but are not limited to, the following:
  - a. Use of the wetland by federal and/or state endangered, threatened, sensitive, rare and/or other indigenous species;

*Discussion:* San Diego fairy shrimp are assumed present within all 0.12 acre of disturbed wetlands and 0.03 acre of vernal pools subject to the BSO. These basins are associated with road rut depressions and are continually impacted with vehicular traffic along that road by trespassers. San Diego fairy shrimp are present within the 0.03 acre of vernal pool along the EVA road alignment; however, these are also along an existing dirt road subject to vehicular traffic. Despite the low-quality condition of these basins, they would be mitigated at a 2:1 ratio as part of the 33.71 acre vernal pool restoration effort.



The impacted less than 0.01 acre of mule fat scrub lacks a diversity of species that would increase its function as a riparian wetlands. The impacted mule fat scrub (see G-3 on Figure 45.4) is associated with two additional wetland features (see G-1 and G-2 on Figure 45.3) that would be impacted as part of the EPP. All three of these resources total less than 0.02 acre. Together, these resources comprise a small portion of wetland vegetation within a canyon dominated by upland species. The mule fat scrub is not extensive enough support populations of federal and/or state endangered, threatened, sensitive, rare and/or other indigenous species.

- b. Diversity of native flora and fauna present (characterizations of flora and fauna must be accomplished during the proper season, and surveys must be done at the most appropriate time to characterize the resident and migratory species);

*Discussion:* Rare plant surveys were conducted, along with focused wildlife surveys within their proper seasons. All plant and wildlife species observed or detected were recorded and presented in Attachments 4 and 6, respectively.

Although, San Diego fairy shrimp were found within some of the disturbed wetland and vernal pool depressions, the impacted wetlands and vernal pools are considered low-quality due to the high-level of disturbance from off-roading. None of the disturbed wetlands contained any vernal pool indicator plants. The 0.03 acre of vernal pools within the EVA road do not support sensitive plant species; however, San Diego fairy shrimp and spadefoot toad were observed. These basins are subject to ongoing disturbance due to their location within a dirt road used for border patrol access. Additionally, these species are widely present within ponding basins in the area.

As discussed under a. above, the less than 0.01 acre of impacted mule fat scrub comprises a small portion of wetland vegetation within a canyon dominated by upland species. These resources are not extensive enough support populations of federal and/or state endangered, threatened, sensitive, rare and/or other indigenous species.

- c. Enhancement or restoration potential;

*Discussion:* The potential to restore or enhance the existing depressions within the project-level area is considered low because the majority of these features lie within dirt roads and are subject to continual vehicular disturbance by off-roading (see Photographs 11-15). These project-level areas and associated resources were anticipated to be impacted by future development by the City's VPHCP. As development is anticipated within the impacted areas, it would be infeasible to accommodate both vernal pool restoration and development due to substantial edge effects that would be associated with restoring impacted resources in place. The EVA road is identified as a critical road for ongoing border patrol access; therefore, preservation of the vernal pools in this location would also be considered infeasible.

Furthermore, the project's proposed vernal pool restoration location is consistent with the City's VPHCP as it is proposed in a location designated as VPHCP preserve and located adjacent to lands intended for conservation. The project would implement a high-quality



vernal pool habitat restoration effort to facilitate enhancement of vernal pool resources and replace impacted resources, including many highly disturbed depressions. The proposed vernal pool restoration areas offer two large areas of mesa top that are not currently under the same level of disturbance as the resources proposed to be impacted, which includes a high level of trespassing by off-road vehicles. The proposed vernal pool restoration would provide mitigation in a location that would be sustainable in the long term due to protections, management and funding that would be provided. The Vernal Pool and Quino Checkerspot Mitigation Plan includes additional information regarding the enhancement or restoration potential within the proposed vernal pool restoration areas (see Attachment 14).

- d. Habitat function/ecological role of the wetland in the surrounding landscape, considering
  1. the current functioning of the wetland in relation to historical functioning of the system; and
  2. rarity of the wetland community in light of the historic loss and remaining resource;

*Discussion:* Regarding the less than 0.01 acre of impacted mule fat scrub, as detailed under a. above, this resource comprises a small portion of wetland vegetation within a canyon dominated by upland species. These resources are not part of a larger wetland that is critical to the functioning of the broader drainages and wetland resources. The location of the impacted resources is in a canyon that provides runoff toward Spring Canyon which is a larger scale and important wetland resource. Impacts to these resources would not affect the overall functioning of the larger system because the impacts are located in the very upper reaches of a finger canyon that would be impacted by development of the Specific Plan area. However, a majority of the finger canyon that feeds into Spring Canyon would remain intact. Additionally, the drainage design for development in this area would be required to ensure the pre-project flows match post-project flows, ensuring that hydrological function is sustained. The mule-fat scrub that would be impacted is not rare in light of the resources remaining.

The function/ecological role of the 0.12 acre of disturbed wetlands (wetland depressions) and 0.03 acre of vernal pools were once a functioning ecological system of vernal pool resources that have been impacted by human disturbances, originally from agricultural use and more recently due to dumping and off-road activity. While vernal pools are a rare resource, the City's VPHCP has been designed to ensure the long-term protection of vernal pools and sensitive species associated with vernal pools. The resources to be impacted are not located within areas determined necessary for the long-term preservation of this resource in the City or region. As a result of historic disturbance, the watersheds of the existing basins are highly degraded, in addition to being isolated and no longer interconnected. These resources lack the features characteristic of high-quality vernal pool habitat such as the presence of vernal pool indicator plants within the basins, complexes of connected vernal pool features, and mima mound topography with native upland vegetation surrounding the basins.



- e. Connectivity to other wetland or upland systems (including use as a stopover or stepping stone by mobile species), considering
  - 3. proximity of the wetland resource to larger natural open spaces, and
  - 4. long-term viability of resource, if avoided and managed;

*Discussion:* As detailed in d. above, the less than 0.01 acre of mule fat scrub is at the upper reaches of a finger canyon that drains to Spring Canyon. However, the wetland resource is not contiguous to other wetlands and is located several miles away from the Spring Canyon drainage. The resource is isolated from other resources and would provide low value for preservation in contrast to the proposed wetland creation and enhancement effort that is proposed in Spring Canyon.

The disturbed wetlands and vernal pools within the project-level area are isolated and not connected to other larger, natural wetlands. Additionally, their original function as vernal pools has been degraded due to ongoing land disturbances. If the scattered, disturbed wetlands and vernal pools were to be avoided (i.e., the project is not developed), it would be difficult to manage the area to eliminate human disturbances from dumping of trash, off-roading activities, and trespassing. Additionally, improvement of the functions and values of the wetlands would involve a major habitat restoration effort that would not be supported by funding from private development. In conclusion, the long-term viability of the resource is low.

- f. Hydrologic function, considering
  - 5. whether the volume and retention time of water within the wetland is sufficient to aid in water quality improvements, and
  - 6. whether there is significant flood control value or velocity reduction function; and,
  - 7. whether there is an opportunity to restore the hydrologic functions;

*Discussion:* The less than 0.01 acre of mule fat scrub is not large enough to provide any measurable function as it relates to water retention, flood control, or improvements in water quality. The 0.12 acre of disturbed wetland depressions and 0.03 acre of vernal pools do not provide any flood control value or velocity reduction function as they do not convey flows of water like a drainage channel. Restoring hydrologic functions of the disturbed wetlands would require a major restoration effort to create a functional vernal pool complex, which would be infeasible to implement for the reasons detailed in Criteria 2.e.4.

- g. Status of watershed considering whether the watershed is partially developed, irrevocably altered, or inadequate to supply water for wetland viability;

*Discussion:* The watersheds of the disturbed wetlands are disturbed and relatively small being restricted to the immediate vicinity around the depression. The watershed of the less than 0.01 acre of mule-fat scrub is supported by drainage flowing into the canyon where



this resource is located. The watershed for this resource contains disturbed mesa top, but is undeveloped. Even in the undeveloped condition, the mule fat scrub is part of a very small area of wetland vegetation (less than 0.02 acre), demonstrating that the existing watershed in its natural condition does not provide adequate flows to support expansion of this wetland.

h. Source and quality of water, considering

8. whether the urban runoff is from a partially developed watershed;
9. whether the water source is in part or exclusively from human -caused runoff which could be eliminated by diversion; and,
10. whether there is an opportunity to restore the water quality or flood control value.

*Discussion:* The source of the water for the less than 0.01-acre mule fat scrub is solely from natural rainfall and the watershed is undeveloped. There would be limited opportunity to restore water quality or flood control value.

The 0.12 acre of isolated disturbed wetlands and 0.03 acre of vernal pool provide very little flood control value. The potential to restore the water quality or flood control value under the current conditions would be difficult due to the frequent occurrence of off-road activity which disturbs these features (i.e., changes the shapes of the depressions and watershed). Additionally, due to the high level of human disturbance, the watersheds of the existing pools are restricted to just the ponding areas themselves.

- II. Additional habitat-specific factors, requirements, and/or examples (by habitat type) to determine biological quality include the following:

**Vernal Pools**

- a. Characterizations of vernal pool flora and fauna must be accomplished during the proper seasons. Surveys must be done between December and May to ensure adequate characterization of the vernal pools. Adequate surveys should be done to determine ponding and vernal pool flora and fauna. Surveys for fairy shrimp must be done in accordance with current USFWS fairy shrimp survey protocol.

*Discussion:* Wet season fairy shrimp surveys were conducted in accordance with USFWS survey protocols and were initiated upon first rainfall/ponding and completed after all ponding was complete for the season. Wet season surveys were conducted in 2017/2018, 2018/2019, and 2019/2020 seasons. Soil collection for dry season surveys was conducted once the soil was dry in accordance with survey protocols. Reports of all focused survey efforts were submitted to USFWS and summarized in this document.

- b. Timing of the first rainfall and subsequent filling of the pools should be determined during the evaluation process. Rainfall and ponding should be monitored throughout the wet season. Endangered, threatened, and sensitive species to consider include: *Brodiaea orcuttii* (when within vernal pools and/or their watershed), *Downingia cuspidata*, *Eryngium*



*aristulatum* ssp. *parishii*, *Myosurus minimus* var. *apus*, *Navarettia fossalis*, *Orcuttia californica*, *Pogogyne abramsii*, *Pogogyne nudiuscula*, *Streptocephalus woottoni*, and *Branchinecta sandiegonensis* (when within vernal pools).

*Discussion:* As noted above, wet season fairy shrimp surveys were conducted in accordance with USFWS survey protocols and were initiated upon first rainfall/ponding and completed after all ponding was complete for the season. Rainfall was low during the 2017/2018 season, 4.28 inches and not all of the basins ponded. Additional wet season surveys were subsequently conducted during season with greater rainfall (12.17 inches in 2018/2019 and 11.94 inches in 2019/2020) in an effort to collect data from all identified basins.

- c. Determination of habitat function can include an assessment of number of pools with a cumulatively small amount of habitat (pool surface area) relative to other nearby vernal pool complexes (i.e., an isolated complex with two small pools would be considered lower quality than a complex adjacent to the MHPA with ten pools).

*Discussion:* An extensive mapping of all basins was conducted as part of the wetland delineation efforts initially conducted in 2018 and continued during the wet season fairy shrimp surveys conducted between 2018 and 2020. Each of these basins were delineated and categorized as vernal pools or disturbed wetlands based on the results of the delineation (see Sections 4.2.2.11 and 4.2.2.12) and all biological resources observed within the basins cataloged.

- d. Restoration potential should include an analysis of compaction of watershed, presence of historic pools, and status of hardpan or clay substrate.

*Discussion:* The Vernal Pool/Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14), provides a detailed analysis of the restoration potential of the proposed restoration site. the City's VPHCP identify the proposed restoration site as part of existing/historic J13 north and J13 south vernal pool complexes both of which were identified in the Recovery Plan for Vernal Pool of Southern California (USFWS 1998a) as key areas to support recovery of several federally listed vernal pool plant species. The Mitigation Plan includes an evaluation of the historic mapped resources, soils, hydrology, topography and watershed as part of determining an appropriate design for the establishment of 3.86 acres of new vernal pool basins and enhancement of 0.05 acre of existing vernal pools.

### **Criteria 3**

The project and proposed mitigation shall conform to the requirements for this option as detailed in Section III B.

*Discussion:* Section 8.2.5.1 of this report includes a mitigation program which would reduce significant impacts to wetland resources to below a level of significance. As required by the City's Biology Guidelines, mitigation consists of three required elements: a Mitigation Element, a Protection and Notice Element, and a Management Element. Per the City's Biology Guidelines, this mitigation program must be incorporated in the permit conditions and/or subdivision map, the construction specifications for public projects, and shown on



the construction plans as appropriate. Each mitigation measure includes the required elements for consistency with the Biology Guidelines.

The mitigation includes two components, implementation of wetland mitigation within Spring Canyon, and implementation of vernal pool re-establishment and enhancement.

The wetland mitigation requirements would be achieved within Spring Canyon through at least 0.36 acre of wetland creation (establishment) and at least 0.37 acre wetland enhancement (rehabilitation) to create wetland function and values consistent with the requirements of the City's Biology Guidelines. The Southwest Village Wetland Plan (Attachment 18) includes 0.36 acre of wetland creation (establishment) and 0.62 acre of wetland enhancement (rehabilitation) within an overall 2.18-acre Wetland Plan area within Spring Canyon. An additional 0.46 acre of wetland creation (establishment) would be implemented as part of the Nakano Wetland Plan (RECON, 2024f), providing a total of 1.45 acres of wetland mitigation for Southwest Village. In addition to these mitigation components, the Southwest Village Wetland Plan includes implementation of project design features including an additional 1.20 acres of weed control and the requirement to ensure the remaining 3.46-acre portion of the upstream Nakano Wetland Plan is implemented first. The proposed 0.43 acre of excess wetland creation (establishment) is proposed to satisfy RWQCB mitigation requirements for impacts to non-wetland waters/streambed and is not required by the City. The proposed wetland creation and enhancement requirement would be satisfied in Spring Canyon in excess of City mitigation requirements which would more than off-site the biological loss of 0.01-acre of mule fat scrub.

Impacts to the 0.12 acre of disturbed isolated wetlands and 0.03 acre of vernal pools subject to the BSO would be mitigated at a 2:1 ratio consistent with the City's Biology Guidelines by restoration of 0.30 acre of basins within the proposed 3.86 acres of vernal pool basins and enhancement of 0.05 acre of existing vernal pool basins (see Attachment 14). The total project mitigation requirement for all disturbed wetlands and vernal pool impacts is 2.18 acres; thus, the proposed restoration would provide an excess of 1.68 acres of vernal pool creation and 0.05 acre of enhancement beyond the mitigation ratios required by the City's Biology Guidelines.

The restored vernal pools would be fenced to prevent illegal entry. As part of the vernal pool restoration, disturbed areas would be graded to provide intricate micro-topography which would allow the pools to flow into one another, creating a pool complex. Micro-topography can be the change in a few inches in elevation. The grading design is supported by a hydraulic analysis (see Attachment 18) that ensures the viability of the hydrologic conditions to support vernal pool creation.

The vernal pool restoration areas are proposed to be fully restored with 3.91 acres of vernal pool surface area (3.86 acres of re-establishment and 0.05 acre of enhancement) and all pools are being inoculated with shrimp. Because the vernal pool mitigation requirement is 2.18 acres (including impacts from the proposed Southwind project), and including indirect impacts to pools within 20 feet of the boundary, there is an excess of 1.68 acres of vernal pool reestablishment and 0.05 acre of enhancement that would also be inoculated with shrimp.



Consistent with the Biology Guidelines Protection and Notice Element, the vernal pool and wetland mitigation area would be dedicated in fee title to the City for long-term management. The vernal pool preserve areas would require a recordation of a deed restriction consistent with California Civil Code Section 815, et seq. acceptable to the Wildlife Agencies.

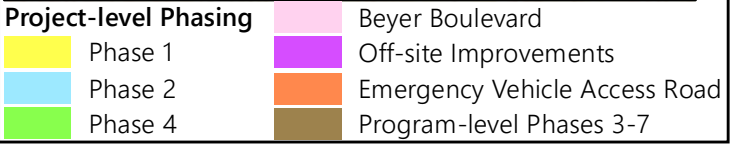
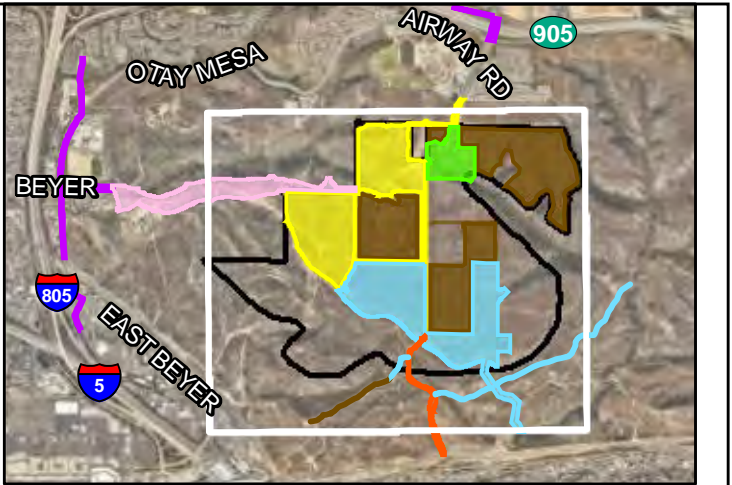
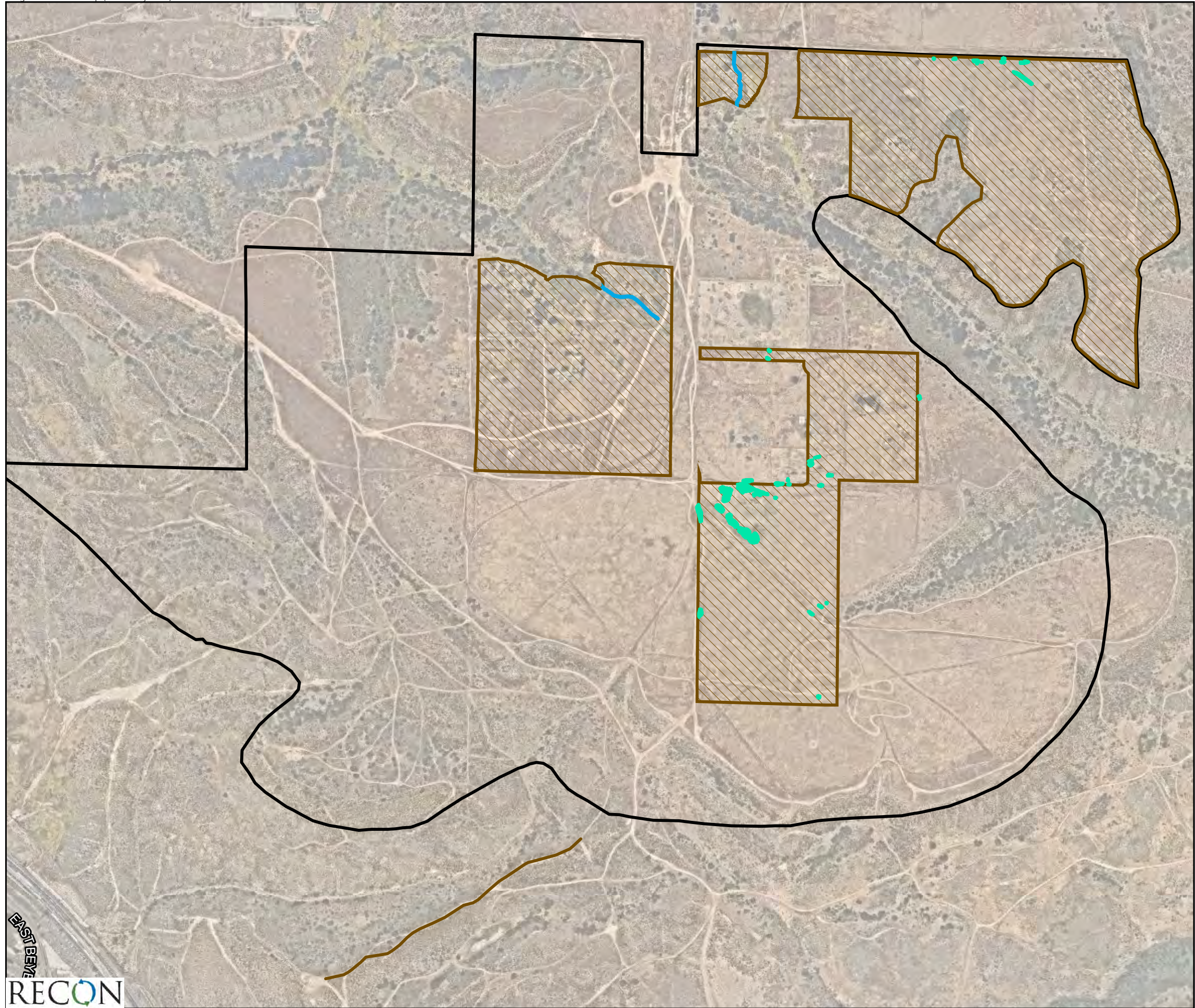
As required by the Biology Guidelines Management Element, funding would be provided to cover the costs of the in-perpetuity management and monitoring of the vernal pool and wetland mitigation sites. Funding would be provided by establishing an endowment prior to initiation of long-term management with funding determined through preparation of a PAR or other similar method and would be approved by the Park and Recreation Department.

#### ***Criteria 4***

The Wildlife Agencies have concurred with the biologically superior project design and analyses. The concurrence shall be in writing and be provided prior to or during the public review of the CEQA document in which the biologically superior project design has been fully described and analyzed. Lack of unequivocal response during the CEQA public review period is deemed to be concurrence.

*Discussion:* The project proponent is working closely with the Wildlife Agencies to obtain concurrence.





Specific Plan Boundary

**Program-level Impacts**

Phases 3-7

**Waters of the U.S. (USACE)**

Vernal Pool

Non-Wetland Waters

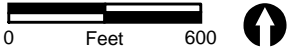


FIGURE 41.1  
Program-level Impacts to  
Potential USACE Waters of the U.S.



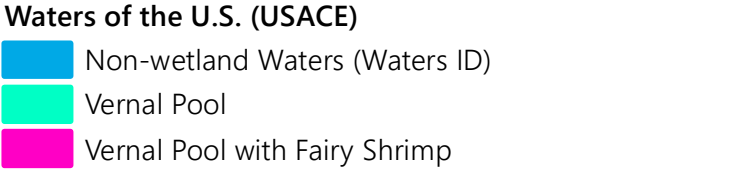
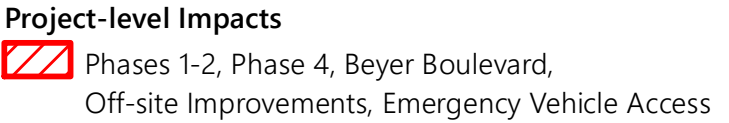
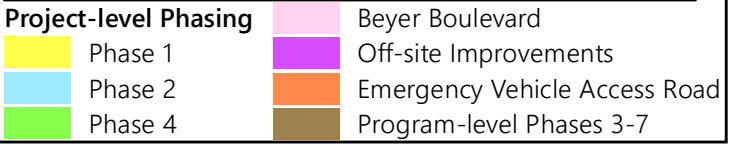
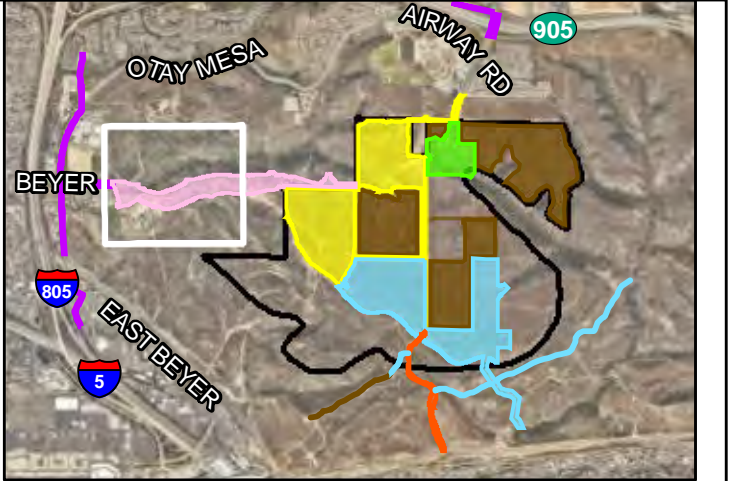
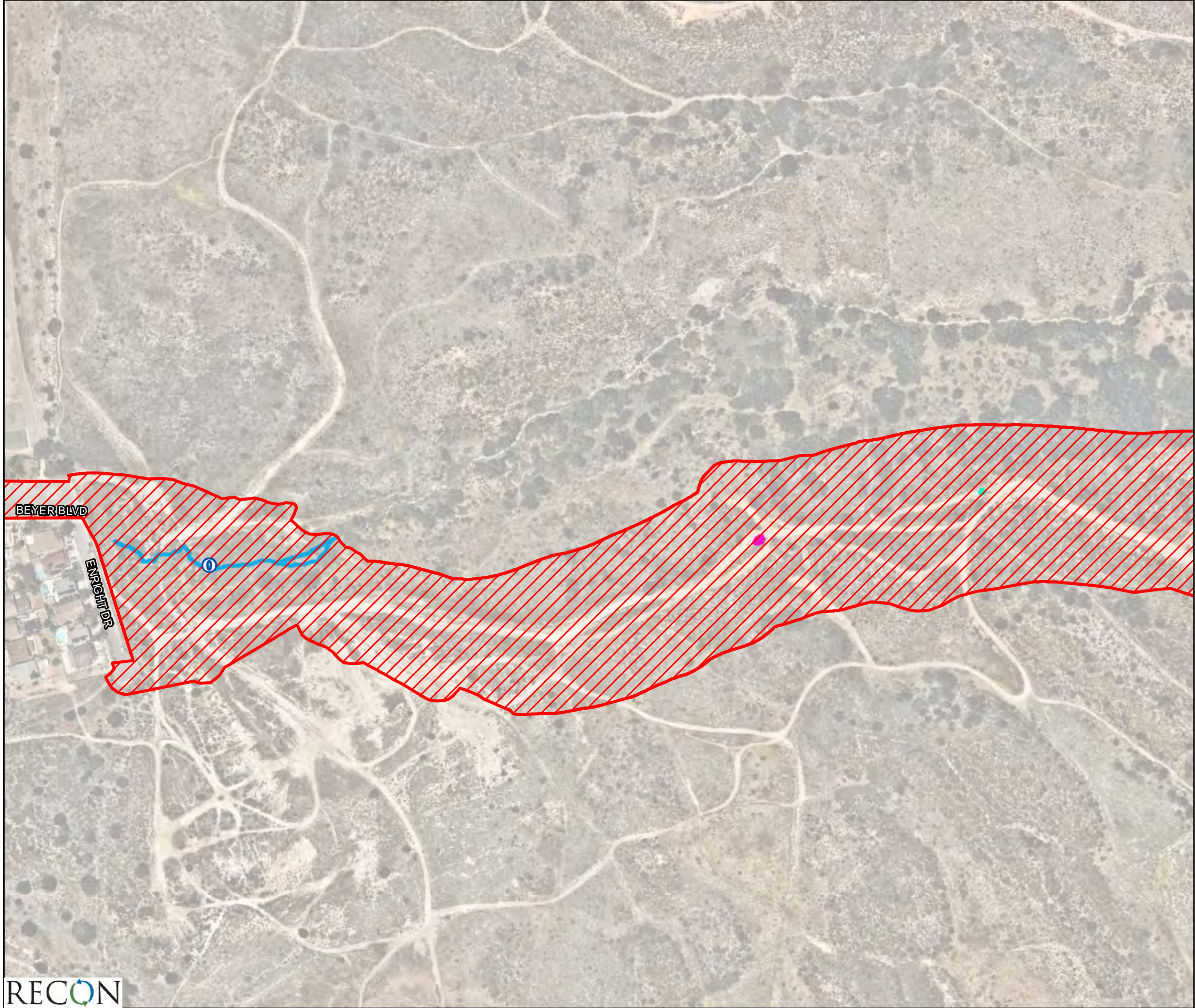


FIGURE 41.2  
Impacts to Potential USACE Waters of the U.S.



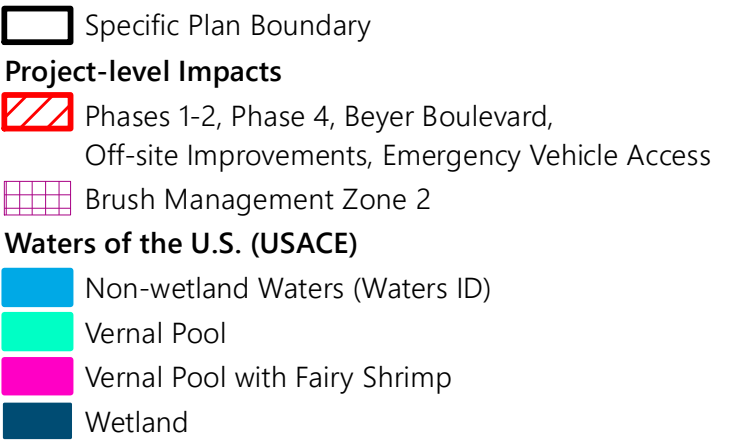
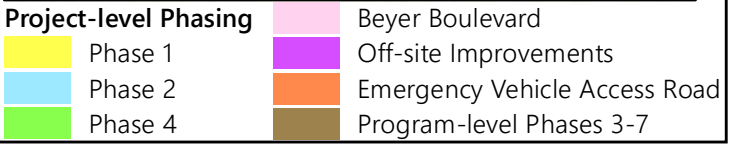
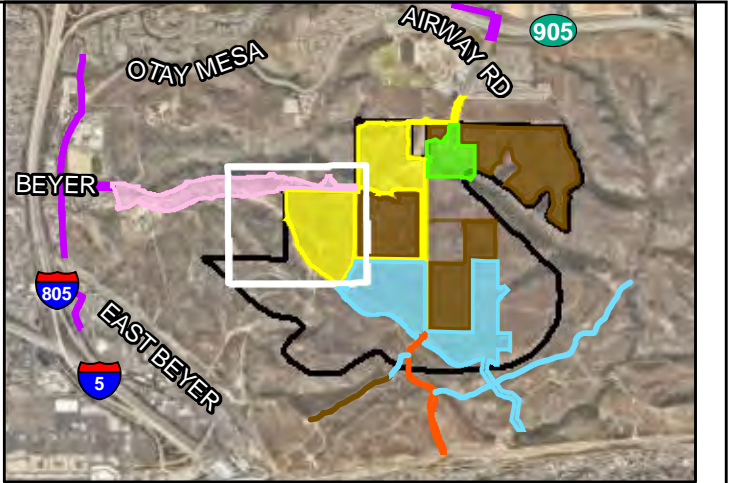
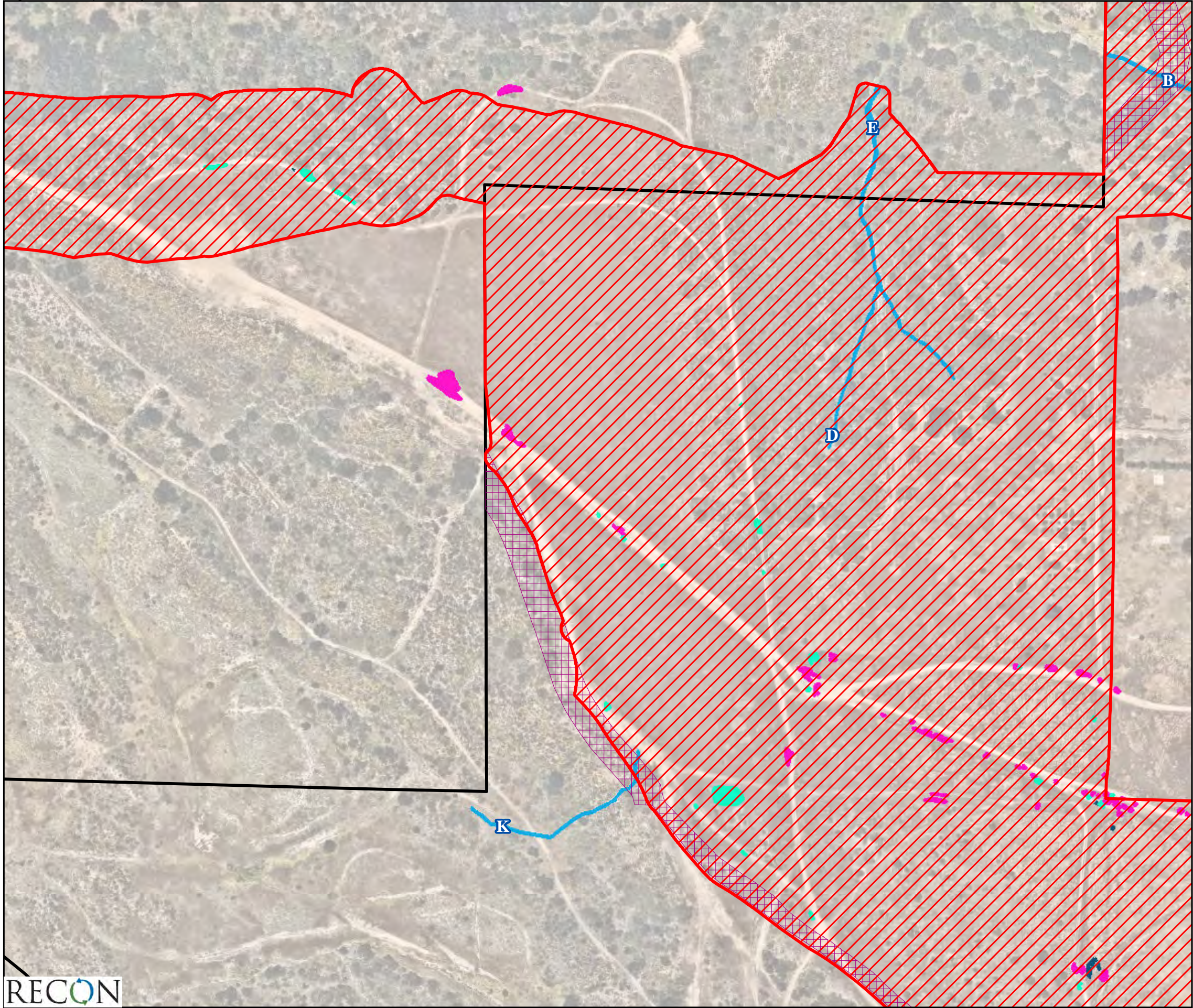


FIGURE 41.3  
Impacts to Potential USACE Waters of the U.S.



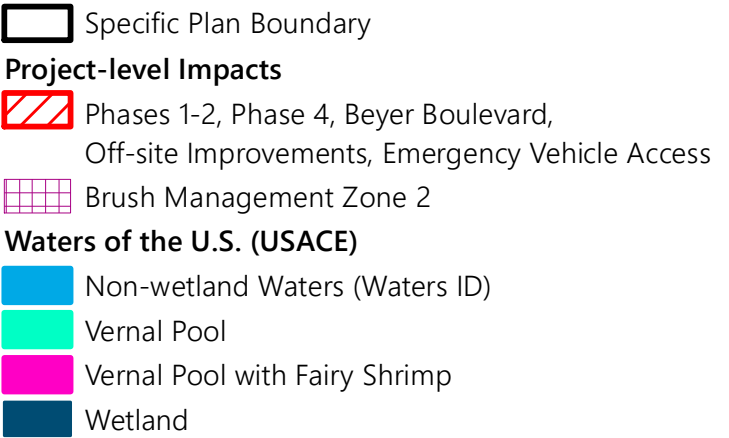
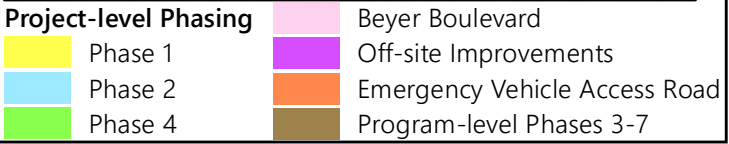
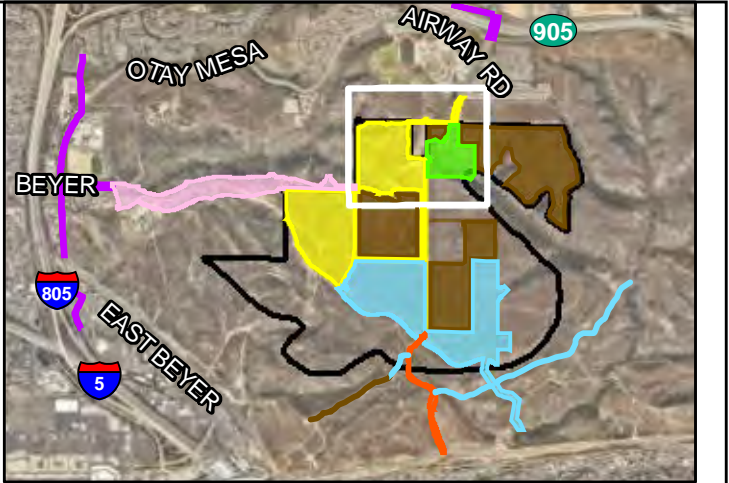
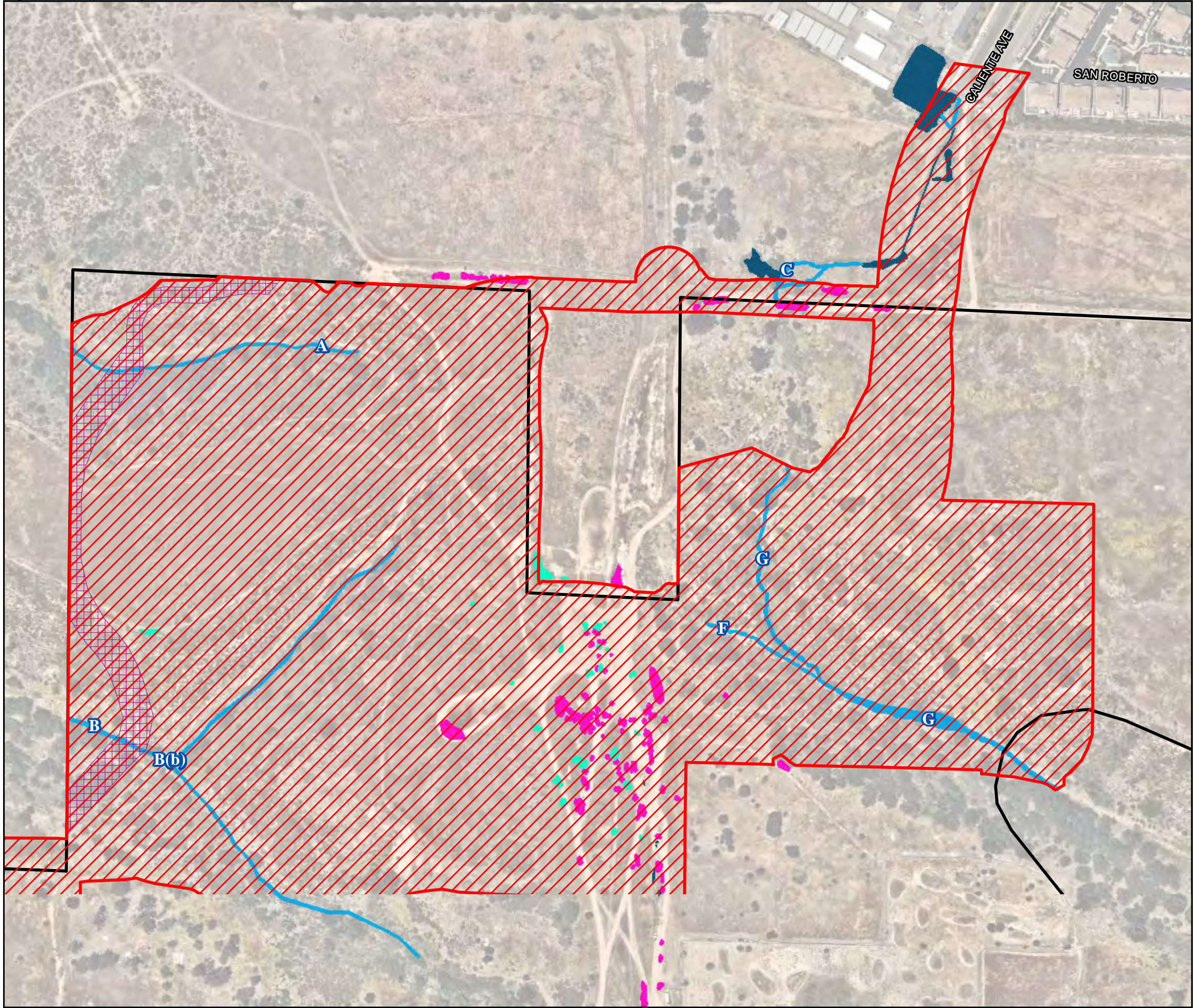


FIGURE 41.4  
Impacts to Potential USACE Waters of the U.S.



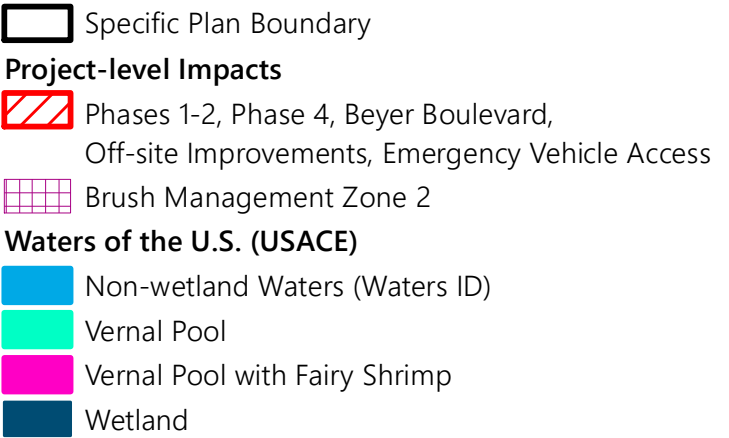
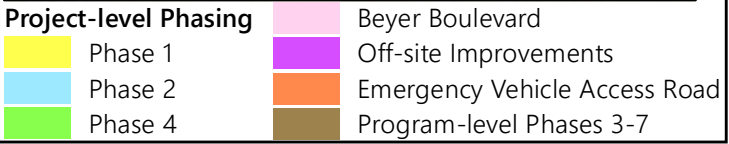
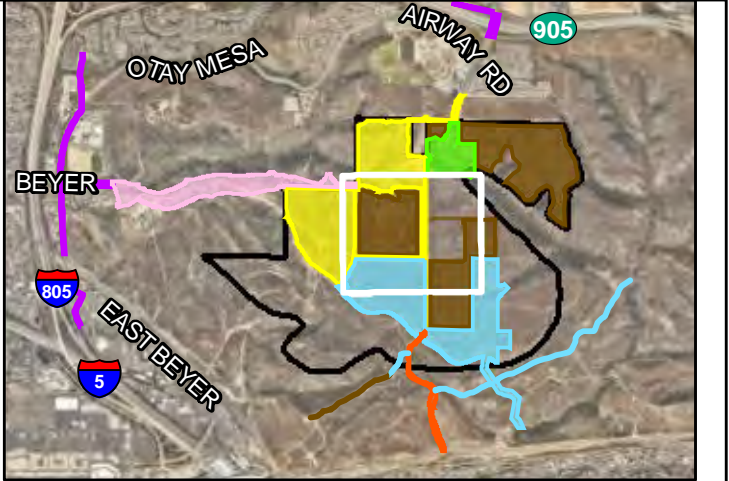
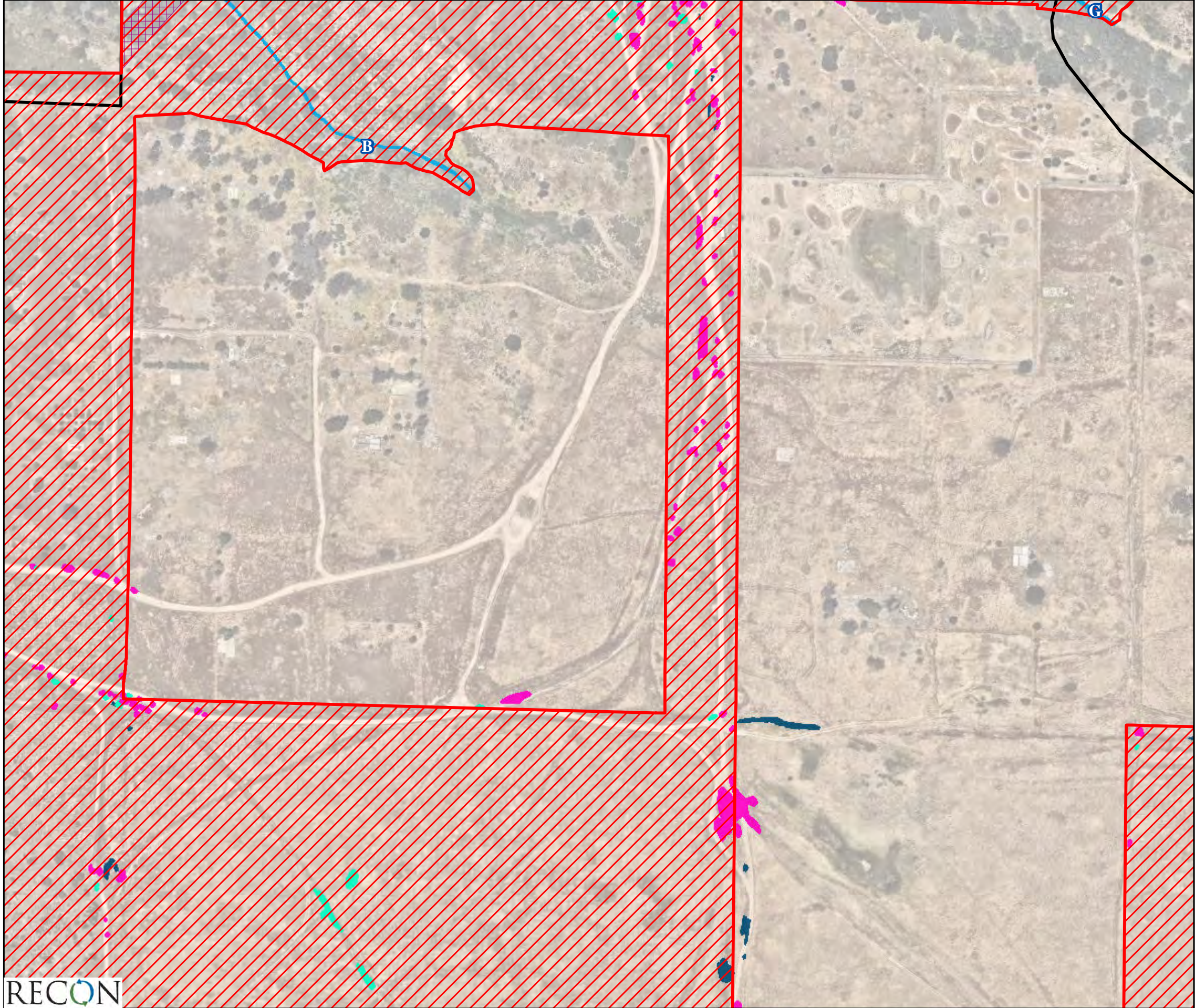


FIGURE 41.5  
Impacts to Potential USACE Waters of the U.S.



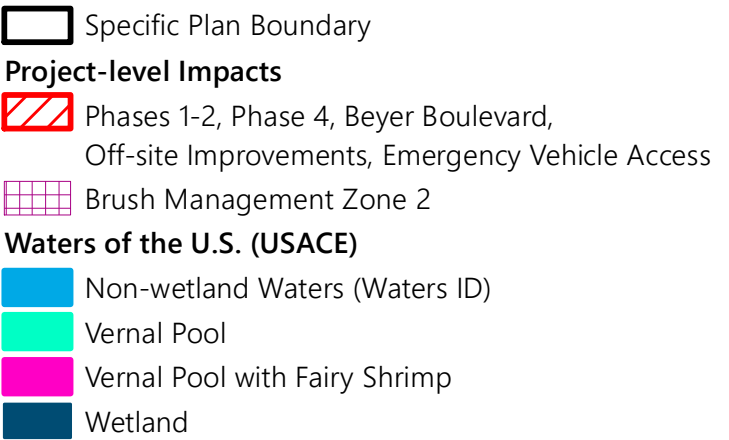
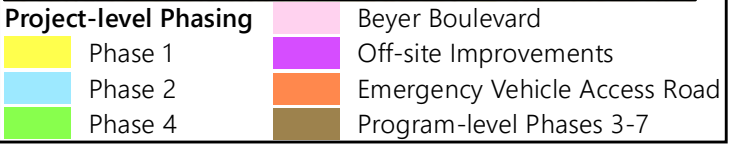
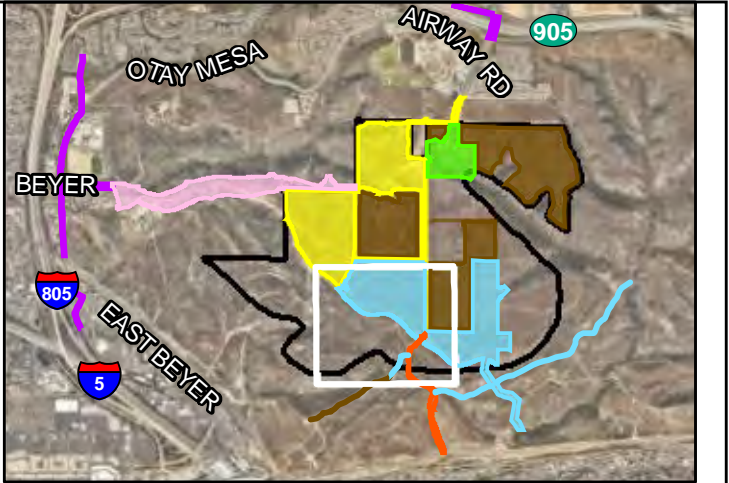
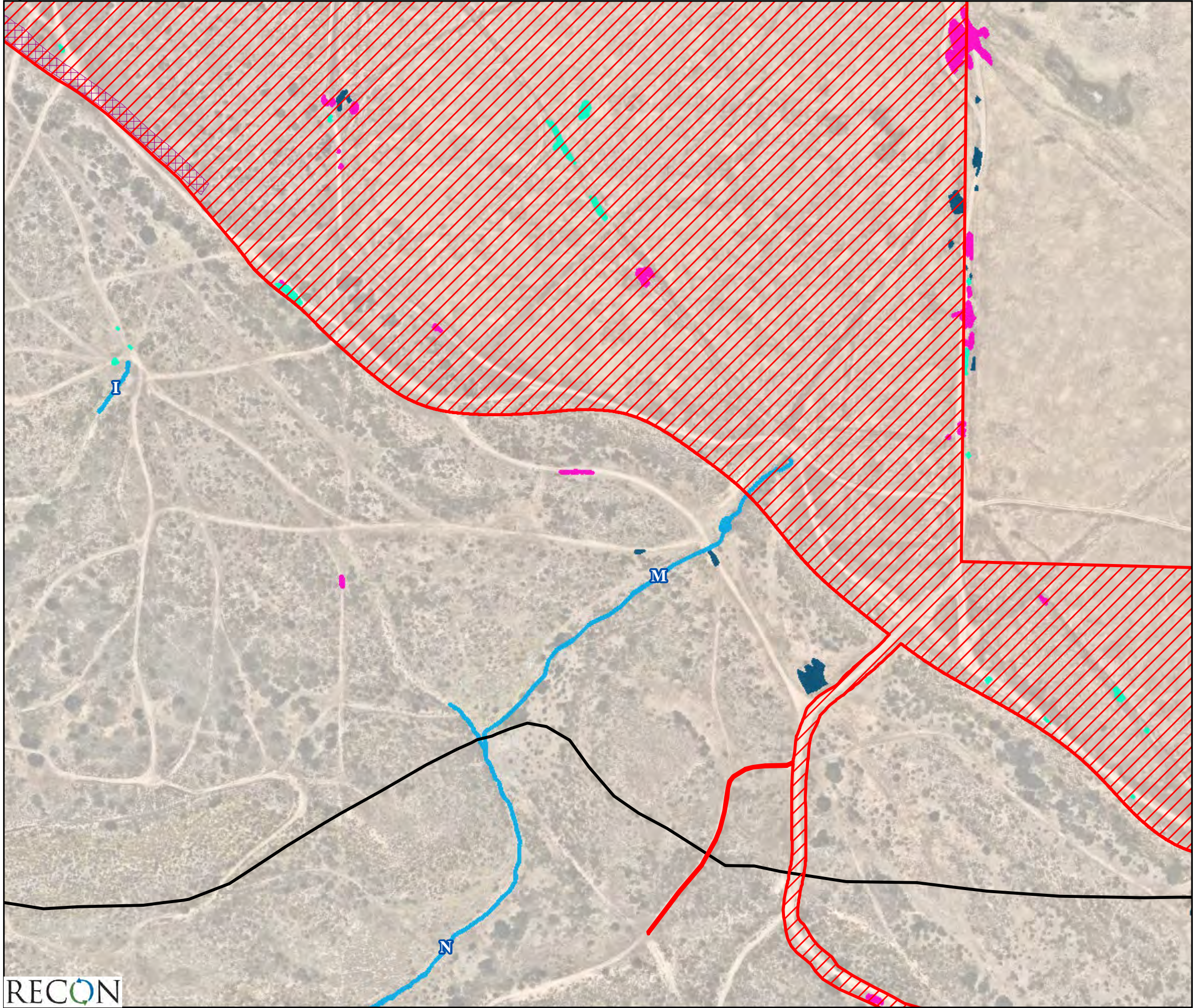


FIGURE 41.6  
Impacts to Potential USACE Waters of the U.S.



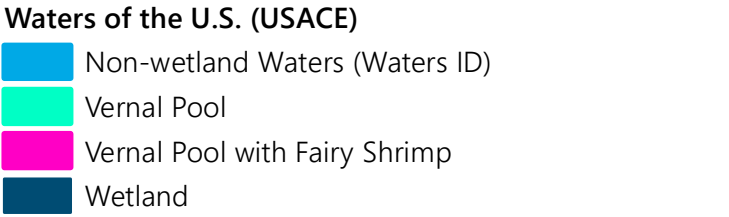
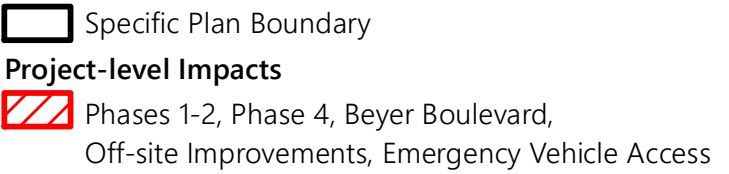
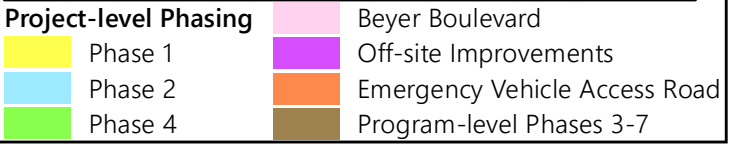
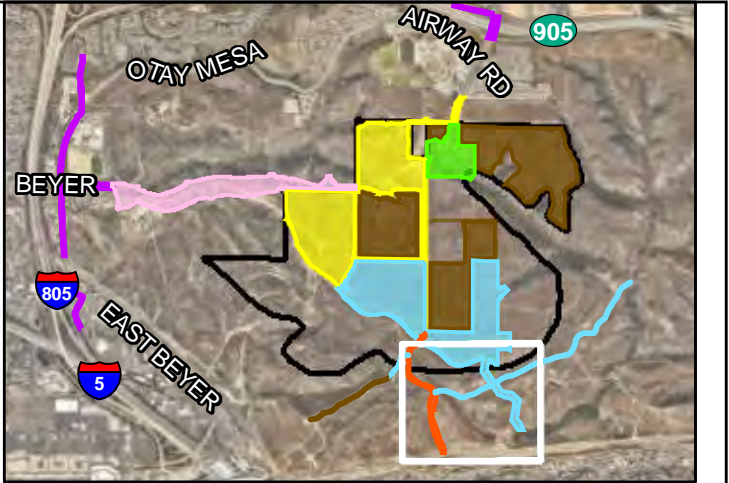
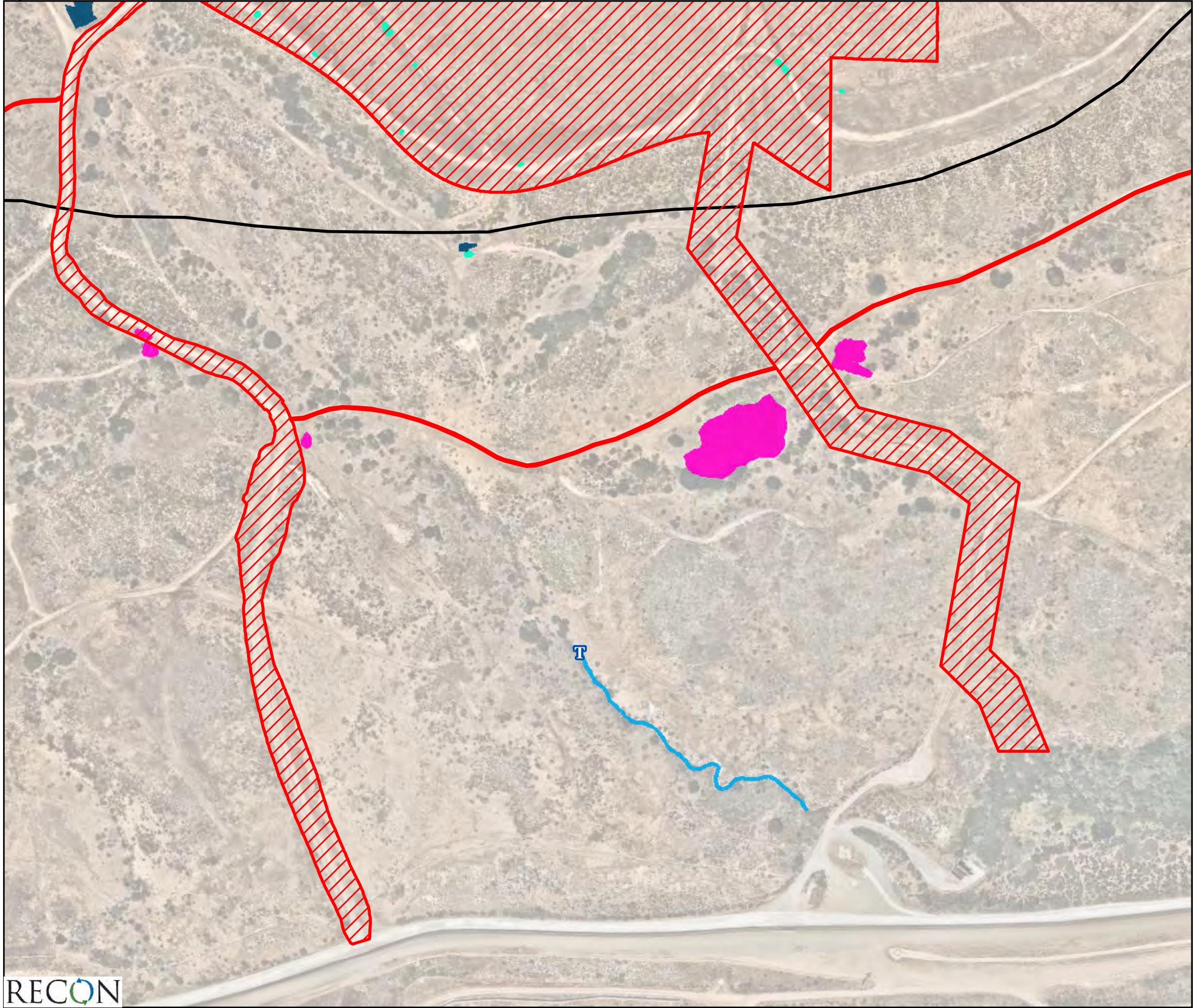
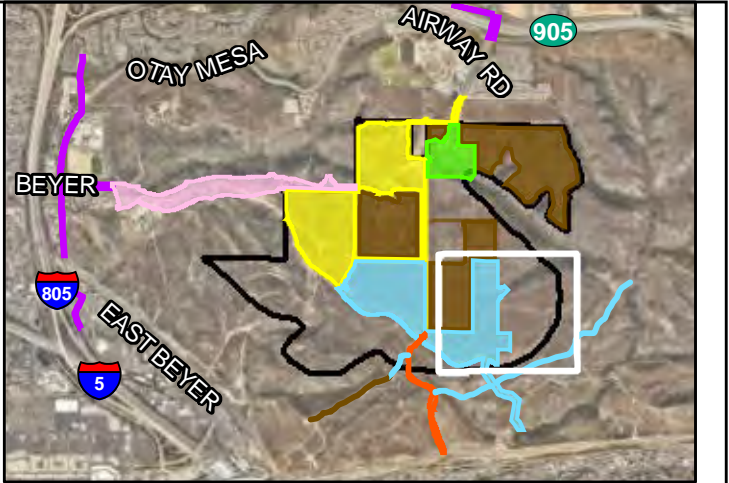
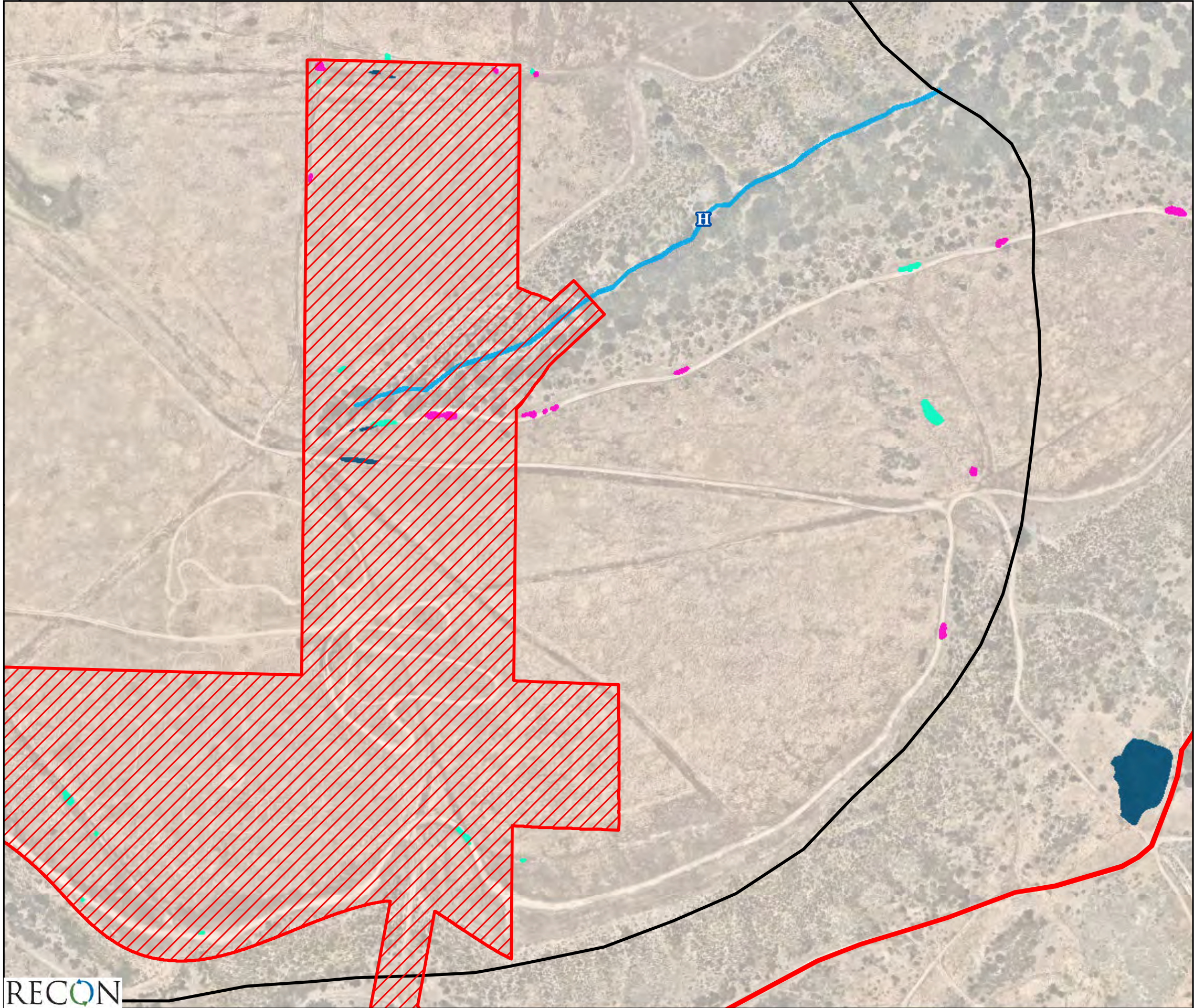


FIGURE 41.7  
Impacts to Potential USACE Waters of the U.S.





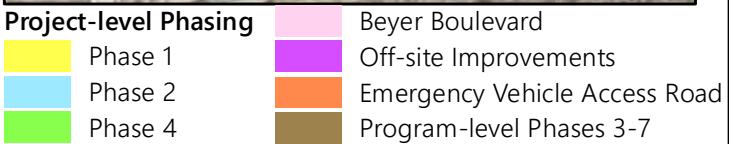
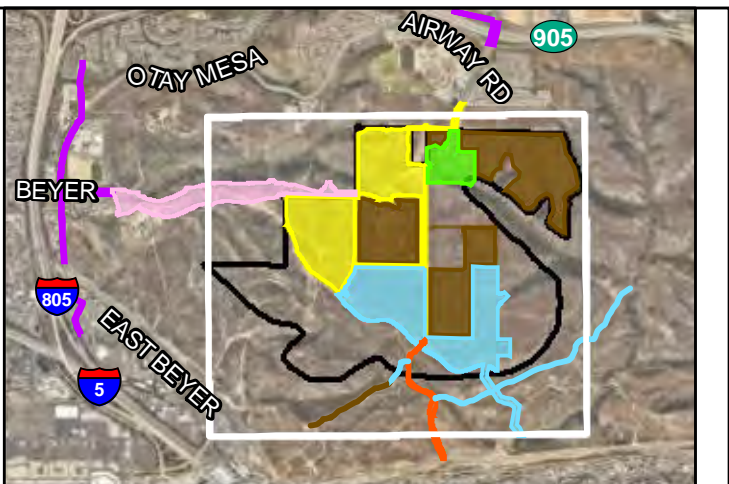
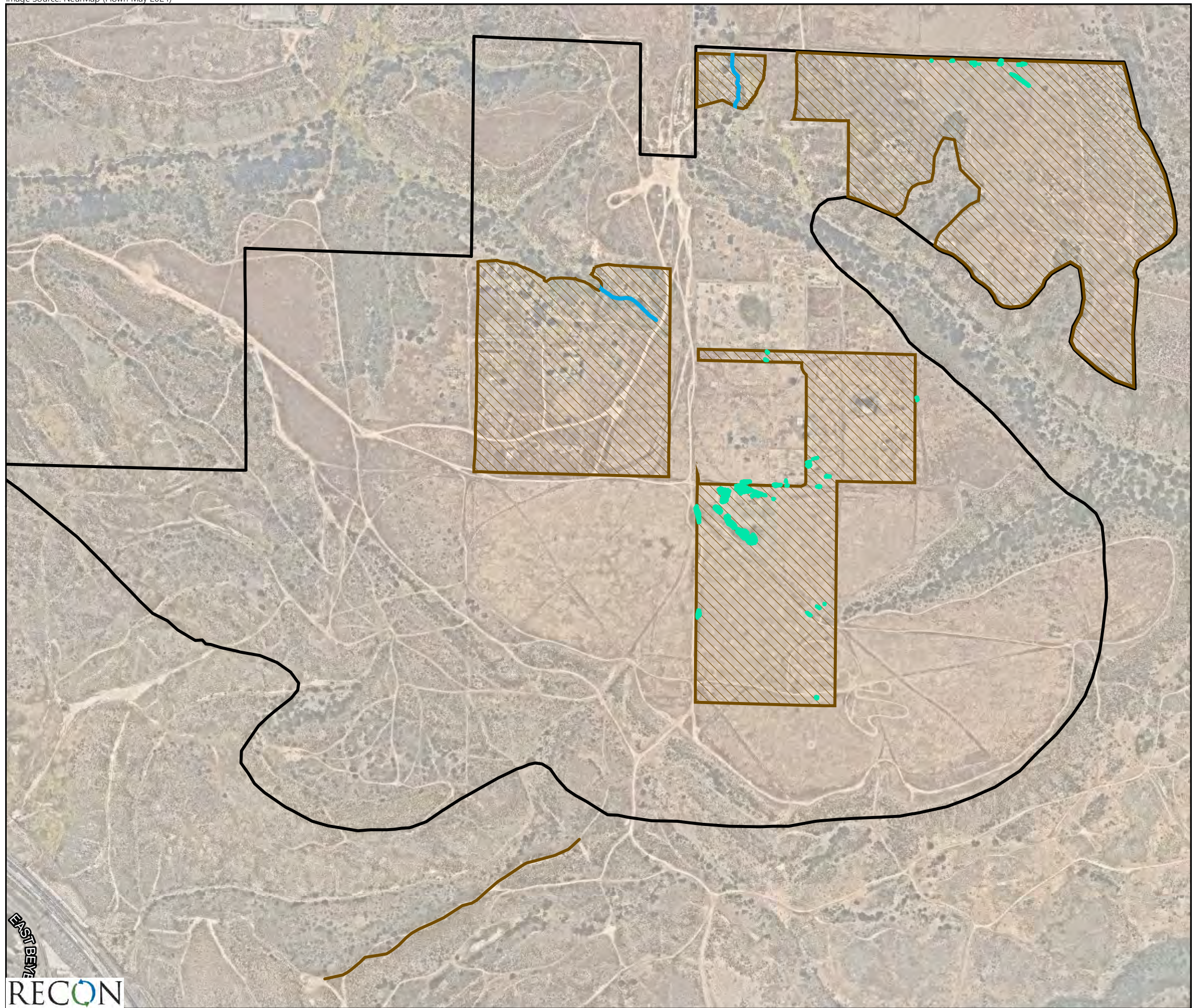
Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 1	<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 2	<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Off-site Improvements
<span style="background-color: limegreen; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 4	<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Impacts**
- Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access
- Waters of the U.S. (USACE)**
- Non-wetland Waters (Waters ID)
- Vernal Pool
- Vernal Pool with Fairy Shrimp
- Wetland



FIGURE 41.8  
Impacts to Potential USACE Waters of the U.S.





Specific Plan Boundary

**Program-level Impacts**

Phases 3-7

**Waters of the State (CDFW & RWQCB)**

Vernal Pool

Non-Wetland Waters

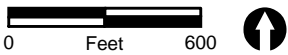


FIGURE 42.1  
Program-level Impacts to Potential  
CDFW & RWQCB Waters of the State



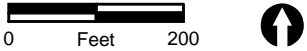
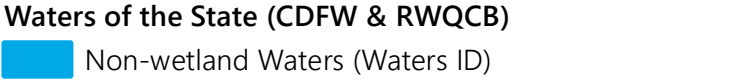
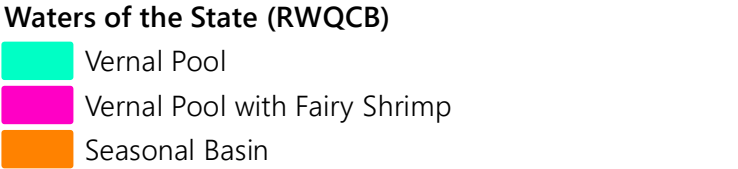
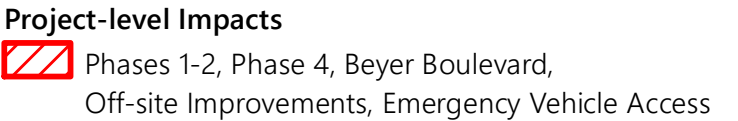
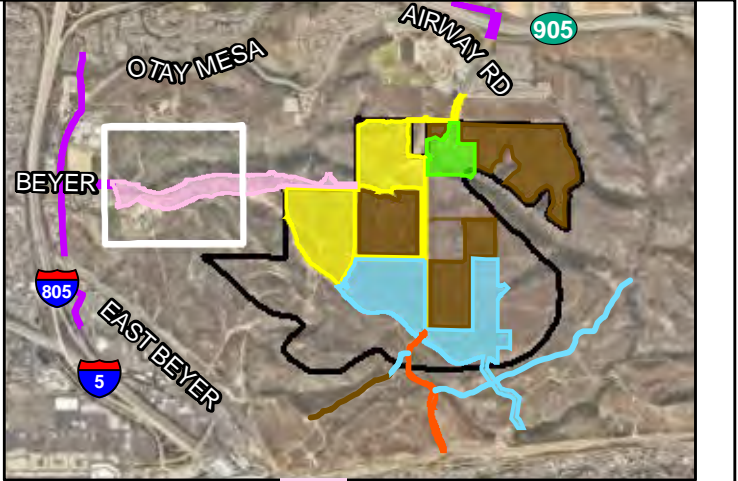
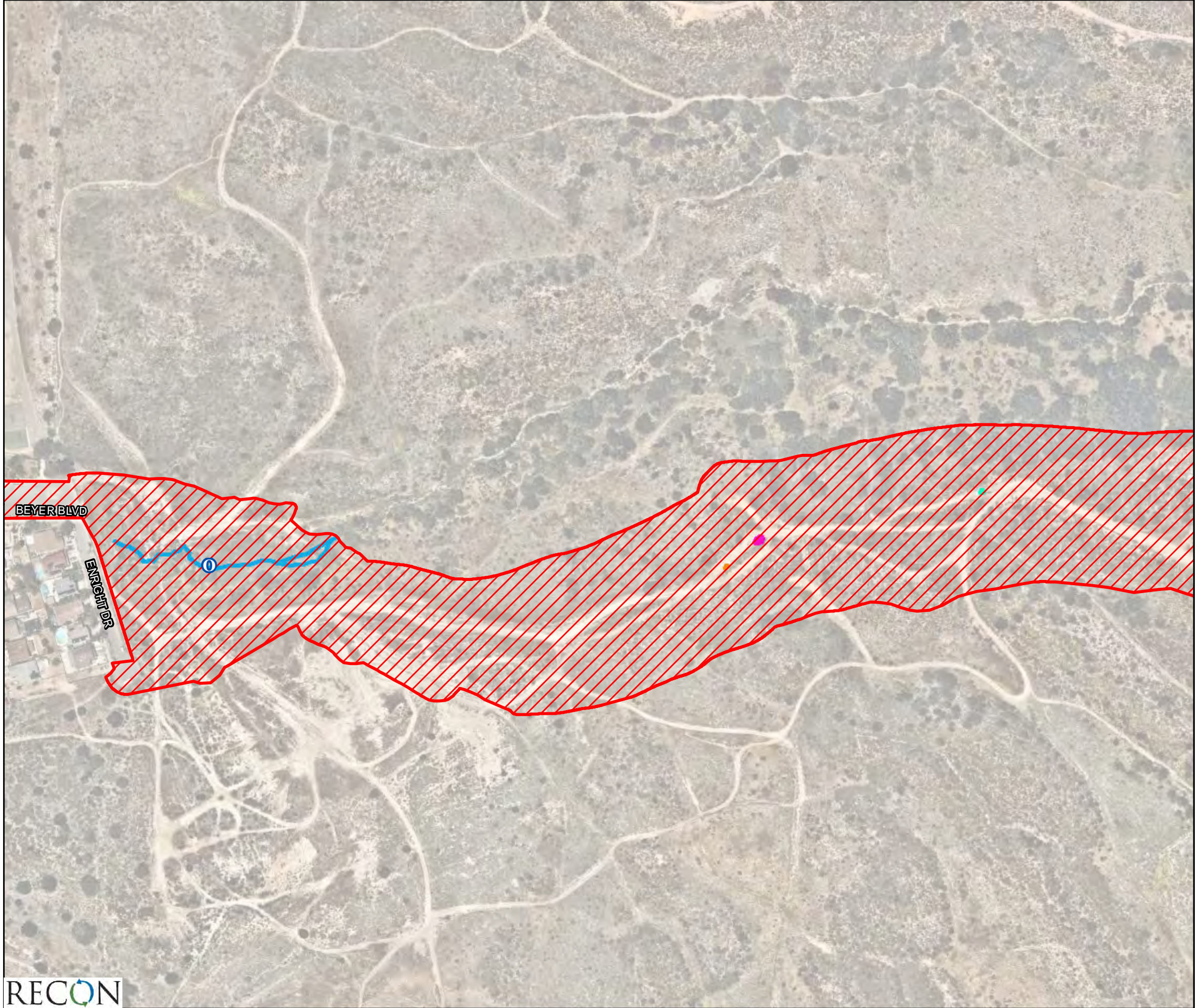
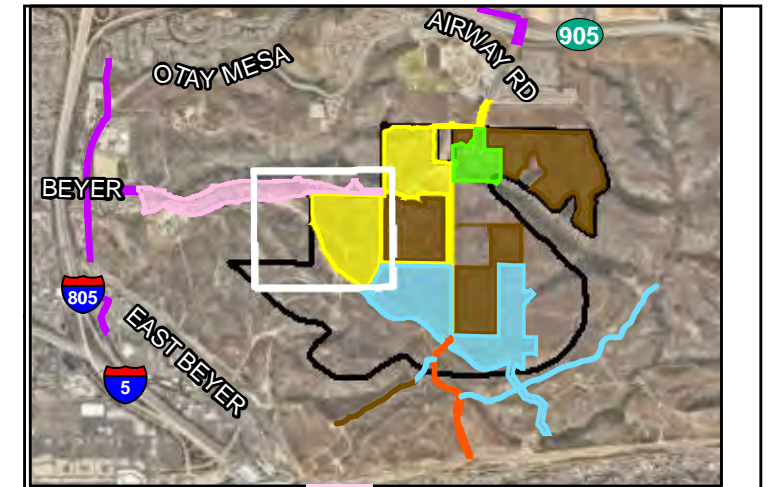
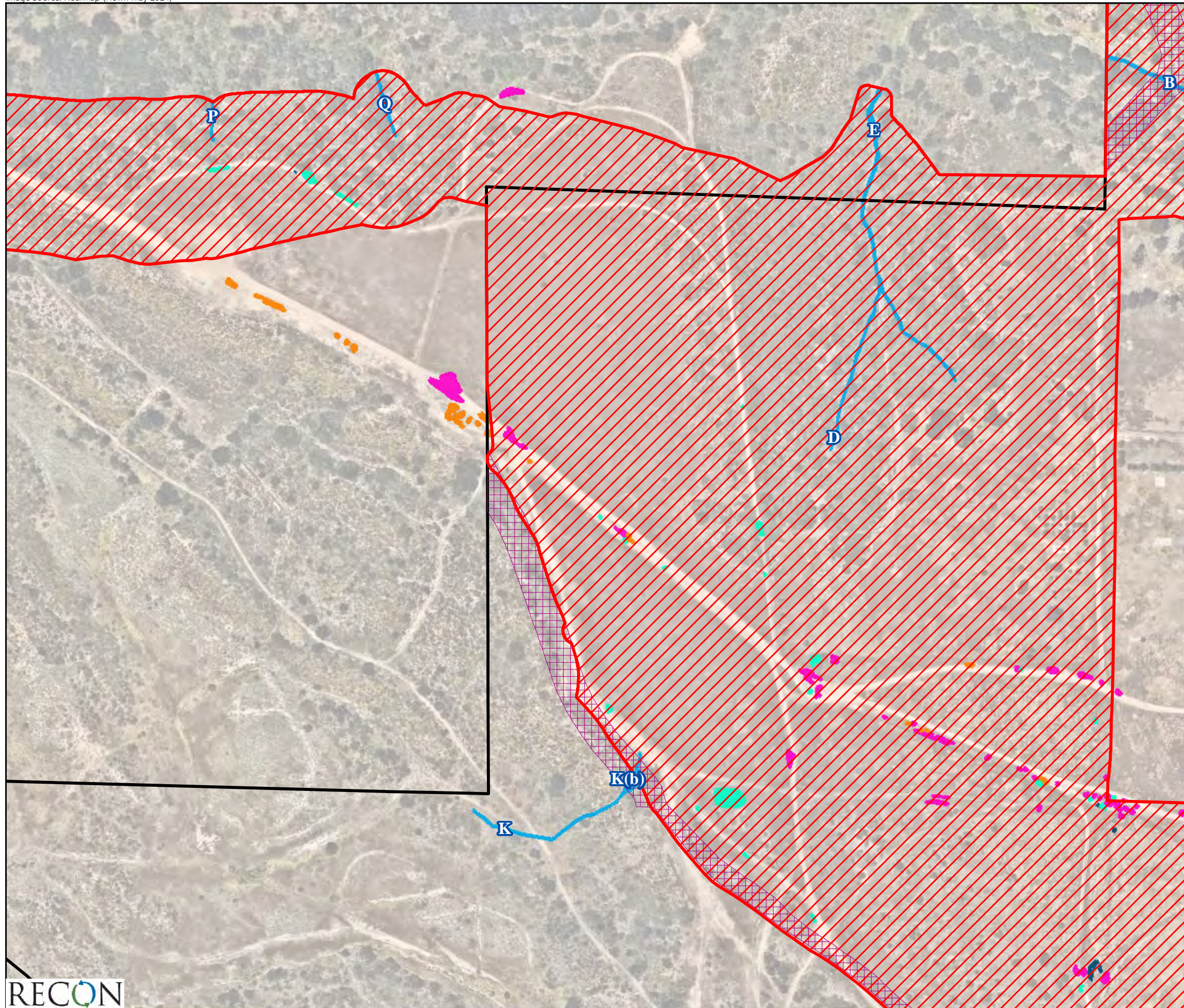


FIGURE 42.2  
Impacts to Potential  
CDFW & RWQCB Waters of the State





Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 1	<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 2	<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Off-site Improvements
<span style="background-color: limegreen; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 4	<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Impacts**
- Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access
- Brush Management Zone 2
- Waters of the State (RWQCB)**
- Vernal Pool
- Vernal Pool with Fairy Shrimp
- Seasonal Basin
- Wetland
- Waters of the State (CDFW & RWQCB)**
- Non-wetland Waters (Waters ID)

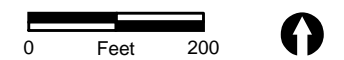


FIGURE 42.3  
Impacts to Potential  
CDFW & RWQCB Waters of the State



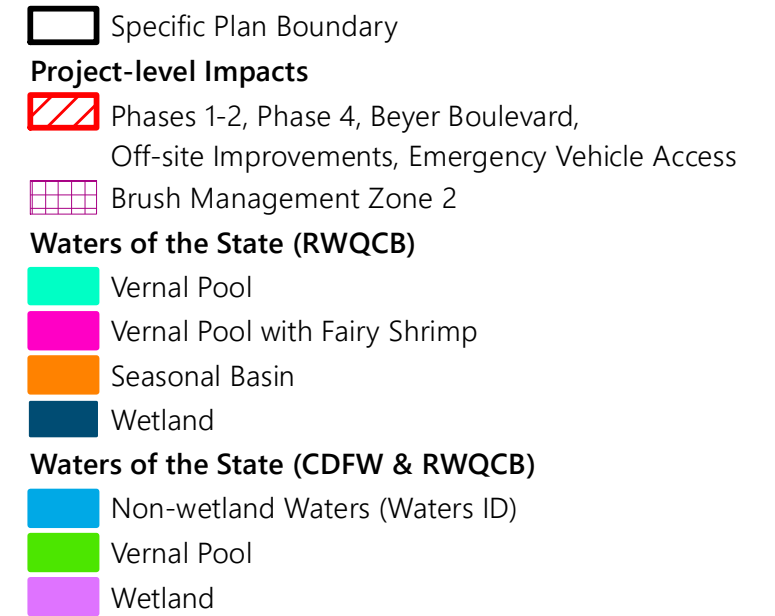
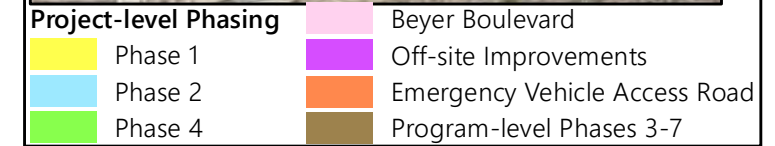
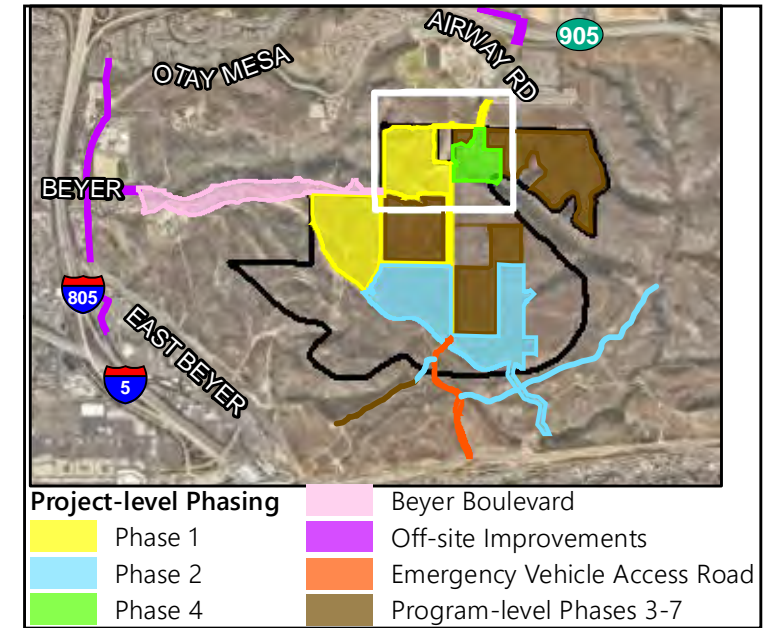
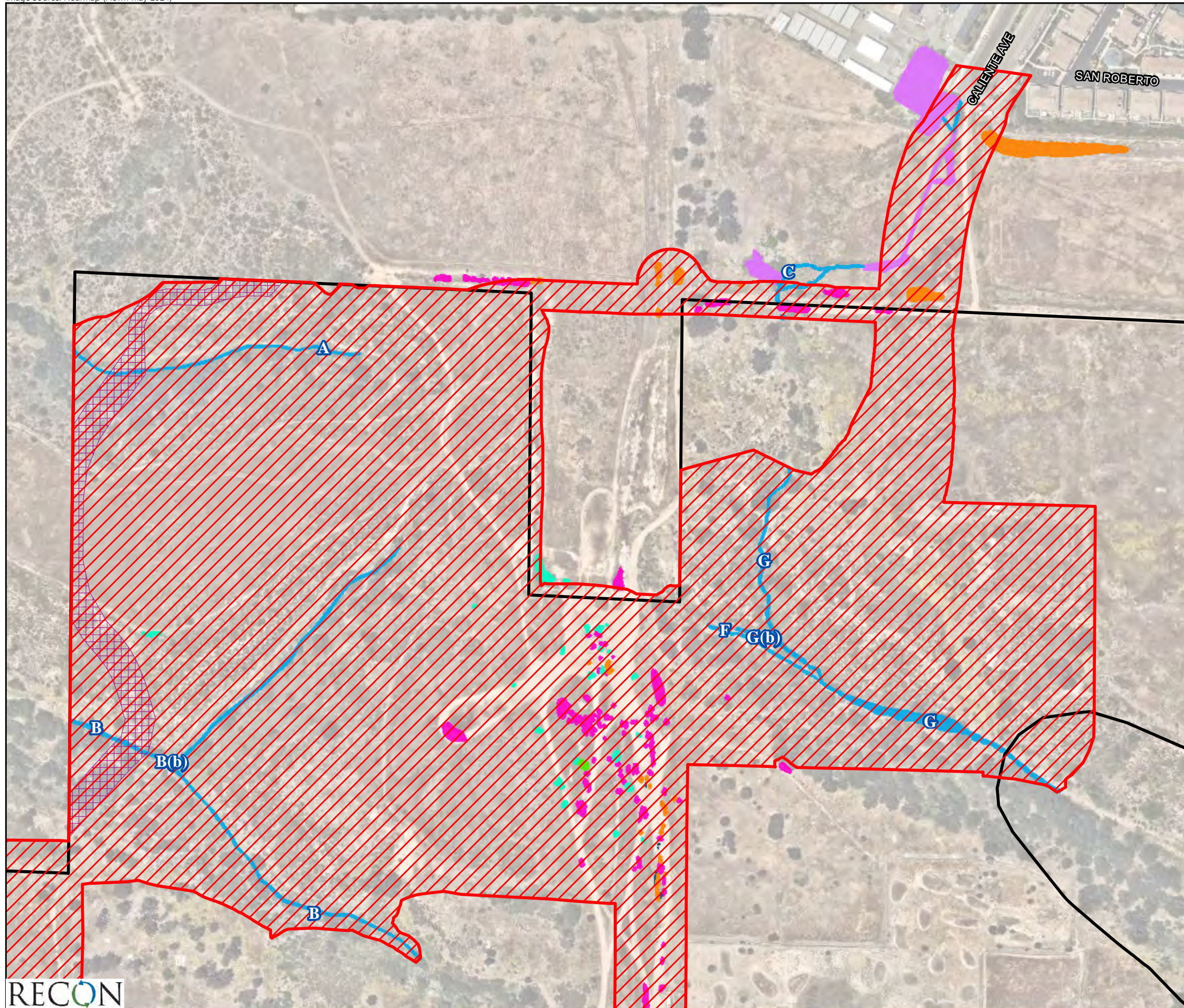
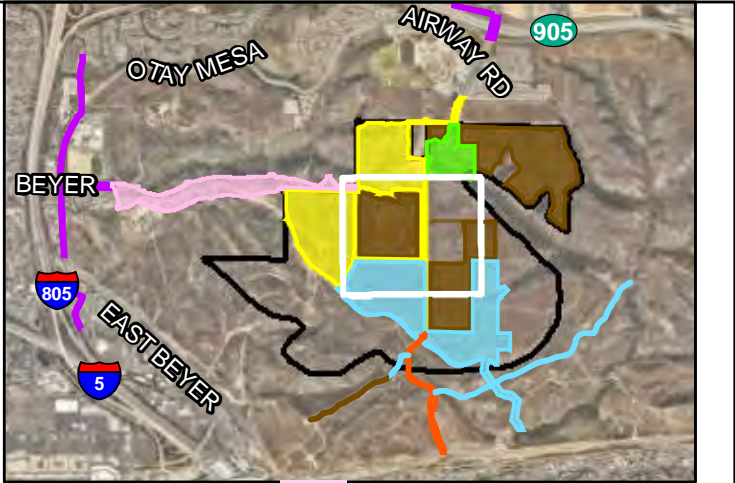
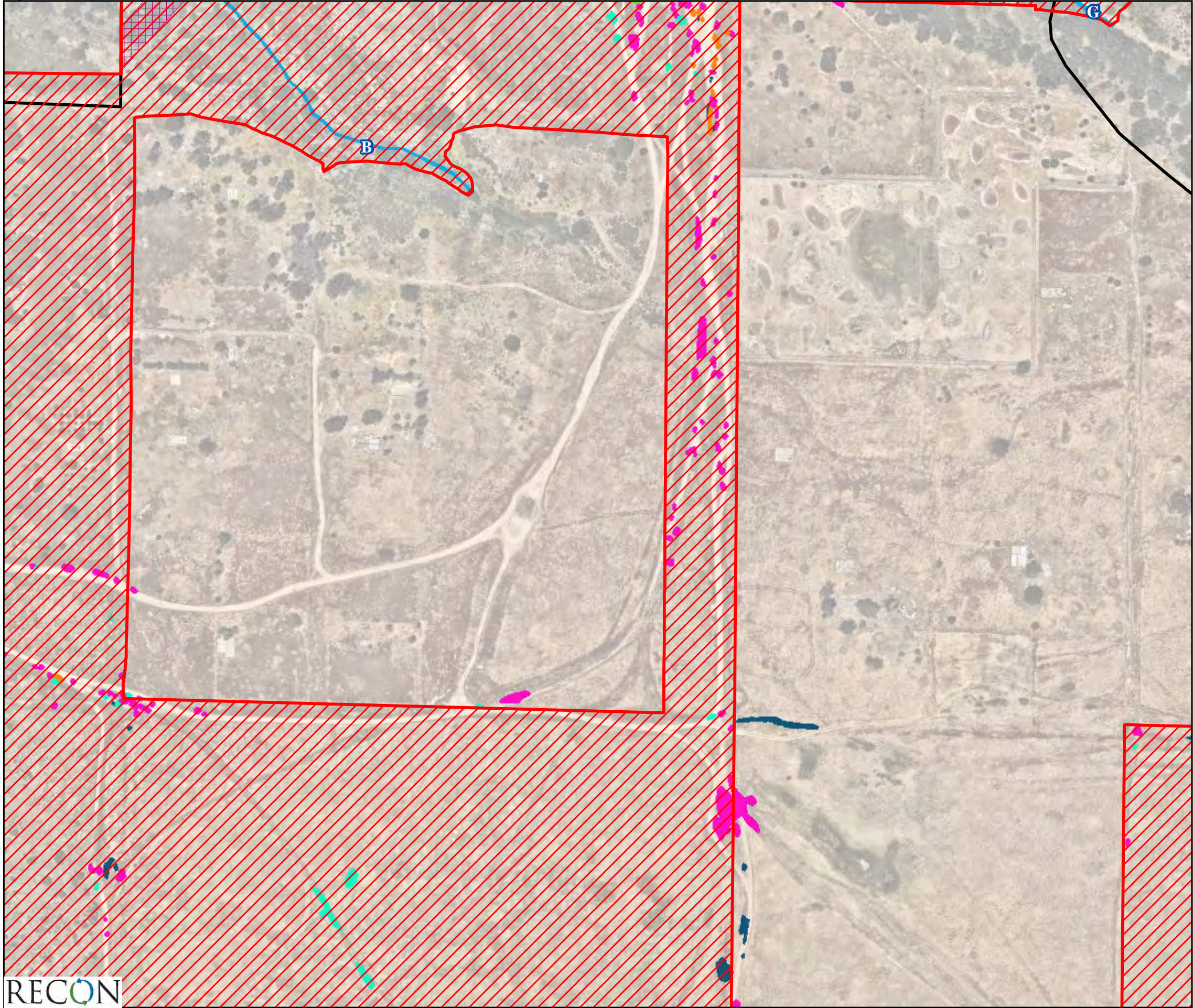


FIGURE 42.4  
Impacts to Potential  
CDFW & RWQCB Waters of the State





Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 1	<span style="background-color: lightpink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 2	<span style="background-color: magenta; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Off-site Improvements
<span style="background-color: limegreen; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 4	<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Program-level Phases 3-7

<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Specific Plan Boundary
<b>Project-level Impacts</b>	
<span style="background-color: red; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access
<span style="background-color: lightpink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Brush Management Zone 2
<b>Waters of the State (RWQCB)</b>	
<span style="background-color: cyan; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Vernal Pool
<span style="background-color: magenta; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Vernal Pool with Fairy Shrimp
<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Seasonal Basin
<span style="background-color: darkblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Wetland
<b>Waters of the State (CDFW &amp; RWQCB)</b>	
<span style="background-color: blue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Non-wetland Waters (Waters ID)
<span style="background-color: limegreen; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Vernal Pool

0 Feet 200



FIGURE 42.5  
Impacts to Potential  
CDFW & RWQCB Waters of the State



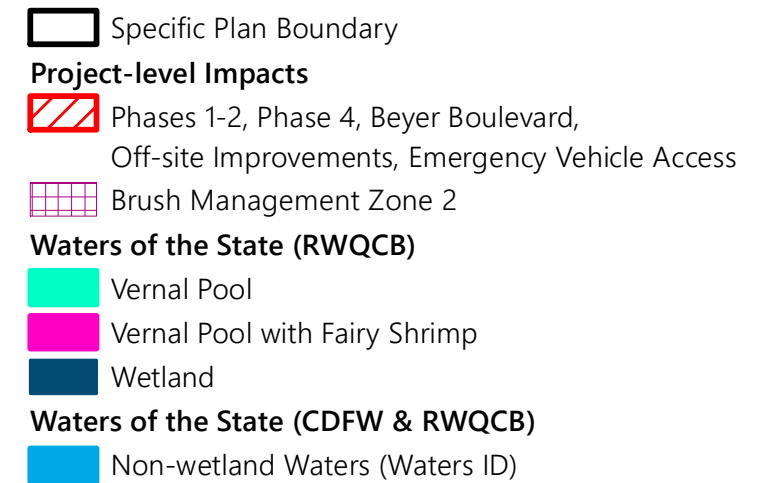
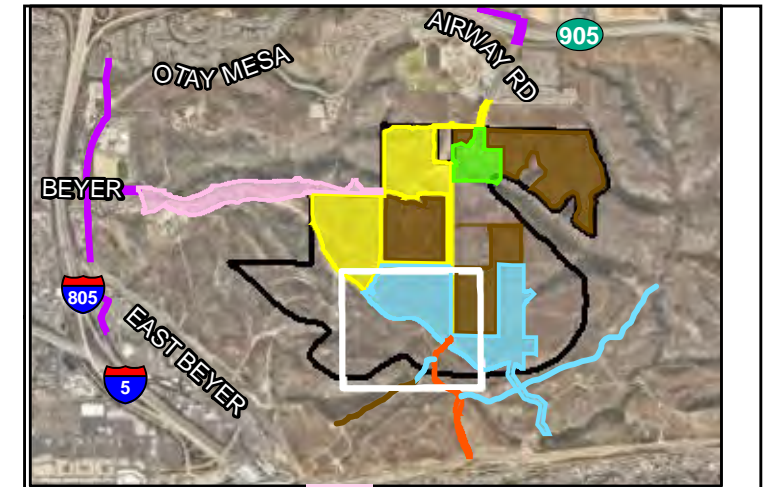
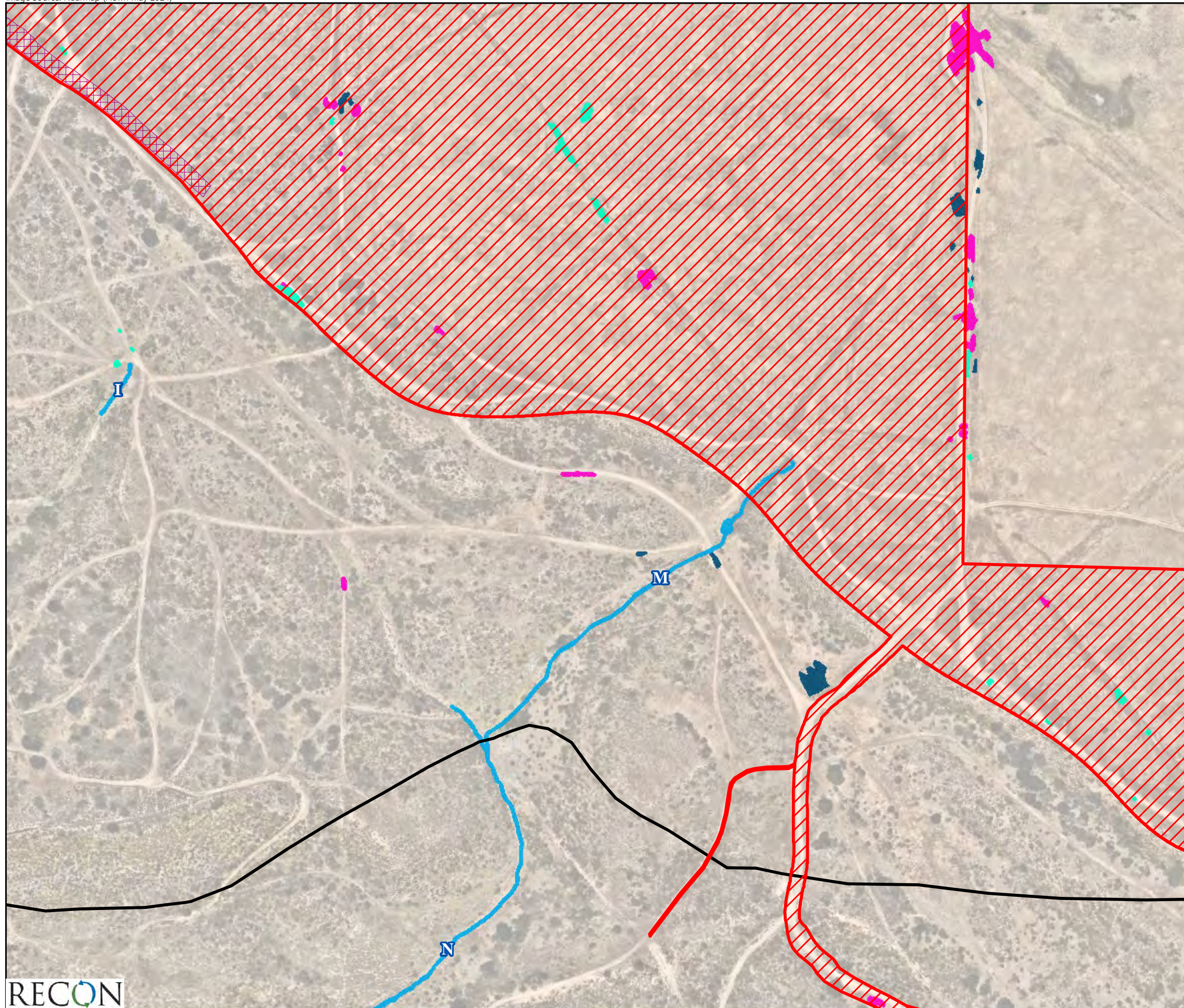


FIGURE 42.6  
Impacts to Potential  
CDFW & RWQCB Waters of the State



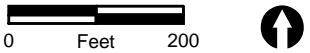
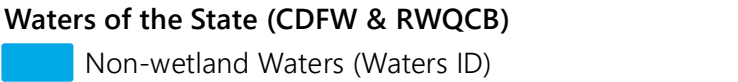
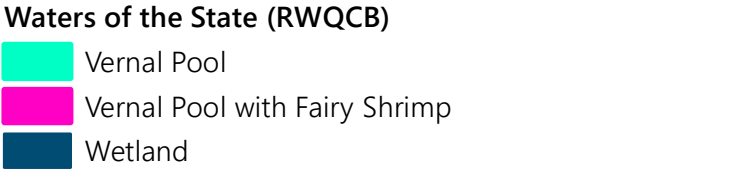
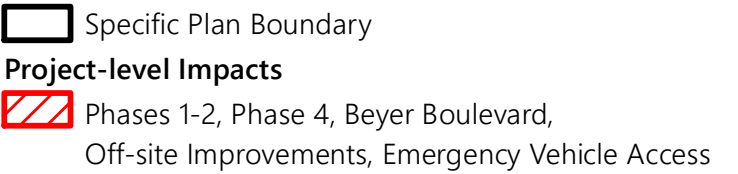
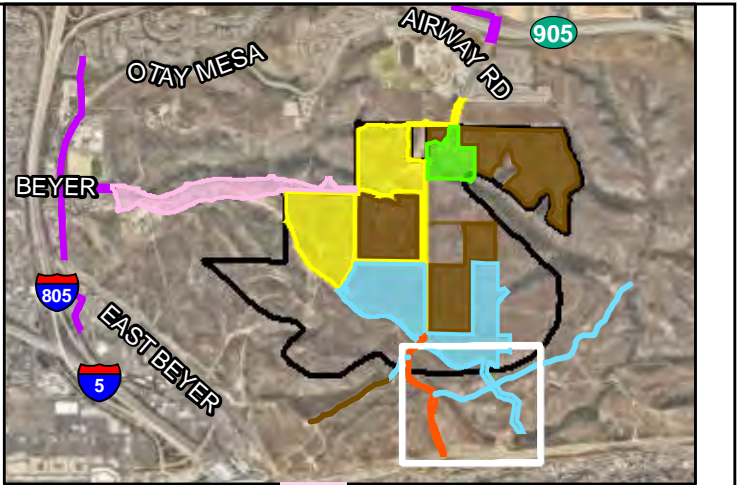
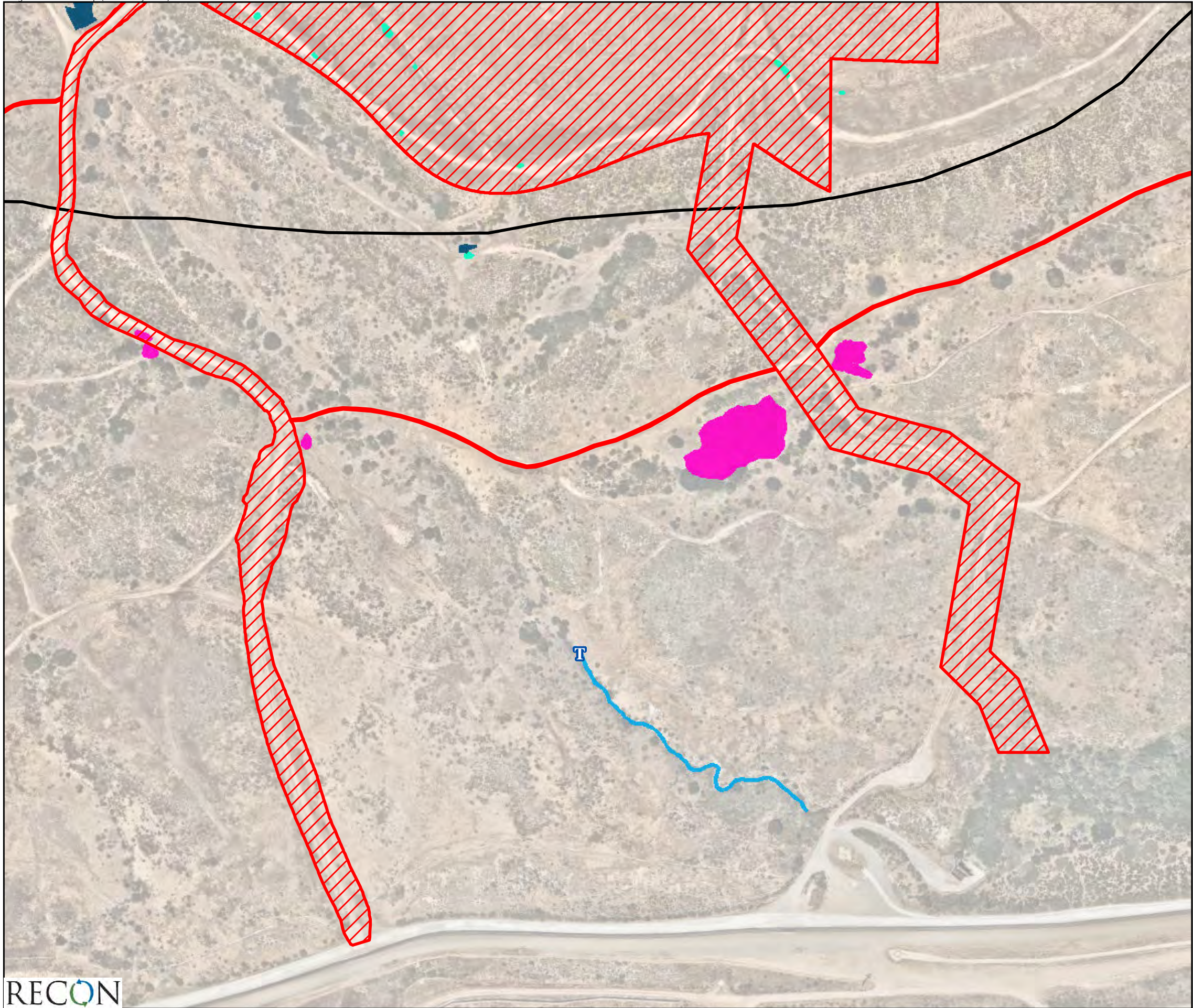
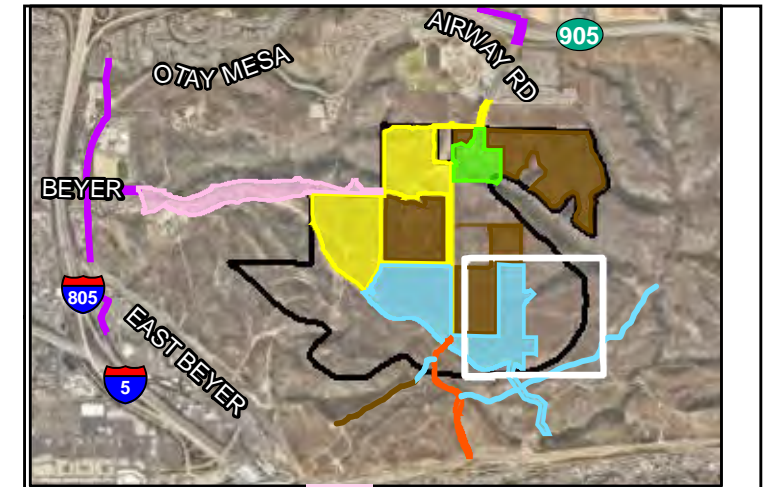
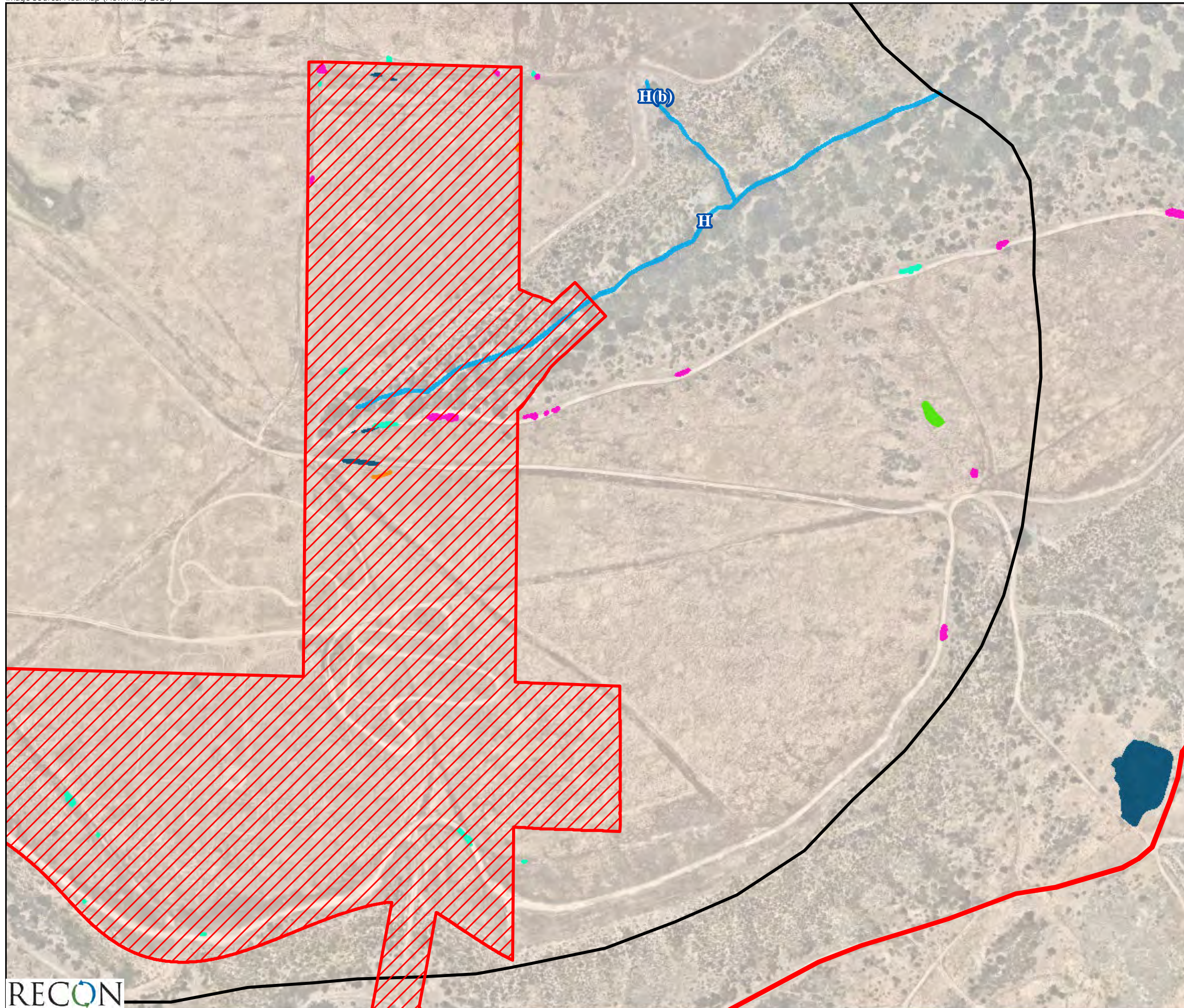


FIGURE 42.7  
Impacts to Potential  
CDFW & RWQCB Waters of the State





Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black;"> </span> Phase 1	<span style="background-color: pink; border: 1px solid black;"> </span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black;"> </span> Phase 2	<span style="background-color: purple; border: 1px solid black;"> </span> Off-site Improvements
<span style="background-color: lightgreen; border: 1px solid black;"> </span> Phase 4	<span style="background-color: orange; border: 1px solid black;"> </span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black;"> </span> Program-level Phases 3-7

Specific Plan Boundary

**Project-level Impacts**

Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access

**Waters of the State (RWQCB)**

- Vernal Pool
- Vernal Pool with Fairy Shrimp
- Seasonal Basin
- Wetland

**Waters of the State (CDFW & RWQCB)**

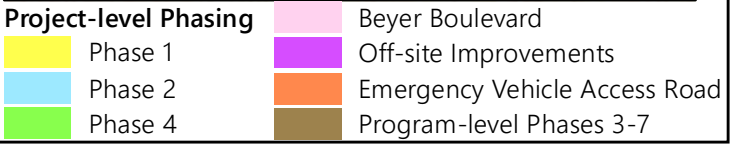
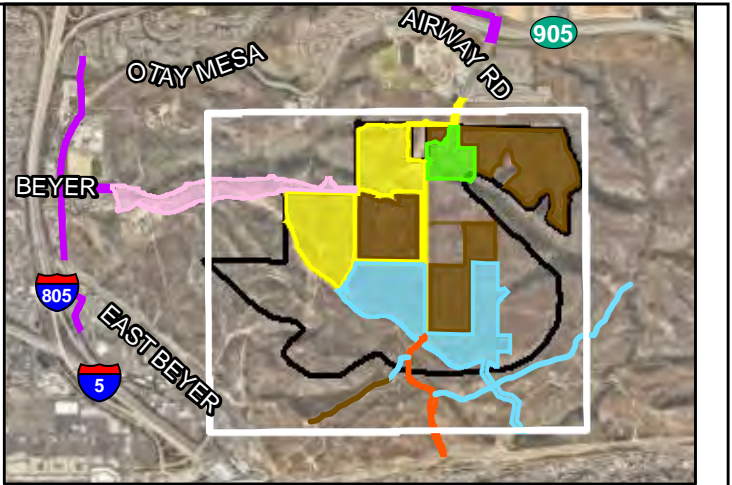
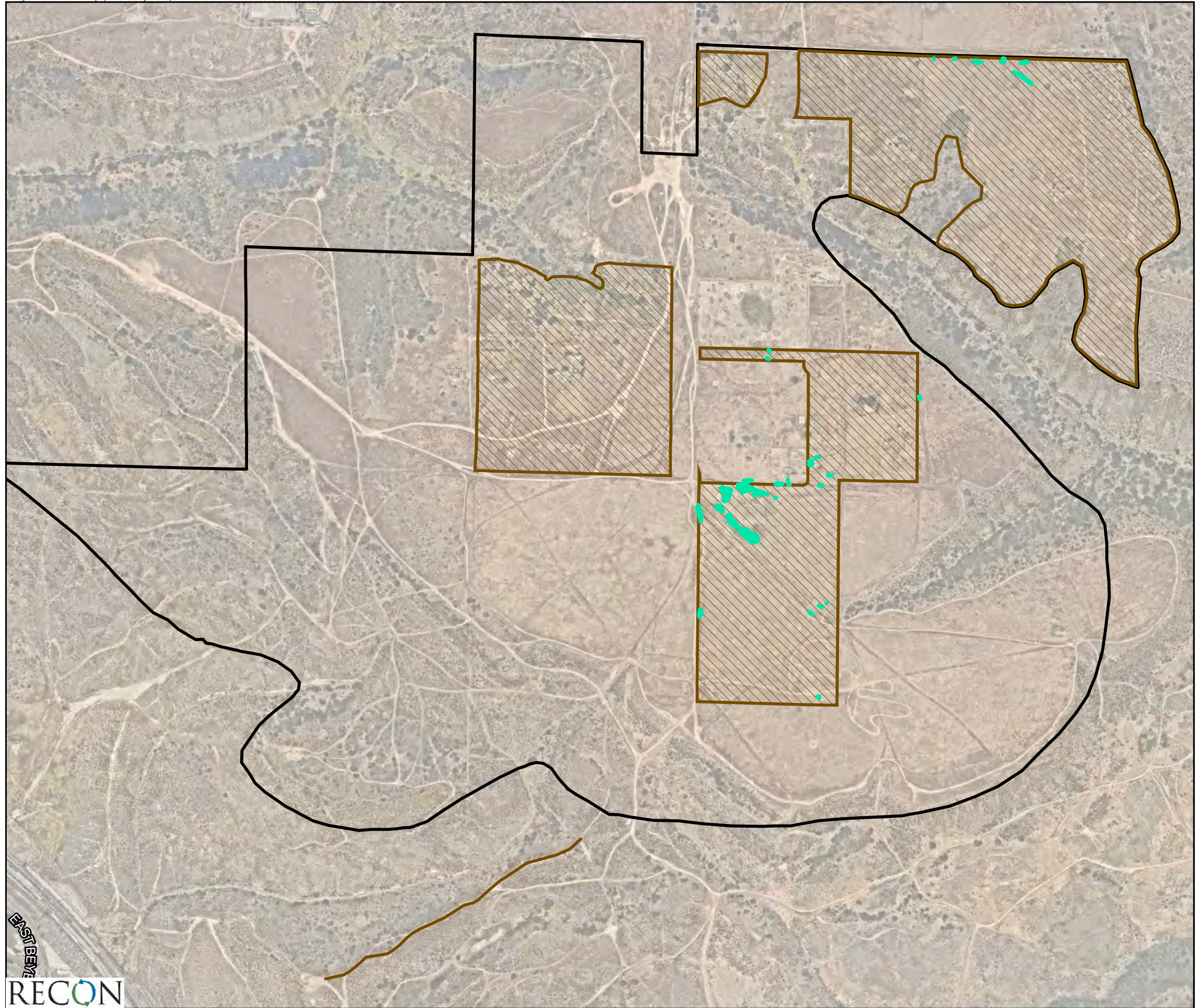
- Non-wetland Waters (Waters ID)
- Vernal Pool

0 Feet 200



FIGURE 42.8  
Impacts to Potential  
CDFW & RWQCB Waters of the State





Specific Plan Boundary

**Program-level Impacts**

Phases 3-7

**City of San Diego Wetlands**

Vernal Pool

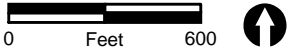


FIGURE 43.1  
Program-level Impacts to  
City of San Diego Wetlands



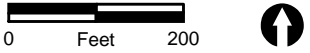
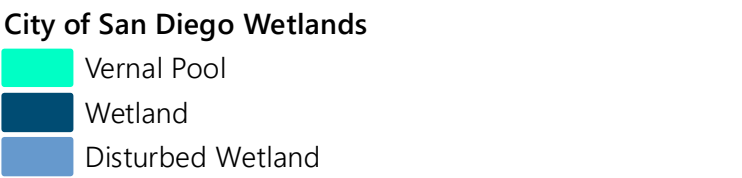
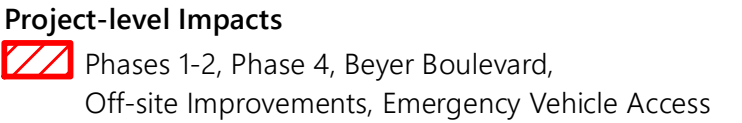
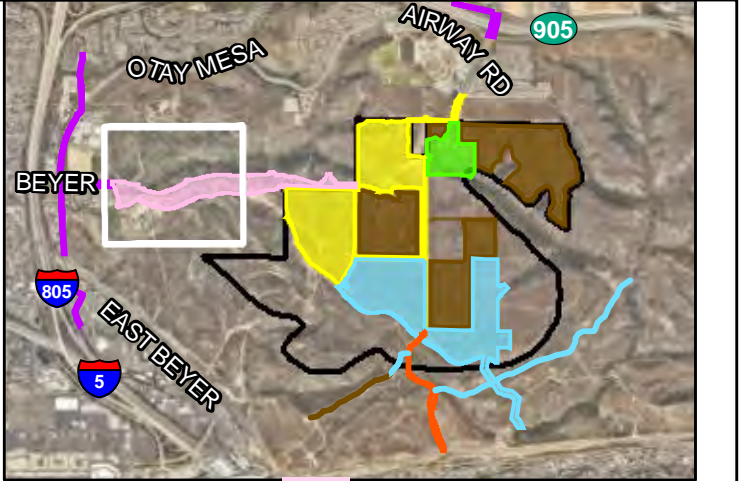
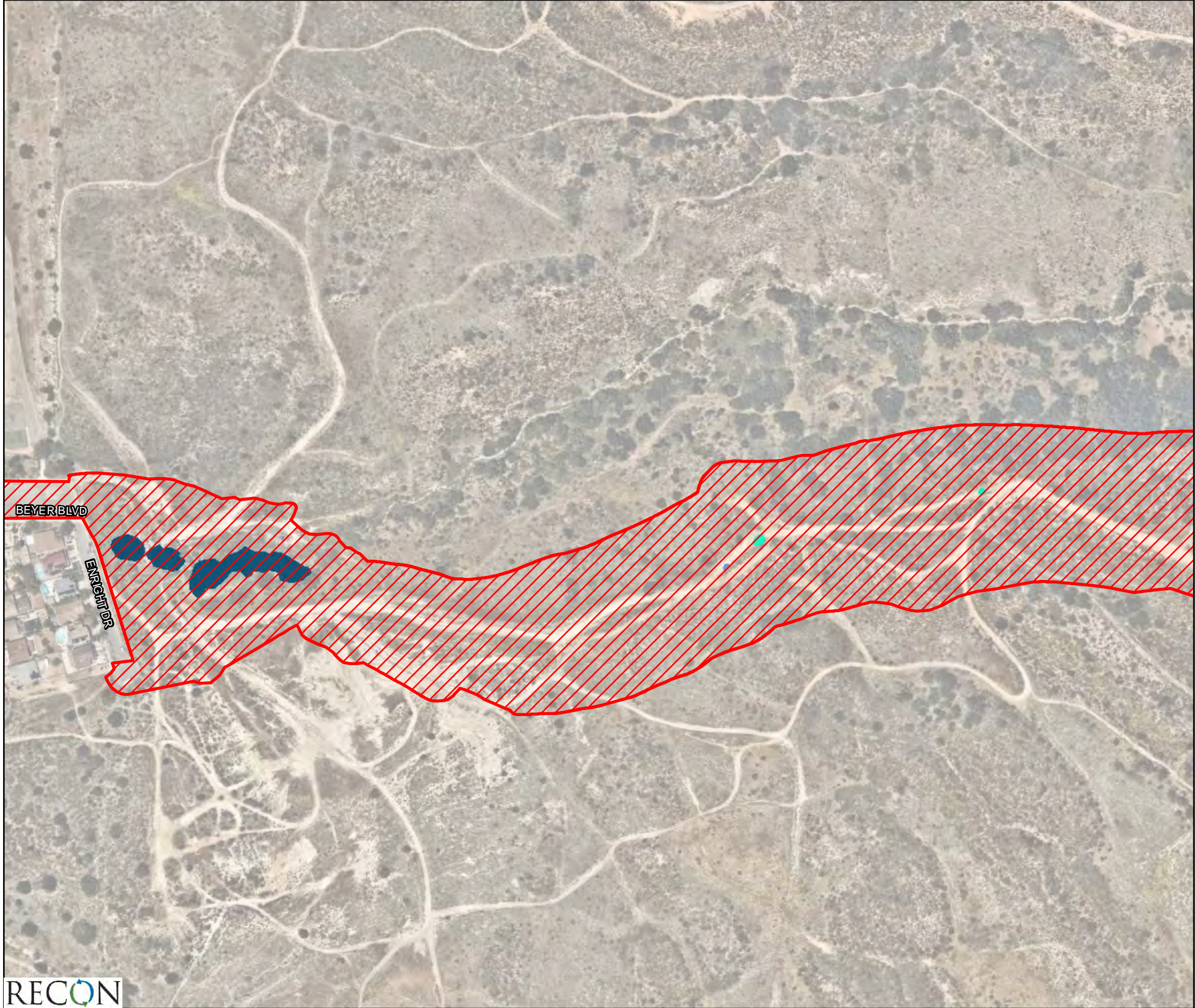
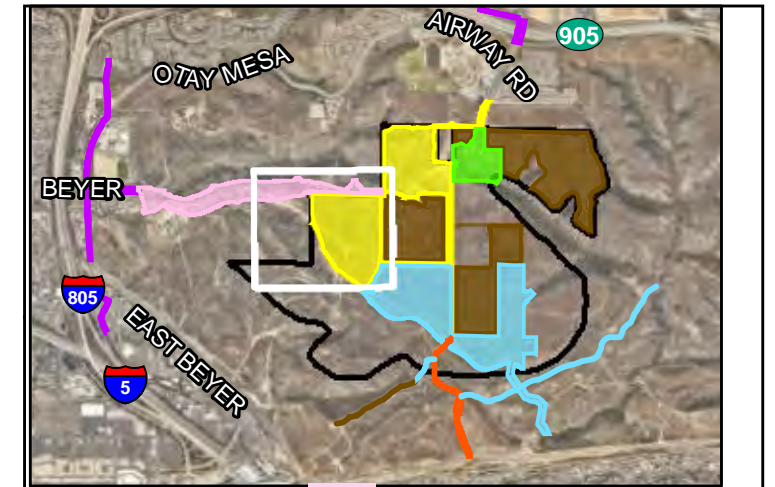
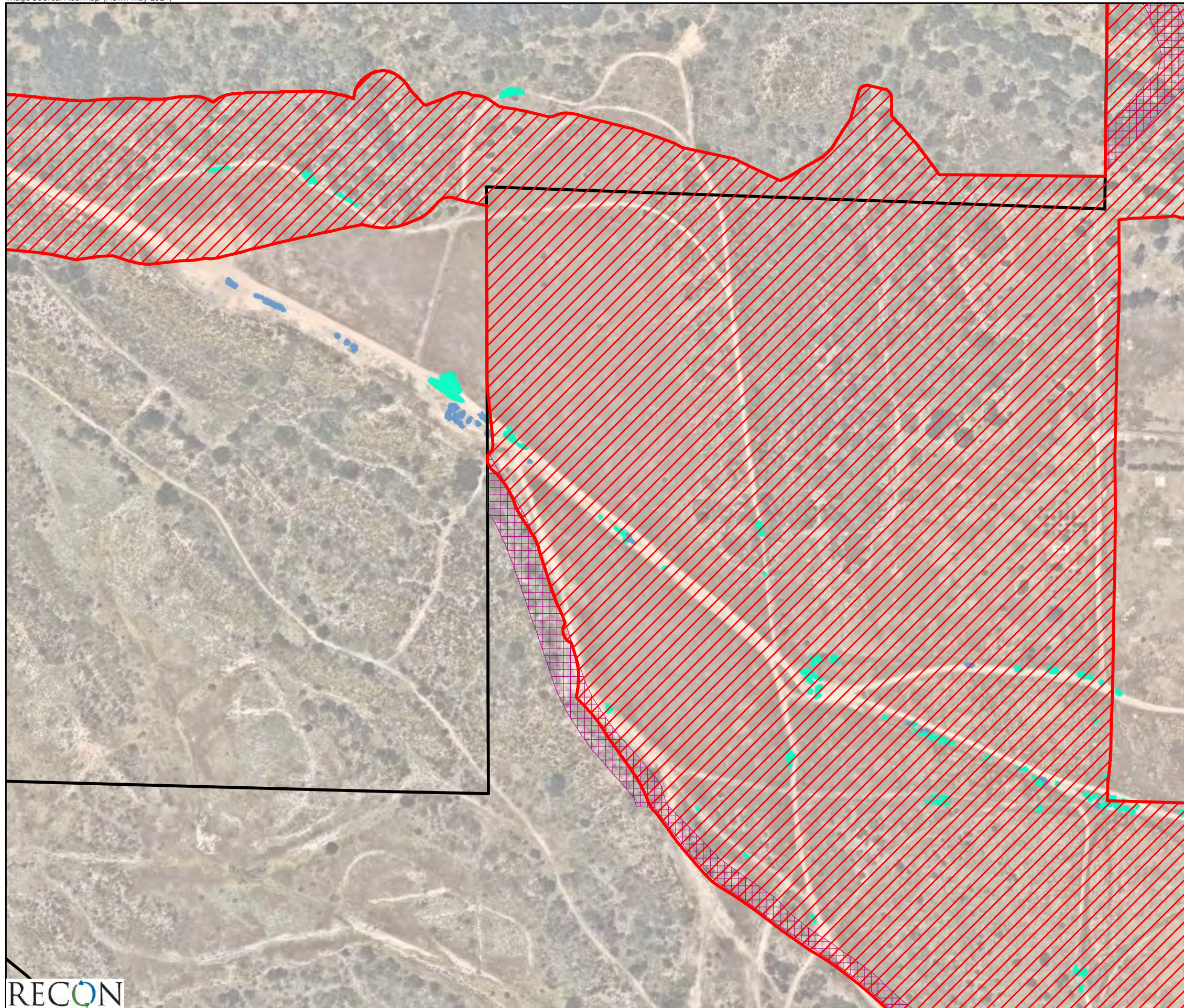


FIGURE 43.2  
Impacts to City of San Diego Wetlands





Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 1	<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 2	<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Off-site Improvements
<span style="background-color: green; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 4	<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Program-level Phases 3-7

- Specific Plan Boundary
- Project-level Impacts**
- Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access
- Brush Management Zone 2
- City of San Diego Wetlands**
- Vernal Pool
- Disturbed Wetland

0 Feet 200



FIGURE 43.3  
Impacts to City of San Diego Wetlands



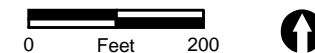
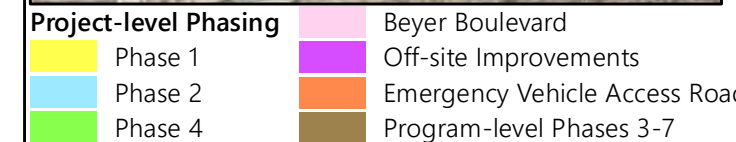
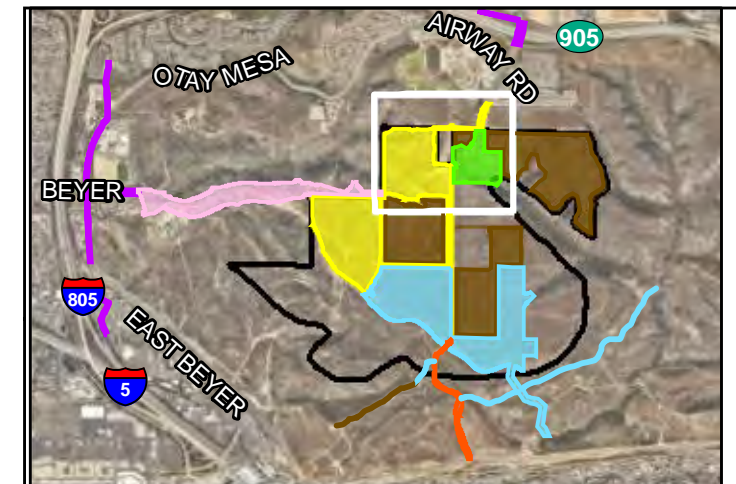
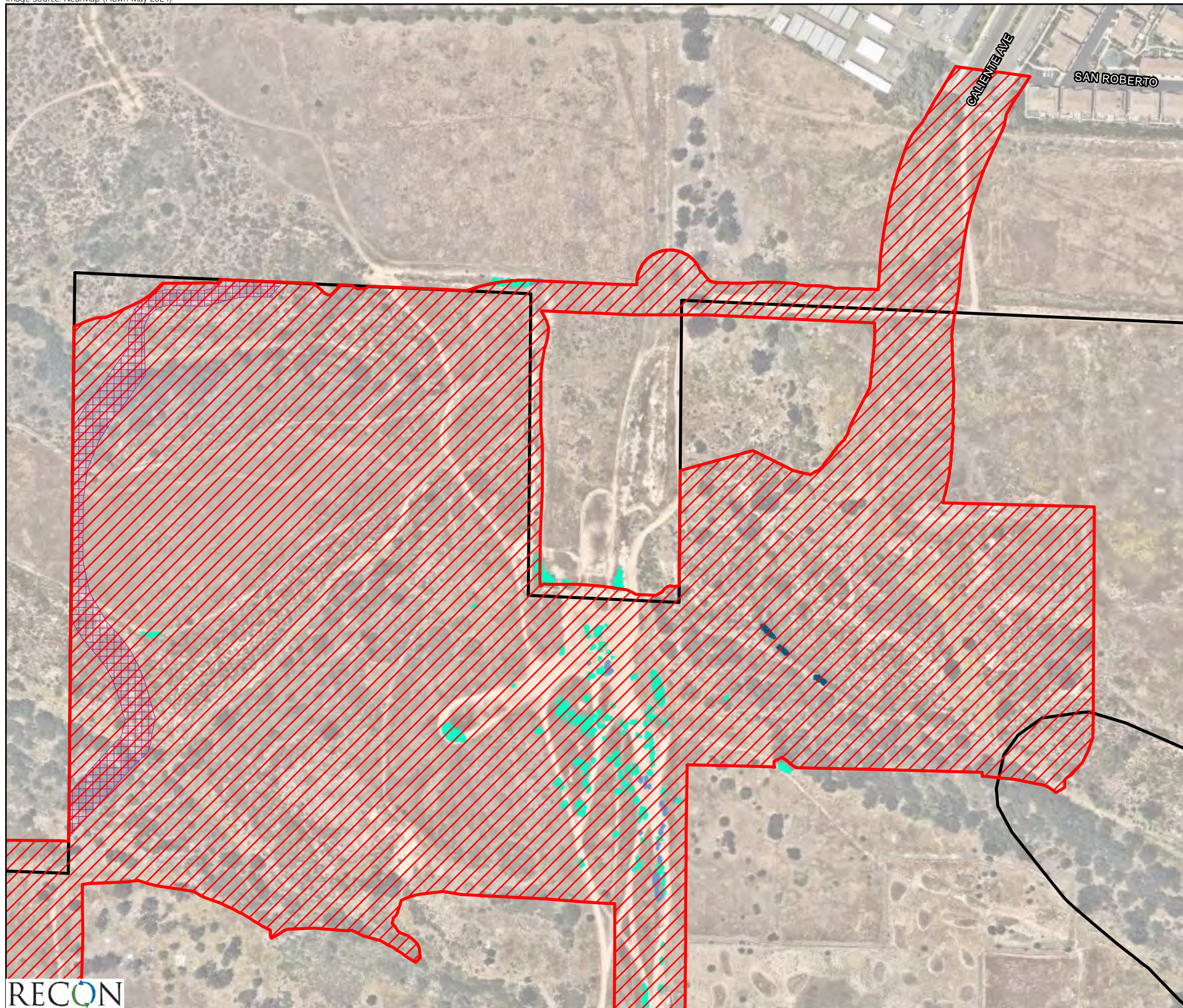


FIGURE 43.4  
Impacts to City of San Diego Wetlands



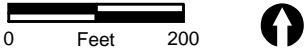
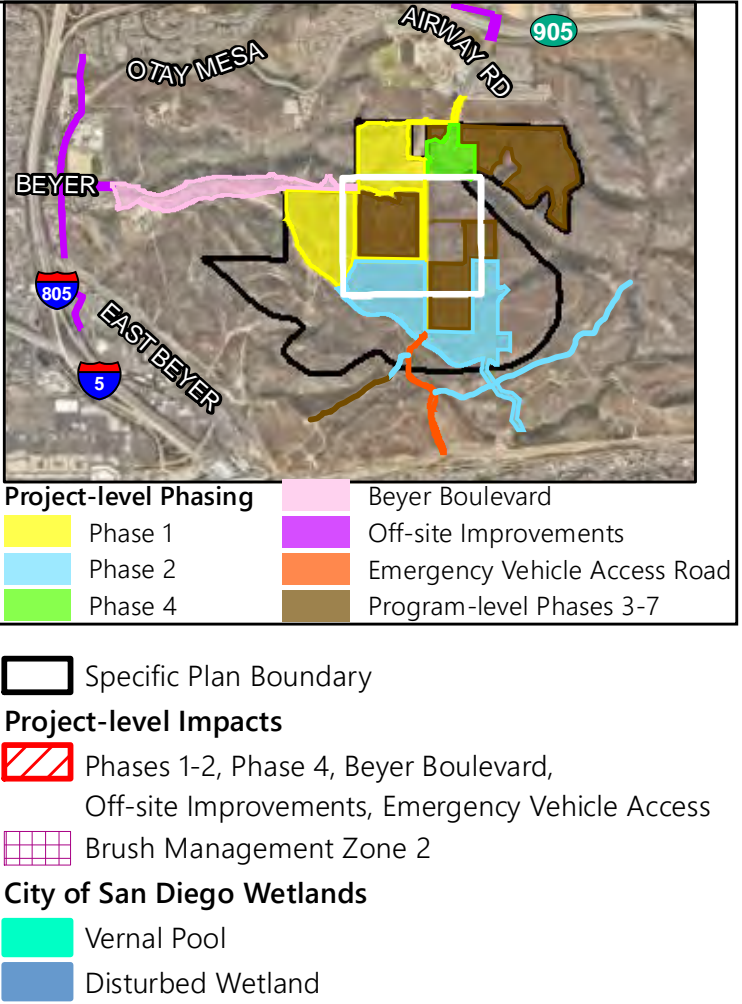
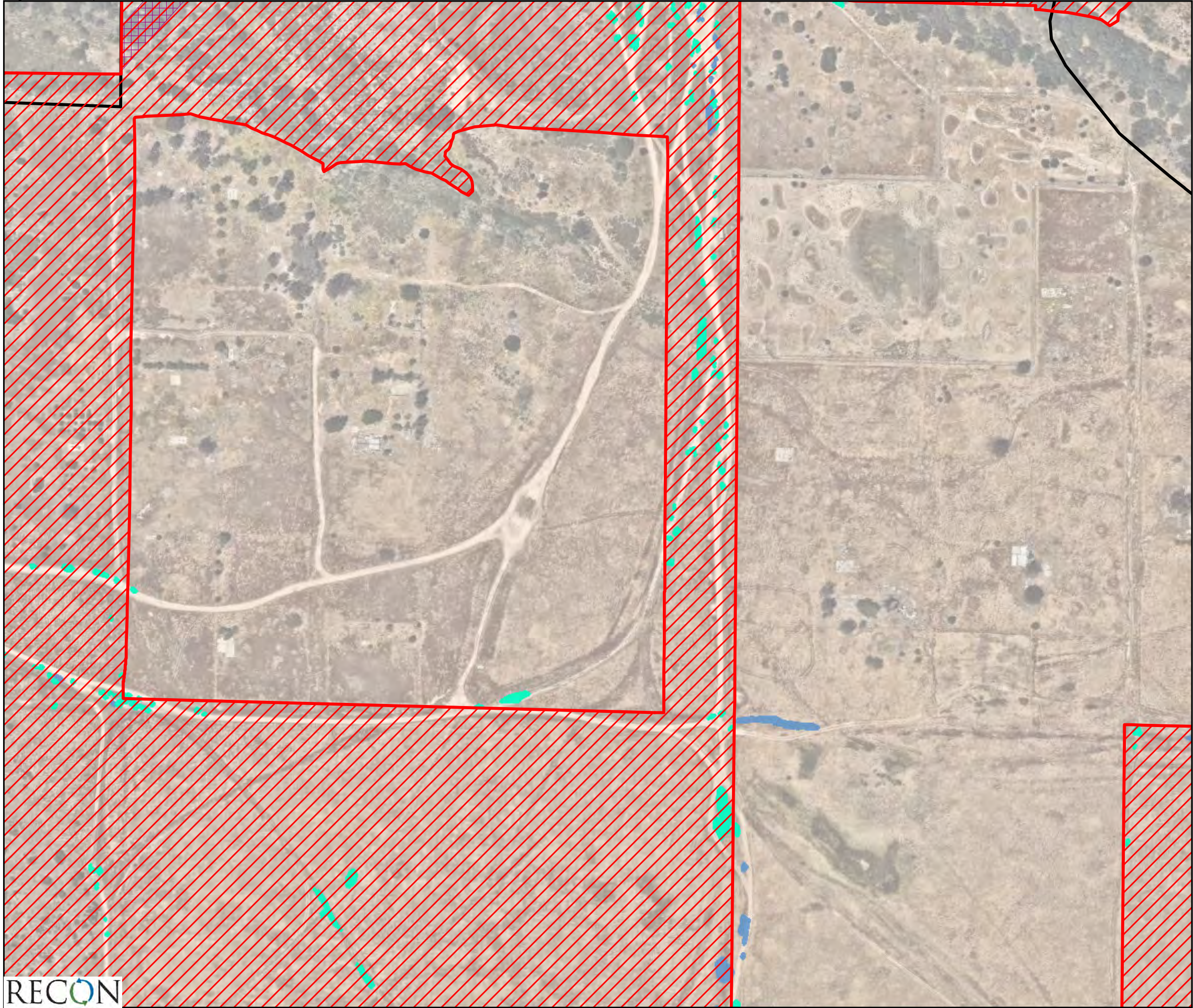
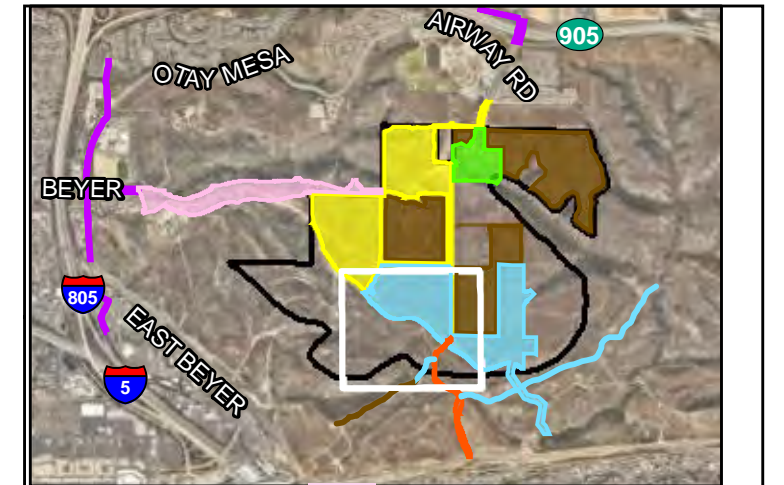
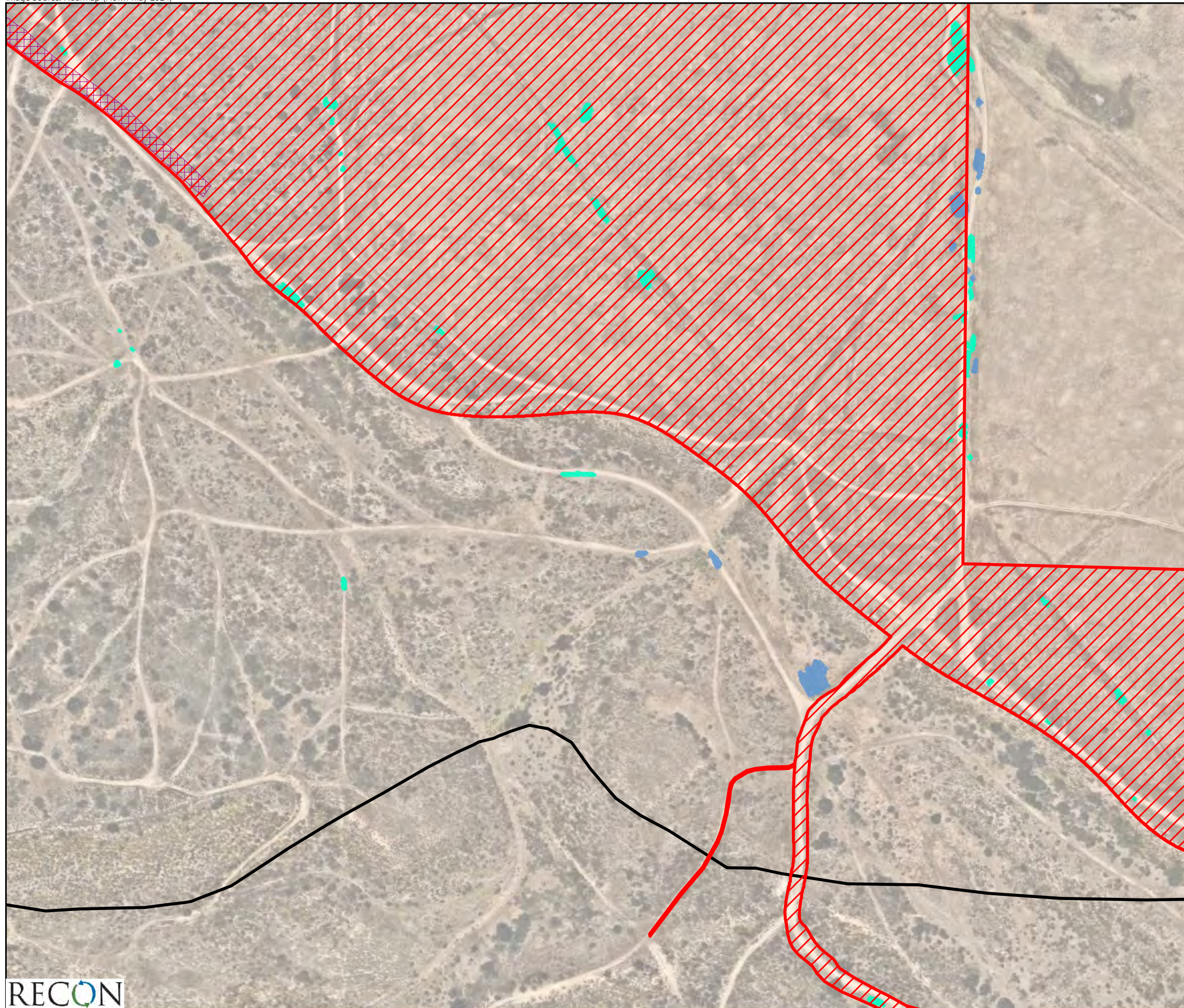


FIGURE 43.5  
Impacts to City of San Diego Wetlands





Project-level Phasing	
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 1	<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Beyer Boulevard
<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 2	<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Off-site Improvements
<span style="background-color: limegreen; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Phase 4	<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Emergency Vehicle Access Road
	<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Program-level Phases 3-7

Specific Plan Boundary

**Project-level Impacts**

Phases 1-2, Phase 4, Beyer Boulevard, Off-site Improvements, Emergency Vehicle Access

Brush Management Zone 2

**City of San Diego Wetlands**

Vernal Pool

Disturbed Wetland

0 Feet 200



FIGURE 43.6  
Impacts to City of San Diego Wetlands



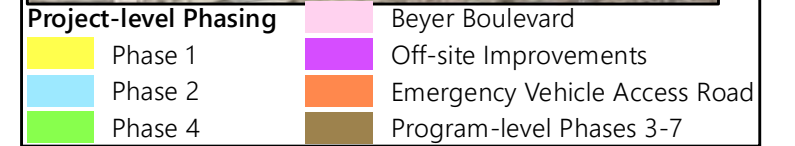
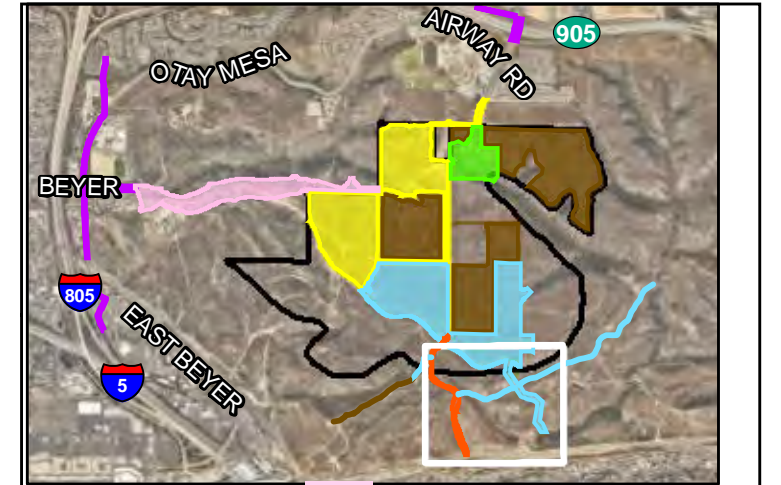
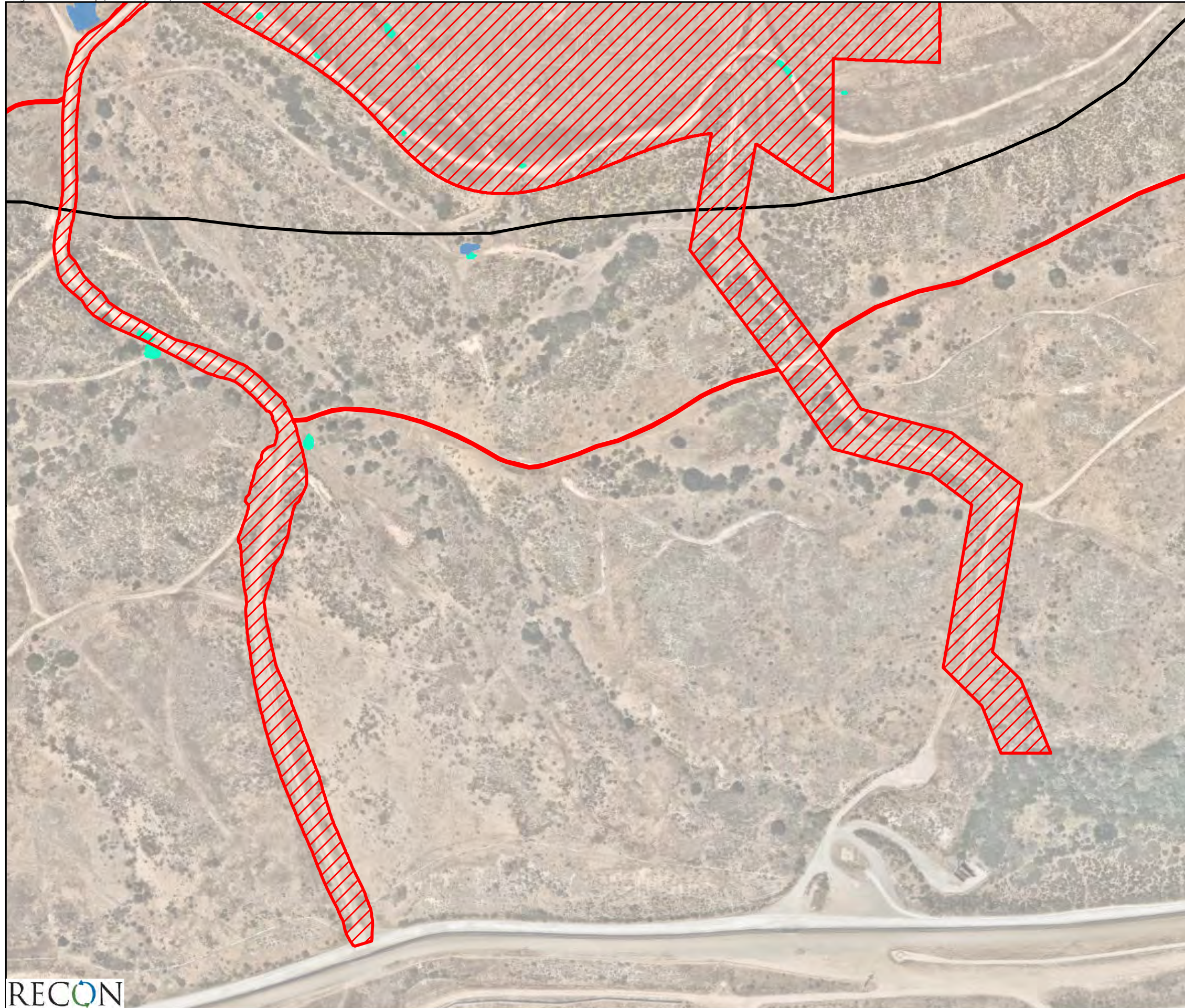


FIGURE 43.7  
Impacts to City of San Diego Wetlands



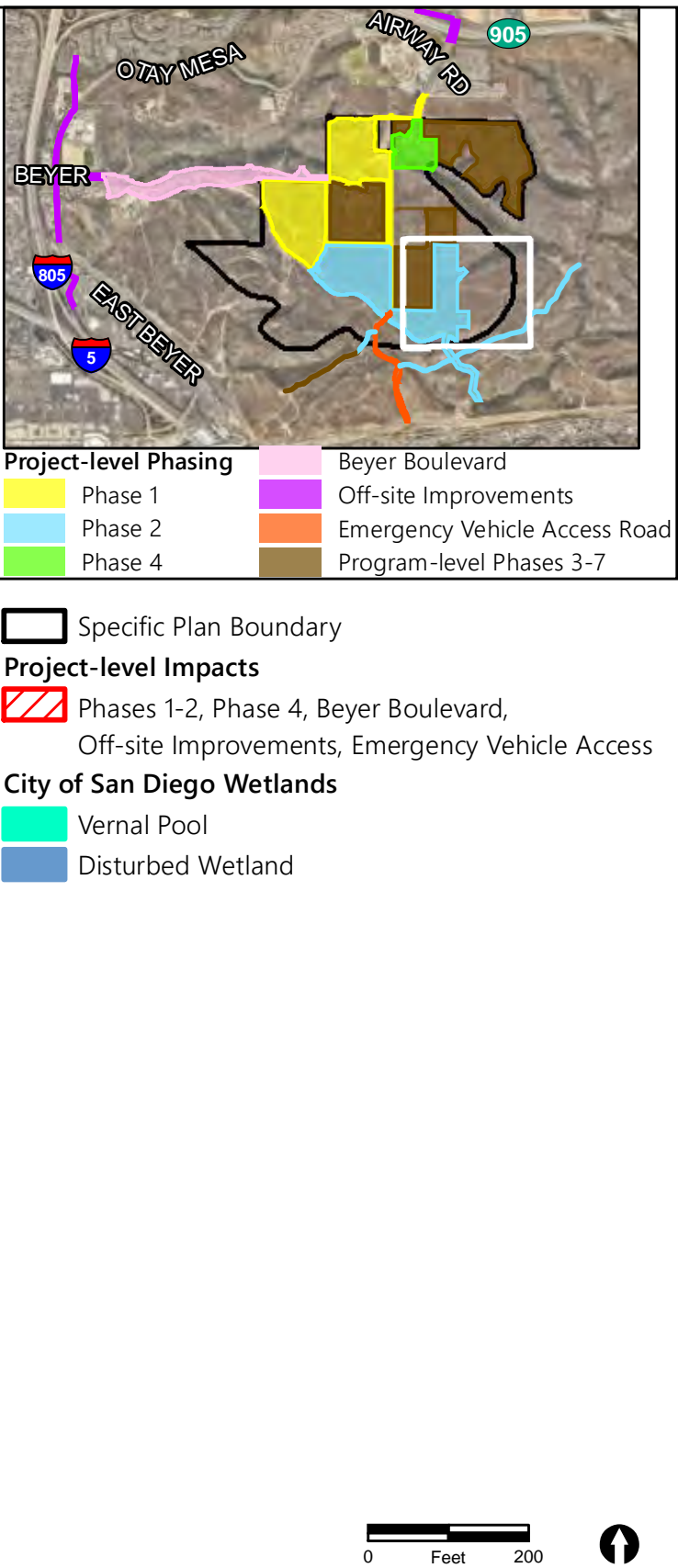
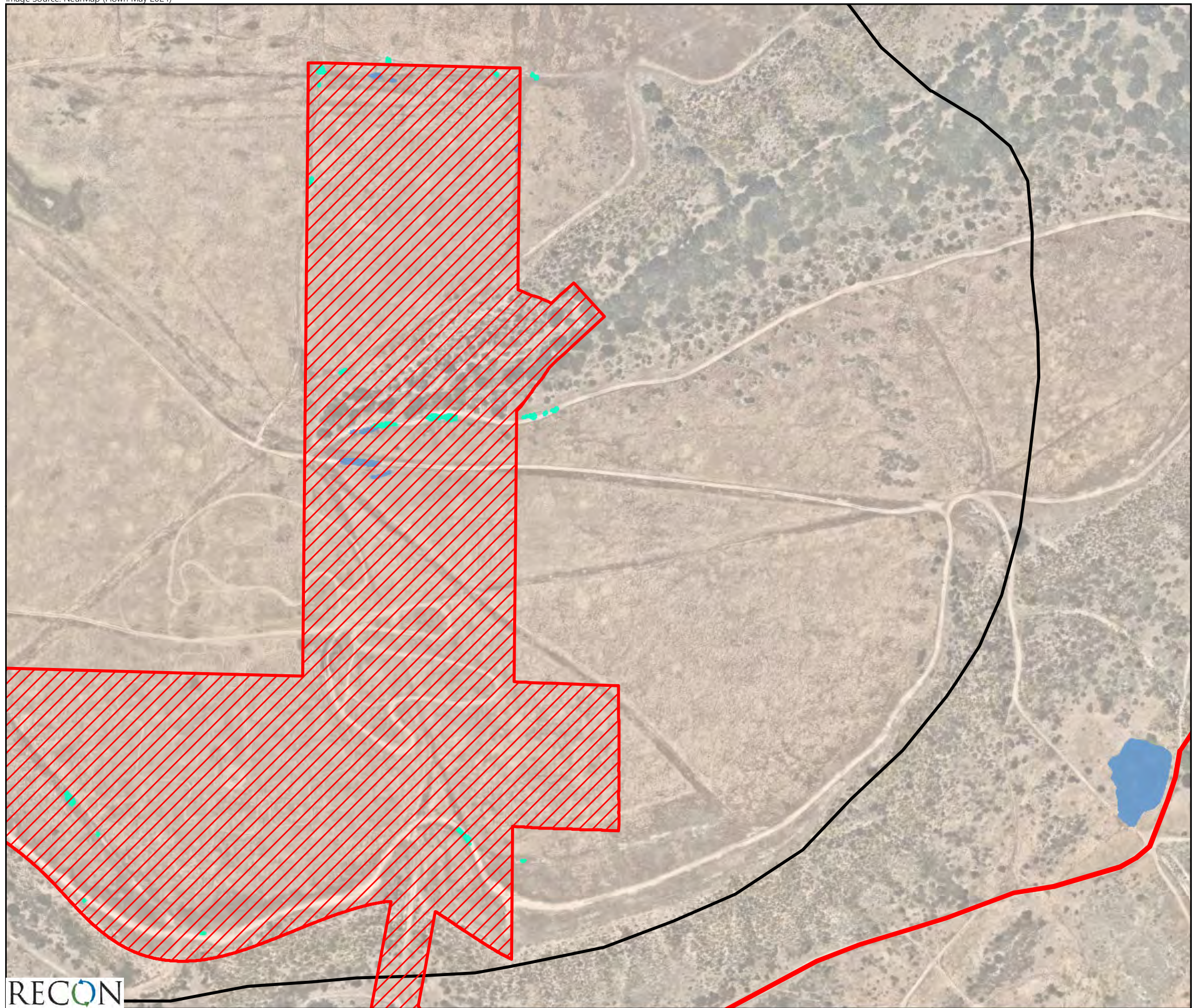


FIGURE 43.8  
Impacts to City of San Diego Wetlands



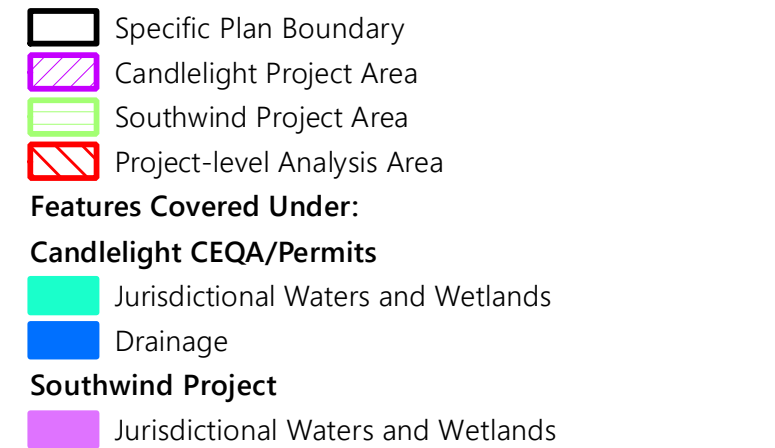
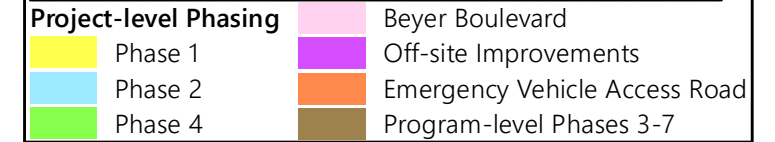
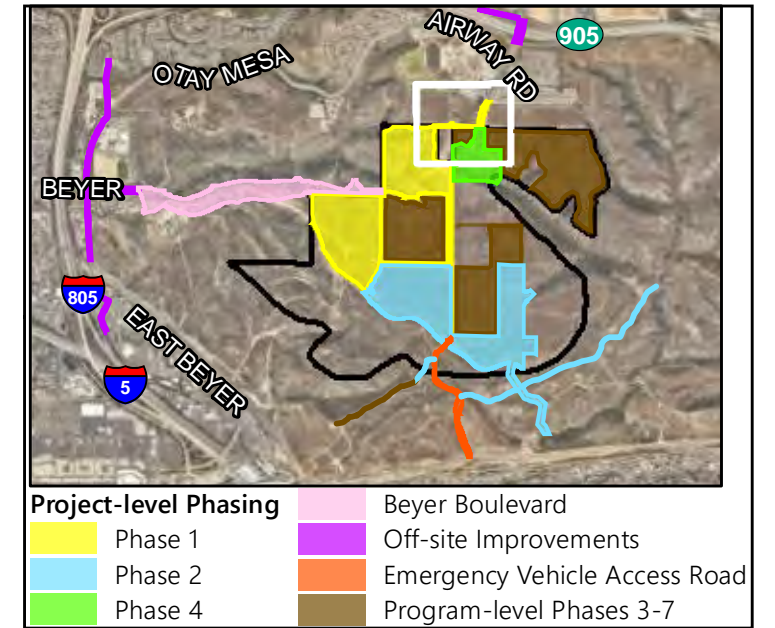
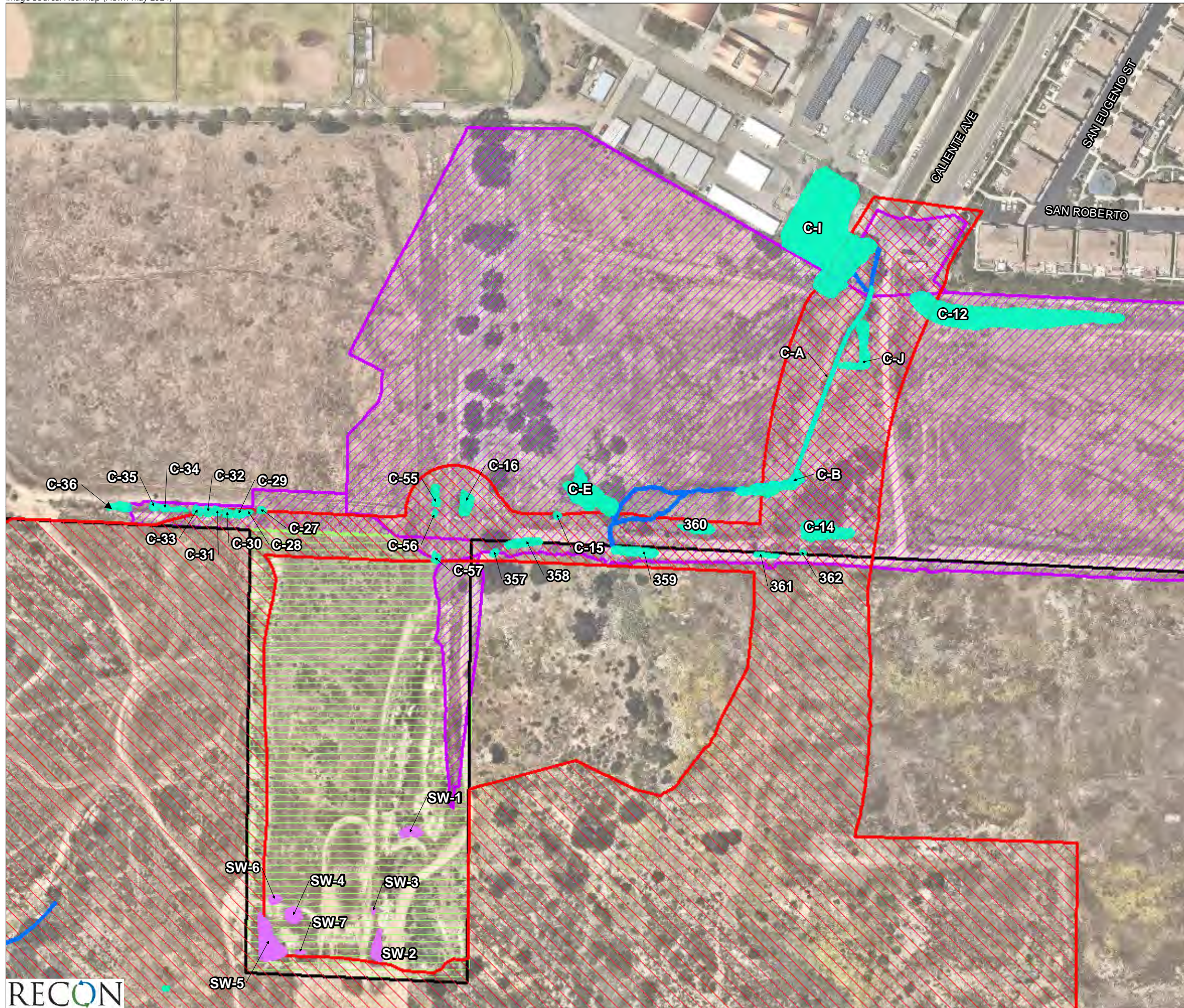
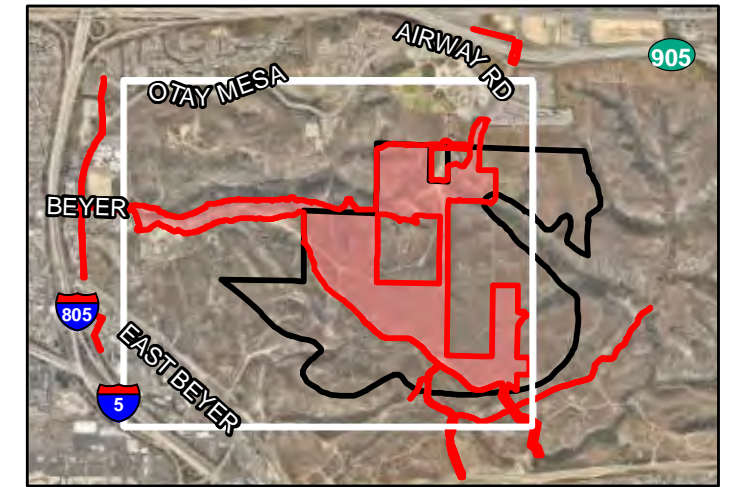
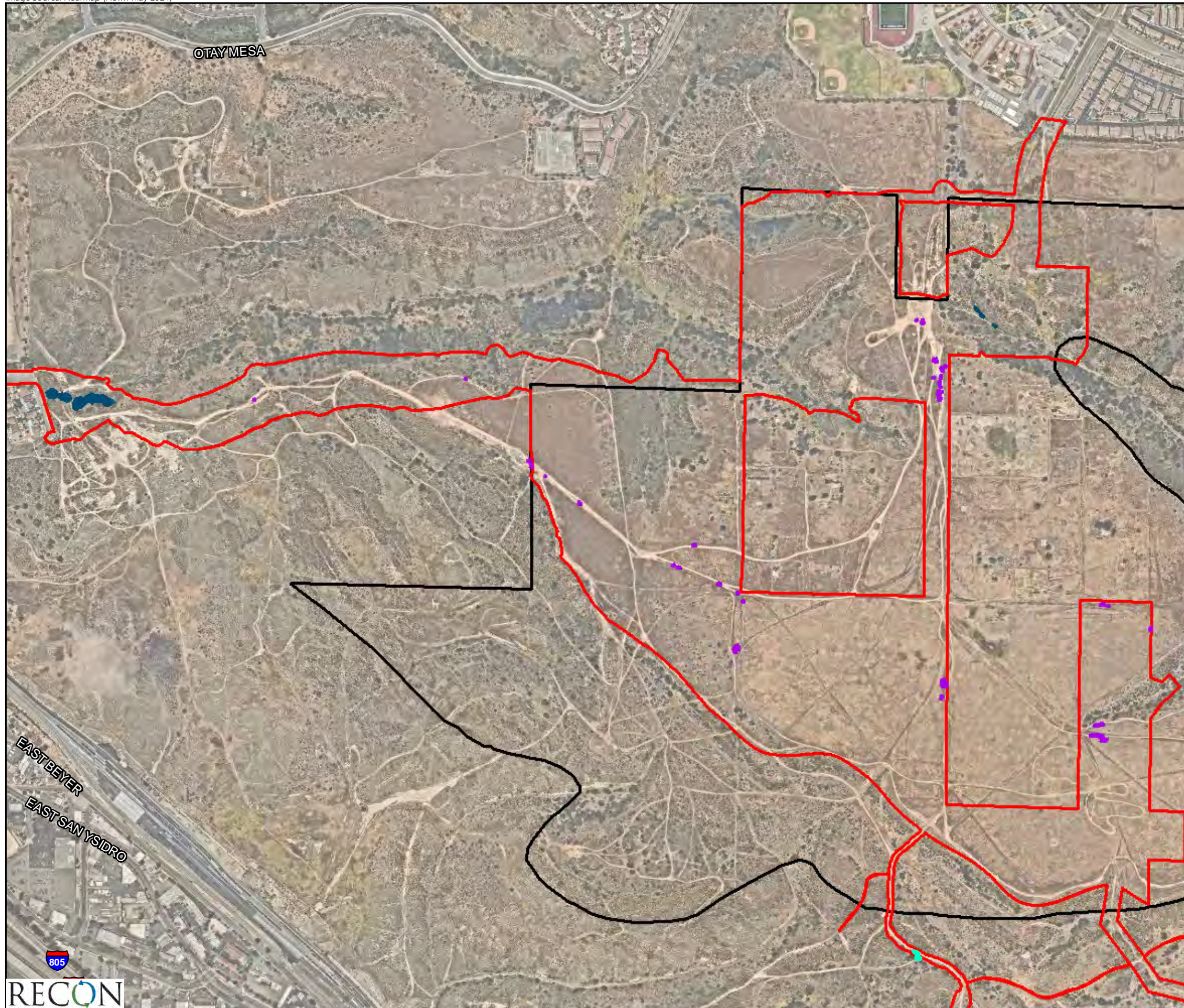


FIGURE 44  
Jurisdictional Resources within the  
Southwest Village Specific Plan Project,  
Candlelight Project and Southwind Project



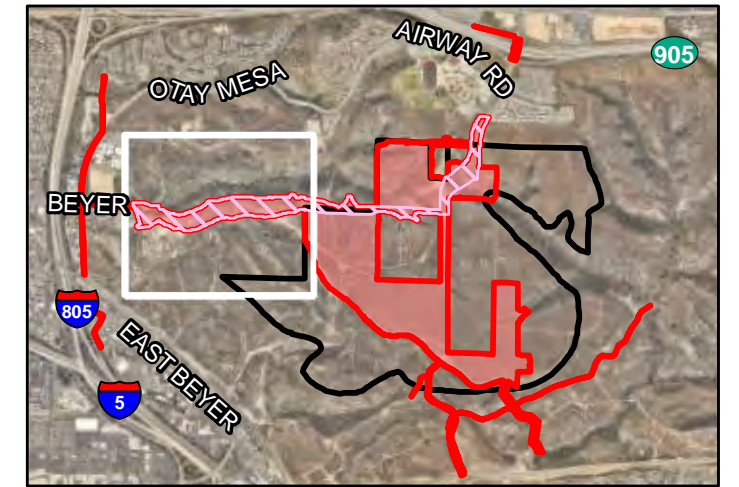


- Project-level Impacts
- Specific Plan Boundary
- City of San Diego Wetlands**
- Wetland
- Disturbed Wetland
- Vernal Pool



FIGURE 45.1  
Resources Subject to  
City of San Diego Wetland Deviation





- Project-level Impacts
- Specific Plan Boundary
- Essential Public Projects Option**
- Beyer Boulevard
- City of San Diego Waters**
- Wetland
- Disturbed Wetland

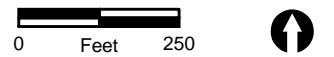
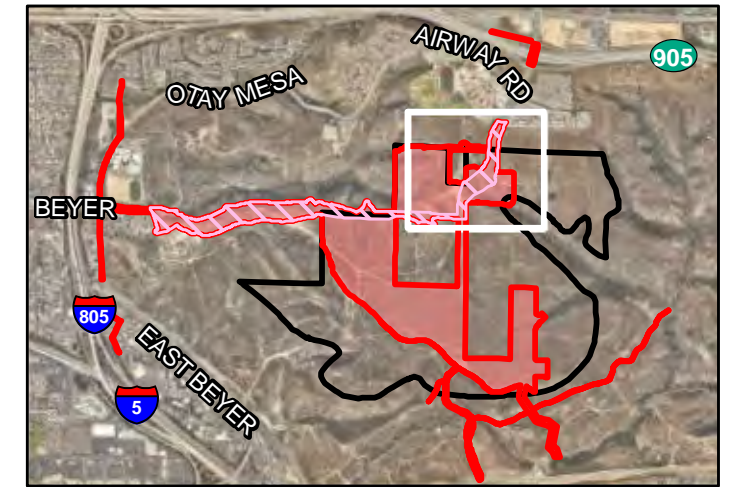
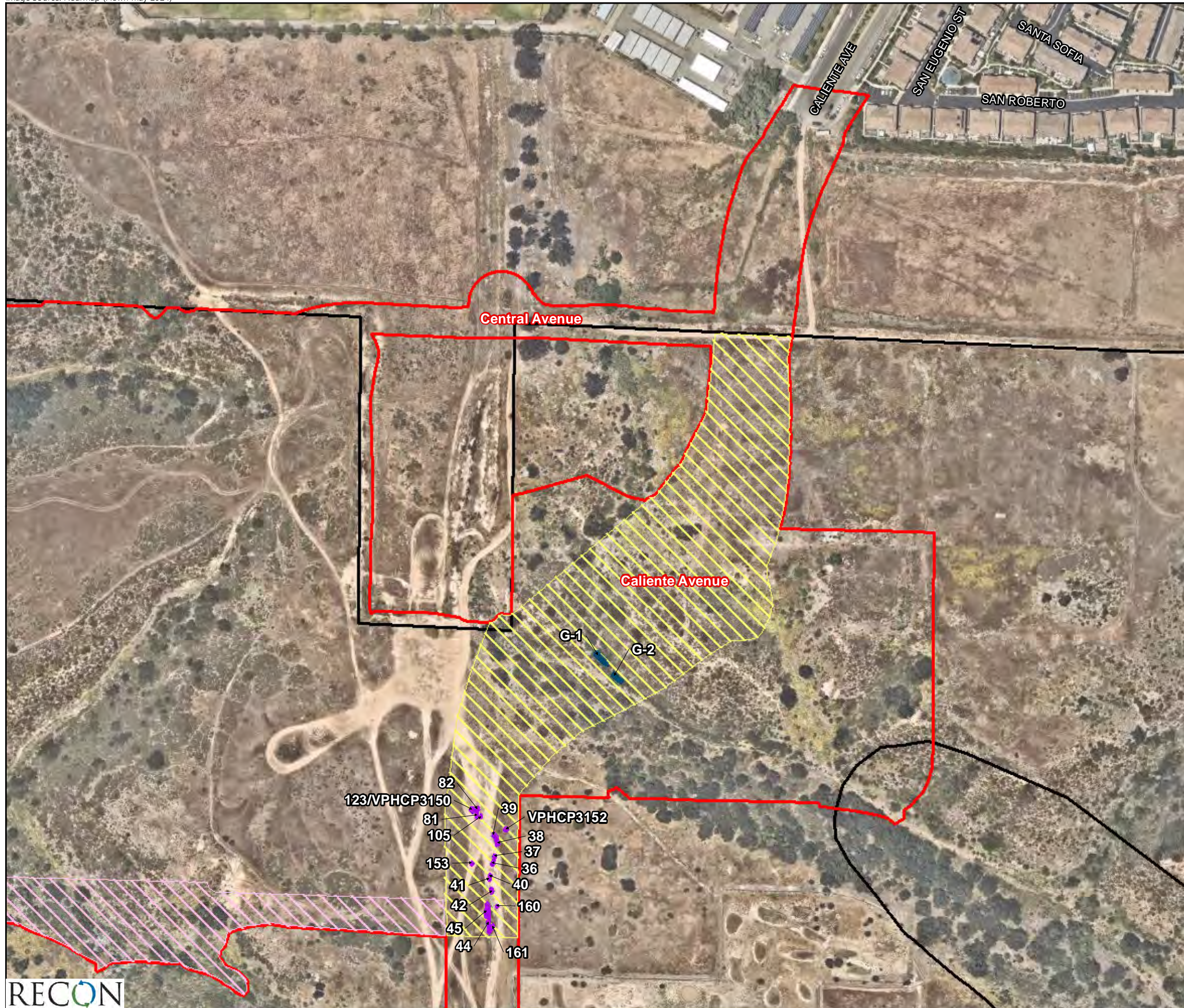


FIGURE 45.2  
Wetland Deviation for Beyer Boulevard -  
Essential Public Projects Option





- Project-level Impacts
- Specific Plan Boundary
- Essential Public Projects Option
  - Beyer Boulevard
  - Caliente Avenue South of Central Avenue
- City of San Diego Waters
  - Wetland
  - Disturbed Wetland

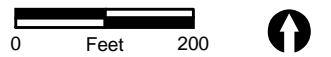
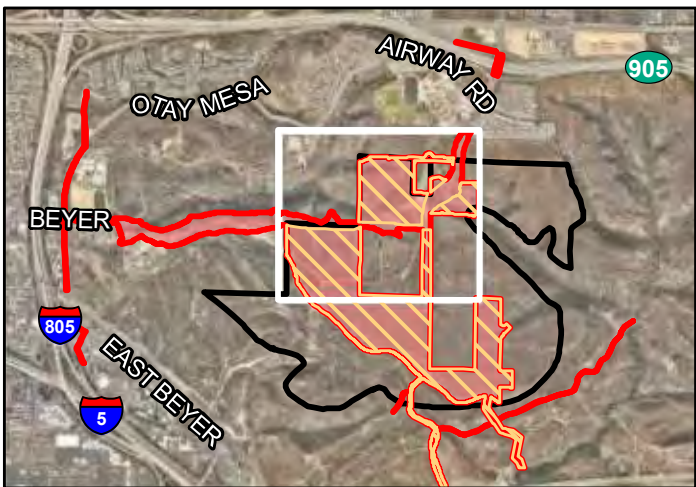
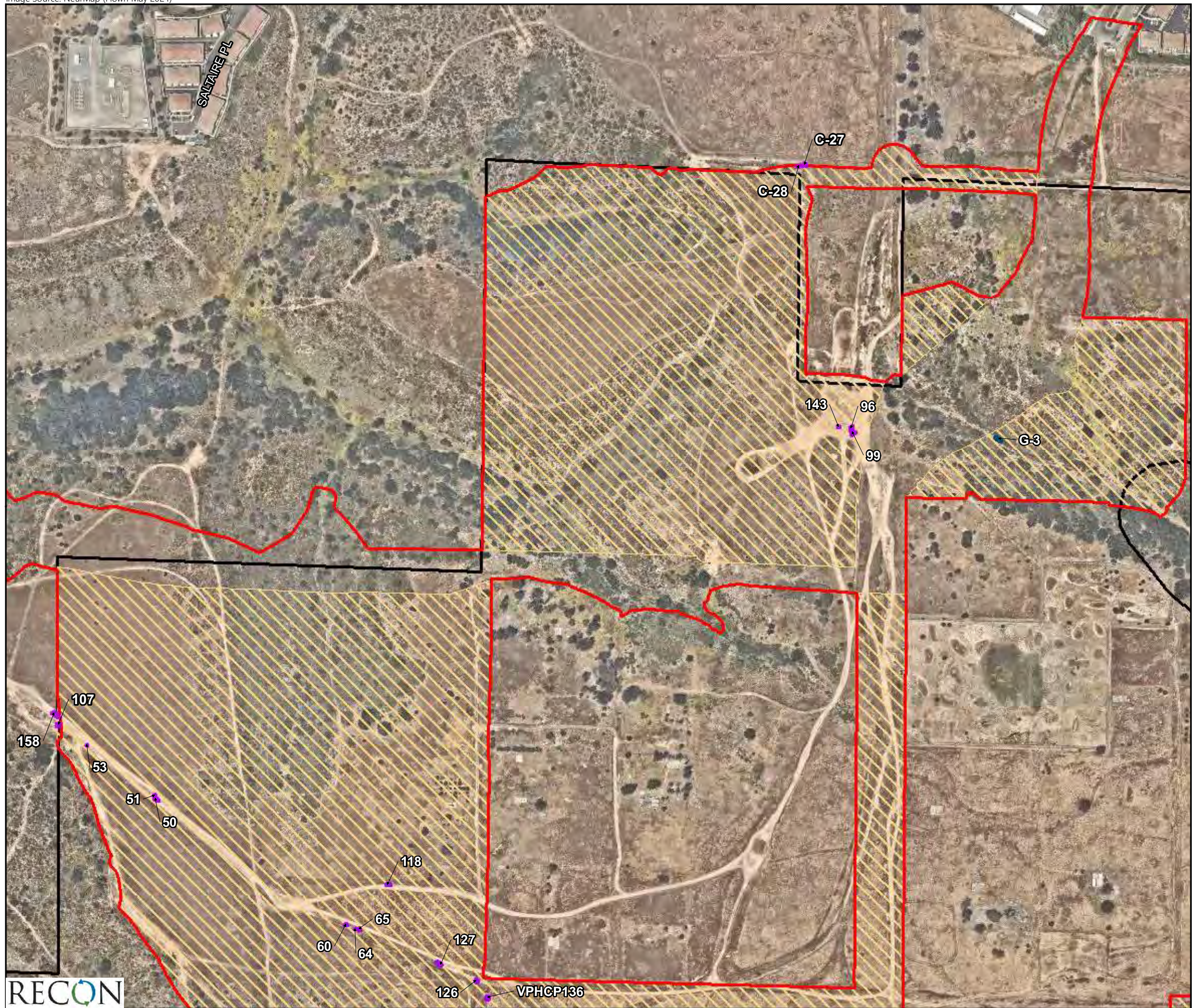


FIGURE 45.3  
Wetland Deviation for Caliente Avenue -  
Essential Public Projects Option





- Project-level Impacts
  - Specific Plan Boundary
  - Biologically Superior Option
- City of San Diego Waters**
- Wetland
  - Disturbed Wetland

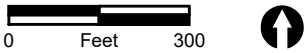
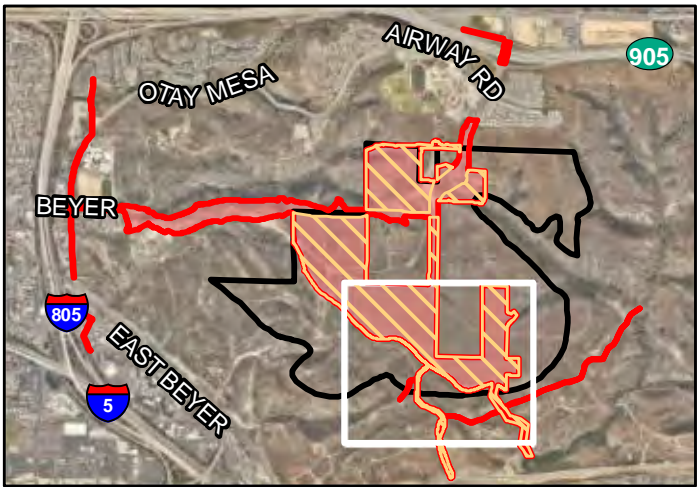
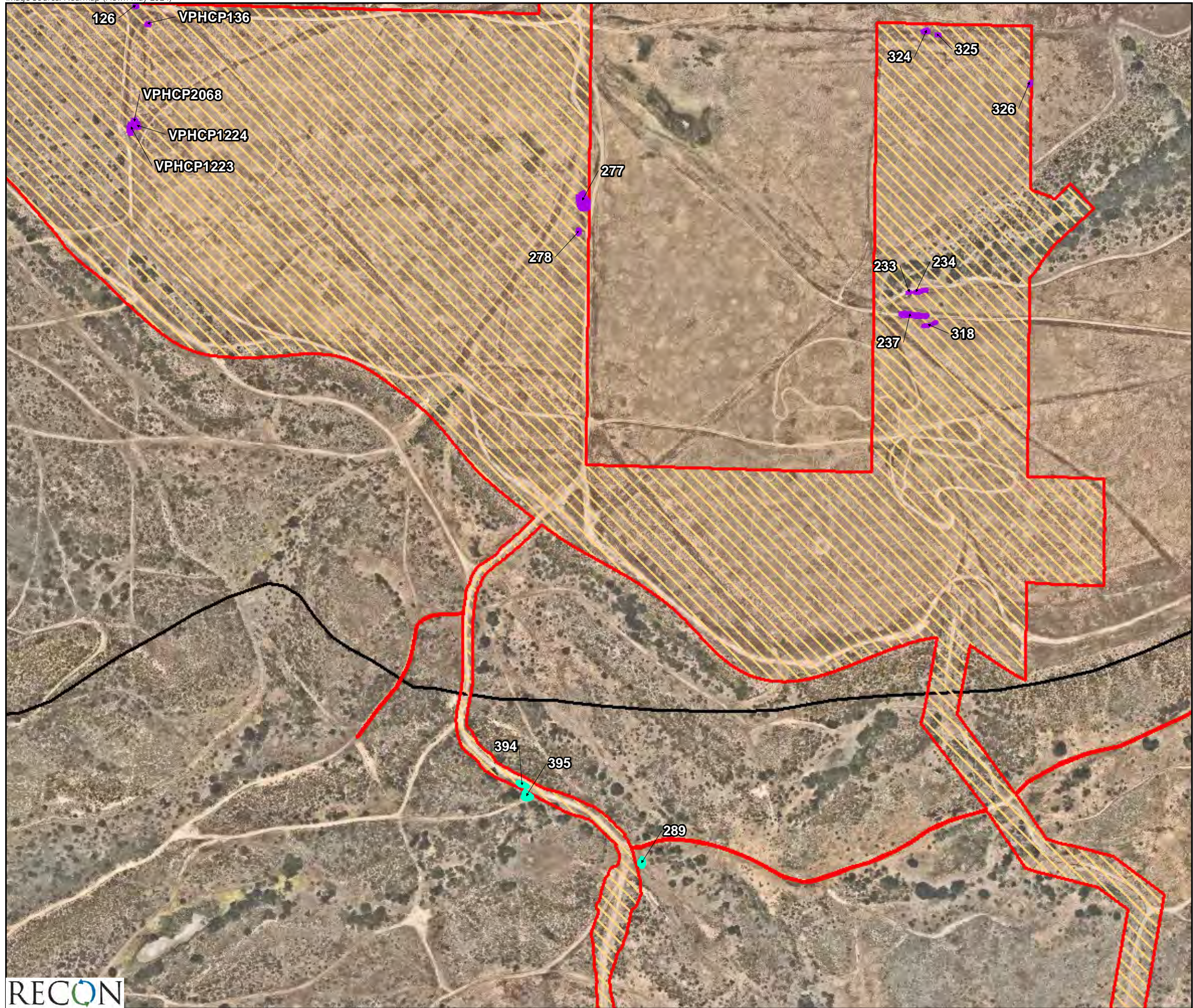


FIGURE 45.4  
Wetland Deviation -  
Biologically Superior Option North



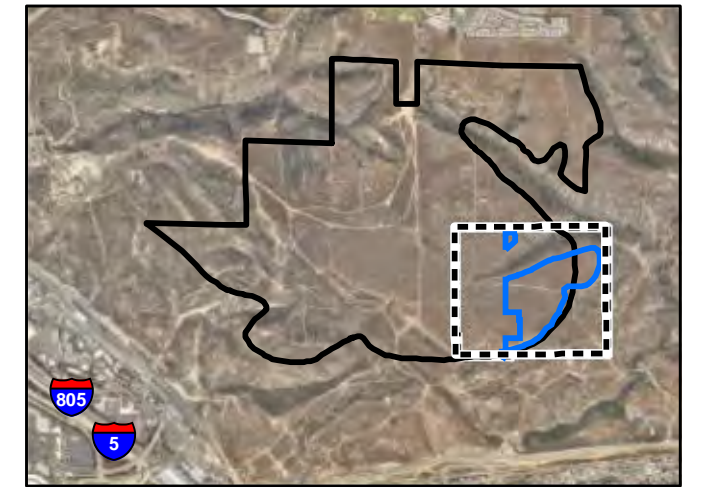
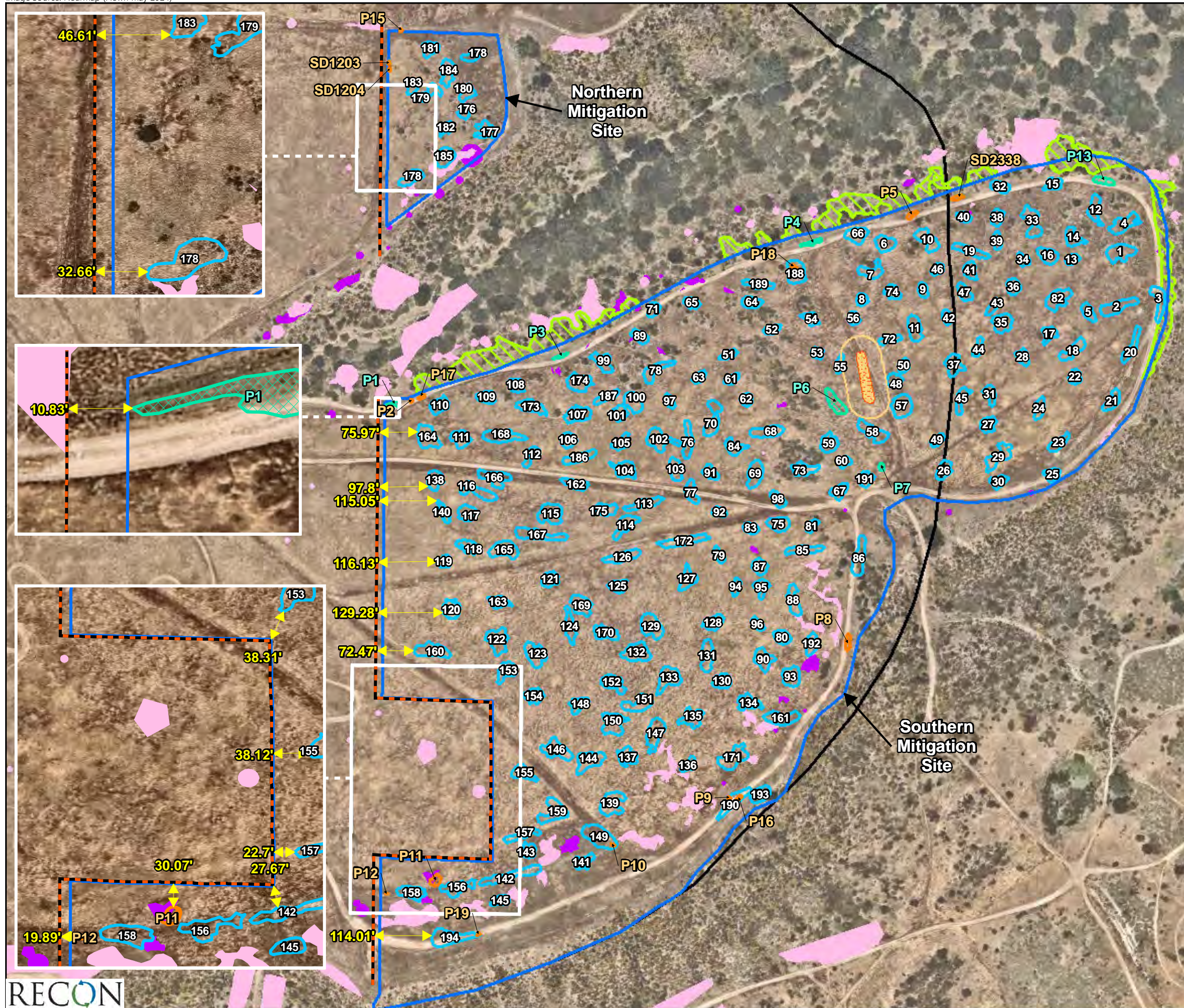


- Project-level Impacts
- Specific Plan Boundary
- Biologically Superior Option
- City of San Diego Waters**
- Disturbed Wetland
- Vernal Pool



FIGURE 45.5  
Wetland Deviation -  
Biologically Superior Option South





- Specific Plan Boundary
- Vernal Pool Mitigation Sites (33.708 acres)
- Fire-rated Wall
- ↔ Wetland Buffer
- Enhancement Pools (0.047 acre)
- Re-establishment Pools (VPHCP/RWQCB/CDFW) (0.029 acre)
- Re-establishment Pools (Historical) (3.829 acres)
- QCB Habitat Restoration (0.704 acre)
- QCB Host Plant
- QCB Nectar Plant
- Western Burrowing Owl Berm
- Western Burrowing Owl Buffer

\*The vernal pool restoration includes re-establishment of 3.86 acres of vernal pool surface area, enhancement of 0.05 acre of existing vernal pools, preservation and enhancement of 0.961 acre of Quino Checkerspot Butterfly habitat, restoration of 0.704 acre of Quino habitat, and improvements for western burrowing owl. This area includes mitigation for the following species: Riverside and San Diego Fairy Shrimp, Spadefoot Toad, Quino Checkerspot Butterfly, and San Diego Button Celery.



FIGURE 46  
Proposed Vernal Pool Restoration\*



## 7.2 Indirect Impacts

### 7.2.1 Program-level Indirect Impacts

Indirect impacts to sensitive vegetation communities (including sensitive plants), jurisdictional resources and sensitive wildlife may result from construction and implementation of program-level development areas and trails. Indirect impacts can result from drainage and runoff into surrounding open space, introduction of noise and trash associated with new development within existing open space areas and wildlife use areas, and/or the addition of new trail users to the trail network. Indirect impacts can also result from changes to drainage patterns affecting downstream vegetation communities and jurisdictional resources. Dust and noise generated from construction activities and trail use can also adversely impact sensitive resources.

As future program-level development and program-level trails are implemented, site-specific analysis would be required in conformance with the City's Biology Guidelines and the OMCP FEIR Mitigation Framework BIO-1 to demonstrate avoidance of indirect impacts. Future development would be required to comply with MHPA Land Use Adjacency Guidelines in order to avoid potential indirect impacts to adjacent sensitive habitats within MHPA lands. The trails that are part of the program-level analysis are shown in Figure 11, with the overall conceptual trail network shown in Figure 12.1. Program-level trails would be located within and adjacent to the MHPA which could result in potential indirect impacts to surrounding vegetation communities, jurisdictional resources that may be present near trails, and wildlife use patterns. Indirect impacts to vegetation communities and jurisdictional resources can occur associated with trail use if trail users do not stay on designated trails, adversely impacting surrounding vegetation communities, sensitive plants, and jurisdictional resources. Additionally, indirect impacts of trail use may include trash and erosion that can adversely affect sensitive resources. Other indirect impacts may occur, depending on the specific activity and resources present.

#### 7.2.1.1 Sensitive Plants and Vegetation Communities

The Specific Plan identifies a plant palette that requires native vegetation to be planted around slopes adjacent to open space and requires avoidance of invasive species that could spread into the open space. Future development within program-level areas would be required to follow this plant palette which is included as Appendix A to the Southwest Village Specific Plan.

Compliance with Land Use Adjacency Guidelines would ensure drainage and lighting is directed away from the MHPA and appropriate barriers are installed to prevent entry into the MHPA. Indirect impacts to vegetation communities from changes in drainage patterns or increases in polluted runoff would be largely avoided through future project compliance with National Pollutant Discharge Elimination System regulations; incorporation of BMPs during construction; installation of permanent BMPs consistency with City Storm Water Standards Manual; and preparation and implementation of project-level SWPPPs. However, at a program-level of review and without project specific development plans, indirect impacts to sensitive vegetation communities would be significant.



### 7.2.1.2 Sensitive Wildlife

In addition to the potential indirect impacts discussed in Section 7.2.1, indirect impacts to breeding wildlife could occur due to construction-related noise if construction occurs during the breeding season (generally, February 1 through September 15) of sensitive wildlife species. According to the City's Biology Guidelines (City of San Diego 2018a), wildlife that may occur in suitable habitat in the project vicinity up to 300 feet from the project work areas would be significantly affected by noise. Potential construction related indirect impacts to sensitive wildlife during the breeding season would generally be avoided through consistency with species-specific ASMDs, the City's Land Use Adjacency Guidelines and requirements for avoidance measures during construction. Potential indirect impacts to coastal California gnatcatcher located inside the MHPA would be avoided through compliance with the City's Land Use Adjacency Guidelines. Indirect impacts from noise to burrowing owl (February 1-August 15), least Bell's vireo (March 15-September 15), and coastal cactus wren (February 1-August 31) would be significant if construction or operational noise levels exceed 60 A-weighted decibels [dB(A)] or the existing ambient noise if already above 60 dB(A) during the breeding season. The presence and potential impacts to other sensitive wildlife species would need to be addressed through future project-level analysis and identification of avoidance measures. While implementation of program-level areas would require consistency with species-specific ASMDs, the City's Land Use Adjacency Guidelines and requirements for avoidance measures during construction, at a program-level of review and without project specific development plans, indirect impacts to sensitive wildlife species would be significant.

### 7.2.1.3 Jurisdictional Resources

Portions of the program-level analysis areas are located adjacent existing VPHCP/MHPA areas, depicted on Figure 36.1. Future development adjacent to existing VPHCP/MHPA areas could create indirect impacts to vernal pools and other wetland resources.

As detailed in the VPHCP, indirect impacts to vernal pools may occur as a result of development of upland watersheds surrounding vernal pool habitat. Modification of upland watersheds, such as altering topography by removing or filling soil, can disrupt natural hydrologic flow necessary for vernal pools to fill and pond. Altering watershed hydrology can impact covered species that occupy vernal pools (e.g., by reducing the ponding capacity of the basins). The VPHCP requires that impacts to upland watersheds associated with vernal pools be avoided to maintain natural hydrological flows (Chapter 5). The vernal pool hard-line preserve areas (VPHCP/MHPA) that have been identified as part of the VPHCP process include sufficient watershed and upland buffer area to protect the natural hydrological flows into the associated vernal pools.

Future development within the program-level areas would require project-specific environmental review to ensure indirect impacts to watersheds and associated vernal pool resources are avoided consistent with the avoidance and minimization measures identified in Chapter 5 of the VPHCP. Compliance with the VPHCP's Avoidance and Minimization Measures (detailed in Section 6.2.2.2) would preclude indirect impacts to vernal pools. As future program-level development is implemented, the location of vernal pools and other jurisdictional resources would need to be identified and measures taken to protect and avoid indirect impacts to these resources. Future site-



specific analysis would be required to identify resources and ensure all project activity is appropriately sited with adequate buffers to avoid indirect impacts.

While future project-level application of VPHCP Avoidance and Minimization Measures would serve to avoid indirect impacts, at a program-level of review and in the absence of project-level development plans, the potential indirect impacts to vernal pool resources resulting from implementation of program-level areas would be significant.

Other jurisdictional resources may also be present within the program-level areas. Indirect impacts to City wetlands or other jurisdictional resources could occur if development does not provide appropriate buffering from jurisdictional resources. Potential indirect impacts to other jurisdictional resources would require future project-level analysis and identification of avoidance measures. At a program-level of review, impacts to jurisdictional resources would be significant.

## 7.2.2 Project-level Indirect Impacts

Potential indirect impacts resulting from construction and implementation of the project-level areas would be similar to the indirect impacts described for program-level areas as detailed above in Section 7.2.1. Where there would be unique project-level indirect impacts, they are discussed further below.

### 7.2.2.1 Sensitive Plants and Vegetation Communities

Potential indirect impacts to sensitive plants and vegetation communities during construction would be avoided through implementation BMPs including installation of silt fencing around the perimeter of the grading limits for all lands and through implementation of City's Land Use Adjacency Guidelines for lands within or adjacent to MHPA lands which are implemented as standard conditions of approval for any project that requires biological monitoring. Refer to Section 6.2.1.2.d for a discussion of the Land Use Adjacency Guidelines and how these measures would address potential indirect impacts related to drainage, dust, toxins, runoff, noise, and invasive species.

Indirect impacts associated with grading and runoff would be addressed by installation of temporary detention basins within graded areas that provide a source of cut and/or fill soils but would not be immediately developed. During construction, indirect impacts from fugitive dust would be prevented by watering of haul roads and areas actively being used by equipment.

Indirect impacts to Tier I and Tier II vegetation communities from the spread of non-native and invasive species could occur if non-native landscaping is proposed adjacent to open space areas such as along the western edge of the Specific Plan and along Beyer Boulevard where it traverses open space lands (e.g., Furby North Preserve, West Otay Mesa A, and West Otay Mesa B). However, indirect impacts associated with the spread of non-natives into open space areas would be avoided through implementation of a native plant palette that has been designed for consistency with the surrounding dominant native species. The Specific Plan includes an approved plant palette that identifies species suitable for land adjacent to the MHPA, open space and BMZ 2 areas. Plant palettes for areas adjacent to open space are also described in Section 1.3.2.2.a. The landscape plan includes plant palettes for internal, non-open space areas that include non-native species; however,



species known to be invasive that could spread into the surrounding open space lands have been excluded or a note provided indicating that certain species must be located at least 200 feet away from open space lands to avoid invasive establishment per the project restoration biologist. Native plantings would be provided within Beyer Boulevard slopes and all slope areas surrounding the development area adjacent to open space, including the EVA road. Compliance with the Specific Plan plant palette and the project's landscape plans would ensure that indirect impacts to sensitive vegetation communities are avoided.

Indirect impacts to vegetation communities and sensitive plants could occur due to human disturbance associated with trails. Through extensive coordination with the City and Wildlife Agencies, primitive trails in the surrounding open space have been minimized to reduce the amount of human intrusion into native habitat areas. Where primitive trails are proposed through open space, restoration is proposed to close unauthorized trail routes to limit and deter human entrance into open space areas. Additionally, where sensitive plant species are identified near trail alignments, peeler pole fencing would be installed to protect adjacent sensitive species. Where Beyer Boulevard traverses open space lands, wildlife fencing is proposed which would serve a dual purpose of keeping humans out of the surrounding open space. Wildlife fencing along with the Beyer Boulevard slopes would provide a preventative barrier to trespass into the surrounding open space areas including the Furby North Preserve and West Otay Mesa A and West Otay Mesa B. Pedestrian access along Beyer Boulevard is limited to the sidewalks along the roadway and no primitive trails are proposed that would provide human access to surrounding open space lands around Beyer Boulevard.

Additionally, required compliance with the MHPA Land Use Adjacency Guidelines including requirements related to drainage, toxins, barriers/access, invasives (see Section 6.2.1.2) would minimize and/or avoid indirect impacts to sensitive plants and vegetation within or adjacent to MHPA. During construction, orange construction fencing would be installed to ensure construction stays within the approved limits of disturbance and dust control measures would be implemented to keep down dust that could affect sensitive plants.

### 7.2.2.2 Sensitive Wildlife

In addition to the potential indirect impacts detailed in Section 7.2.1, wildlife may be indirectly affected by short-term construction and restoration related noise, which can disrupt normal activities and subject wildlife to higher predation risks. Breeding birds can be significantly affected by short-term construction/restoration related noise, which can result in the disruption of foraging, nesting, and reproductive activities.

Additionally, post-construction operational noise associated with Beyer Boulevard traffic noise was modeled to identify the post-project noise contours in relation to habitat surrounding the proposed Beyer Boulevard extension (Figure 47). As shown in Figure 47, the 60 community noise equivalent level (CNEL) noise contours largely follows the limits of grading for the roadway, with the exception that a swath of land within the Furby North Preserve would be subject to noise levels of approximately 60–65 CNEL after construction. However, because these north-south 60 CNEL contour lines run roughly parallel to I-805, it shows that noise levels in this area are due to vehicle traffic on I-805, not the future extension of Beyer Boulevard. The 60 CNEL contour that runs parallel



to Beyer Boulevard is due to vehicle traffic on Beyer Boulevard, and it generally stays within the project-level analysis boundary with the exception of a small area north and south of Beyer Boulevard along the western end of the extension. Approximately 0.95 acre of land near the edges of the proposed Beyer Boulevard manufactured slopes would be subject to noise levels above 60 dB after buildout of the Specific Plan and all associated traffic volumes anticipated. Indirect impacts to sensitive bird species due to operational noise within these edge areas adjacent to Beyer Boulevard are not anticipated because of the substantial surrounding open space that would remain available for breeding, nesting and foraging. The design of Beyer Boulevard is such that there are clear sight lines for birds to fly across the road and avoid any undesirable areas. Furthermore, there is a lack of evidence that noise can substantially affect bird breeding or other habits (see additional discussion under Section 7.2.2.2.c regarding noise impacts to bird species). Therefore, indirect impacts to wildlife species due to operational noise levels along Beyer Boulevard would be less than significant.

Installation of wildlife fencing along Beyer Boulevard would additionally support avoidance of indirect impacts to sensitive species within the open space surrounding Beyer Boulevard, including the Furby North Preserve and conserved parcels referred to as West Otay Mesa A and West Otay Mesa B. Fencing would not only protect wildlife but would deter human entry into wildlife areas.

Where alternative compliance walls with glass panes are proposed along the brush side of structures, only bird safe glass shall be used to prevent bird strikes adjacent to open space areas. Refer to Section 1.3.2.6.c for the proposed bird safe glass specifications. The requirement for bird safe glass shall be incorporated as a project design feature which shall be implemented as a project condition of approval.

Additional discussion of potential indirect impacts to specific wildlife species is provided below.

#### **a. Quino Checkerspot Butterfly**

Suitable habitat areas for Quino checkerspot butterfly are depicted on Figure 29. Indirect impacts to Quino checkerspot butterfly could result from the introduction of non-native species and generation of dust in the vicinity of Quino checkerspot butterfly host and nectar plants. These impacts would be considered significant and require mitigation as described in Section 8.2.6.2.

#### **b. Coastal California Gnatcatcher**

As discussed in Section 6.2.1.2, the project would be required to comply with the City's Land Use Adjacency Guidelines when adjacent to MHPA lands. As this species is present or suitable habitat is present within the MHPA adjacent to the project-level analysis area including along the Beyer Boulevard extension, around the EVA road, and around the restoration areas, indirect noise impacts from construction and restoration activities could occur to this species within the MHPA if these actions are proposed during the breeding season (see Section 6.2.1.2.d). These impacts would be significant and mitigated as detailed in Section 8.2.4.5.

Indirect impacts from Beyer Boulevard operational noise may occur to approximately 0.09-acre area of suitable habitat (Diegan coastal sage scrub) based on noise modeling. This includes a small area



that would be exposed to noise levels above 60 dB contour (see Figure 47). This impact would be significant and mitigated through additional habitat preservation as discussed in Sections 8.2.2 and 8.2.6.2.

Restoration activities and clearing of invasive species in Spring Canyon could result in potential indirect impacts to coastal California gnatcatcher nesting within adjacent maritime succulent scrub in the MHPA. Any work that may cause noise in excess of 60 A-weighted decibels hourly average, or the ambient if it is greater, shall be avoided during the breeding season for this species (March 1 to August 15). If the removal of habitat in the mitigation area must occur during the breeding season, a qualified biologist shall conduct a pre-implementation survey to determine the presence or absence of nesting birds adjacent to the proposed area of disturbance.

### c. Coastal Cactus Wren

Indirect impacts to coastal cactus wren may result from edge effects associated with development construction in addition to operational noise impacts due to the proposed Beyer Boulevard extension being proposed adjacent to suitable habitat.

Indirect impacts associated with construction and restoration noise may occur if activities are conducted during this species' breeding season. Occupied suitable habitat for this species occurs adjacent to the project impact area both inside and outside of the MHPA and construction and restoration is likely to cause noise levels within these adjacent habitat areas to exceed 60 dB(A) average sound level ( $L_{eq}$ ), which would be considered a significant indirect impact requiring mitigation.

To identify operational noise levels in the vicinity of coastal cactus wren habitat, noise modeling was conducted assuming buildout traffic volumes along Beyer Boulevard, including the installation of 6-foot masonry walls along the north side, western end of Beyer Boulevard where the road is adjacent to coastal cactus wren habitat. The masonry wall is proposed as a project design feature to reduce noise levels at adjacent habitat and to deter trespassing post-construction. Refer to Figure 47 for the post-project noise contours associated with Beyer Boulevard in relation to surrounding habitat areas including coastal cactus wren habitat. As shown, the 60 CNEL noise contour extends slightly into the adjacent cactus wren habitat area within an approximate 0.46-acre area of cholla-dominated maritime succulent scrub. Despite the inclusion of a 6-foot masonry wall to minimize noise effects to adjacent habitat, the 60 dB operational noise contour would extend into the adjacent coastal cactus wren habitat, resulting in a significant impact to 0.46 acre.

Additional indirect impacts from dust during construction and restoration activities and pedestrian trespass into the habitat would be significant and mitigated as discussed in Section 8.2.6.2.

### d. Least Bell's Vireo

Indirect impacts to least Bell's vireo from construction are not anticipated given that the occupied habitat within Beyer Boulevard footprint would be removed completely and the species would not be subject to construction or operational noise impacts.



Indirect impacts associated with restoration noise may occur if activities are conducted during this species' breeding season. Occupied suitable habitat for this species occurs adjacent to Spring Canyon where wetland creation is proposed and these restoration activities are likely to cause noise levels within these adjacent habitat areas to exceed 60 dB(A) average sound level ( $L_{eq}$ ), or the ambient if it is greater, which would be considered a significant indirect impact requiring mitigation, discussed in Section 8.2.4.4. Trails restoration would only require the use of line trimmers which are not expected to result in a significant noise impact requiring mitigation.

#### **e. Burrowing Owl**

While one incidental sighting of a burrowing owl was detected during surveys, the site has only a moderate potential to support burrowing owl as no burrows or evidence of burrows were identified within the project-level areas.

Indirect noise impacts to burrowing owl during restoration and construction would be significant and would require mitigation. Mitigation would consist of either avoidance of construction during the breeding season of February 1–August 31 or, if construction/restoration must occur during this period, pre-construction bird surveys would be completed and, if needed, noise reduction measures in accordance with the Biology Guidelines. See Section 8.2.4.6 for further mitigation details.

#### **f. Western Spadefoot**

Indirect impacts to this species could potentially occur during enhancement of jurisdictional resources within the 100-foot trail corridor and during vernal pool restoration activities, if work were to occur when ponding is present. These would be significant and mitigated through implementation of required VPHCP avoidance and minimization measures detailed in Section 6.2.2.2.a and measures detailed in Section 8.2.4.3 which limits activity to times of the year when no ponding is present. The Trails Restoration Plan (see Attachment 1) and Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) requires that no enhancement activities occur within vernal pools when ponded. Implementation of these measures would avoid indirect impacts to western spadefoot.

#### **g. San Diego and Riverside Fairy Shrimp**

A number of vernal pools and disturbed wetlands containing San Diego fairy shrimp are located outside of the project impact boundary; however, during construction, there is a potential for indirect impacts to occur to vernal pools containing San Diego fairy shrimp if the watershed of the basin is impacted, affecting the capacity of the pool to retain water for sufficient time to support fairy shrimp. An evaluation of vernal pools and disturbed wetlands was conducted to identify where project grading may indirectly impact these wetland resources. As further detailed in Section 7.2.2.3, a number of vernal pools and disturbed wetlands would be indirectly impacted by grading within the watershed of the basin, resulting in a significant impact. None of the pools near the grading footprint contained Riverside fairy shrimp; therefore, indirect impacts would be limited to San Diego fairy shrimp. A total of 0.06 acre of vernal pools and disturbed wetlands containing San Diego fairy shrimp would be indirectly impacted through grading within the watershed. An additional 0.07 acre of vernal pools and disturbed wetlands that did not support San Diego fairy shrimp would be



impacted. For purposes of potential impacts to San Diego fairy shrimp, all of the indirectly impacted vernal pools and disturbed wetlands are assumed to contain the species. Therefore, the project would result in a significant indirect impact to 0.13 acre of vernal pool and disturbed wetland surface area containing San Diego fairy shrimp (Table 13) and mitigated as detailed in Section 8.2.4.1.

Table 13 Indirect Impacts to Vernal Pool and Disturbed Wetlands Assumed to Contain San Diego Fairy Shrimp	
Impacted City Wetland	Indirect Impact Acreage
Vernal Pools	0.05
Vernal Pool in West Otay Mesa B	0.01
Disturbed Wetlands	0.07
<b>Total Acreage</b>	<b>0.13</b>
NOTE: 0.06 acre of the 0.13 acre of indirectly impacted resources are documented to contain San Diego fairy shrimp; however, all resources are assumed to contain San Diego fairy shrimp for purposes of the analysis.	

Indirect impacts to San Diego and Riverside fairy shrimp within other vernal pools and disturbed wetlands outside of the grading limits could be indirectly impacted during construction and restoration activities. VPCHP avoidance and minimization measures detailed in Section 6.2.2.2.a would apply and all construction vehicles would be limited to travel within the project-level impact area, avoiding the potential to spread invasive fairy shrimp species into surrounding open space areas. Vehicle use within the surrounding open space where vernal pools are present have the potential to spread invasive fairy shrimp species that are not known to occur within the area. Some vehicular use is expected to occur within surrounding open space areas associated with implementation of restoration activities; however, these vehicular activities would be undertaken by qualified biologists that implement protocols for avoiding vernal pools and basins when traversing the open space. For example, where feasible, driving through pools is avoided even when dry and regular vehicle cleaning is implemented to avoid cross contamination. Additionally, indirect impacts to vernal pool species during restoration efforts, including vernal pool restoration (see Attachment 14), requires that no enhancement activities shall occur within vernal pools when ponded, surveying to identify any occupied pools within and adjacent to the restoration area, and marking/fencing any occupied pools to protect from adjacent restoration activities. Due to the potential for these indirect impacts to occur during project grading and restoration activities, indirect impacts to San Diego and Riverside fairy shrimp would be significant.

#### h. Crotch's Bumble Bee

Indirect impacts to Crotch's bumble bee could result from the introduction of non-native species and generation of dust in the vicinity of nectar plants. As detailed in Section 7.2.2.1, introduction of non-native species would be avoided through compliance with the Specific Plan plant palette which requires native plantings adjacent to open space. Additionally, within the vernal pool preserve where the majority of suitable habitat is present, only native species would be planted, including nectar plants (see Attachment 14).



Indirect impacts to Crotch's bumble bee during construction would be avoided in areas adjacent to proposed grading through the implementation of dust control measures, erosion control, and fencing to demark the limits of disturbance as required by the MHPA Land Use Adjacency Guidelines.

During the construction of the vernal pool preserve and other restoration activities, indirect impacts could occur, resulting in a significant impact and Crotch's bumble bee surveys would be conducted prior to implementation and buffers established to the extent feasible to avoid indirect impacts to foraging and nesting Crotch's bumble bee. With implementation of the mitigation measures detailed in Section 8.2.4.8 and Section 8.2.6.2.h, indirect impacts to Crotch's bumble bee from construction and restoration would be reduced less than significant.

#### **i. Bald and Golden Eagle**

As neither bald eagle nor golden eagle are anticipated to nest given that the project-level area lacks suitable nesting habitat, no indirect impacts to these species are anticipated.

#### **j. Nesting Avian Species**

Indirect impacts to nesting avian species, particularly Cooper's hawk, northern harrier, white-tailed kite, merlin, California horned lark, yellow warbler, yellow-breasted chat, loggerhead shrike, southern California rufous-crowned sparrow, grasshopper sparrow, and Bell's sage sparrow could occur from construction or restoration noise, which would be significant. Refer to Section 8.2.4.9 Breeding Season Avoidance/Preconstruction Survey for additional details regarding mitigation.

#### **k. Sensitive Reptiles and Mammals**

Indirect impacts to orange-throated whiptail, coast horned lizard, coastal whiptail, red diamond rattlesnake, two-striped garter snake, Coronado skink, southern mule deer, and San Diego desert woodrat as a result of construction and/or maintenance-related erosion, contaminated runoff, or generation and deposition of dust would be less than significant with adherence to proper BMPs during construction and implementation of species specific ASMDs detailed in Section 6.2.1.2.g, and implementation of the City's Land Use Adjacency Guidelines for species present within lands adjacent to MHPA. No nighttime lighting is proposed during construction or restoration activities.

### **7.2.2.3 Jurisdictional Resources**

During construction, indirect impacts to jurisdictional resources near grading footprints could occur due to erosion, changes to watershed function, and introduction of toxins and trash into jurisdictional resources. While impacts would be minimized through implementing BMPs, including, but not limited to silt fencing, straw waddle, and sandbags, impacts may still result to ponding features that rely on hydrologic flow from a localized watershed basin, if that watershed is impacted.

City wetlands located outside of the project-level grading footprint were reviewed in relation to available topography to identify the potential for project grading to indirectly impact wetland resources through impacts to the watersheds of non-impacted pools. City wetlands located outside



of the project-level grading footprint that were either mapped as part of the project-level survey effort or available from City vernal pool mapping resources, within 100 feet of the grading impact boundaries for the project-level areas are depicted on Figures 48.1 through 48.11. After evaluation, it was determined that 0.07 acre of disturbed wetlands and 0.06 acre of vernal pools would be indirectly impacted due to watershed impacts to pools beyond the impact footprint (see Table 13). The analysis determining whether individual resources are impacted is provided below.

The resources depicted on Figure 48.1 include resources located within West Otay Mesa A and West Otay Mesa B. Of the resources depicted on Figure 48.1, vernal pool 252 and disturbed wetlands 107 and 158 are assumed impacted, while the remaining resources would be avoided as detailed below:

- Vernal pool 255 depicted on Figure 48.1 is a vernal pool with fairy shrimp located just north of the Beyer Boulevard grading footprint. This resource is assumed impacted due to unavoidable watershed impacts. A retaining wall would be incorporated along Beyer Boulevard in this location to provide additional buffer from the pool to retain watershed and provide additional buffering; however, despite the efforts to retain some watershed for this pool, the resource is considered impacted.
- Disturbed wetlands 107 and 158 depicted on Figure 48.1 are features assumed to be impacted due to watershed impacts and proximity to the grading footprint. While the development area would drain away from these pools, they are assumed impacted.
- The remaining resources on this graphic are avoided resources due to the watershed remaining to support inundation of these areas, in addition to the fact that the development area would not drain into these resources.

The resources depicted on Figure 48.2 include resources located within the Southwind project boundary.

- SW-4, SW-6, and SW-7 are small vernal pools totaling 0.036 acre within the Southwind property that are assumed impacted due to its proximity to the grading footprint. If the Southwind project were to proceed first, these impacts would be mitigated by another party.

Figure 48.3 depicts vernal pool 224 which is a vernal pool with fairy shrimp that would be assumed avoided by the project's grading based on the fact that the pool is supported by watershed area located to the south of the pool where no disturbance is proposed. The area north of pool 224 is a downslope which does not provide any supporting drainage to the pool in the existing condition.

Resources depicted on Figure 48.4 are assumed impacted due to their proximity to the grading footprint and impacts to the watersheds of these vernal pool basins.

Resources depicted on Figure 48.5 include a number of resources that are assumed impacted due to watershed impacts and proximity to the grading footprint. Only vernal pool 380, VPHCP1205, and 286 are assumed avoided due to their watersheds being avoided based on topography and distance from the grading footprint. While vernal pool 286 is the closest to the project-level grading area, the pool would be protected by VPHCP avoidance and minimization measures and its watershed is located to the northwest which would remain undisturbed.



Resources depicted on Figure 48.6 are assumed impacted with the exception of three vernal pools (270, 271, 231) and one isolated wetland (285), which would have watershed available after grading to continue to support these pools. Disturbed wetland 242 would additionally be avoided as it would be located downslope of intact native vegetation and the project's drainage design would not result in urban runoff discharges into this basin. Additionally, this basin is included as part of the trail restoration enhancement effort which would involve removal of non-natives and addition of common vernal pool plant species. The trail restoration effort additionally includes restoration of disturbed land southeast of this pool which will support closure of unauthorized trails and reduce potential for human disturbance. Refer to Figure 18.2 for a depiction of the restoration that would occur around this pool which would convert existing disturbed and non-native grassland habitats to maritime succulent scrub. The Trails Restoration Plan (see Attachment 1) includes avoidance measures to ensure restoration efforts do not indirectly impact jurisdictional resources.

Figure 48.7 depicts two vernal pools labeled as pools 395 and 289. Both pools are located immediately adjacent to the edge of the EVA road which would likely impact the watershed of these pools.

Figure 48.8 depicts two large vernal pools (VPHCP 1754 and VPHCP 2337) located adjacent to drainage outfall impacts and just south of a proposed primitive trail alignment. These vernal pools would be avoided during grading and disturbance associated with installation of the drainage outfall through implementation of VPHCP avoidance and minimization measures. Additionally, after installation of the drainage outfall, the impact area would be fully restored to native habitats, retaining all watershed functions that support the existing vernal pools.

Figure 48.9 depicts a vernal pool located within lands designated as VPHCP MHPA, which is the site of proposed vernal pool restoration. All of these resources are assumed avoided because they have been accounted for in the project's Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14), which was prepared as mitigation for the project-level components of the Southwest Village Specific Plan. This plan includes evaluation of watersheds to ensure each vernal pool that would be created and/or restored would have sufficient watershed to support adequate inundation for fairy shrimp viability. Vernal pools P-14, P-15, P-1, P-2, P-17, in addition to all other pools shown on Figures 48.9, 48.10, and 48.11 (vernal pool P-8/VPHCP119) have been accounted in the preparation of the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan.

Disturbed wetland 311, depicted on Figure 48.11, would not be indirectly impacted by the project. This pool would be subject to enhancement associated with the trail restoration effort; additionally, the trail restoration effort would restore disturbed and non-native grassland habitats adjacent to the resource which would enhance biological function (see Attachment 1 and Figure 18.6 for details of the proposed restoration activities). The Trails Restoration Plan includes avoidance measures to ensure restoration efforts do not indirectly impact jurisdictional resources.

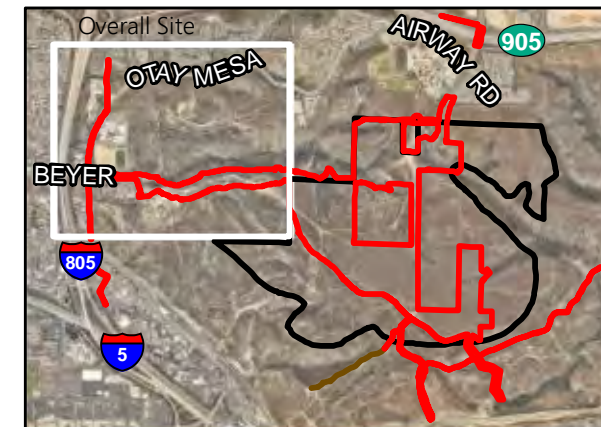
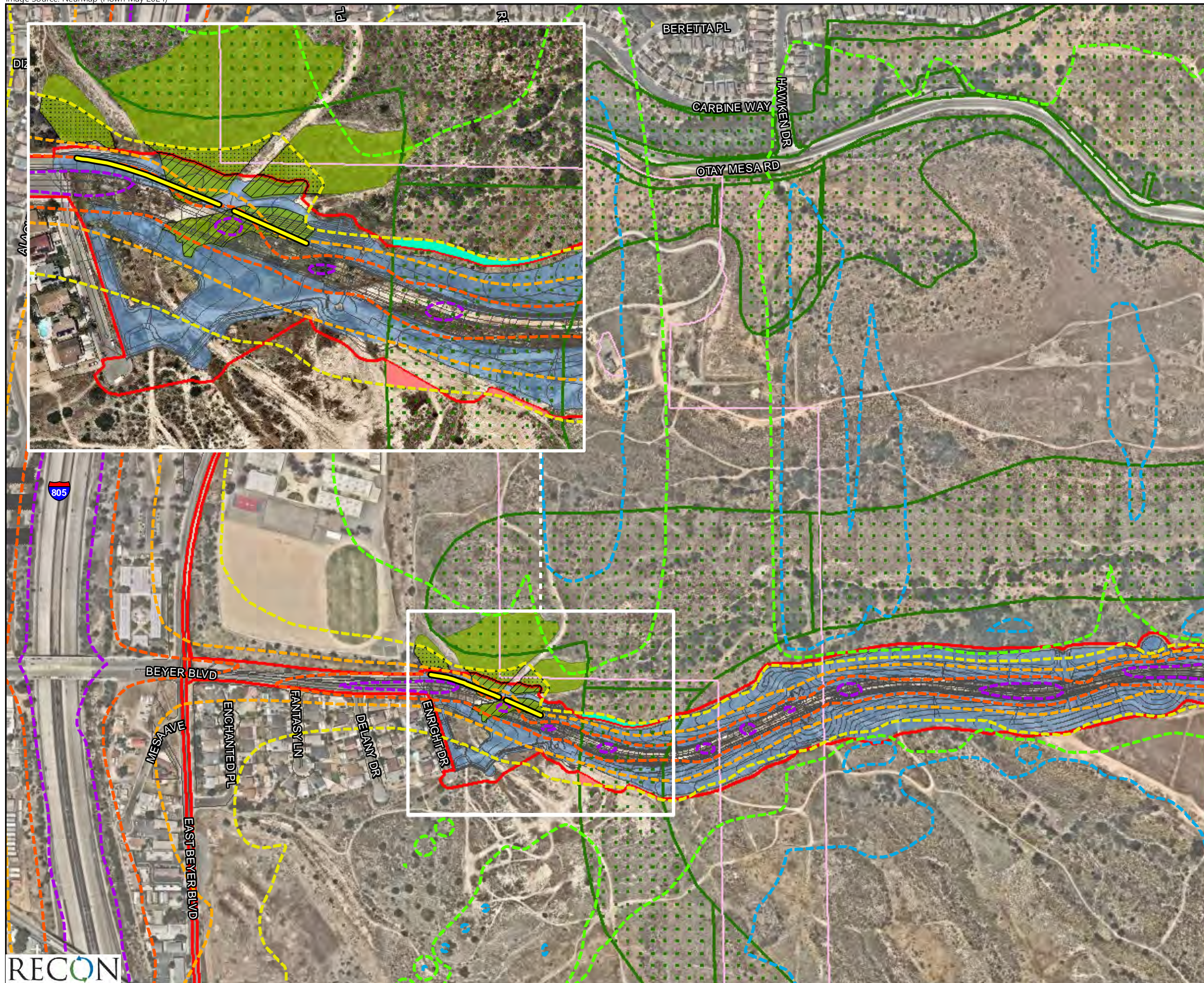
Indirect impacts related to changes in drainage conditions would be avoided by managing post-project runoff flows and durations so that they are maintained to the levels of the pre-project condition. Additionally, hydromodification management would be provided at each outfall. Outfalls have also been strategically located to help minimize erosion to adjacent non-wetland waters by extending them to a well-defined low point.



Indirect impacts to the avoided vernal pools after construction of the project would be avoided by ensuring development does not drain to avoided pools and through compliance with the MSCP Land Use Adjacency Guidelines and the VPHCP Avoidance and Minimization Measures discussed in Section 6.2.2.2.

In summary, indirect impacts to jurisdictional resources would be significant due to 0.13 acre of indirect impacts to vernal pool and disturbed wetland resources located outside of the project-level grading footprint as detailed in Table 13 and Figures 48.1 through 48.11.



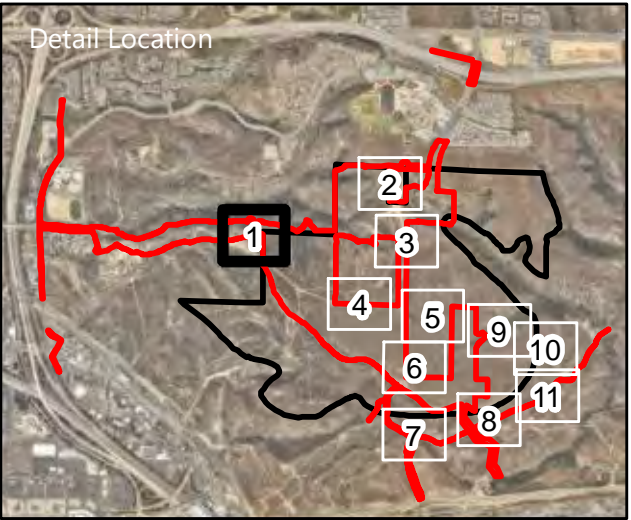
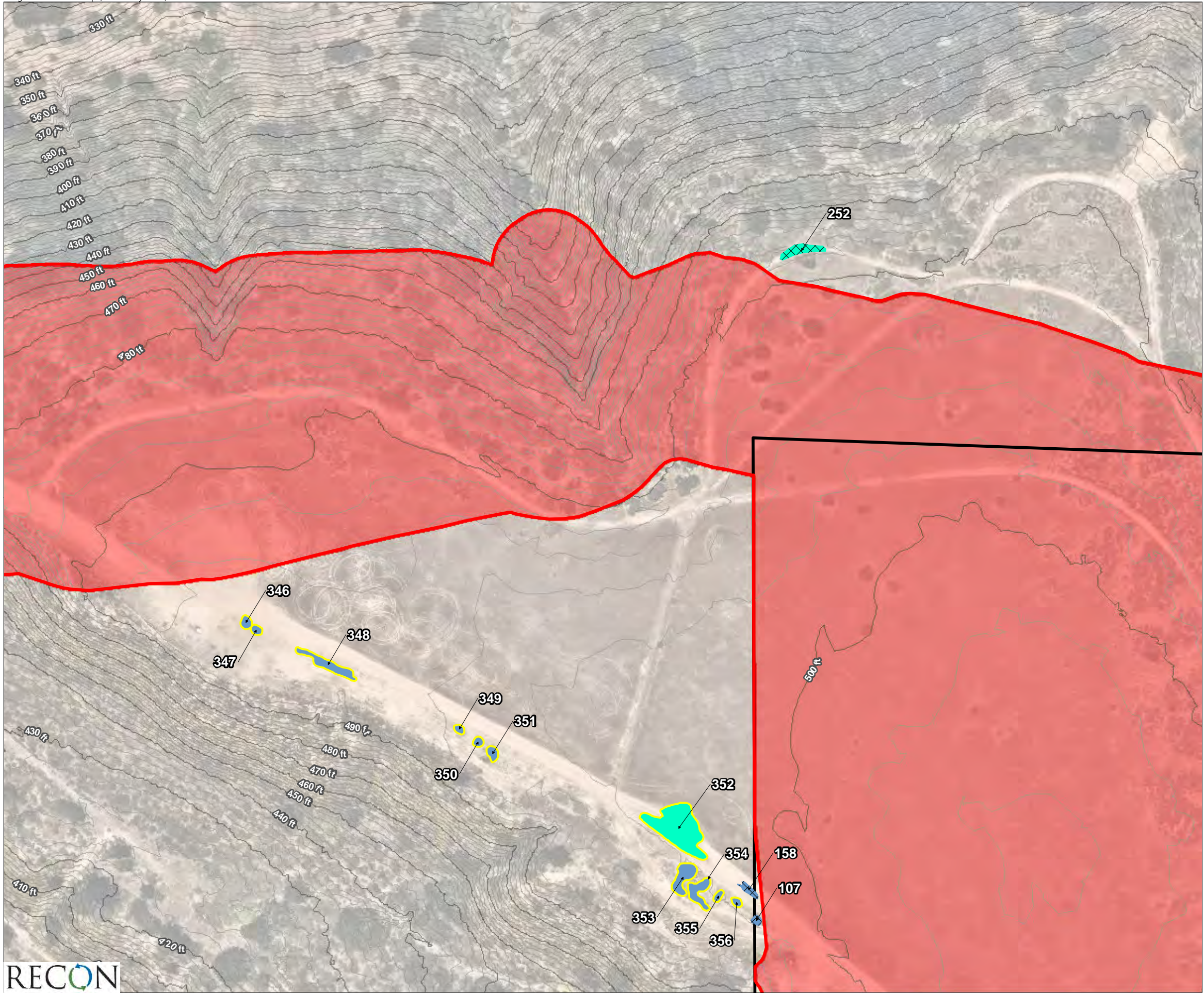


- Direct Impact to Cactus Wren Habitat (0.625 acre)
- Indirect Impact to Cactus Wren Habitat (0.457 acre)
- Maritime Succulent Scrub (0.094 acre Indirect impact to Coastal California Gnatcatcher Habitat)
- Disturbed Land
- Project-Level Analysis Area
- Site Plan
- 6-foot Masonry Noise Wall
- Manufactured Slopes to be Revegetated with Native Species
- Specific Plan Boundary
- Furby North Preserve
- Cactus Wren Habitat/Cholla Thicket
- City of SD MHPA
- Traffic Noise**
  - 50 CNEL
  - 55 CNEL
  - 60 CNEL
  - 65 CNEL
  - 70 CNEL
  - 75 CNEL



FIGURE 47  
Beyer Boulevard Noise Contours



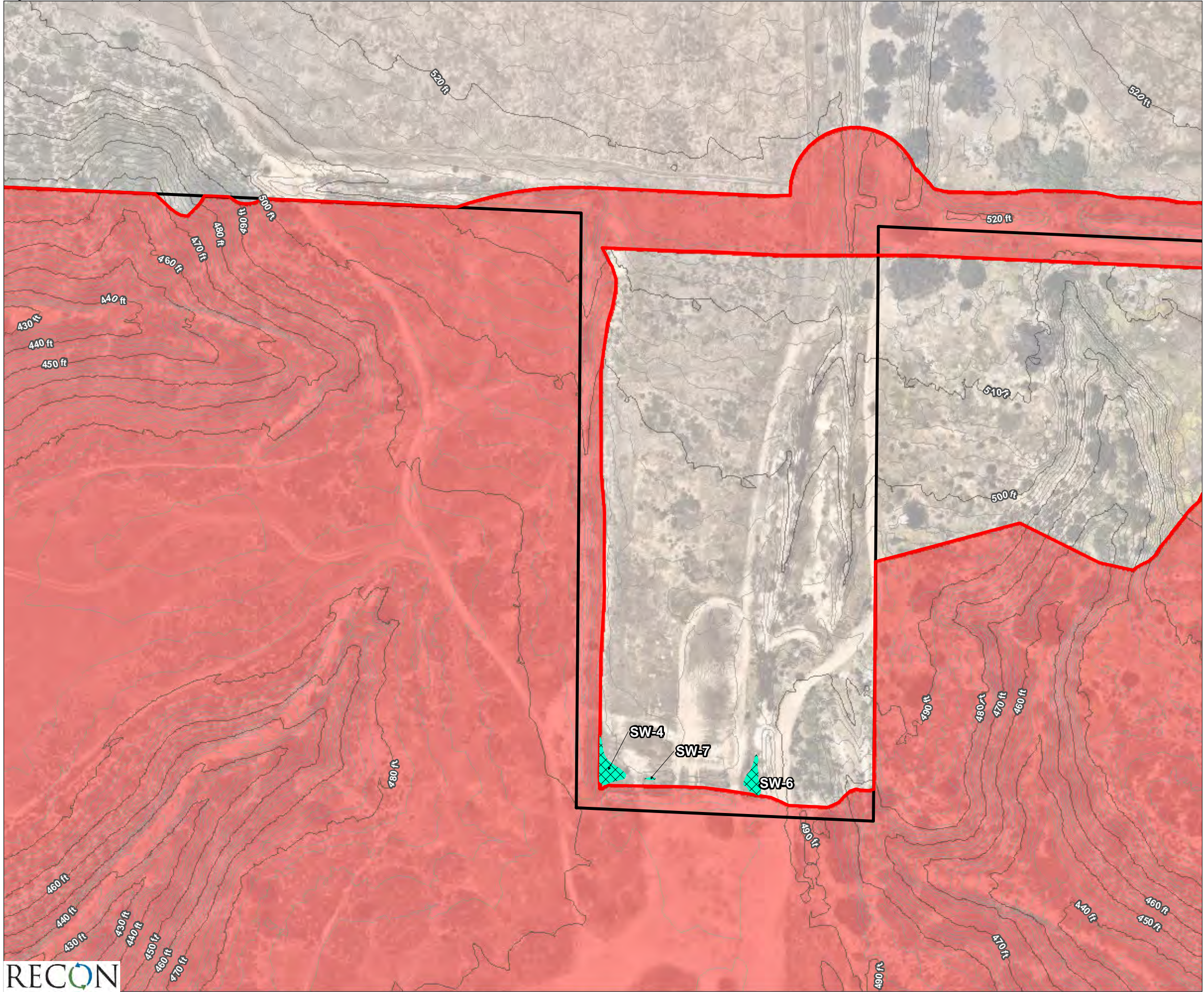


- Project-level Impacts
- Specific Plan Boundary
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Disturbed Wetland (Waters ID)
- Wetland Impact Potential**
  - Assumed Impacted
  - Assumed Avoided



FIGURE 48.1  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint



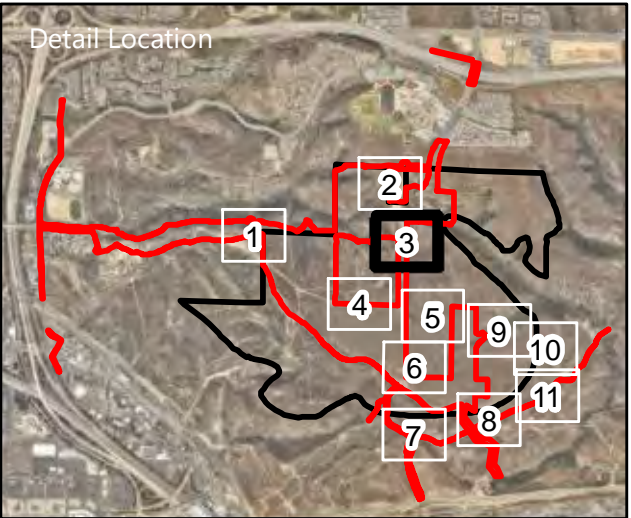
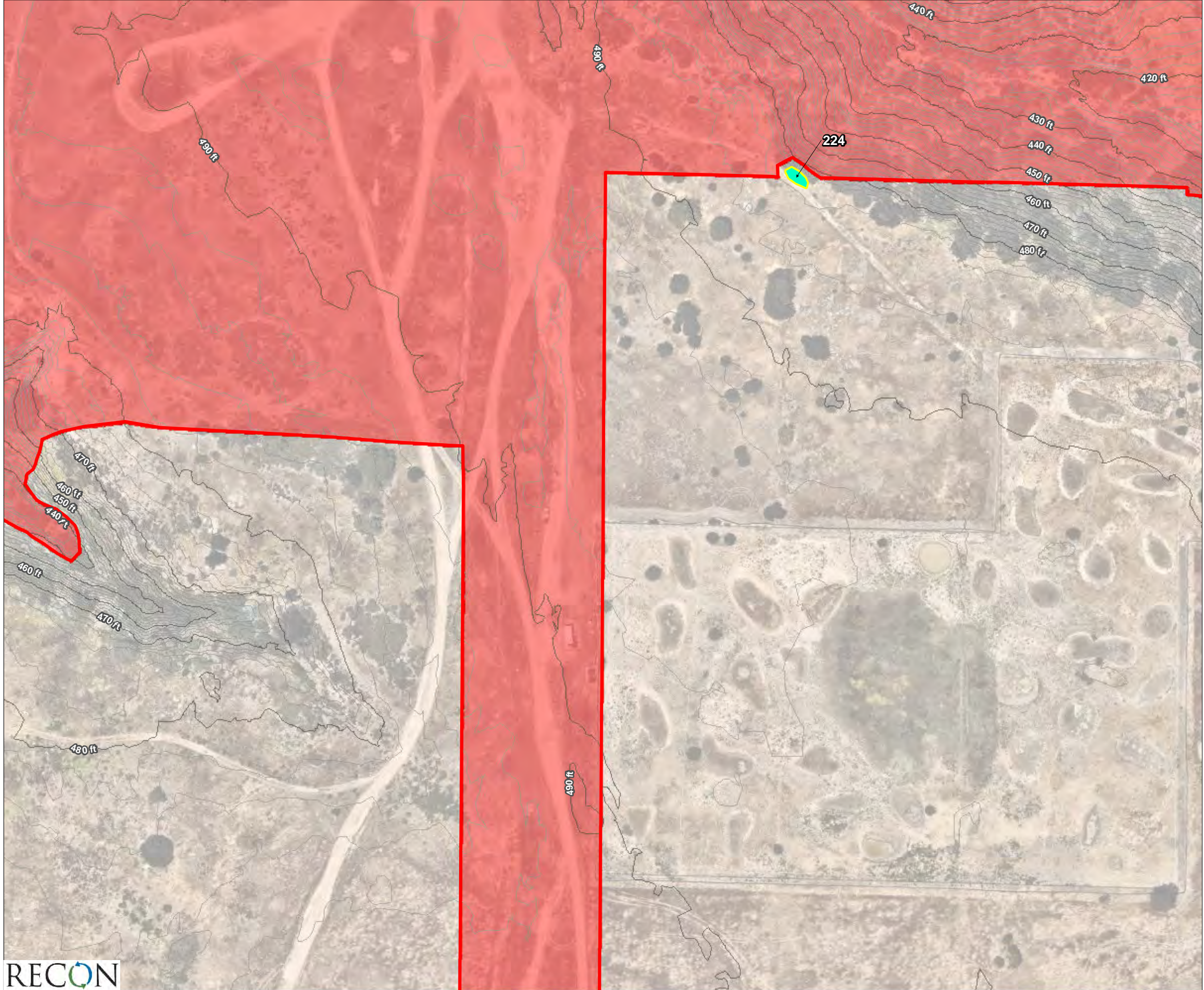


- Project-level Impacts
- Specific Plan Boundary
- City of San Diego Wetlands**
- Vernal Pool (Waters ID)
- Wetland Impact Potential**
- Assumed Impacted



FIGURE 48.2  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint









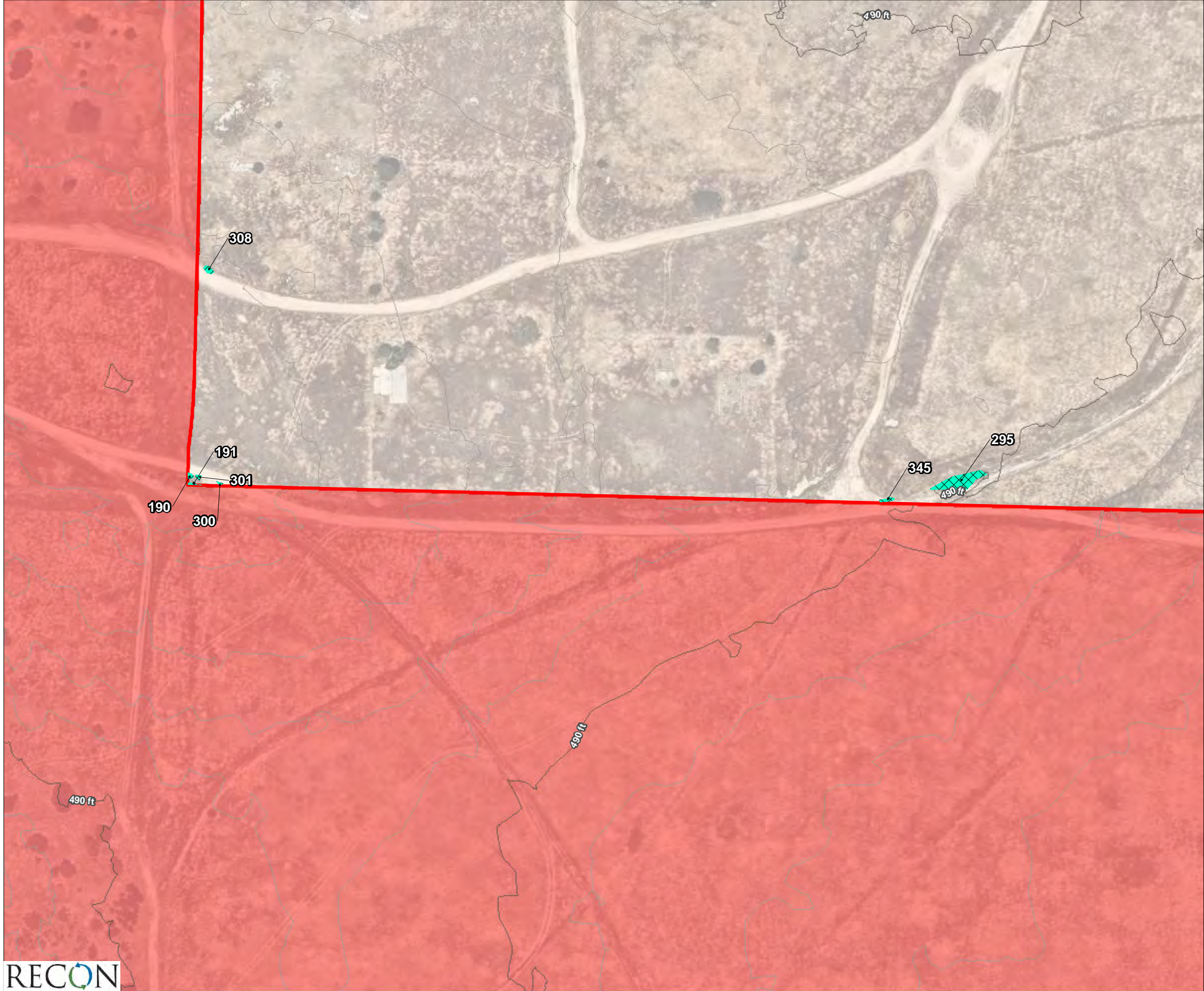
-  Project-level Impacts
-  Specific Plan Boundary
- City of San Diego Wetlands**
-  Vernal Pool (Waters ID)
- Wetland Impact Potential**
-  Assumed Avoided



FIGURE 48.3  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint









-  Project-level Impacts
-  Specific Plan Boundary
- City of San Diego Wetlands**
-  Vernal Pool (Waters ID)
- Wetland Impact Potential**
-  Assumed Impacted



FIGURE 48.4  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint



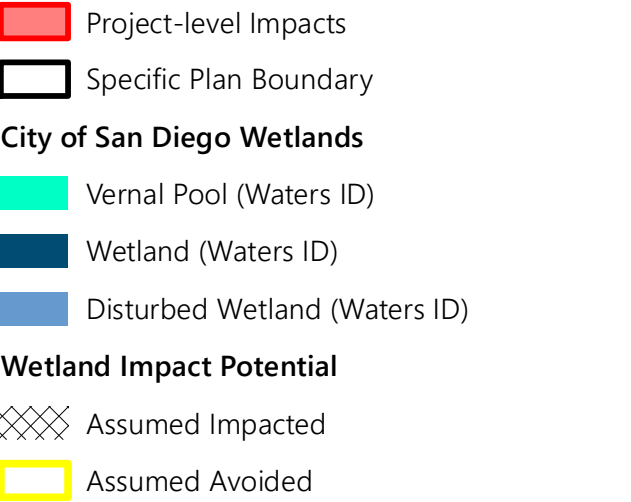
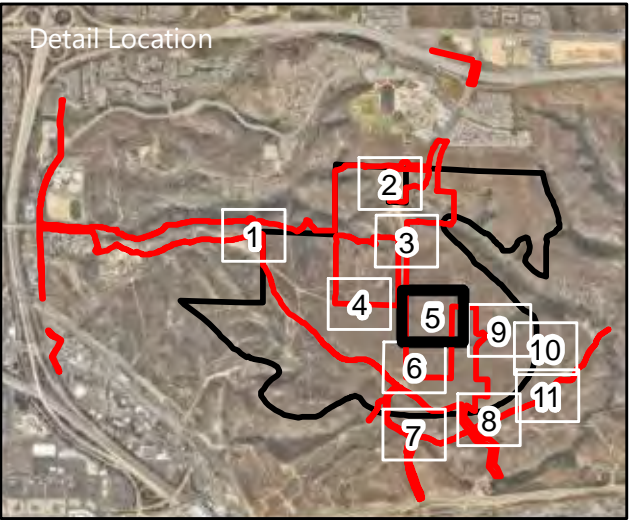
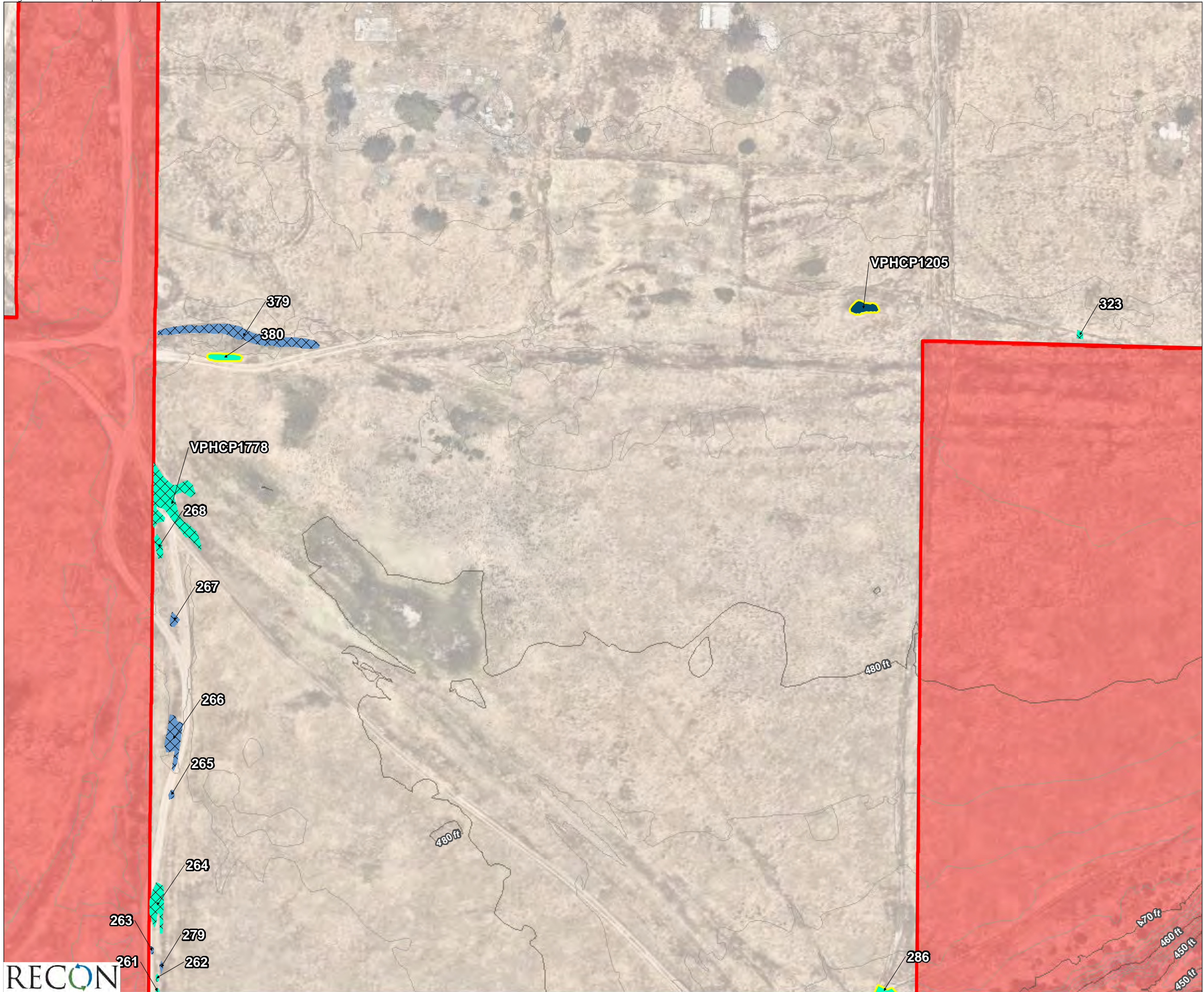
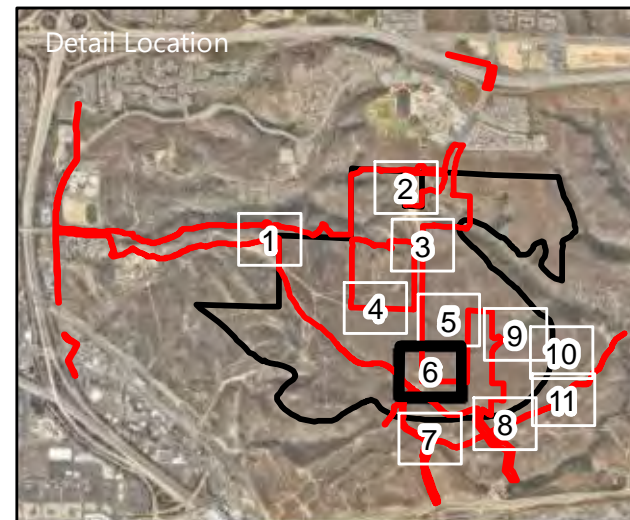
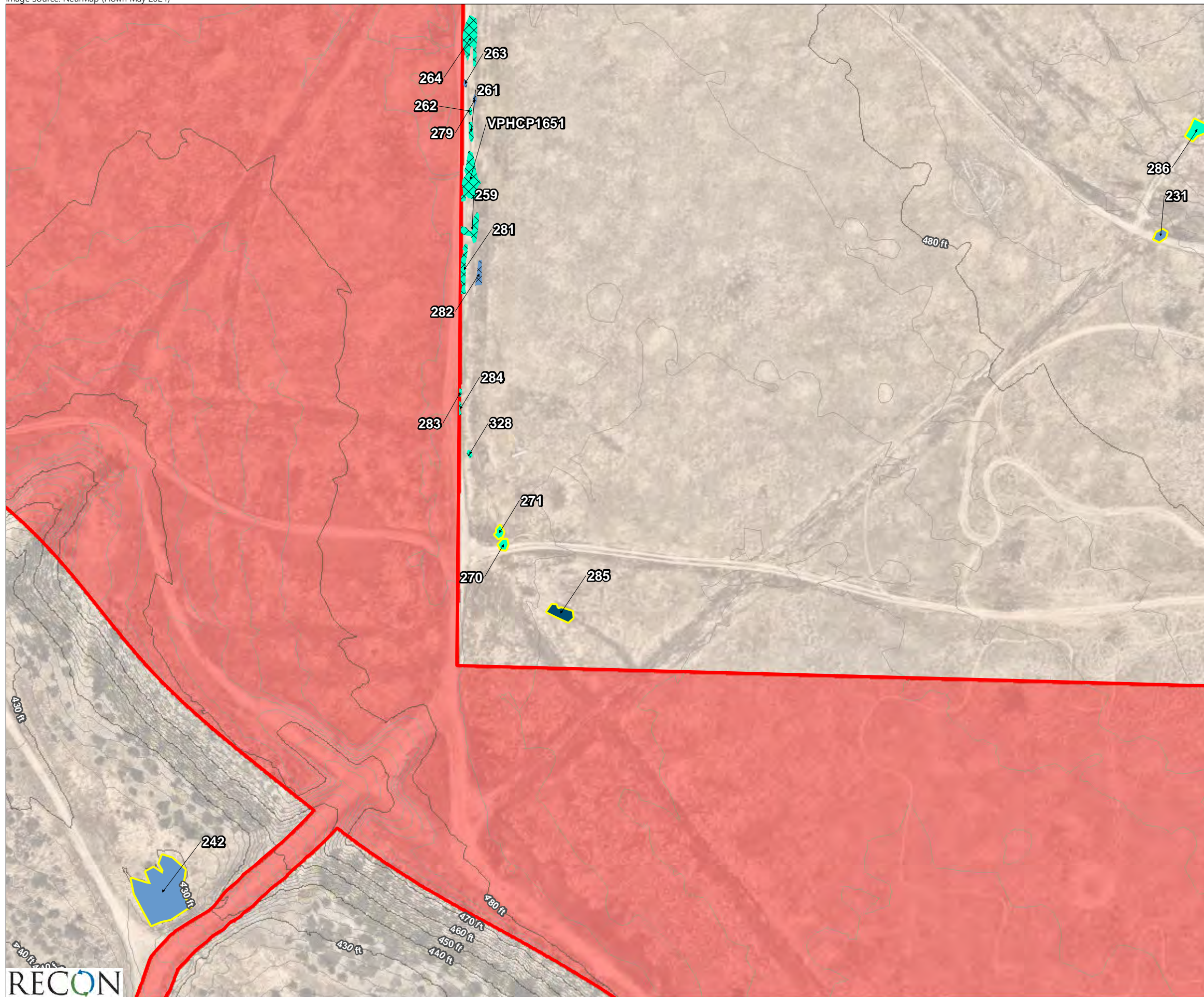


FIGURE 48.5  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint



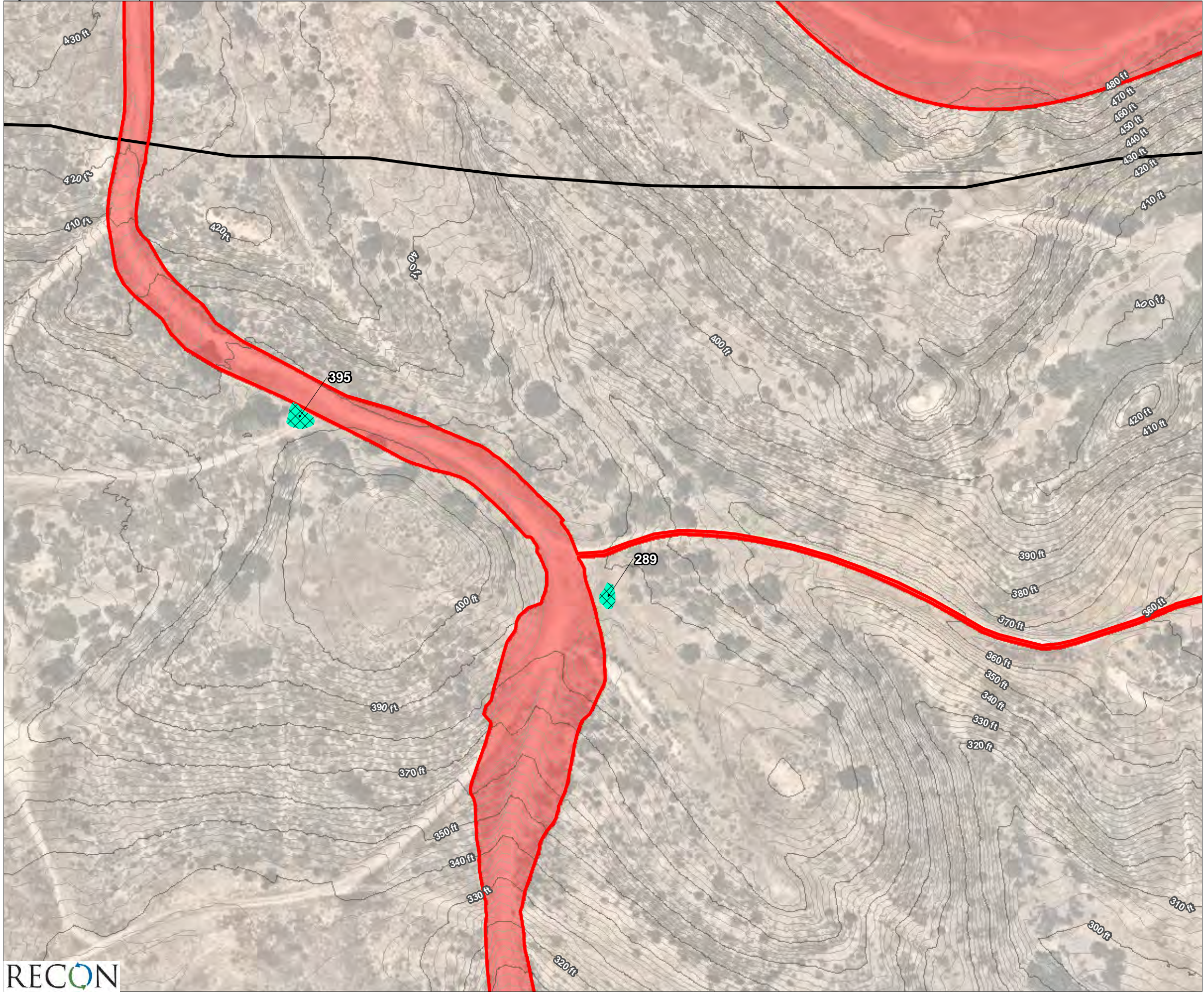


- Project-level Impacts
- Specific Plan Boundary
- City of San Diego Wetlands**
  - Vernal Pool (Waters ID)
  - Wetland (Waters ID)
  - Disturbed Wetland (Waters ID)
- Wetland Impact Potential**
  - Assumed Impacted
  - Assumed Avoided



FIGURE 48.6  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint



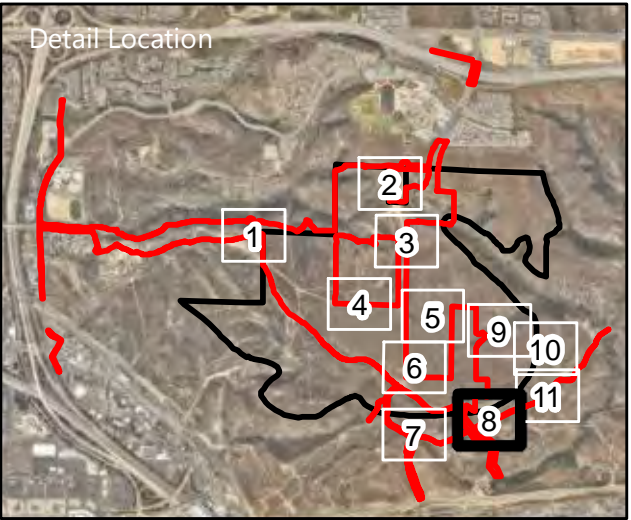
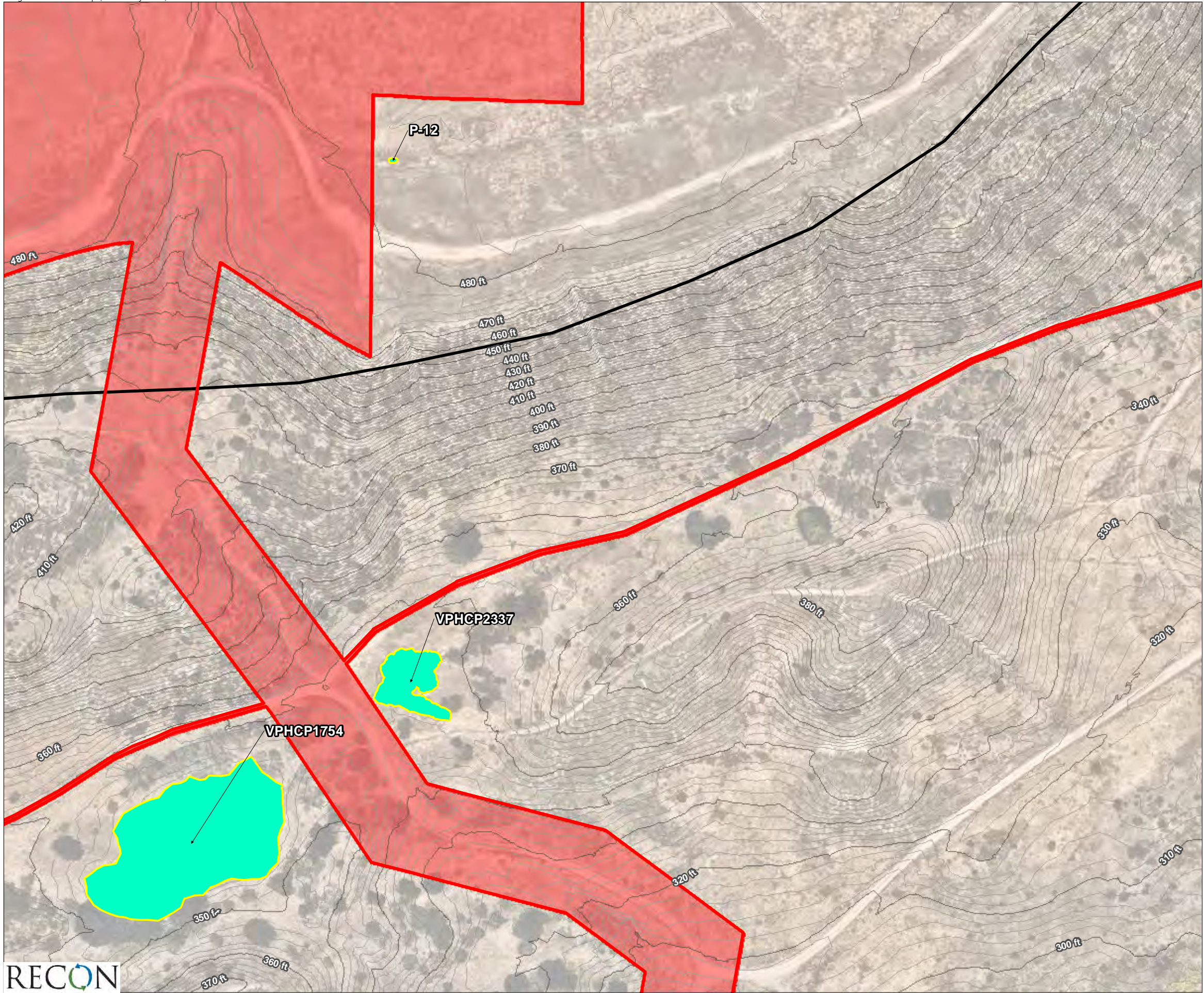


- Project-level Impacts
- Specific Plan Boundary
- City of San Diego Wetlands**
- Vernal Pool (Waters ID)
- Wetland Impact Potential**
- Assumed Impacted



FIGURE 48.7  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint



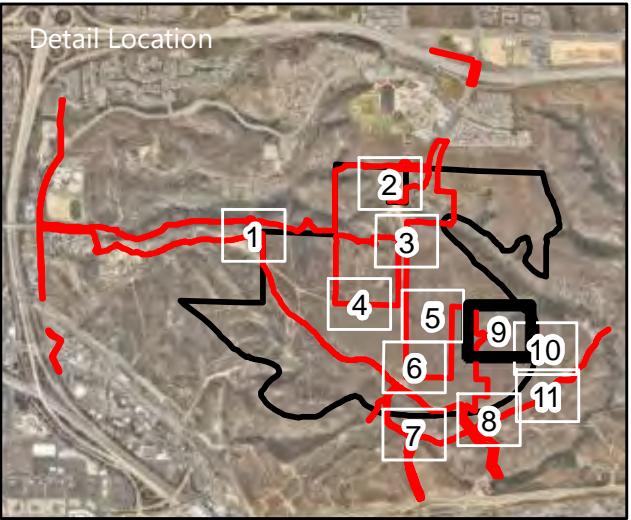
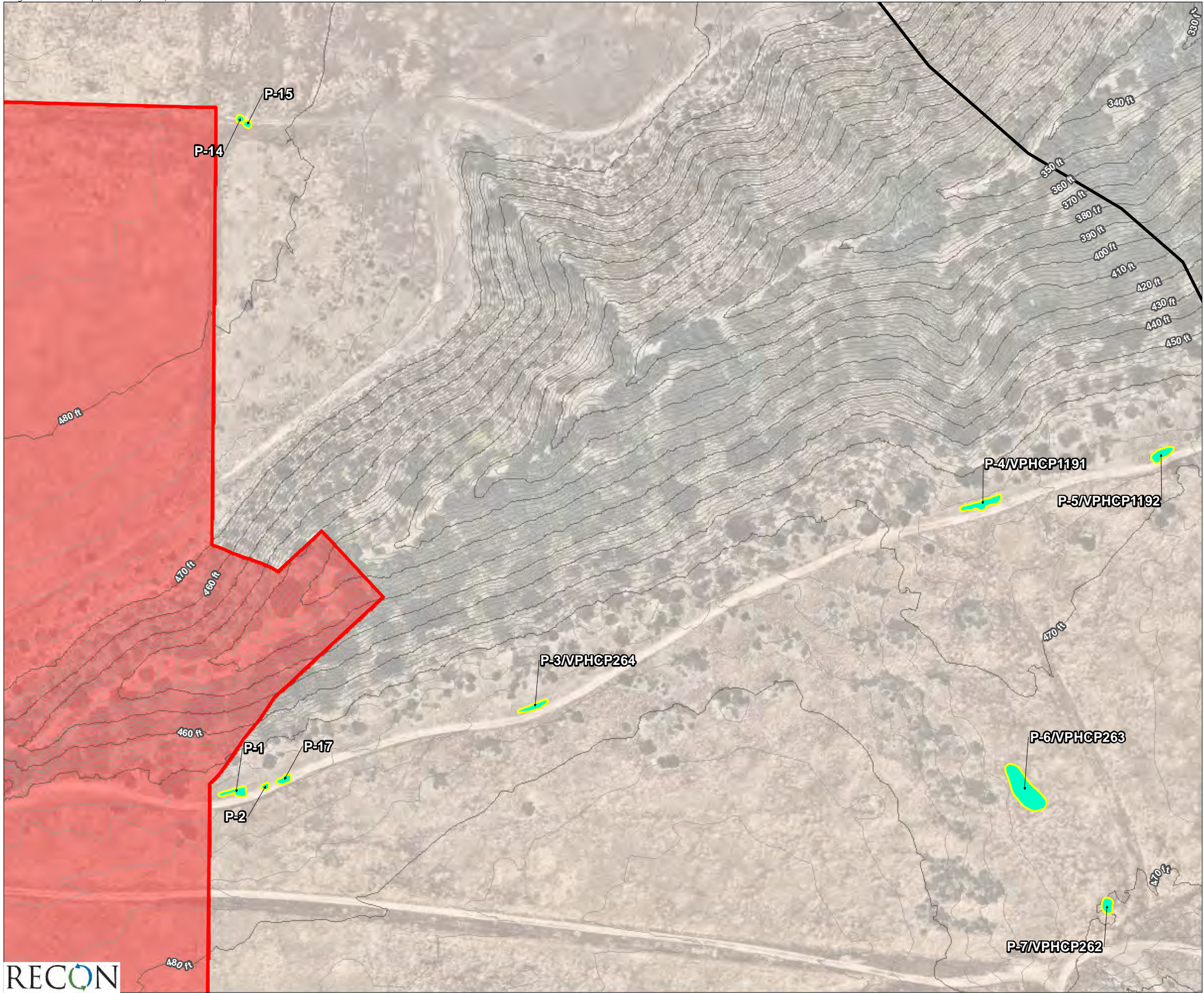


- █ Project-level Impacts
- Specific Plan Boundary
- City of San Diego Wetlands**
- █ Vernal Pool (Waters ID)
- Wetland Impact Potential**
- Assumed Avoided



FIGURE 48.8  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint





- █ Project-level Impacts
- Specific Plan Boundary
- City of San Diego Wetlands**
- Vernal Pool (Waters ID)
- Wetland Impact Potential**
- Assumed Avoided



FIGURE 48.9  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint



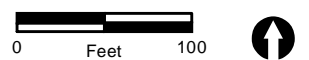
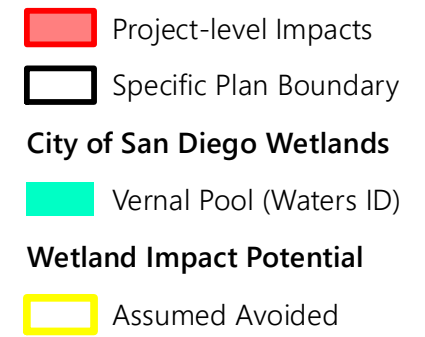


FIGURE 48.10  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint





- █ Project-level Impacts
- Specific Plan Boundary
- City of San Diego Wetlands**
  - █ Vernal Pool (Waters ID)
  - █ Disturbed Wetland (Waters ID)
- Wetland Impact Potential**
  - Assumed Avoided



FIGURE 48.11  
City of San Diego Wetlands Outside  
the Project-level Grading Footprint



## 7.3 Impacts to Wildlife Corridors

### 7.3.1 Program-level Impacts

Impacts to migratory wildlife such as migratory birds due to potential construction and operational impacts to nesting or foraging wildlife species would be significant. Impacts to wildlife species are addressed in Section 7.1.1.2.

As described in Section 5.6.1, wildlife movement occurs within the canyon networks surrounding the Specific Plan area with Moody Canyon and Spring Canyon supporting a majority of the wildlife movement, namely large mammals such as coyote and bobcat. As detailed in the Wildlife Tracking Study (Wildlife Tracking Institute 2020; see Attachment 2), the highest wildlife use areas within and surrounding the Specific Plan area are within the canyon networks surrounding the Specific Plan development area. Program-level areas are limited to the mesa tops and would not reduce the availability of the surrounding open space in Spring Canyon, which is mapped as a regional wildlife movement corridor. Program-level impacts related to wildlife movement corridors would be less than significant.

### 7.3.2 Project-level Impacts

#### 7.3.2.1 Beyer Boulevard Extension

The extension of Beyer Boulevard would have the greatest effect on wildlife movement as the proposed roadway would bisect a large block of conserved lands separating habitat within Moody Canyon from the habitat to the south that connects to Spring Canyon (see Figure 7). However, the extension of Beyer Boulevard through conserved land was anticipated and evaluated in the OMCP FEIR and it was determined that compliance with City MSCP Subarea Plan policies would reduce impacts to less than significant. Additionally, since adoption of the OMCP FEIR the City has adopted the VPHCP. The VPHCP acknowledges in Section 4.1.4 that development of new roads may be required to cross the MHPA to accommodate existing and planned land use in the circulation/mobility element of the City's General Plan and the corresponding Community Plans. Maintenance of existing access roads, expansion of existing roads, and development of new roads are covered projects because they are conditionally compatible with the MHPA. Additionally, the VPHCP MA analysis discussed above in Section 6.2.2.1 addresses impacts to 100 percent conserved lands and the proposed conservation strategy to ensure VPHCP conservation levels are maintained or exceeded.

To demonstrate consistency with the MSCP and the VPHCP, Beyer Boulevard has been the subject of extensive study to identify a design that would minimize impacts to the greatest degree feasible and incorporate features to ensure wildlife movement through the open space areas north and south of the road would remain viable.

Based on the results of the wildlife tracking study presented in Section 5.6, three culvert crossings for wildlife and one wildlife overcrossing are proposed to facilitate wildlife movement. Details of the design of the crossing and associated wildlife fencing are described in Section 1.3.2.3.b. Proposed



wildlife crossings and associated design features would minimize project impacts to wildlife movement associated with the construction of Beyer Boulevard by providing wildlife connections from Moody Canyon to large habitat areas south of the proposed Beyer Boulevard which connects to extensive habitat extending south of the Specific Plan area and connecting to Spring Canyon and north through existing crossing locations (e.g., SR-905 bridge) that connects to Dennerly Canyon.

In order to direct wildlife to utilize one of three proposed undercrossings and the proposed wildlife overcrossing and avoid wildlife vehicular collisions, as described in Section 1.3.2.3.b, chain link fencing is proposed along the entire length of Beyer Boulevard on both the north and south sides of the road. The height of the fencing would be based on the slope aspect in relation to the fence, with fence heights being 6 feet up to 8 feet depending on the orientation of the slope. Where the fence is located mid-slope with wildlife usage area located above the fence-line, the fence would need to be 8 feet tall. Where the fence is located at grade or within wildlife use area located downslope of the fence, a 6-foot fence height would be sufficient. These fence heights would be adequate to prevent animals from jumping over.

Fencing on both sides of the road would be fashioned with a fine mesh cover on the bottom 2-foot portion of the fence to prevent small animal movement through openings in the fence. The fencing would also be buried a minimum of six inches to prevent animals from burrowing under. Refer to Figure 15 for the location of proposed fencing.

Moody Canyon and Spring Canyon support a majority of the wildlife movement, namely large mammals such as coyote and bobcat. The project design features listed in Section 1.3.2.3.b would facilitate the avoidance and minimization of impacts to wildlife species associated with the construction of Beyer Boulevard across a wildlife movement area. Additionally, a Long-Term Management and Monitoring Plan has been prepared to ensure all of the wildlife movement features proposed along Beyer Boulevard are monitored and managed for a period of 10 years to evaluate the functioning of the wildlife crossings (see Attachment 16). The purpose of the monitoring period is to evaluate the success of the wildlife overcrossing and allow for adaptive management as needed to support its functionality. Prior to initiation of long-term management and monitoring, an endowment would be provided to fund the management and monitoring of the wildlife features for the 10 year period in addition to ongoing funding in perpetuity to support regular maintenance and monitoring. With implementation of the Beyer Boulevard wildlife features and the Long-Term Management and Monitoring Plan for the Beyer Boulevard Wildlife Features (see Attachment 16), impacts to wildlife corridors would be less than significant.

### 7.3.2.2 Trails

The potential for primitive trails to be formalized within the open space areas within the Specific Plan area and surrounding the Specific Plan area was evaluated as part of the development of the Specific Plan. Trails have been substantially minimized compared to the originally conceived trail network identified in the OMCP conceptual trail network. No trail alignments are proposed within the vicinity of the wildlife crossings along Beyer Boulevard to ensure no conflicts with wildlife and humans. Additionally, within the surrounding open space, limited trails are proposed as detailed in Figure 12.3. No conflicts are anticipated with proposed primitive trails and wildlife usage as trails would be designed to be consistent with the City's MSCP Subarea Plan trail policies. Trails are sited



to follow existing disturbed alignments. As detailed in Section 1.3.2.6.a, the proposed trail establishment would include restoration of disturbed habitats surrounding the proposed trail corridor which would enhance the existing habitats, supporting wildlife use.

### 7.3.2.3 Residential Development

Development of the mesa top would impact habitat within the use range of focal species; however, significant large blocks of habitat would remain intact after development. As shown in Figure 36.4, connectivity of MHPA lands is retained after development of the Specific Plan. Therefore, impacts to wildlife corridors from development of the mesa top would be less than significant and no mitigation would be required.

### 7.3.2.4 EVA Road

Improvements are proposed within the MHPA to provide EVA to the south of the Specific Plan to enhance emergency evacuation and response options for the project. While the EVA road and its slopes would be deleted from the MHPA, the improvements would not adversely affect wildlife movement through the surrounding open space because the use of the road is not anticipated to increase. The EVA road would be closed to public vehicular access with a gate within the Specific Plan to prohibit public vehicular access. The proposed improvements would follow an existing dirt road that is currently used by border patrol and land managers. Improvements to the existing dirt road are proposed for accessibility by fire engines by reducing the road steepness in certain areas to achieve a maximum 15 percent grade and providing a mix of surfacing including decomposed granite, asphalt, and concrete depending on grade (refer to Section 1.3.2.3.e for details). Where grading is required to reduce grades, slopes would be restored to native habitats consistent with the surrounding area after construction.

Although improvements are proposed along this road, the improvements are not anticipated to result in increased use beyond existing conditions. Currently, border patrol uses this road, and other roads, to patrol the area. The surfacing would not increase border patrol use of the road or their presence in the area. Similarly, land managers may use the road for access to the open space to conduct restoration and habitat management and maintenance activities. Some pedestrian and bicycle access along the northern portion of the EVA road is anticipated to provide access to the primitive trail network (see Figure 12.3 for the existing utility road in relation to proposed primitive trails). The improvements to the EVA road would not affect wildlife usage in this area. The City is the anticipated long-term manager for the surrounding open space would monitor trespass and address any issues should they arise. No indirect effects to wildlife are anticipated due to the EVA road improvements.



## 7.4 Land Use Consistency

### 7.4.1 Program-level

#### 7.4.1.1 Otay Mesa Community Plan

As detailed in Section 3.3.4, the OMCP includes policies pertaining to biological resources and Otay Mesa in particular. Consistency with these policies for the program-level areas is addressed below:

*OMCP Policy 8.1-6: Implement Area Specific Management Directives and Conditions of Coverage as stated in Table 3-5 of the MSCP Subarea Plan for Species protected in Otay Mesa and identified in Table 8-1.*

*Discussion:* All future development within the Specific Plan area would be required to complete a site-specific biological technical report and appropriate species surveys, as required by OMCP FEIR Mitigation Framework BIO-1. Based on the species present or with the potential to occur, the City's Biology Guidelines would require evaluation of consistency with the MSCP including ASMDs and Conditions of Coverage as stated in Table 3-5 of the MSCP Subarea Plan. Therefore, at the program-level, the project would be consistent with this policy.

*OMCP Policy 8.1-7: Require preservation, restoration, management, and monitoring within identified vernal pool preservation areas in accordance with City, state, and federal policies and regulations. The boundaries of vernal pool preserve areas should be of sufficient size and shape to protect the vernal pool basins, watersheds, functional buffers, and areas necessary to maintain vernal pool ecosystem function and species viability.*

- A. Design, as feasible, the preserve areas to provide connectivity between vernal pools, surrounding open space, and nearby vernal pool complexes.*
- B. Conduct management and monitoring of preserved and restored vernal pool sites in accordance with the citywide regulations and Biology Guidelines.*

*Discussion:* This policy has largely been implemented through the City's completion of the VPHCP which defines vernal pool preserve areas of a sufficient size and shape to protect vernal pool ecosystems and species viability and identifies required management and monitoring actions that the City is responsible for implementing. The Specific Plan has incorporated all VPHCP identified vernal pool preserve areas into the land use plan for the Specific Plan. As future development within the Specific Plan is proposed near vernal pool preserve areas and vernal pool resources potential direct and indirect impacts to vernal pools would be evaluated to ensure adequate buffers and vernal pool watersheds are maintained. With implementation of the program-level mitigation described in Section 8.1, all future development would be designed to address protection of vernal pools and their watersheds.



*OMCP Policy 8.1-8 Amend the Otay Mesa Community Plan as needed for consistency with an adopted Vernal Pool Habitat Conservation Plan (HCP).*

*Discussion:* The City amended the OMCP after adoption of the VPHCP. The Specific Plan is consistent with the VPHCP; therefore, additional OMCP amendments to address the VPHCP are not anticipated.

*OMCP Policy 8.1-11 Encourage the development of a comprehensive approach to habitat identification, management, and establishment of preservation nodes in order to address long term survival of the burrowing owl on Otay Mesa.*

*Discussion:* The City continues to work with the Wildlife Agencies to develop a comprehensive approach to habitat identification, management, and establishment of nodes to address long-term survival of burrowing owl on Otay Mesa. At a program-level, future development would likely affect foraging habitat for burrowing owl. Future site-specific biological studies would be required to include burrowing owl protocol surveys and assess the potential for impacts to burrowing owl and its habitats. Implementation of the Specific Plan would not impede development of a comprehensive approach to addressing long term survival of burrowing owl on Otay Mesa.

## 7.4.2 Project-level

### 7.4.2.1 Otay Mesa Community Plan

As detailed in Section 3.3.4, the OMCP includes policies pertaining to biological resources and Otay Mesa in particular. Consistency with these policies at the project-level is addressed below:

*OMCP Policy 8.1-6 Implement Area Specific Management Directives and Conditions of Coverage as stated in Table 3-5 of the MSCP Subarea Plan for Species protected in Otay Mesa and identified in Table 8-1.*

*Discussion:* As detailed in Section 6.2.1.2.g, the following MSCP covered species were identified within the project impacts limits: coast horned lizard, least Bell's vireo, orange-throated whiptail, Cooper's hawk, southern California rufous-crowned sparrow, northern harrier, coastal California gnatcatcher, burrowing owl, coastal cactus wren, and southern mule deer. The project would implement the ASMDs and Conditions of Coverage for each of these species, as discussed in Section 6.2.1.2.g.

*OMCP Policy 8.1-7 Require preservation, restoration, management, and monitoring within identified vernal pool preservation areas in accordance with City, state, and federal policies and regulations. The boundaries of vernal pool preserve areas should be of sufficient size and shape to protect the vernal pool basins, watersheds, functional buffers, and areas necessary to maintain vernal pool ecosystem function and species viability.*

*A. Design, as feasible, the preserve areas to provide connectivity between vernal pools, surrounding open space, and nearby vernal pool complexes.*



- B. Conduct management and monitoring of preserved and restored vernal pool sites in accordance with the citywide regulations and Biology Guidelines.*

*Discussion:* The project-level mitigation includes implementation of a vernal pool restoration area within a location identified as preserve in the City's VPHCP. All existing vernal pools within this area would be preserved and enhanced in place with appropriate watersheds retained to ensure ecosystem function. The proposed restoration area includes requirements for ongoing management including funding for management and monitoring in perpetuity following the requirements of City, state and federal policies and regulations. Refer to Attachment 14 for details of the proposed Vernal Pool and Quino Checkerspot Mitigation Plan.

*OMCP Policy 8.1-8 Amend the Otay Mesa Community Plan as needed for consistency with an adopted Vernal Pool Habitat Conservation Plan (HCP).*

*Discussion:* The City amended the OMCP after adoption of the VPHCP. The project is consistent with the VPHCP; therefore, additional OMCP amendments to address the VPHCP are not anticipated.

*OMCP Policy 8.1-11 Encourage the development of a comprehensive approach to habitat identification, management, and establishment of preservation nodes in order to address long term survival of the burrowing owl on Otay Mesa.*

*Discussion:* The project completed burrowing owl protocol surveys and did not find any evidence of burrowing owl nesting on-site. Impacts to burrowing owl foraging habitat would occur and would be mitigated through habitat based in-kind mitigation. Although direct impacts to burrowing owl are not anticipated based on the results of protocol surveys, the project includes as a design feature installation of a berm with artificial burrows/pilot holes within the mitigation lands. While not required as mitigation, this project design feature was coordinated with the Wildlife Agencies and was determined desirable due to the potential for the area (including Spring Canyon to the east) to potentially be developed as a burrowing owl preservation node. The City continues to work with the Wildlife Agencies to develop a comprehensive approach to habitat identification, management, and establishment of nodes to address long-term survival of burrowing owl on Otay Mesa. The project's installation of the berm within the Vernal Pool and Quino Checkerspot Butterfly restoration area would support this goal. Therefore, implementation of the project-level areas would not impede development of a comprehensive approach to addressing long term survival of burrowing owl on Otay Mesa.



## 7.5 Cumulative Impacts

Cumulative impacts are those that may occur at a landscape or regional level as a result of past, current, and foreseeable projects within the cumulative study area. While impacts from one project may not be significant, when analyzed in concert with multiple projects in the area, impacts may compound and reach a level of significance. For purposes of this section, the cumulative impact analysis considers both the project-level and program-level areas since buildout of both areas would be part of the cumulative condition.

Cumulative impacts to sensitive habitats and wildlife are addressed through project compliance with the MSCP. The MSCP was designed to compensate for the regional loss of biological resources throughout the region. Projects that conform with the MSCP as specified by the Subarea Plan, and implementing ordinances, (i.e., Biology Guidelines and ESL Regulations) are not expected to result in a significant cumulative impact to vegetation communities identified as Tier I through IV. Therefore, with implementation of habitat-based mitigation required by the City's Biology Guidelines (2018), no cumulative impacts to Tier I – IIIB vegetation communities are anticipated to occur. Similarly, adequate preservation of habitat consistent with the MSCP would avoid cumulative impacts to sensitive species covered under the plan.

Like the MSCP, the VPHCP is designed to ensure regional protection of vernal pool resources and the species that occupy them. As the project-level areas are consistent with the VPHCP and all future development within program-level areas would be required to demonstrate consistency with the VPHCP, cumulative impacts would be less than significant.

The compensatory mitigation for the loss of wetlands (mule fat scrub, southern willow scrub, disturbed southern willow scrub, disturbed riparian and disturbed wetlands) and natural flood channel for the project-level areas is proposed as reestablishment/rehabilitation credits at a 3:1 ratio and 2:1 ratio, respectively. Similarly, the mitigation required for impacts to jurisdictional resources associated with program-level areas would be required to fulfill the no-net-loss wetland policy implemented by the City and the resource agencies which would ensure no cumulatively significant loss of wetland vegetation communities.

Regarding Quino checkerspot butterfly, although the project is not anticipated to support a regionally significant population of this species based on the survey results, the project-level impact area combined with future development within program-level areas would result in development of an approximate 300-acre area within the Specific Plan area in Otay Mesa. The Specific Plan, combined with the other developments anticipated in the area and the lack of MSCP coverage for the species, would result in a cumulative impact to Quino checkerspot butterfly. As development in the Otay Mesa community persists, any loss of Quino checkerspot butterfly or its suitable habitat would result in a cumulative impact. Therefore, cumulative impacts to suitable Quino checkerspot butterfly habitat resulting from project-level impacts would be significant.

Regarding Crotch's bumble bee, the project-level impact area combined with future development within program-level areas would result in development of an approximate 300-acre area within the Specific Plan area in Otay Mesa. The Specific Plan, combined with the other developments anticipated in the area and the lack of MSCP coverage for the species, would result in a cumulative impact to Crotch's bumble bee. As development in the Otay Mesa community persists, any loss of



Crotch's bumble bee or its suitable habitat would result in a cumulative impact. Therefore, cumulative impacts to suitable Crotch's bumble bee habitat resulting from project-level impacts would be significant.

Regarding western spadefoot, the project-level impact area combined with future development within program-level areas would result in development of an approximate 300-acre area within the Specific Plan area in Otay Mesa. The Specific Plan, combined with the other developments anticipated in the area and the lack of MSCP coverage for the species, would result in a cumulative impact to western spadefoot. As development in the Otay Mesa community persists, any loss of western spadefoot or its suitable habitat would result in a cumulative impact. Therefore, cumulative impacts to western spadefoot habitat resulting from project-level impacts would be significant.



## 8.0 Impact Summary and Mitigation

Mitigation is required for project impacts that are significant under CEQA (City of San Diego 2022), including impacts to sensitive or listed species and sensitive vegetation communities. All impacts to sensitive biological resources should be avoided to the maximum extent feasible and minimized when possible. Mitigation measures typically employed include resource avoidance, habitat preservation, restoration/enhancement of habitat, or dedication/acquisition of habitat.

As discussed in Section 3.3.6, this biological analysis will support preparation of a Subsequent EIR to the OMCP FEIR. As a result, the impacts and mitigation in the section are presented in light of the OMCP FEIR Mitigation Framework, which is cited in Section 3.3.7. To provide clarity on how the OMCP FEIR analysis and Mitigation Framework relates to the analysis in this biological resources report, the following summarizes the issues evaluated in the OMCP FEIR and where they are addressed in this biological resources report. The issue organization has been updated for clarity; however, as detailed in Table 14 below, all issues addressed in the OMCP FEIR have been covered in this analysis.

Table 14 Otay Mesa Community Plan Final Environmental Impact Report and Southwest Village Biological Resources Report Issue Cross-reference			
OMCP FEIR Issue	OMCP FEIR Mitigation Framework	Program-level Analysis	Project-level Analysis
Land Use: Environmental Plan Consistency (MSCP Adjacency)	LU-2 Land Use Adjacency Guidelines	Addressed in Section 6.1	Addressed in Section 6.2
Sensitive Plants and Animals	BIO-1 Site Specific Biology Report and Compliance with Biology Guidelines	Addressed in Section 7.1.1.1, 7.1.1.2 7.2.1.1, 7.2.1.2	Addressed in Section 7.1.2.1, 7.1.2.2, 7.1.2.3, 7.2.2.1, 7.2.2.2
Migratory Wildlife	BIO-1 and BIO-2 – Protocol Surveys and Biology Report	Addressed in Section 7.1.1.2, 7.2.1.2, and 7.3.1	Addressed in Section 7.1.2.3, 7.2.2.2, and 7.3.2
Sensitive Habitat	BIO-1	Addressed in Section 7.1.1.1, 7.2.1.1	Addressed in Section 7.1.2.1, 7.2.2.1
MSCP	N/A	Addressed in Section 6.1	Addressed in Section 6.2
Invasive Plants	LU-2	Addressed in Section 7.2.1.1	Addressed in Section 7.2.2.1
Wetland Impacts	BIO-1 and BIO-4	Addressed in Section 7.1.1.3, 7.2.1.3	Addressed in Section 7.1.2.4, 7.2.2.3
Noise Generation	BIO-1, BIO-3, BIO-4, and LU-2	Addressed in Section 7.2.1.2	Addressed in Section 7.2.2.2



## 8.1 Program-level Impact Summary and Mitigation Framework

### 8.1.1 Consistency with the MSCP and VPHCP

The OMCP FEIR addressed consistency with the MSCP as a key issue in the FEIR. This analysis topic was expanded to include the VPHCP consistency since the VPHCP was adopted subsequent to certification of the OMCP FEIR.

#### 8.1.11 MSCP Consistency

As detailed in Section 6.1.1, the Specific Plan development concept (see Figure 8), including all program-level areas demonstrates consistency with the MSCP because no future development areas are planned within existing MHPA and all future development would be required to demonstrate consistency with the MSCP. At the program-level, the project would be consistent with the MSCP. Impacts would be less than significant.

#### 8.1.2 VPHCP Consistency

As detailed in Section 6.1.2, the Specific Plan has incorporated VPHCP 100 percent conserved lands into the Specific Plan land use concept and language has been incorporated into the Specific Plan that requires any development adjacent to conserved open space to be designed to protect the function and value of surrounding vernal pool resources and their watersheds. Program-level areas are located outside of existing VPHCP/MHPA lands. All future development adjacent to VPHCP/MHPA lands would be required to demonstrate consistency with the VPHCP through consideration of potential indirect impacts to vernal pool watersheds as part of implementation of Mitigation Framework BIO-1. Additionally, future development adjacent to the VPHCP/MHPA would be required to comply with both the MHPA Land Use Adjacency Guidelines and VPHCP Avoidance and Minimization Measures.

As future projects are proposed within the program-level areas, each individual development would be reviewed for consistency with the VPHCP and development would be required to demonstrate consistency with surrounding vernal pool resources including avoidance of indirect impacts through implementation of avoidance and minimization measures described in VPHCP Section 5.2.1. Through required compliance with the VPHCP for development within program-level areas and required consistency with the Specific Plan development concept, future development within the program-level areas would be consistent with the VPHCP. Impacts would be less than significant.

#### 8.1.2 Sensitive Vegetation Communities, Plants, and Wildlife Species

The OMCP FEIR found that impacts to sensitive plants and animals and sensitive habitats would be significant and would require implementation of Mitigation Framework BIO-1 and BIO-2, which are



cited verbatim in Section 3.3.7. The requirements of the OMCP FEIR Mitigation Frameworks are carried forward as mitigation for the program-level areas of the Specific Plan, but have been modified where appropriate, to include updated City requirements and to specifically address implementation of the Specific Plan, as detailed below.

As detailed in Section 7.1.1.1 and 7.1.1.2, impacts to sensitive vegetation communities and sensitive plants and wildlife and associated with future development within the program-level areas would be significant. Future program-level development would be required to conduct site-specific biological surveys to determine the presence or potential for sensitive plants and wildlife and vegetation communities, and develop site-specific mitigation, as necessary, to reduce impacts to less than significant. If burrowing owl habitat or signs are encountered on or within 150 meters of the project site, breeding season surveys would be required and if burrowing owl are present, site-specific avoidance measures would be required including preparation of a Conceptual Burrowing Owl Mitigation Plan that includes take avoidance (pre-construction) surveys, site surveillance, and the use of buffers, screens, or other measures to minimize construction-related impacts. Implementation of the OMCP FEIR Mitigation Frameworks BIO-1 and BIO-2, as modified below for the Specific Plan area, would ensure that at the program-level impacts to sensitive plants, sensitive wildlife, and vegetation communities would be reduced less than significant.

### **SP-BIO-1 – Sensitive Plants and Wildlife**

To reduce potentially significant impacts that would cause a reduction in the number of unique, rare, endangered, sensitive, or fully protected species of plants or animals, if present within the Specific Plan area, all subsequent projects implemented in accordance with the Specific Plan shall be analyzed in accordance with the CEQA Significance Thresholds, which require that site-specific biological resources surveys be conducted in accordance with City's Biology Guidelines (2018a). The locations of any sensitive plant species, including listed, rare, and narrow endemic species, as well as the potential for occurrence of any listed or rare plant or wildlife species shall be recorded and presented in a biological resources report. Focused presence/absence surveys shall be conducted in accordance with the biology guidelines and applicable resource agency survey protocols to determine the potential for impacts resulting from the future projects on these species. Engineering design specifications based on project-level grading and site plans shall be incorporated into the design of future projects to minimize or eliminate direct impacts on sensitive plant and wildlife species consistent with the FESA, MBTA, Bald and Golden Eagle Protection Act, CESA, MSCP Subarea Plan, VPHCP, and ESL Regulations.

In addition to the requirements detailed above, specific measures shall be implemented when the biological survey results in the identification of burrowing owls on the project site. Future projects shall be required to conduct a habitat assessment to determine whether or not protocol surveys are needed. Should burrowing owl habitat or sign be encountered on or within 150 meters of the project site, breeding season surveys shall be conducted. If occupancy is determined, site-specific avoidance and mitigation measures shall be developed in accordance with the protocol established in the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Measures to avoid and minimize impacts to burrowing owl shall be included in a Conceptual Burrowing Owl Mitigation Plan which includes take avoidance (pre-construction) surveys, site surveillance, and the use of buffers, screens, or other measures to minimize construction-related impacts.



### Mitigation for Impacts to Sensitive Upland Habitats

Future projects implemented in accordance with the Specific Plan resulting in impacts to sensitive upland Tier I, II, IIIA, or IIIB habitats shall implement avoidance and minimization measures consistent with the City's Biology Guidelines, MSCP Subarea Plan, and VPHCP and provide suitable mitigation in accordance with the City's Biology Guidelines, MSCP Subarea Plan, and VPHCP. Future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive vegetation communities including but not limited to riparian habitats, wetlands, oak woodlands, and coastal sage scrub consistent with federal, state, and City guidelines. Any required mitigation for impacts on sensitive vegetation communities shall be outlined in a conceptual mitigation plan following the outline provided in the City's Biology Guidelines.

Mitigation for impacts to sensitive vegetation communities shall be implemented at the time future development projects are proposed. Project-level analysis shall determine whether the impacts are within or outside of the MHPA. Any MHPA boundary adjustments shall be processed by the individual project applicants through the City and Wildlife Agencies during the early project planning stage.

Mitigation for impacts to sensitive upland habitats shall occur in accordance with the MSCP mitigation ratios as specified within the City's Biology Guidelines (City of San Diego 2018a). These mitigation ratios are based on Tier level of the vegetation community, the location of the impact and the location of the mitigation site(s). For example, impacts to lands inside of the MHPA and mitigated outside the MHPA would have the highest mitigation ratio whereas impacts to lands outside the MHPA and mitigated inside the MHPA would have the lowest mitigation ratio.

### SP-BIO-2 – Migratory Wildlife

Mitigation for future projects to reduce potentially significant impacts that would interfere with the nesting, foraging, or movement of wildlife species within the Specific Plan area, shall be identified in site-specific biological resources surveys prepared in accordance with City's Biology Guidelines as further detailed in SP-BIO-1 during the subsequent development review process. The biological resources report shall include results of protocol surveys and recommendations for additional measures to be implemented during construction related activities; shall identify the limits of any identified local-scale wildlife corridors or habitat linkages and analyze potential impacts in relation to local fauna, and the effects of conversion of vegetation communities (e.g., non-native grassland to riparian or agricultural to developed land) to minimize direct impacts on sensitive wildlife species and to provide for continued wildlife movement through the corridor. Measures that shall be incorporated into project-level construction documents to minimize direct impacts on wildlife movement, nesting or foraging activities shall be addressed in the biological resources report and shall include recommendations for preconstruction focused surveys to be conducted during established breeding seasons, construction noise monitoring and implementation of any species-specific mitigation plans (such as a Burrowing Owl Mitigation Plan) in order to comply with the FESA, MBTA, Bald and Golden Eagle Protection Act, State fish and Game Code, and/or the ESL Regulations.



### 8.1.3 Jurisdictional Resources

As detailed in Section 7.2.1.3, impacts to jurisdictional resources within the program-level areas would be significant. Compliance with City regulations and policies, ESL Regulations, the MSCP Subarea Plan, VPHCP, the City's Biology Guidelines, and implementation of OMCP FEIR Mitigation Framework BIO-4, as modified below would serve to reduce impacts to wetlands, vernal pools, and other jurisdictional resources at the program-level to below a level of significance.

#### SP-BIO-3-Wetlands

To reduce potential direct impacts to City, state, and federally regulated wetlands, all subsequent projects developed in accordance with the Specific Plan shall be required to comply with USACE Clean Water Act Section 404 requirements and special conditions, RWQCB Clean Water Act Section 401 requirements and special conditions, CDFW Section 1602 Streambed Alteration Agreement requirements and special conditions, and the City's ESL Regulations for avoiding and minimizing impacts to wetlands or compliance with City guidelines for the wetland deviation. Achieving consistency with these regulations for impacts on wetlands and special jurisdictional sites would reduce potential impacts to regulated wetlands and provide compensatory mitigation (as required) to ensure no net-loss of wetland habitats.

Prior to obtaining discretionary permits for future actions implemented in accordance with the Specific Plan, a site-specific biological resources survey shall be completed in accordance with the City's Biology Guidelines. In addition, a preliminary or final jurisdictional resource delineation of the program-level areas shall be completed following the methods outlined in the USACE's 1987 Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Delineation Manual for the Arid West Region. A determination of the presence/absence and boundaries of any waters of the United States and waters of the state shall also be completed following the appropriate USACE guidance documents for determining the OHWM boundaries. The limits of any riparian habitats within the program-level analysis areas under the sole jurisdiction of CDFW shall also be delineated, as well as any special jurisdictional sites (excluding vernal pools) that may not meet federal criteria but are regulated by the RWQCB. Engineering design specifications based on project-level grading and site plans shall be incorporated into the project design to minimize direct impacts to potential wetlands/waters, riparian habitats, vernal pools, etc. consistent with federal, state, and City guidelines. Any required mitigation for impacts shall be outlined in a conceptual wetland plan prepared in accordance with the City's Biology Guidelines (2018a).

Additionally, any impacts to wetlands in the City would require a deviation from the ESL wetland regulations. Under the wetland deviation process, development proposals that have wetland impacts shall be considered only pursuant to one of three options: Essential Public Projects, Economic Viability Option, or BSO. ESL Regulations require that impacts to wetland be avoided. Unavoidable impacts to wetlands shall be minimized to the maximum extent practicable and mitigated consistent with the City's Biology Guidelines including a no-net loss of wetland resources.



### Vernal Pools and Vernal Pool Species

Impacts to vernal pools shall be addressed through project compliance with the VPHCP. This includes required assessments of vernal pool flora and fauna, hydrology, habitat function, and restoration potential and protocol fairy shrimp surveys, in addition to the requirements listed above. Mitigation for projects impacting vernal pools shall be consistent with the VPHCP and City's Biology Guidelines as determined by completion of a Compensatory Mitigation Plan approved by the City and Wildlife Agencies. Mitigation may include salvage of sensitive species from vernal pools to be impacted, introduction of salvaged material into restored vernal pool habitat where appropriate (e.g., same pool series) and maintenance of vernal pool habitat consistent with the VPHCP.

### 8.1.4 Indirect Impacts

The OMCP FEIR addressed indirect impacts in both the Land Use and Biological Resources sections of the FEIR. The OMCP FEIR found potentially significant indirect impacts related to development occurring adjacent to the MHPA. Additionally, potent indirect impacts were identified related to the issues of invasive plants and noise generation. At the program-level, potential indirect impacts related to development adjacent to the MHPA or VPHCP preserve is addressed through compliance with the City's MHPA Land Use Adjacency Guidelines, which is required as a standard City condition of approval and implements the OMCP FEIR Mitigation Framework LU-2. Additionally, regarding indirect impacts from construction noise, implementation of Mitigation Framework BIO-1 would ensure project-level analysis is conducted to identify the potential for indirect impacts to sensitive species to occur during construction and implementation of appropriate avoidance measures.

As detailed in Section 7.2.1, implementation of the program-level areas would have the potential to result in indirect impacts to sensitive plants and vegetation communities, sensitive wildlife, and jurisdictional resources. To address these potential indirect impacts, the program-level areas would be required to implement the MHPA Land Use Adjacency Guidelines as a condition of future development.

Additionally, regarding indirect impacts to vernal pools, since adoption of the OMCP FEIR, the City adopted the VPHCP which expands on the MHPA and adds additional avoidance measures for vernal pools that are required as standard conditions of approval for projects adjacent to the VPHCP/MHPA. As detailed in Section 6.1, future development adjacent to the MHPA, including VPHCP/MHPA lands that are considered MHPA, would be required to comply with MHPA Land Use Adjacency Guidelines which would serve to avoid indirect impacts to the adjacent MHPA and VPHCP/MHPA. Additionally, future development would be required to comply with VPHCP avoidance and minimization measures to avoid indirect impacts to vernal pools that would be avoided. The City requires compliance with MHPA Land Use Adjacency Guidelines and VPHCP avoidance and minimization measures as conditions of project approval for any project adjacent to the MHPA or VPHCP/MHPA. The OMCP FEIR identified implementation of MHPA Land Use Adjacency Guidelines as Mitigation Framework LU-2 as they were not standard conditions at the time the OMCP was prepared (refer to Section 3.3.7 for detailed text of OMCP FEIR Mitigation Framework LU-2). The MHPA Land Use Adjacency Guidelines would be applied as standard conditions to all future development within the Specific Plan area adjacent to the MHPA, ensuring implementation of OMCP FEIR Mitigation Framework LU-2. Adverse impacts related to adjacency



to the MHPA or VPHCP/MHPA lands would be less than significant based on implementation of the MHPA Land Use Adjacency Guidelines and VPHCP Avoidance and Minimization Measures as City standard conditions in addition to implementation of SP-BIO-1 and SP-BIO-2 detailed above.

### 8.1.5 Wildlife Corridors

The OMCP FEIR addressed the topic of wildlife corridors as part of an analysis of migratory wildlife. OMCP Mitigation Framework BIO-2 required biological analysis to “identify the limits of any identified local-scale wildlife corridors or habitat linkages...” As detailed in Sections 5.6.1 and 5.6.2, wildlife movement studies were completed to evaluate wildlife usage and corridors within and surrounding the Specific Plan area. As detailed in Section 7.3.1, impacts to wildlife corridors resulting from implementation of program-level areas would be less than significant as the program-level development areas would be located on mesa tops and would avoid key wildlife use areas within the surrounding canyon networks. This issue has been addressed comprehensively for the entire Specific Plan due to the fact that the location of development is known at the program-level of review, allowing for consideration for regional wildlife corridors. Through completion of wildlife movement studies as required by OMCP Mitigation Framework BIO-2, the analysis shows that implementation of the Specific Plan would have a less than significant impact on wildlife movement corridors.

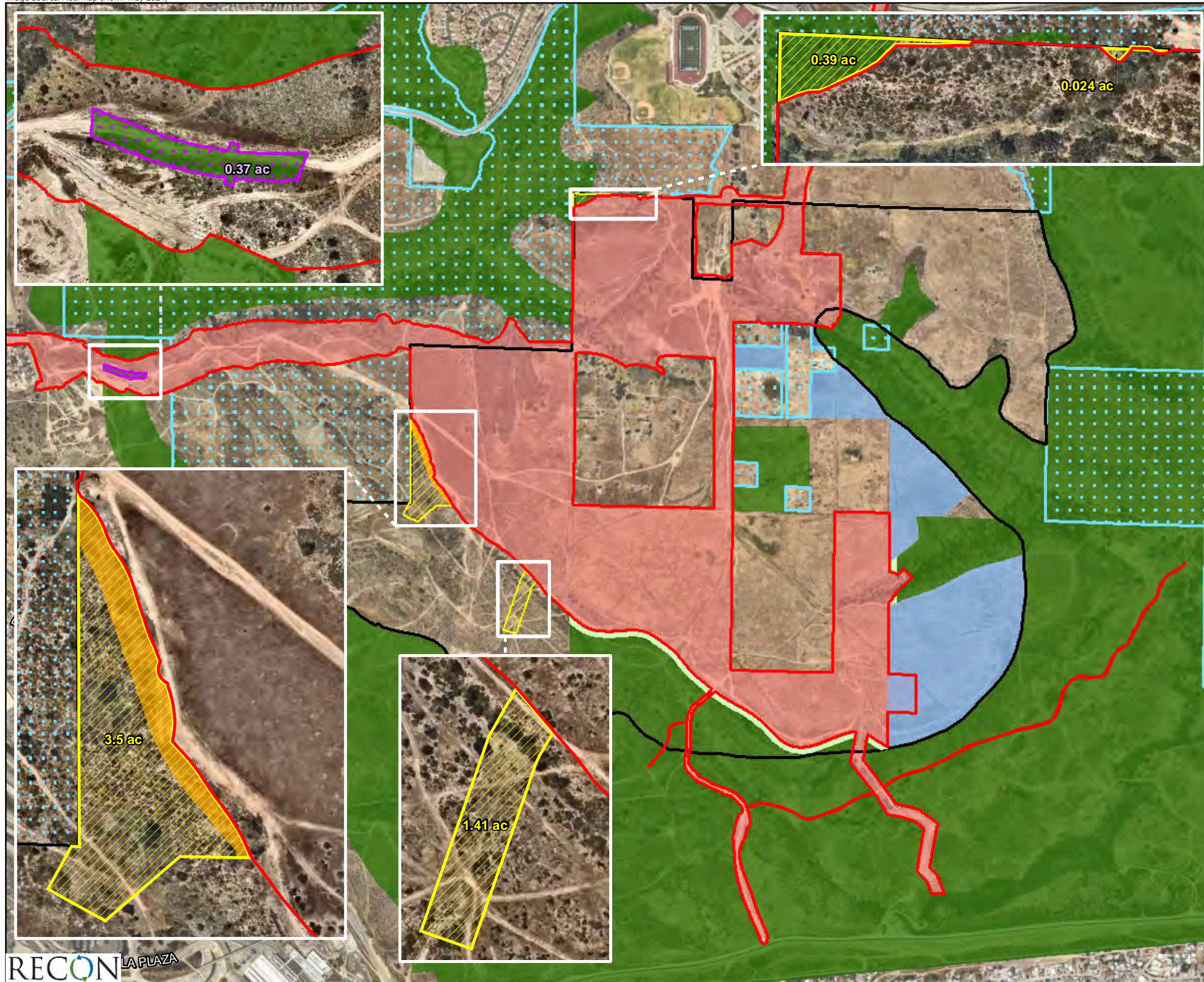
### 8.1.6 Land Use Consistency

As detailed in Section 7.4.1, implementation of the Specific Plan would not conflict with any policies of the OMCP related to biological resources. Impacts related to conflicts with environmental policies would be less than significant.

## 8.2 Project-level Impact Summary and Mitigation Element

The subsections that follow detail the mitigation proposed to reduce significant impacts resulting from the project-level development areas. A significant component of the mitigation is the proposed vernal pool restoration area (see Figure 46), which would incorporate mitigation for vernal pools, San Diego fairy shrimp, Riverside fairy shrimp, San Diego button-celery, San Diego barrel cactus, Quino checkerspot butterfly, and western spadefoot. Figure 49 identifies proposed covenant of easements for protection of ESL within the VTM boundary in addition to the locations of MHPA and VPHCP/MHPA after the BLA. Figure 50 provides an overview of the biological resources mitigation including the mitigation lands that would serve as mitigation for impacts to sensitive upland habitats, the location of the vernal pool and Quino checkerspot butterfly restoration area, the proposed wetland mitigation area, the restoration area for Otay tarplant/native grassland, and the proposed coastal cactus wren mitigation area within the County’s Furby North Preserve. Figure 51 provides a breakdown of the mitigation areas including project design features.





- Project-level Impacts
- Covenant of Easement - Protection of ESL within VTM (5.234 acres)
- Future Covenant of Easement Areas for Protection of ESL/Brush Management Zone 2
- Brush Management Zone 2 (Impact Neutral)
- Specific Plan Boundary
- 100% Conservation
- City of SD MHPA
- VPHCP MHPA
- MHPA Allowed Use\*

\*Circulation Element Roadways are an allowed use in the MHPA; therefore, a MHPA deletion is not required where Beyer Boulevard crosses the MHPA.

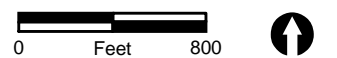
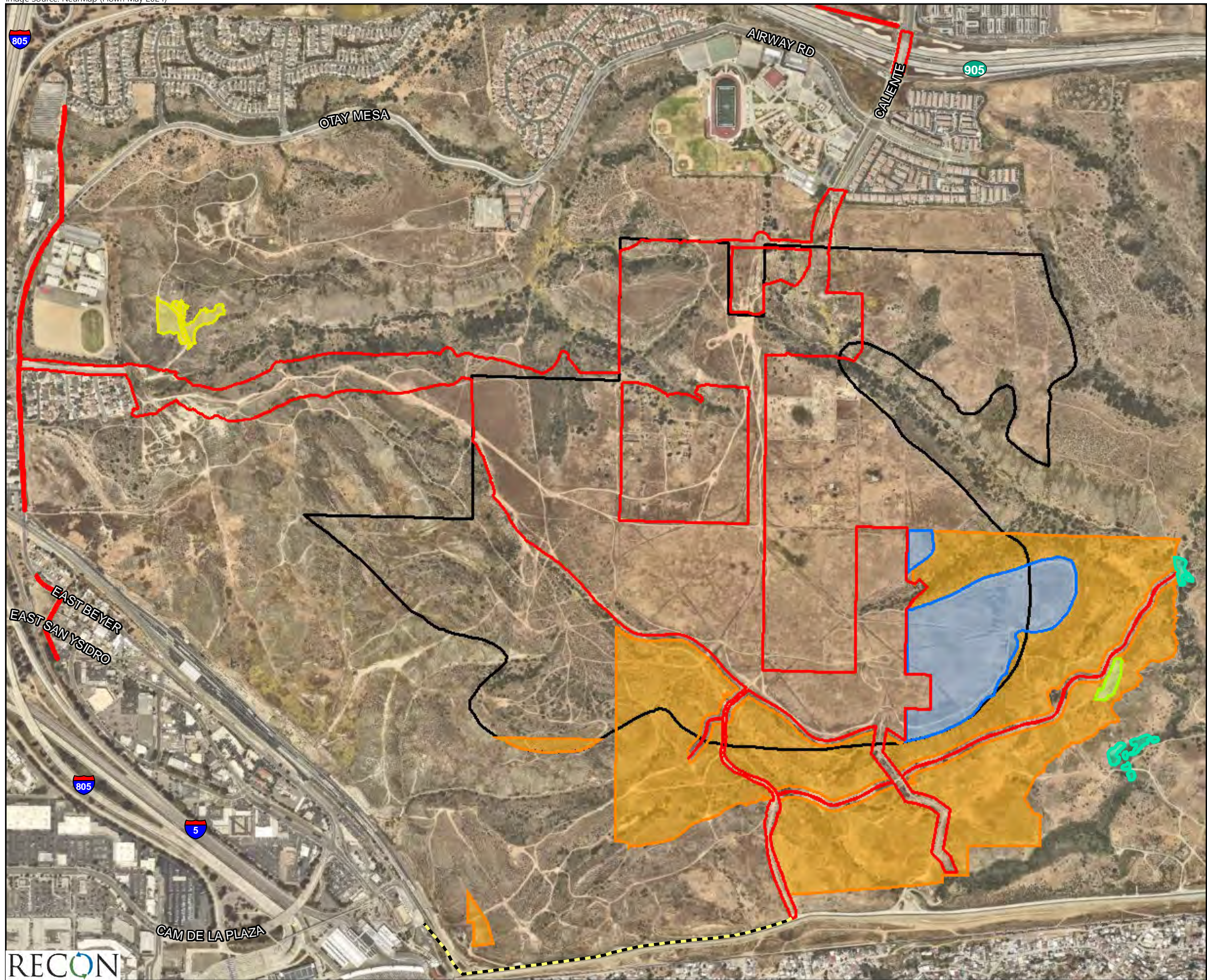


FIGURE 49  
Proposed Covenant of Easements and  
MHPA after Boundary Line Adjustment



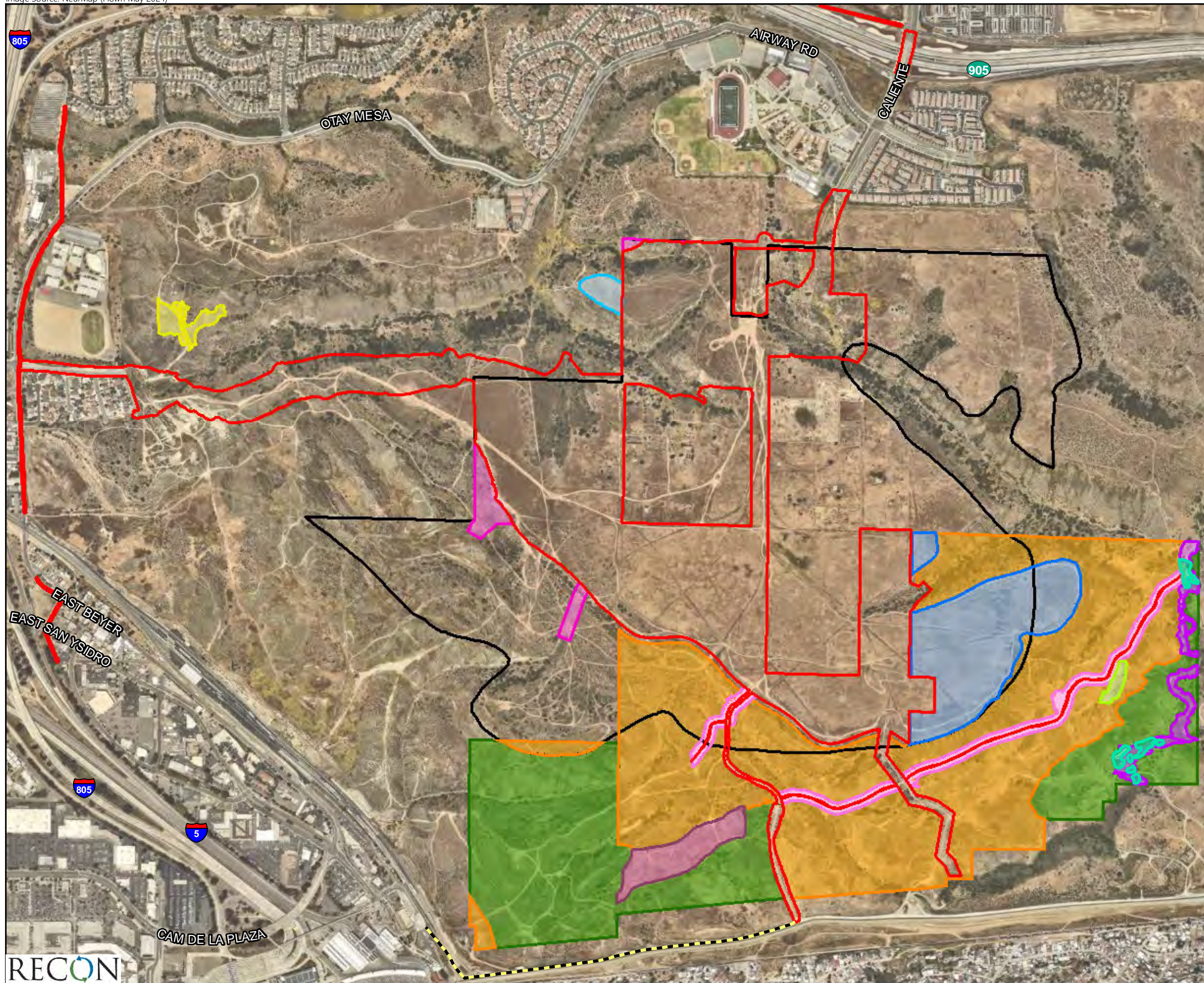


- Project-Level Impacts
- Specific Plan Boundary
- Uplands Mitigation
- Coastal Cactus Wren Mitigation Site
- Otay Tarplant / Native Grassland Mitigation Site
- Wetland Mitigation Areas
- Vernal Pool and Quino Checkerspot Butterfly Restoration Areas
- Emergency Vehicle Access Road - No Improvements Required (Existing Road)



FIGURE 50  
Mitigation Areas





- Project-Level Impacts
- Specific Plan Boundary
- Emergency Vehicle Access Road - No Improvements Required (Existing Road)
- Project Design Features**
  - Additional Potential Habitat Preservation (95.29 acres)
  - Potential Vernal Pool Restoration Area (2.13 acres)
  - Wetland Plan Project Design Features (4.66 acres)
  - Trail Restoration (12.18 acres)
  - County of San Diego Furby North Exchange Lands (7.98 acres)
  - Covenant of Easement - Protection of ESL within VTM (5.23 acres)
- Mitigation**
  - Uplands Mitigation (169.64 acres)
  - Coastal Cactus Wren Mitigation Site (2.54 acres)
  - Otay Tarplant / Native Grassland Mitigation Site (0.96 acre)
  - Wetland Mitigation Areas (1.45 acres)
  - Vernal Pool and Quino Checkerspot Butterfly Restoration Areas (33.71 acres)

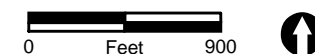


FIGURE 51  
Mitigation with Project Design Features



## 8.2.1 Consistency with MSCP and VPHCP

As detailed in Section 6.2, the project has demonstrated consistency with the City's MSCP Subarea Plan and the VPHCP. A MHPA boundary line adjustment has been incorporated into the project design that would ensure replacement of biologically equivalent MHPA preserve lands (see Figures 36.2 and 36.3). Additionally, a VPHCP MA has been incorporated into the project to ensure consistency with the VPHCP related to removal of VPHCP 100 percent conserved lands which would be addressed by providing MHPA additions of biologically equivalent value (see Figures 36.3 and 36.4). Recognizing USFWS requests for additional conservation beyond the MHPA replacement land to demonstrate consistency with the VPHCP, additional project design features are proposed as described in Section 1.3.2.5.b. These project design features are depicted on Figure 51 along with the proposed project mitigation. Detailed analysis and compliance with MSCP and VPHCP policies is provided in Section 6.2.1 and 6.2.2, respectively. Refer to Figure 36.5 for the post-project MHPA boundaries in relation to the project-level analysis area and the Specific Plan area. Impacts related to consistency with the MSCP and VPHCP would be less than significant.

## 8.2.2 Direct Impacts to Sensitive Upland Habitats

Consistent with the OMCP FEIR Mitigation Framework, site specific surveys and biological resources analysis have been conducted for the project-level areas as required by OMCP FEIR Mitigation Framework BIO-1. As required by this measure, all mitigation has been identified consistent with the City's MSCP and Biology Guidelines. Additionally, the following is stated in OMCP FEIR Mitigation Framework BIO-1,

If mobility element roads (i.e., Beyer Boulevard, Airway Road, and Del Sol Boulevard) impact existing conserved lands, an additional 1:1 ratio shall be added to the City required mitigation ratio in order to replace the lands that were previously preserved as open space. Mitigation lands purchased to compensate for impacts to areas within conserved lands shall be located in the Otay Mesa area if feasible.

Beyer Boulevard crosses 100 percent conserved lands, including the Furby North Preserve, West Otay Mesa A, and West Otay Mesa B. Consistent with the OMCP FEIR Mitigation Framework BIO-1, an additional 1:1 ratio has been applied to the City's standard mitigation ratio to account for impacts to 100 percent conserved lands.

As detailed in Tables 8a through 8g, implementation of the project-level areas would result in significant impacts to 187.59 acres of sensitive upland vegetation communities including maritime succulent scrub, disturbed maritime succulent scrub, native grassland, Diegan coastal sage scrub, disturbed coastal sage scrub, and non-native grassland. All mitigation for permanent impacts to sensitive upland vegetation communities would occur within the MHPA, through habitat preservation within uplands mitigation areas (see Figure 50). Required City mitigation by phase is presented in Table 15a. Mitigation requirements by project components within each phase are provided in Tables 15b through 15f.



**Table 15a**  
**Mitigation Requirements and Proposed Mitigation for Project Level Sensitive Upland Vegetation Community Impacts with Mitigation Occurring Inside the MHPA**  
**Assuming an MHPA BLA**  
**(acres)**

Vegetation Communities/ Land Cover Types	City of San Diego Tier	Phase 1	Phase 2	Beyer Boulevard	Phase 4	Emergency Vehicle Access Road	Off-site Improvements	Total Mitigation Required <sup>1</sup>	Proposed Upland Mitigation (acres) <sup>2,3</sup>	Mitigation Difference <sup>4</sup>
<b>Upland Vegetation Communities</b>										
Maritime Succulent Scrub	I	4.72	6.50	25.13	2.38	0.87	-	39.60	89.94	+50.34
Disturbed Maritime Succulent Scrub	I	5.15	1.59	2.63	0.53	-	-	9.90	24.82	+14.92
Native Grassland	I	-	-	-	0.12	-	-	0.12	-	-0.12
Diegan Coastal Sage Scrub	II	24.19	1.62	6.26	4.25	0.01	-	36.33	24.93	-11.40
Disturbed Coastal Sage Scrub	II	8.19	-	0.74	1.29	0.83	-	11.05	2.36	-8.69
Non-native Grassland	IIIB	21.07	29.46	3.71	1.91	0.08	-	56.23	18.89	-37.34
<b>Total</b>		<b>63.32</b>	<b>39.17</b>	<b>38.47</b>	<b>10.48</b>	<b>1.79</b>	<b>-</b>	<b>153.23</b>	<b>160.94</b>	<b>+7.71</b>

NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.

<sup>1</sup>Impacts would be mitigated consistent with the Biology Guidelines mitigation ratios for impacts within or outside the MHPA. All mitigation is proposed inside the MHPA, all impacts occur outside of the MHPA except a 0.37 linear utility portion of Beyer Boulevard that would remain in MHPA (see Table 17d); Mitigation requirement incorporates the additional 1:1 ratio added to the City's standard mitigation ratio for upland impacts within the Furby North Preserve, West Otay Mesa A and West Otay Mesa B, as detailed in Table 17d.

<sup>2</sup>Mitigation acreages exclude all portions of the Spring Canyon drainage that are part of the wetland restoration plans for Southwest Village and Nakano projects, the trail restoration corridor, the vernal pool restoration area, and Otay Tarplant/Native Grassland restoration area.

<sup>3</sup>In addition to the total 160.94 acres of mitigation proposed to offset impacts to sensitive uplands, the proposed mitigation lands include 7.12 acres of disturbed lands, 0.34 acre of natural flood channel (drainages), 0.30 acre of disturbed wetland, 0.46 acre of tamarisk scrub, 0.02 acre of vernal pool, and 0.76 acre of vernal pool with fairy shrimp totaling 169.94 acres.

<sup>4</sup>Impacts to Tier II and Tier IIIB sensitive upland vegetation would be mitigated by uptiering to Tier I maritime succulent scrub; 0.18 acre of the excess maritime succulent scrub mitigation would be used to address indirect noise impacts to 0.09 acre of Diegan coastal sage scrub habitats (see Section 8.2.6.2.b).



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

Vegetation Community/ Land Cover Type	City of San Diego Tier	Standard Mitigation Ratio <sup>1</sup>	Phase 1 Candlelight <sup>2</sup>		Phase 1 Southwind <sup>1</sup>		Development Footprint		Total Mitigation
			Impact	Mitigation	Impact	Mitigation	Impact	Mitigation	
Upland Vegetation Communities									
Maritime Succulent Scrub	I	1:1	-	-	0.05	0.05	4.67	4.67	4.72
Disturbed Maritime Succulent Scrub	I	1:1	-	-	-		5.15	5.15	5.15
Diegan Coastal Sage Scrub	II	1:1	-	-	-		24.19	24.19	24.19
Disturbed Coastal Sage Scrub	II	1:1	-	-	0.12	0.12	8.07	8.07	8.19
Non-native Grassland	IIIB	0.5:1	1.81	0.91	0.34	0.17	39.98	19.99	21.07
Total			1.81	0.91	0.50	0.34	82.07	62.07	63.32

NOTE: Phasing corresponds to grading phasing depicted in Figure 10.1. Totals may not add due to rounding.

<sup>1</sup>Impacts would be mitigated consistent with the Biology Guidelines mitigation ratios for impacts within or outside the MHPA. All mitigation is proposed inside the MHPA.

<sup>2</sup>Refer to Figure 22 for the location of the Candlelight and Southwind Project areas located within Phase 1. These areas are reported separately in the event development of these areas proceeds independent of the project. Mitigation would be implemented by the first project to proceed.

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

Vegetation Community/ Land Cover Type	City of San Diego Tier	Mitigation Ratio <sup>1</sup>	Development Footprint		Pump Station (within MHPA) <sup>2</sup>		South Drainage Outfall		Total Mitigation
			Impact	Mitigation	Impact	Mitigation <sup>2</sup>	Impact	Mitigation	
<b>Upland Vegetation Communities</b>									
Maritime Succulent Scrub	I	1:1	3.55	3.55	-		2.95	2.95	6.50
Disturbed Maritime Succulent Scrub	I	1:1	1.43	1.43	-	-	0.16	0.16	1.59
Diegan Coastal Sage Scrub	II	1:1	1.62	1.62	-	-	-	-	1.62
Non-native Grassland	IIIB	0.5:1/1:1 <sup>2</sup>	55.26	27.63	1.66	1.66	0.34	0.17	29.46
<b>Total</b>			<b>61.86</b>	<b>34.23</b>	<b>1.66</b>	<b>1.66</b>	<b>3.45</b>	<b>3.28</b>	<b>39.17</b>

NOTE: Phasing corresponds to grading phasing depicted in Figure 10.1. Totals may not add due to rounding.

<sup>1</sup>Impacts would be mitigated consistent with the Biology Guidelines mitigation ratios for impacts within or outside the MHPA. All mitigation is proposed inside the MHPA.

<sup>2</sup>The 1.66-acre area associated with the Pump Station is identified as an allowed use within the VPHCP Preserve, therefore is considered an impact within the MHPA and impacts to non-native grassland would be mitigated at a 1:1 ratio.



**Table 15d**  
**Mitigation Requirements for Impacts to the Sensitive Upland Vegetation Communities within the Beyer Boulevard Project Level Areas Assuming an MHPA BLA <sup>1</sup>**  
**(acres)**

Vegetation Community/ Land Cover Type	City of San Diego Tier	Mitigation Ratio <sup>2, 3</sup>	Beyer Boulevard <sup>4</sup>		Beyer Park <sup>3</sup>		Furby North Preserve		West Otay Mesa A		West Otay Mesa B		Mitigation Total <sup>1</sup>
			Impact	Mitigation	Impact	Mitigation	Impact	Mitigation <sup>2</sup>	Impact	Mitigation <sup>2</sup>	Impact	Mitigation <sup>2</sup>	
Upland Vegetation Communities													
Maritime Succulent Scrub	I	1:1/2:1/3:1	0.03	0.03	2.70	2.70	3.03 0.09	6.06 0.27	8.03	16.06	<0.01	0.01	25.13
Disturbed Maritime Succulent Scrub	I	1:1/2:1	0.01	0.01	1.06 0.13	1.06 0.26	0.04	0.08	0.61	1.22	-	-	2.63
Diegan Coastal Sage Scrub	II	1:1/2:1	-	-	0.08	0.08	-	-	0.91	1.82	2.18	4.36	6.26
Disturbed Coastal Sage Scrub	II	1:1/2:1	-	-	0.50	0.50	-	-	-	-	0.12	0.24	0.74
Non-native Grassland	IIIB	0.5:1/1.5:1	-	-	-	-	-	-	1.38	2.07	1.09	1.64	3.71
Total			0.05	0.05	4.47	4.47	3.16	6.41	10.92	21.17	3.40	6.25	38.47

NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.

<sup>1</sup>This area includes only the portions of Beyer Boulevard located outside of the Specific Plan. Other portions of Beyer Boulevard are located within the Specific Plan are addressed as part of the overall development footprint within Phase 1.

<sup>2</sup>Mitigation ratios are based on all impacts occurring outside MHPA and be mitigated within the MHPA except a portion of Beyer Park impacts that would occur within the MHPA would be mitigated at a higher ratio (see footnote 4). An additional 1:1 mitigation ratio is added to City standard mitigation ratios for impacts within the Furby North Preserve, West Otay Mesa A, and West Otay Mesa B consistent with the Otay Mesa Community Plan Final Environmental Impact Report BIO-1. In addition, a 0.09 acre portion of the Furby North Preserve requires a 3:1 mitigation ratio due to that land used as mitigation under the County's Mitigation Banking Policy I-138.

<sup>3</sup>A 0.37-acre developed portion of the roadway that runs through the Beyer Park property would remain within the MHPA due to it being classified as a City linear utility, which is exempt from ESL regulations and considered an MHPA allowed use. This 0.37-acre portion includes 0.24 acre of disturbed land and 0.13 acre of disturbed maritime succulent scrub. The disturbed maritime succulent scrub would be mitigated at a 2:1 ratio due to impacts occurring within the MHPA.

<sup>4</sup>This portion includes impacts within the San Ysidro School District parcel located north of the City's Beyer Park parcel.



Table 15e Mitigation Requirements for Impacts to the Sensitive Upland Vegetation Communities within the Phase 4 Project Survey Areas Assuming an MHPA BLA (acres)					
Vegetation Community/Land Cover Type	City of San Diego Tier	Standard Mitigation Ratio <sup>1</sup>	Development Footprint Impact	Mitigation	Mitigation Total
<b>Upland Vegetation Communities</b>					
Maritime Succulent Scrub	I	1:1	2.38	2.38	2.38
Disturbed Maritime Succulent Scrub	I	1:1	0.53	0.53	0.53
Native Grassland	I	1:1	0.12	0.12	0.12
Diegan Coastal Sage Scrub	II	1:1	4.25	4.25	4.25
Disturbed Diegan Coastal Sage Scrub	II	1:1	1.29	1.29	1.29
Non-native Grassland	IIIB	0.5:1	3.81	1.91	1.91
<b>Total</b>			<b>12.38</b>	<b>10.48</b>	<b>10.48</b>
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figures 10.1. <sup>1</sup> Impacts would be mitigated consistent with the Biology Guidelines mitigation ratios for impacts within or outside the MHPA. All mitigation is proposed inside the MHPA					

Table 15f Mitigation Requirements for Impacts to the Sensitive Upland Vegetation Communities within the Emergency Vehicle Access Survey Areas Assuming an MHPA BLA (acres)					
Vegetation Community/Land Cover Type	City of San Diego Tier	Standard Mitigation Ratio <sup>1</sup>	Emergency Vehicle Access Road		Mitigation Total
			Impact	Mitigation	
Upland Vegetation Communities					
Maritime Succulent Scrub	I	1:1	0.87	0.87	0.87
Diegan Coastal Sage Scrub	II	1:1	0.01	0.01	0.01
Disturbed Diegan Coastal Sage Scrub	II	1:1	0.83	0.83	0.83
Non-native Grassland	IIIB	0.5:1	0.16	0.08	0.08
Total			1.84	1.79	1.79
NOTE: Totals may not add due to rounding. Phasing corresponds to grading phasing depicted in Figure 10.1.					
<sup>1</sup> Impacts would be mitigated consistent with the Biology Guidelines mitigation ratios for impacts within or outside the MHPA. All mitigation is proposed inside the MHPA.					



As shown in Table 15d, mitigation for impacts to upland habitats within the Furby North property and 100 percent conserved parcels West Otay Mesa A and West Otay Mesa B include impacts to maritime succulent scrub, disturbed maritime succulent scrub, Diegan coastal sage scrub, and disturbed coastal sage scrub that would be mitigated at the standard mitigation ratio plus an additional 1:1 for all uplands consistent with the OMCP FEIR (e.g., 2:1 rather than a 1:1 for coastal sage scrub and 1.5:1 rather than a 0.5:1 for non-native grassland). Additionally, a 0.09-acre portion of the Furby North Preserve requires a 3:1 mitigation ratio due to that land used as mitigation under the County's Mitigation Banking Policy I-138.

Mitigation for sensitive upland vegetation communities would be provided through the dedication of mitigation lands (excluding all BMZ 2 areas outside of the grading limits) as land in fee title for long term management by the City per the City's Biology Guidelines (City of San Diego 2018a). As depicted on Figure 52, all mitigation areas south of the Specific Plan would be conveyed to the City for long-term management. The Furby North Exchange lands would go the County of San Diego in fee title with the management being provided by the City. The remaining lands would ultimately convey to the City in fee title. Mitigation lands may be conveyed to the City in phases corresponding to the impact acreages by phase.

Sensitive upland mitigation requirements total 153.23 acres. Habitat-based mitigation via preservation of 160.94 acres consisting of 89.94 acres of maritime succulent scrub, 24.82 acres of disturbed maritime succulent scrub, 24.93 acres of Diegan coastal sage scrub, 2.36 acre of disturbed coastal sage scrub, and 18.89 acres of non-native grassland would serve as mitigation for project-level impacts to sensitive vegetation communities (see Table 15a; individual habitat areas may not add to total due to rounding). Approximately 57 acres of Tier II and Tier IIB sensitive uplands impacts would be mitigated through the preservation of maritime succulent scrub, up-tiering to a Tier I community. In total, proposed mitigation would result in an excess preservation of 7.71 acres of sensitive uplands beyond the minimum requirement.

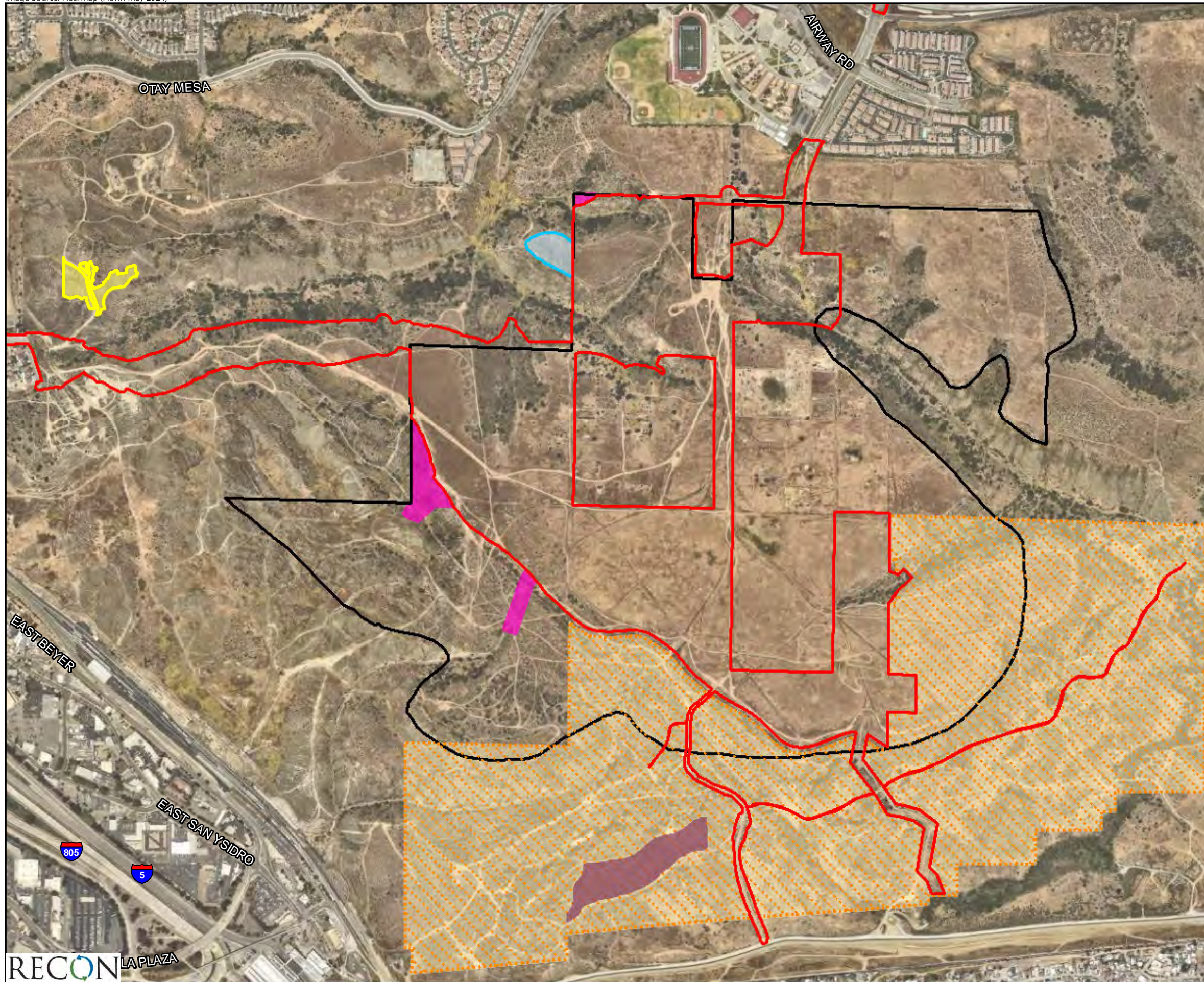
To ensure the preservation of proposed mitigation lands (including lands that would be added to the MHPA through the BLA process), the lands would be dedicated in fee title to the City for management consistent with Section 1.5, Preserve Management of the City's MSCP Subarea Plan and/or Section 5.3.2 and Chapter 7 of the VPHCP, as appropriate. This dedication would ensure the protection of the habitat from any future development proposals. Additionally, a funding source for the long-term maintenance and management of the mitigation lands would be required.

Implementation of the following mitigation would ensure impacts to sensitive upland habitats would be reduced to less than significant.

## Uplands Mitigation

The applicant is required to mitigate for a total of 153.23 acres of sensitive upland vegetation communities as detailed in Table 15a. The sensitive upland vegetation communities shall be dedicated in fee title to the City for management consistent with Section 1.5, Preserve Management of the City's MSCP Subarea Plan and/or Section 5.3.2 and Chapter 7 of the VPHCP, as appropriate. A funding source for the long-term maintenance and management of the mitigation lands would be required.










-  Project-level Impacts
-  Specific Plan Boundary
-  Covenant of Easement - Protection of ESL within VTM (5.23 acres)
-  County of San Diego Ownership and Management (2.54 acres)
-  Land to be Conveyed to City of San Diego for Long-Term Management (317.97 acres)
-  County of San Diego Furby North Exchange Lands - Ownership to be transferred to the County of San Diego and land managed by the City of San Diego (7.98 acres)
-  Potential Vernal Pool Restoration Area - Existing City Owned Land with Long-Term Management Provided by the City (2.13 acres)



FIGURE 52  
Long-Term Management



### 8.2.3 Direct Impacts to Sensitive Plants

Implementation of the project-level areas would result in significant impacts to Otay tarplant, San Diego barrel cactus, snake cholla, San Diego button-celery, and thread-leaved brodiaea (if present). Impacts and mitigation for these species are detailed in the subsections below.

As detailed in Table 16, ashy spike-moss, bobtail barley, California adolphia, California box-thorn, cliff spurge, decumbent goldenbush, Palmer's grapplinghook, San Diego bur-sage, San Diego County viguiera, San Diego needlegrass, seaside cistanthe, south coast saltscale/south coast saltbush, and western dichondra were observed within the project-level areas. Additionally, golden-ray pentachaeta and variegated dudleya were observed within the survey area; however, were not observed within the project-level impact areas. Graceful tarplant, Orcutt's bird's-beak, San Diego goldenstar, and small-flowered microseris have a moderate potential to occur, however, were not observed during surveys. However, impacts to all of these species were determined to be less than significant because the existing distribution and extent of these species is adequate to support the species and impacts associated with development of the project-level areas would not result in the potential to cause these species to become state or federally listed as endangered.

Impacts to sensitive species during primitive trail implementation would be potentially significant; however, impacts would be mitigated to less than significant with implementation of the following measure which is incorporated into the Trails Restoration Plan (see Attachment 1):

- Conduct a focused rare plant survey in the spring prior to the start of construction to determine the presence of sensitive plant species not previously detected. If no rare plants are detected, no additional measures would be required.
- The ultimate trail alignment shall be sited to avoid impacts to sensitive plant species and all rare plant species within the restoration area shall be flagged to ensure avoidance during restoration efforts. All sensitive plants shall be avoided to the maximum extent feasible within the temporary impact and restoration areas.



Table 16 Sensitive Plant Species Impact Summary		
Common Name	Discussion	Significance Determination
Otay tarplant, San Diego barrel cactus, snake cholla, thread-leaved brodiaea (if present), and San Diego button-celery	Direct impacts to these species would be significant.	Significant
ashy spike-moss, bobtail barley, California adolphia, California box-thorn, cliff spurge, decumbent goldenbush, Palmer's grapplinghook, San Diego bur-sage, San Diego County viguiera, San Diego needlegrass, seaside cistanthe, south coast saltscale/saltbush, and western dichondra	Present within project-level area; non-MSCP covered species; however, existing distribution and extent adequate to support the species.	Less than Significant
graceful tarplant and small-flowered microseris	Not observed during surveys, but moderate potential to occur. Non-MSCP covered species. Existing distribution and extent adequate to support the species	
Orcutt's bird's-beak and San Diego goldenstar	Not observed during surveys, but moderate potential to occur. These are MSCP covered species with no additional conditions of coverage that apply to the current project. Existing distribution and extent adequate to support the species	
golden-ray pentachaeta and variegated dudleya	Present within the survey area, but outside of the project-level area. No impacts expected to occur.	Not significant



### 8.2.3.1 San Diego Button-celery

Implementation of Beyer Boulevard would impact the federally and state listed San Diego button-celery.

To prevent the regional loss of San Diego button-celery populations, mitigation for the impacts to this sensitive plant species would occur through salvage of impacted San Diego button-celery individuals and in-kind restoration consistent with the VPHCP within the proposed vernal pool restoration areas. In addition, the vernal pool supporting this species would be mitigated at a 3:1 ratio as part of the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14). This mitigation is discussed in detail in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (RECON 2020c; see Attachment 14).

### 8.2.3.2 Otay Tarplant

Implementation of Beyer Boulevard would impact the federally listed Otay tarplant.

Impacts to approximately 1,900 Otay tarplant individuals within an approximately 0.21-acre area would be mitigated through implementation of a proposed Otay tarplant restoration area to be located within the proposed mitigation lands, where suitable soils are present. The restoration effort would ensure a 4:1 replacement of impacted Otay tarplant within a 1-acre area. The proposed mitigation site is located within non-native grasslands; therefore, the restoration effort is not a significant impact. Restoration would involve seed collection from on-site Otay tarplant prior to fall rains when seeds are fully mature. Native grassland species that co-exist well with Otay tarplant and compete with non-native weed species would be seeded in the restoration area. An Otay Tarplant/Native Grassland Restoration Plan has been prepared detailing the proposed mitigation effort, required maintenance and monitoring, as well as the performance standards that the restoration effort would be required to meet for successful implementation (see Attachment 15; RECON 2024e).

### 8.2.3.3 San Diego Barrel Cactus and Snake Cholla

Significant Impacts to San Diego barrel cactus would occur with implementation of Phases 1, 2, and 4 and Beyer Boulevard. Significant impacts to snake cholla would occur with implementation of Phase 2 and Beyer Boulevard.

Mitigation for San Diego barrel cactus and snake cholla includes salvage of these species within the project-level areas and translocation to the proposed vernal pool preserve, as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) and the Coastal Cactus Wren Mitigation Plan (see Attachment 13). Individual barrel cactus and snake cholla would be replaced at a 1:1 ratio. San Diego barrel cactus is an appropriate species for planting within upland areas and on the mima mounds near the vernal pools and both species are appropriate for planting within the coastal cactus wren habitat and translocation would be conducted accordingly.



### 8.2.3.4 Thread-leaved Brodiaea

Thread-leaved brodiaea was not detected during rare plant surveys; however, there is a moderate potential for this species to occur within the project. Impacts to this species, if present, would be significant.

Mitigation for these potential impacts during both project construction and restoration implementation would include:

Conduct a focused rare plant survey in the spring prior to the start of project construction and restoration activities to determine the presence of thread-leaved brodiaea not previously detected. If no thread-leaved brodiaea are detected, no additional measures would be required.

If detected, a qualified biologist will flag or fence any thread-leaved brodiaea that occur within the temporary impact areas prior to initiation of construction activities. Thread-leaved brodiaea shall be avoided to the maximum extent feasible within the temporary impact and restoration areas.

Any individuals that cannot be avoided within temporary impact or restoration areas shall be salvaged for transplant and incorporated into the Vernal Pool/Quino Checkerspot Mitigation Plan area (see Attachment 14).

## 8.2.4 Direct Impacts to Sensitive Wildlife

As detailed in Table 17, significant direct impacts to sensitive wildlife would occur to Quino checkerspot butterfly, San Diego fairy shrimp, Riverside fairy shrimp, Crotch's bumble bee, western spadefoot, burrowing owl, southern California rufous-crowned sparrow, coastal cactus wren, least Bell's vireo, Cooper's hawk, northern harrier, coastal California gnatcatcher, white-tailed kite, merlin, California horned lark, yellow-breasted chat, grasshopper sparrow, yellow warbler, loggerhead shrike, and Bell's sage sparrow.

Impacts to orange-throated whiptail, coast horned lizard, coastal whiptail, red diamond rattlesnake, two-striped gartersnake, bald eagle, golden eagle, San Diego desert woodrat, Coronado skink, and southern mule deer would be less than significant.

A summary of these impact conclusions and proposed mitigation is provided in the following subsections.



**Table 17**  
**Sensitive Wildlife Species Project Level Impact and Mitigation Summary**

Wildlife Species	Status/Potential to Occur in Survey Area	Impacts	Mitigation
Quino checkerspot butterfly	Observed	Significant direct and indirect impact to host plant habitat	Habitat Restoration (Attachment 14); restoration avoidance measures
San Diego fairy shrimp	Observed	Significant direct and indirect impact	Vernal pool restoration and inoculation; restoration avoidance measures
Riverside fairy shrimp	Observed	Significant direct and indirect impact	Vernal pool restoration and inoculation; restoration avoidance measures
Crotch's bumble bee	Observed within mitigation lands; Low to high potential for nesting and foraging in project impact area based on habitat assessment conducted during the spring 2024	Significant direct and indirect impact to nesting and foraging habitat due to construction	Pre-construction surveys/avoidance buffers; restoration avoidance measures; and habitat-based mitigation
western spadefoot	Observed	Significant direct and indirect impact to individuals and breeding habitat due to construction	Pre-construction surveys; restoration avoidance measures; translocation and habitat- based mitigation
burrowing owl	Observed foraging, incidental. Moderate potential to nest.	Significant direct impact to 103.77 acres of potential foraging habitat during construction. Indirect impacts during construction and restoration.	Pre-construction surveys/ breeding season avoidance and habitat-based mitigation; Berm with artificial berms included in the vernal pool and Quino Checkerspot butterfly restoration areas
southern rufous crown sparrow	Observed	Significant direct impact due to construction during breeding season; direct impact to 75 acres of foraging habitat	Pre-construction surveys/ breeding season avoidance and habitat-based mitigation
coastal cactus wren	Not Observed, High Potential	Significant direct impact due to habitat loss and construction during breeding season; Indirect noise impacts to 0.46 acre of suitable habitat.	Pre-construction surveys/ breeding season Avoidance and cactus wren habitat restoration (Attachment 12)



**Table 17**  
**Sensitive Wildlife Species Project Level Impact and Mitigation Summary**

Wildlife Species	Status/Potential to Occur in Survey Area	Impacts	Mitigation
least Bell's vireo	Observed	Significant direct and indirect impact to individuals and suitable habitat during construction.	Pre-construction surveys/ breeding season avoidance; restoration avoidance measures; and habitat-based mitigation
Cooper's hawk	Observed	Significant impact due to construction during breeding season; direct impact to 180 acres of foraging habitat	Pre-construction surveys/ breeding season avoidance and habitat-based mitigation
northern harrier	Observed	Significant impact due to construction during breeding season; direct impact to 180 acres of foraging habitat	Pre-construction surveys/ breeding season avoidance and habitat-based mitigation
coastal California gnatcatcher	Observed	Significant direct impact due to individuals and suitable habitat construction during breeding season	Breeding season avoidance within MHPA and habitat-based mitigation
white-tailed kite	Observed	Significant direct impact due to construction during breeding season	Pre-construction surveys/ breeding season avoidance
merlin	Observed	Significant direct impact due to construction during breeding season	Pre-construction surveys/ breeding season avoidance
California horned lark	Observed	Significant direct impact due to construction during breeding season	Pre-construction surveys/ breeding season avoidance
yellow-breasted chat	Observed	Significant direct impact due to construction during breeding season	Pre-construction surveys/ breeding season avoidance
grasshopper sparrow	Observed	Significant direct impact due to construction during breeding season	Pre-construction surveys/ breeding season avoidance
yellow warbler	Observed	Significant direct impact due to construction during breeding season	Pre-construction surveys/ breeding season avoidance
loggerhead shrike	Not observed, Moderate Potential	Significant direct impact due to construction during breeding season	Pre-construction surveys/ breeding season avoidance
Bell's sage sparrow	Not observed, Moderate Potential	Significant direct impact due to construction during breeding season	Pre-construction surveys/ breeding season avoidance
golden eagle	Observed, but not expected to nest	Less than significant	none
bald eagle	Observed, but not expected to nest	Less than significant	none



**Table 17**  
**Sensitive Wildlife Species Project Level Impact and Mitigation Summary**

Wildlife Species	Status/Potential to Occur in Survey Area	Impacts	Mitigation
orange-throated whiptail	Observed	Less than significant	none
coast horned lizard	Observed	Less than significant	none
coastal whiptail	Observed	Less than significant	none
red diamond rattlesnake	Observed	Less than significant	none
two-striped gartersnake	Observed	Less than significant	none
San Diego desert woodrat	Observed	Less than significant	none
Coronado skink	Not Observed, Moderate Potential	Less than significant	none
southern mule deer	Not Observed, Moderate Potential	Less than significant	none



### 8.2.4.1 San Diego and Riverside Fairy Shrimp Species

Impacts to San Diego and Riverside fairy shrimp occurring in vernal pools and disturbed wetlands would be significant. As detailed in Section 7.1.2.3.a (see Table 9), the project-level areas would result in a significant direct impact to 0.63 acre of disturbed wetlands and vernal pools confirmed to contain San Diego fairy shrimp. One of the vernal pools (0.03 acre) and a seasonal basin (0.17 acre) that would be impacted also contains Riverside fairy shrimp. The latter feature consists of a man-made disturbed wetland within the extension of Caliente Avenue north of Central Avenue that will be constructed as part of the approved Candlelight project. However, all disturbed wetlands and vernal pools are assumed to contain San Diego fairy shrimp since these species are widely present across the mesa. There is a low likelihood of Riverside fairy shrimp being present in additional project-level ponding basins due to the longer ponding requirements for these species; therefore, the impact to this species is assumed to be limited to the 0.20 acre of vernal pool surface area encountered during surveys. Therefore, the project could result in a significant direct impact to a total of 1.21 acres of vernal pool and/or disturbed wetland surface area (with Candlelight) or a total of 0.94 acre of vernal pool and/or disturbed wetland surface area containing San Diego fairy shrimp (without Candlelight). Included in this total, a 0.20-acre (with Candlelight) or 0.03-acre (without Candlelight) vernal pool/seasonal basin containing both San Diego fairy shrimp and Riverside fairy shrimp would be impacted. In addition, there are 0.13 acre of basins that would be indirectly impacted from construction activities, which would result in a total direct and indirect impact to 1.34 acres of basins supporting fairy shrimp (with Candlelight) or a total of 1.06 acres of impact to basins supporting fairy shrimp (without Candlelight). If the Candlelight and/or Southwind project areas are impacted prior to Southwest Village proceeding, mitigation would be the responsibility of that project (see Section 8.2.5.1 Table 18c below for Candlelight and Southwind direct and indirect impact totals).

City's Biology Guidelines require a 2:1 mitigation ratio for impacts to vernal pools with fairy shrimp. The project would mitigate for impacts to San Diego and Riverside fairy shrimp species through a 2:1 inoculation of a minimum of 2.66 acres of vernal pool surface area (with Candlelight) or 2.12 acres (without Candlelight). A minimum of 0.40 acre of that total would be inoculated with both San Diego fairy shrimp and Riverside fairy shrimp. The remainder would be inoculated with San Diego fairy shrimp cysts.

As all vernal pools are proposed to be inoculated with one or both shrimp species, as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14), a total of 3.86 acres of re-established vernal pools would be inoculated, exceeding the 2.66-acre mitigation obligation for impacts to San Diego and Riverside fairy shrimp.

Implementation of the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan included as Attachment 14 includes requirements related to vernal pool inoculation to meet the required 2:1 ratio. Refer to the additional mitigation detail in Section 8.2.5.1.b.

Both the Trails Restoration Plan (see Attachment 1) and the Vernal Pool Restoration Plan (see Attachment 14) include mitigation language that would ensure protection of the existing vernal pools and disturbed wetlands that could support these species during the restoration implementation. These measures include pre-activity surveys to identify the location of current



resources, conducting work outside of the wet season, realigning trails to avoid vernal pools, and marking/fencing pools within and adjacent to the vernal pool mitigation area so that resources can be avoided.

#### 8.2.4.2 Quino Checkerspot Butterfly

Direct impacts to Quino checkerspot butterfly would occur as a result of the removal of host and nectar plants (0.93 acre) within the project-level areas (see Figure 29.1). Impacts to these suitable habitat areas would be significant and require mitigation through habitat replacement.

Formal consultation through ESA Section 7 or coordination through ESA Section 10 process would be required with USFWS to determine mitigation for direct impacts to occupied habitat for Quino checkerspot butterfly. In early consultation discussions with USFWS the proposed mitigation for Quino checkerspot butterfly has been discussed which includes restoration of host plant and nectar plant patches within the vernal pool restoration areas (see Figure 50). Proposed restoration of Quino checkerspot butterfly host and nectar plants is detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14). Mitigation for impacts to host and nectar plans would be provided through preservation and enhancement of 0.96 acre of Quino habitat and habitat restoration of 0.93 acre of for a total of 1.89 acres of Quino checkerspot butterfly habitat preservation, enhancement and creation/restoration. These enhancement and restoration efforts would compensate for the loss of Quino checkerspot butterfly suitable habitat; however, formal consultation with the USFWS would also be required.

Implementation of the mitigation further detailed in Section 8.2.5.1.b in addition to USFWS consultation would ensure impacts are reduced to less than significant.

Impacts to Quino checkerspot butterfly during restoration activities including within the proposed vernal pool and Quino checkerspot mitigation area (see Attachment 14), cactus wren mitigation plan area (see Attachment 13), Otay tarplant mitigation plan area (see Attachment 15), wetland plan areas (see Attachment 18), and within the trail restoration buffers (see Attachment 1) would be mitigated through implementation of mitigation measures detailed in the respective mitigation and restoration plans and detailed below. All existing Quino checkerspot butterfly suitable habitats within restoration areas would be avoided and protected in place through the following measures:

To avoid potential direct impacts to Quino checkerspot butterfly and potentially occupied habitat during restoration activities, the following measures would be implemented:

- Prior to restoration implementation, locations of Quino checkerspot butterfly host and nectar plants would be mapped.
- During restoration activities, Quino checkerspot butterfly nectar plants shall be avoided.
- Herbicide application would not occur within the 10-foot buffers of the Quino checkerspot butterfly host plant patches, nectar plant patches, and Quino restoration areas. Buffers would be used to prohibit restoration activities from occurring or personnel from entering areas where Quino checkerspot butterfly larvae have potential to traverse between host plant patches, and to ensure only target species are treated with herbicide. The field crew



would not enter occupied Quino checkerspot butterfly areas or areas where host plants are present.

- Only locations with dense non-native plant cover and no Quino checkerspot butterfly host or nectar plants would be sprayed with a glyphosate-based herbicide. A field crew trained in habitat restoration would spray weeds in areas where Quino checkerspot butterfly and its host plants have not been documented.
- Herbicide would not be applied when wind speed and direction may cause herbicide drift to areas with host plants, nectar plants or Quino restoration areas. Marker dye would be added to the herbicide mixture so the restoration field crew can see any drift.
- The California Invasive Plant Council BMPs for wildland stewardship, including covering host plant patches and nectar plant patches with tarps during herbicide applications.

### 8.2.4.3 Western Spadefoot

Direct impacts to western spadefoot toad are anticipated through potential incidental mortality of adults and/or larvae (tadpoles) during construction and restoration activities due to the presence of occupied and suitable breeding habitat. Implementation of the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) would replace a total of 3.86 acres of vernal pool habitat expected to support western spadefoot within a 33.71-acre vernal pool restoration area. This would mitigate for the loss of the estimated 1.33 acres of directly and indirectly impacted habitat within the project-level analysis area. In addition, western spadefoot was detected in 23 basins covering 1.96 acres within parts of the survey area proposed to be preserved as a part of habitat-based mitigation (see Figures 40.2 through 40.4). An additional 14 basins in these areas were negative for spadefoot and 14 basins did not pond during the 2024 survey.

The following measure shall be implemented to reduce potentially significant direct impacts to individual western spadefoot during construction and restoration activities:

- Construction and restoration activities within the project impact area shall occur during the dry season when no portions of the project impact area contain areas of ponded water with the potential to support the breeding of western spadefoot.
- If construction or restoration must occur during a time when portions of the site may support the breeding of this species, a qualified biologist shall conduct a survey of all potential western spadefoot breeding areas no more than 3 days prior to construction or restoration impacts within these areas. If any areas are determined to be occupied by western spadefoot eggs or larva/tadpoles, these areas shall either be:
  - staked or fenced by, or under the supervision of a qualified biologist. No construction or restoration activities shall occur within these avoidance areas unless authorized by the Qualified Biologist or until the western spadefoot individuals and/or larvae have left of their own accord; or



- a Qualified Biologist will relocate eggs or larva/tadpoles to a suitable location subject to the approval of the City of San Diego.
- Regardless of timing, a Qualified Biologist shall be on-site during all construction and restoration activities occurring within and adjacent to the disturbed wetlands, vernal pools, and vernal pools with fairy shrimp, to ensure no western spadefoot adults are directly impacted. Any western spadefoot adult found within an area that will be impacted shall be relocated to the nearest safe location containing suitable habitat outside the work area. Both the biological monitor and the translocation area should be approved by the City of San Diego prior to construction.
- The biological monitor shall maintain a complete record of any western spadefoot encountered and moved from harm's way during the activity. Information shall include location, date, and time of observation; details of the observed behavior; relocation site; estimated number of toads seen or heard; and photographs (when feasible). A letter report detailing the results of all monitoring activities would be provided to the City of San Diego upon completion of the construction and/or restoration activity.

Both the Trails Restoration Plan (see Attachment 1) and the vernal pool restoration plan (see Attachment 14) include mitigation language that will ensure protection of the existing vernal pools and disturbed wetlands that could support this species during the restoration implementation. These measures include pre-activity surveys to identify the location of current resources, conducting work outside of the wet season, realigning trails to avoid vernal pools, and marking/fencing pools within and adjacent to the vernal pool mitigation area so that resources can be avoided.

In the event the western spadefoot toad becomes listed as endangered at the federal level, within the timeframe of this project, formal consultation through ESA Section 7 or coordination through ESA Section 10 process would be required. The applicant anticipates obtaining take authorization in anticipation of a potential listing concurrent with the Section 10 processing for Quino checkerspot butterfly.

#### **8.2.4.4 Least Bell's Vireo**

Impacts to 0.28 acre of foraging habitat would be considered a significant direct impact to the species. Preservation of approximately 0.31 acres of southern willow scrub and proposed restoration of 0.36 acre of riparian vegetation would mitigate for the loss of foraging habitat. With implementation of habitat-based mitigation detailed in Section 8.2.5.1, these impacts would be reduced to less than significant.

Impacts to least Bell's vireo would be significant due to the presence of the species within wetland areas at the western end of the proposed Beyer Boulevard extension and suitable habitat adjacent restoration areas in Spring Canyon. Mitigation required for anticipated impacts to least Bell's vireo would involve pre-construction surveys to determine presence of the species before grading activities commence. The following mitigation measures shall be implemented to reduce potentially significant direct impacts to least Bell's vireo during construction and restoration implementation:



## Least Bell's Vireo Breeding Season Avoidance-Construction

### LEAST BELL'S VIREO (State Endangered/Federally Endangered)

Prior to the issuance of any grading permit, the City Manager (or appointed designee) shall verify that the following project requirements regarding the least Bell's vireo are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur within least Bell's vireo suitable habitat areas between March 15 and September 15, the breeding season of the least Bell's vireo, until the following requirements have been met to the satisfaction of the City Manager:

- A. A Qualified Biologist shall survey those wetland areas that would be subject to construction noise levels exceeding 60 dB(A) hourly average for the presence of the least Bell's vireo. Surveys for this species shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service within the breeding season prior to the commencement of construction. If the least Bell's vireo is present, then the following conditions must be met:
  1. Between March 15 and September 15, no clearing, grubbing, or grading of occupied least Bell's vireo habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and
  2. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied least Bell's vireo habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a Qualified Acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the city manager at least two weeks prior to the commencement of construction activities. Prior to the commencement of any of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or
  3. At least two weeks prior to the commencement of construction activities, under the direction of a Qualified Acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the least Bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring\* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the Qualified Acoustician or Biologist, then the associated construction



activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

\*Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

- B. If least Bell's vireo are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the City Manager and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 15 and September 15 as follows:
  - 1. If this evidence indicates the potential is high for least Bell's vireo to be present based on historical records or site conditions, then condition A. iii shall be adhered to as specified above.
  - 2. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

### **Least Bell's Vireo Breeding Season Avoidance-Restoration Implementation**

During wetland mitigation implementation, impacts to least Bell's vireo could occur. General measures for all restoration projects are described in Section 8.2.7. The following measure specific to least Bell's vireo is provided below.

- A. To avoid any direct impacts to any species identified as a listed, candidate, sensitive, or special status species in the MSCP, removal of habitat that supports active nests in the mitigation area should occur outside the breeding season for these species (February 1 to September 15). To avoid indirect impacts to least Bell's vireo nesting within Spring Canyon and coastal California gnatcatcher nesting within the adjacent maritime succulent scrub, any work that may cause noise in excess of 60 A-weighted decibels hourly average, or the ambient if it is greater, shall be avoided during the breeding season for this species (March 1–August 15). If removal of habitat in the mitigation area must occur during the breeding season, a qualified biologist shall conduct a pre-implementation survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-implementation survey shall be conducted within 3 calendar days prior to the start of restoration activities (including removal of vegetation). The applicant shall submit the results of the pre-implementation survey to the City of San Diego for review and approval prior to initiating any restoration activities. If nesting birds are detected, a letter report in conformance with the City of San Diego's Biology Guidelines (i.e., appropriate follow-up



surveys, monitoring schedules, work and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report shall be submitted to the City for review and approval and implemented to the City's satisfaction. The City of San Diego's Mitigation Monitoring Coordinator shall verify and approve that all measures identified in the report are in place prior to and/or during implementation.

#### 8.2.4.5 Coastal California Gnatcatcher

Impacts to 27.25 acres of foraging habitat within MHPA lands would be considered a significant direct impact to the species. To mitigate for this loss of gnatcatcher habitat, the project would be required to provide a minimum of 54.5 acres of habitat-based mitigation, for a 2:1 ratio. Habitat-based mitigation via preservation of 160.94 acres of sensitive upland vegetation communities, including over 140 acres of coastal sage scrub and maritime succulent scrub, would mitigate for the loss of foraging habitat. With implementation of habitat-based mitigation detailed in Section 8.2.2, these impacts would be reduced to less than significant.

Direct impacts to nesting individuals within the MHPA would be significant. Mitigation required for anticipated impacts would involve pre-construction surveys to determine presence of the species before grading activities commence. In addition, implementation of ASMDs would be required as detailed in Section 6.2.1.2.g. The following mitigation measure shall be implemented to reduce potentially significant direct impacts during construction and restoration activities:

Prior to the issuance of any grading permit, the City Manager (or appointed designee) shall verify that the Multi-Habitat Planning Area (MHPA) boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur within coastal California gnatcatcher suitable habitat areas within MHPA between March 1 and August 15, the breeding season of the coastal California gnatcatcher, until the following requirements have been met to the satisfaction of the City Manager:

- A. A Qualified Biologist (possessing a valid endangered species act section 10(a)(1)(a) recovery permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 dB(A) hourly average for the presence of coastal California gnatcatcher. Surveys for this species shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service within the breeding season prior to the commencement of construction. If gnatcatchers are present, then the following conditions must be met:
  1. Between March 1 and August 15, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and
  2. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A)



- hourly average at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a Qualified Acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the city manager at least two weeks prior to the commencement of construction activities. Prior to the commencement of any of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; or
3. At least two weeks prior to the commencement of construction activities, under the direction of a Qualified Acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the least Bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring\* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the Qualified Acoustician or Biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

\*Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the Qualified Biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

- B. If coastal California gnatcatcher are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the City Manager and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 1 and August 15 as follows:
  1. If this evidence indicates the potential is high for gnatcatcher to be present based on historical records or site conditions, then condition A. iii shall be adhered to as specified above.
  2. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.



During restoration implementation, impacts to coastal California gnatcatcher could occur. General measures for all restoration projects are described in Section 8.2.7. The following measure specific to coastal California gnatcatcher is provided.

- A. To avoid any direct impacts to any species identified as a listed, candidate, sensitive, or special status species in the MSCP, removal of habitat that supports active nests in the mitigation area should occur outside the breeding season for these species (February 1 to September 15). To avoid indirect impacts to least Bell's vireo nesting within Spring Canyon and coastal California gnatcatcher nesting within the adjacent maritime succulent scrub, any work that may cause noise in excess of 60 A-weighted decibels hourly average, or the ambient if it is greater, shall be avoided during the breeding season for this species (March 1–August 15). If removal of habitat in the mitigation area must occur during the breeding season, a qualified biologist shall conduct a pre-implementation survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-implementation survey shall be conducted within 3 calendar days prior to the start of restoration activities (including removal of vegetation). The applicant shall submit the results of the pre-implementation survey to the City of San Diego for review and approval prior to initiating any restoration activities. If nesting birds are detected, a letter report in conformance with the City of San Diego's Biology Guidelines (i.e., appropriate follow-up surveys, monitoring schedules, work and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report shall be submitted to the City for review and approval and implemented to the City's satisfaction. The City of San Diego's Mitigation Monitoring Coordinator shall verify and approve that all measures identified in the report are in place prior to and/or during implementation.

#### 8.2.4.6 Burrowing Owl

Consistent with the OMCP FEIR Mitigation Framework BIO-2 (detailed in Section 3.3.7), site-specific focused surveys for burrowing owl were completed within the project-level areas to identify the potential for the site to support burrowing owl. One incidental sighting was observed; however, the site was found to not support any burrowing owl nesting habitat and no active nests were observed. To support consistency with the MSCP conditions of coverage for burrowing owl, the project includes implementation of an artificial berm within the vernal pool preserve as a project design feature as detailed in Section 1.3.2.6.b. Therefore, direct impacts to burrowing owl would be less than significant. However, burrowing owls have the potential to occupy the project-level areas prior to grading; therefore, potential impacts during construction would be significant.

Consistent with the OMCP FEIR mitigation framework, the following measure shall be implemented to reduce potentially significant direct impacts to burrowing owl during construction:



## Burrowing Owl Preconstruction Surveys

### PRECONSTRUCTION SURVEY ELEMENT

#### Prior to Permit or Notice to Proceed Issuance:

1. As this project has been determined to be BUOW occupied or to have BUOW occupation potential, the Applicant Department or Permit Holder shall submit evidence to the ADD of Entitlements and Multiple Species Conservation Program (MSCP) staff verifying that a Biologist possessing qualifications pursuant "Staff Report on Burrowing Owl Mitigation, State of California Natural Resources Agency Department of Fish and Game. March 7, 2012 (hereafter referred as CDFG 2012, Staff Report), has been retained to implement a burrowing owl construction impact avoidance program.
2. The qualified BUOW biologist (or their designated biological representative) shall attend the pre-construction meeting to inform construction personnel about the City's BUOW requirements and subsequent survey schedule.

#### Prior to Start of Construction:

1. The Applicant Department or Permit Holder and Qualified Biologist must ensure that initial pre-construction/take avoidance surveys of the project ""site"" are completed between 14 and 30 days before initial construction activities, including brushing, clearing, grubbing, or grading of the Development Footprint; regardless of the time of the year. ""Site"" means the Development Footprint and the area within a radius of 450 feet of the Development Footprint. The report shall be submitted and approved by the Wildlife Agencies and/or City MSCP staff prior to construction or BUOW eviction(s) and shall include maps of the Development Footprint and BUOW locations on aerial photos.
2. The pre-construction survey shall follow the methods described in CDFG 2012, Staff Report - Appendix D
3. 24 hours prior to commencement of ground disturbing activities, the Qualified Biologist shall verify results of preconstruction/take avoidance surveys. Verification shall be provided to the City's Mitigation Monitoring and Coordination (MMC) and MSCP Sections. If results of the preconstruction surveys have changed and BUOW are present in areas not previously identified, immediate notification to the City and Wildlife Agencies shall be provided prior to ground disturbing activities.

#### During Construction:

1. **Best Management Practices** shall be employed as BUOWs are known to use open pipes, culverts, excavated holes, and other burrow-like structures at construction sites. Legally permitted active construction projects which are BUOW occupied and have followed all protocol in this mitigation section, or sites within 450 feet of occupied BUOW areas, should undertake measures to discourage BUOWs from recolonizing previously occupied areas or colonizing new portions of the site. Such measures include, but are not limited to, ensuring



that the ends of all pipes and culverts are covered when they are not being worked on, and covering rubble piles, dirt piles, ditches, and berms.

2. **Ongoing BUOW Detection** — If BUOWs or active burrows are not detected during the pre-construction surveys, Section "A" below shall be followed. If BUOWs or burrows are detected during the pre-construction surveys, Section "B" shall be followed, along with coordination with the Wildlife Agencies, EAS, and MSCP. NEITHER THE MSCP SUBAREA PLAN NOR THIS MITIGATION SECTION ALLOWS FOR ANY BUOWs TO BE INJURED OR KILLED OUTSIDE OR WITHIN THE MHPA; in addition, IMPACTS TO BUOWs WITHIN THE MHPA MUST BE AVOIDED.

**A. Post Survey Follow Up if Burrowing Owls and/or Signs of Active Natural or Artificial Burrows Are Not Detected During the Initial Pre-Construction Survey** — Monitoring the site for new burrows is required using CDFW Staff Report 2012 Appendix D methods for the period following the initial pre-construction survey, until construction is scheduled to be complete and is complete (*NOTE — Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule*).

- 1) If no active burrows are found but BUOWs are observed to occasionally (1-3 sightings) use the site for roosting or foraging, they should be allowed to do so with no changes in the construction or construction schedule.
- 2) If no active burrows are found but BUOWs are observed during follow up monitoring to repeatedly (4 or more sightings) use the site for roosting or foraging, the City's MMC and MSCP Sections shall be notified and any portion of the site where owls have been sites and that has not been graded or otherwise disturbed shall be avoided until further notice.
- 3) If a BUOW begins using a burrow on the site at any time after the initial pre-construction survey, procedures described in Section B must be followed.
- 4) Any actions other than these require the approval of the City and the Wildlife Agencies.

**B. Post Survey Follow Up if Burrowing Owls and/or Active Natural or Artificial Burrows are detected during the Initial Pre-Construction Survey** — Monitoring the site for new burrows is required using Appendix D CDFG 2012, Staff Report for the period following the initial pre-construction survey, until construction is scheduled to be complete and is complete (*NOTE – Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule which adheres to the required number of surveys in the detection protocol*).

- 1) This section (B) applies only to sites (including biologically defined territory) wholly outside of the MHPA – **all direct and indirect impacts to BUOWs within the MHPA SHALL be avoided.**
- 2) If one or more BUOWs are using any burrows (including pipes, culverts, debris piles, etc.) on or within 300 feet of the proposed construction area, the City's MMC and



MSCP Sections shall be contacted. The City's MSCP and MMC Section shall contact the Wildlife Agencies regarding eviction/collapsing burrows and enlist appropriate City biologist for on-going coordination with the Wildlife Agencies and the qualified consulting BUOW biologist. A translocation plan will be required for any owls discovered within the impact area prior to or during construction, with the approval of the Wildlife Agencies, EAS, and MSCP. No construction shall occur within 300 feet of an active burrow without written concurrence from the Wildlife Agencies. This distance may increase or decrease, depending on the burrow's location in relation to the site's topography, and other physical and biological characteristics.

- a) **Outside the Breeding Season** — If the BUOW is using a burrow on site outside the breeding season (i.e., September 1 – January 31), the BUOW may be evicted after the qualified BUOW biologist has determined via fiber optic camera or other appropriate device, that no eggs, young, or adults are in the burrow. Eviction requires preparation of an Exclusion Plan prepared in accordance with CDFW Staff Report 2012, Appendix E (or most recent guidance available) for review and submittal to Wildlife Agencies. Written concurrence from the Wildlife Agencies is required prior to Exclusion Plan implementation.
  - b) **During Breeding Season** — If a BUOW is using a burrow on-site during the breeding season (February 1-August 31), construction shall not occur within 300 feet of the burrow until the young have fledged and are no longer dependent on the burrow, at which time the BUOWs can be evicted. Eviction requires preparation of an Exclusion Plan prepared in accordance with CDFW Staff Report 2012, Appendix E (or most recent guidance available) for review and submittal to Wildlife Agencies. Written concurrence from the Wildlife Agencies is required prior to Exclusion Plan implementation.
3. **Survey Reporting During Construction** — Details of construction surveys and evictions (if applicable) carried out shall be immediately (within 5 working days or sooner) reported to the City's MMC, and MSCP Sections and the Wildlife Agencies and must be provided in writing (as by e-mail) and acknowledged to have been received by the required Agencies and DSD Staff member(s).

**Post Construction:**

4. Details of all surveys and actions undertaken on-site with respect to BUOWs (i.e., occupation, eviction, locations etc.) shall be reported to the City's MMC and MSCP sections and the Wildlife Agencies within 21 days post-construction and prior to the release of any grading bonds. This report must include summaries of all previous reports for the site; and maps of the Development Footprint and BUOW locations on aerial photos.

Impacts to 103.77 acres of burrowing owl foraging habitat would be considered a significant direct impact to the species. Habitat-based mitigation would be provided and would include the preservation of approximately 160.94 acres of sensitive upland vegetation communities through dedication to the City would protect substantial burrowing owl foraging habitat. With



implementation of habitat-based mitigation detailed in Section 8.2.2, indirect impacts to direct impacts to burrowing owl due to loss of foraging habitat would be reduced to less than significant.

#### 8.2.4.7 Coastal Cactus Wren

Impacts to coastal cactus wren habitat would be significant due to impacts to 0.63 acre of maritime succulent scrub habitat dominated by coast cholla in an area known to support cactus wren. This would be mitigated with the restoration described in the following measure.

##### Cactus Wren Habitat Restoration

Impacts to coastal cactus wren would be significant due to impacts to 0.63 acre of maritime succulent scrub habitat that supports cactus thickets required to support this species. An additional 0.46 acre of indirect impact from modeled operational noise from Beyer Boulevard post-construction is included as detailed in Section 7.2.2.2.c. Species-specific mitigation for impacts to coastal cactus wren habitat would include implementation of a cactus translocation and restoration effort to create and expand coastal cactus wren habitat within the County's Furby North Preserve at a minimum 1:1 ratio. Mitigation for impacts to 1.09 acres of coastal cactus wren habitat would be completed through restoration of 0.72 acre of disturbed maritime succulent scrub (greater than 50 percent cover by non-native species) and 1.82 acre of enhancement of maritime succulent scrub (25 percent non-native cover) within a 2.54-acre restoration area. The restoration effort would include salvage and translocation of sensitive and non MSCP-covered plant species including but not limited to coast cholla, liveforevers, fish-hook cactus, coastal prickly pear, chaparral prickly pear, our Lord's candle, Mojave yucca, as detailed in the Coastal Cactus Wren Mitigation Plan included as Attachment 13. The Coastal Cactus Wren Mitigation Plan describes implementation guidelines, including the density of cholla, maintenance tasks, and monitoring methodologies for species to be salvaged and translocated. The restoration area would be maintained for a period of five years and would be required to meet performance standards including providing a 50 percent coast cholla cover and 20 percent cover of native herbaceous species. No more than 10 percent non-native vegetation may be present. Following the completion of management and monitoring for the five-year period, the City would be responsible for verifying all success criteria have been met consistent with the Coastal Cactus Wren Mitigation Plan. After restoration success, the County of San Diego, as landowner of the Furby North Preserve would take over long-term management consistent with their current obligations to manage the Furby North Preserve consistent with City MSCP ASMDs for coastal cactus wren as detailed in the County's Furby-North Property Resource Management Plan.

The project also would mitigate for the loss of 20 acres of potential foraging habitat for this species in the vicinity of the Beyer Boulevard project component through the preservation of 161 acres of sensitive uplands, as detailed in Section 8.2.2.

#### 8.2.4.8 Crotch's Bumble Bee

Impacts to Crotch's bumble bee would be significant based on the presence of several individuals within the mitigation lands and a low to high potential for the species to nest and forage within the project-level areas based on the 2024 habitat assessment (see Figure 29.2). Species-specific mitigation for potential impacts to Crotch's bumble bee would include implementation of the



following mitigation measure. Additionally, subsequent coordination and an incidental take permit from CDFW would be required which may result in different or additional mitigation requirements. The ITP shall be obtained prior to issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits. Take of any endangered, threatened, candidate species that results from the project is prohibited, except as authorized by State law (California Fish and Game Code §§ 86, 2062, 2067, 2068, 2080, 2085; California Code of Regulations, Title 14, § 786.9) under the CESA.

Impacts to approximately 190 acres of potential foraging and nesting habitat, including approximately 42 acres that supports moderate to high cover of nectar resources, would be mitigated via habitat-based mitigation. Preservation of 160.94 acres of upland vegetation communities and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland plan areas, all suitable for foraging by this species (see Table 10). In addition, there are several project design features that include habitat restoration of approximately 17 acres, e.g., trail restoration and wetland plan areas, that would provide additional habitat for this species. This habitat preservation would reduce the impact to foraging and nesting habitat to less than significant.

### Crotch's Bumble Bee Preconstruction Survey

The following language has been developed in coordination with CDW and the City. Further coordination with CDFW would be required which may result in an adjustment to the specific mitigation measure requirements. If Crotch's bumble bee is no longer a candidate or listed species at the time of implementation, this measure would not apply.

**Direct Impact Avoidance for Crotch's Bumble Bee.** Prior to the Notice to Proceed for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, and implementation of restoration plans, the Development Services Department (DSD) Director's Environmental Designee shall verify the following project requirements regarding the Crotch's bumble bee are shown on the construction and restoration plans:

- A. To avoid impacts to Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.
- B. Surveys must be conducted by a Qualified Biologist meeting the qualifications discussed in the California Department of Fish and Wildlife (CDFW) guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The Qualified Biologist shall send all photo vouchers to a CDFW-approved taxonomist to confirm the identifications of the bumble bees encountered during surveys.
- C. The pre-construction survey shall be conducted during the colony active period between April 1 through August 31 by the Qualified Biologist prior to the issuance



of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and within one year prior to the initiation of project activities (including removal of vegetation). The pre-construction survey shall consist of photographic surveys following CDFW guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of three separate visits spaced two to four weeks apart. Survey results will be considered valid until the start of the next colony active period.

- D. The Qualified Biologist/owner permittee shall submit the results (including positive or negative survey results) of the pre-construction survey to City DSD (Mitigation Monitoring and Coordination) City Planning Department (MSCP) staff and CDFW for review and written approval prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits.
- E. If pre-construction surveys identify Crotch's bumble bee individuals on-site, the Qualified Biologist shall notify CDFW and the measures identified in the ITP will be implemented.
- F. Survey data shall be submitted by the Qualified Biologist to the CNDDDB in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.
- G. Herbicide application should consider proximity to known Crotch's bumble bee occurrences or nests (i.e., known occurrences within 1 kilometer of the mitigation site) during the nesting season (February 15 to September 15), and to the extent feasible herbicide shall be avoided during the peak blooming season for potential foraging resources of Crotch's bumble bee.

#### 8.2.4.9 Nesting Avian Species

Direct impacts to nesting avian species including northern harrier, coastal cactus wren, Cooper's hawk, southern California rufous-crowned sparrow, white-tailed kite, merlin, California horned lark, yellow-breasted chat, grasshopper sparrow, yellow warbler, loggerhead shrike, and Bell's sage sparrow during construction and restoration activities would be significant. Mitigation would be accomplished through implementation of the following mitigation measure:

#### Breeding Season Avoidance/Preconstruction Bird Surveys

Removal of habitat that supports active nests in the proposed area of disturbance shall occur outside the breeding season for northern harrier, coastal cactus wren, Cooper's hawk, southern California rufous-crowned sparrow, white-tailed kite, merlin, bald eagle, California horned lark, yellow-breasted chat, grasshopper sparrow, yellow warbler, loggerhead shrike, and Bell's sage sparrow, or any species identified as a listed, candidate, sensitive, or special status species in the MSCP (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey



to determine the presence or absence of nesting bird species, listed above, on the proposed area of disturbance. The pre-construction survey shall be conducted within 3 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the pre-construction survey to the City for review and approval prior to initiating any construction activities. If these bird species listed above are detected, a letter report in conformance with the City's Biology Guidelines (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section and Biologist shall verify and approve that all measures identified in the report are in place prior to and/or during construction.

In addition, the loss of up to 190 acres of foraging habitat for Cooper's hawk, white-tailed kite, northern harrier, and southern California rufous-crowned sparrow would be mitigated through the habitat-based mitigation via preservation of 160.94 acres of sensitive upland vegetation communities and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland plan areas, all suitable for foraging by this species. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for these species.

Implementation of species-specific conditions of coverage would be assured through conditions of project approval. ASMDs for MSCP covered species, least Bell's vireo, Cooper's hawk, southern California rufous-crowned sparrow, northern harrier, coastal California gnatcatcher, burrowing owl, and coastal cactus wren would also be implemented as detailed in Section 6.2.1.2.g.

## **8.2.5 Direct Impacts to Jurisdictional Resources with the Potential to be Jurisdictional**

Impacts to potential Waters of U.S. and Waters of the State are summarized in Tables 11a-11d. Mitigation for state and federal waters is subject to the approval of the regulatory agencies. USACE Waters of U.S. and CDFW and RWQCB Waters of the State are regulated by the federal and state governments under a no-net-loss policy. Notification to the USACE Section 404 Nationwide Permit Program, a 1602 Streambed Alteration Agreement from the CDFW, and a 401 Water Quality Certification from the RWQCB would be required for impacts to these resources, as discussed below in Section 8.2.5.2.

Impacts and mitigation for City wetlands are detailed in Section 8.2.5.1. Detailed mitigation requirements are specified in Table 18a-18c.



Table 18a Mitigation Requirements for Direct Impacts to City of San Diego Wetlands										
Grading Phase	Disturbed Wetland			Vernal Pool			Wetland			Mitigation Total
	Impact (acres)	Mitigation Ratio	Mitigation Required	Impact (acres)	Mitigation Ratio	Mitigation Required	Impact (acres)	Mitigation Ratio	Mitigation Required	
Phase 1										
Southwind <sup>1</sup>	-	-	-	0.04	2:1	0.08	-	-	-	0.08
Development Footprint	0.07	2:1	0.14	0.63	2:1	1.26	-	-	-	1.40
Vernal pool with button celery <sup>2</sup>	-	-	-	0.01	3:1	0.03	-	-	-	0.03
Phase 2										
Development Footprint	0.04	2:1	0.08	0.12	2:1	0.24	-	-	-	0.32
Beyer Boulevard										
Beyer Park	-	-	-	-	-	-	0.35	2:1 <sup>3</sup>	0.70	0.70
Furby North	<0.01 (54 sq. ft.)	2:1	<0.01 (108 sq. ft.)	0.01 (264 sq. ft.)	2:1	0.02 (528 sq. ft.)	-	-	-	0.02
West Otay Mesa A	<0.01 (19 sq. ft.)	2:1	<0.01 (38 sq. ft.)	0.02 (847 sq. ft.)	2:1	0.04 (1,694 sq. ft.)	-	-	-	0.04
Phase 4										
Development Footprint	-	-	-	<0.01 (35 sq. ft.)	2:1	<0.01 (70 sq. ft.)	0.01	2:1 <sup>3</sup>	0.02	0.03
							<0.01 (159 sq. ft.)	3:1 <sup>3</sup>	0.01	
EVA Road										
Development Footprint	-	-	-	0.02	2:1	0.04	-	-	-	0.04
Total	0.11		0.22	0.85		1.70	0.36		0.73	2.65
NOTE: Totals may not add due to rounding. <sup>1</sup> Mitigation would be implemented for impacts within the Southwind project area by the first project to proceed. If these impacts occur and are mitigated by another project, the impacts and mitigation obligations would be eliminated from this project. <sup>2</sup> 0.01 acre of vernal pool supports San Diego button-celery which requires a 3:1 mitigation ratio, per the VPHCP. <sup>3</sup> Beyer Park wetlands are classified as mule fat riparian scrub which requires a 2:1 mitigation ratio. The wetlands within Phase 4 includes 0.004 acre (159 sq. ft.) of southern willow scrub which would be mitigated at a 3:1 ratio, whereas the remaining resources within Phase 4 are mule fat scrub which would be mitigated at a 2:1 ratio.										



### 8.2.5.1 City of San Diego Wetlands

Direct impacts to City wetlands would be considered significant and mitigation requirements are summarized in Table 18a. Because of the nature of impacted resources, the proposed mitigation includes two separate restoration/creation/enhancement efforts, detailed below.

#### a. Wetlands with Riparian Function

Impacts to City wetlands that have a riparian function would be mitigated through wetland creation (establishment) and enhancement (rehabilitation) in existing areas of disturbed land and non-native grassland areas of Spring Canyon that contain invasive and non-native cover. The wetland creation (establishment) and enhancement (rehabilitation) effort would result in creation of wetland functions and values within disturbed and non-native grassland portions of the Spring Canyon drainage to ensure no net loss of wetland resources. Wetland enhancement would involve removal of 100 percent cover stands of invasives within the wetland plan area to increase functions and values of the wetland. Details of the proposed wetland creation and enhancement effort are detailed in a Wetland Plan for the Southwest Village Specific Plan (see Attachment 18). The wetland resources reported in Table 18b would be mitigated in Spring Canyon. A summary of the wetland impacts and proposed mitigation for these resources is reported in Table 18b.

Per the City's Biology Guidelines (City of San Diego 2018a), the project's impacts to jurisdictional resources must be mitigated at a minimum ratio of 2:1 for riparian scrub habitat (mule fat scrub) and a 3:1 for riparian forest (southern willow scrub). As shown in Table 18b, mule fat scrub would be mitigated at a 2:1 ratio while southern willow scrub would be mitigated at a 3:1 ratio.

The 0.73-acre wetland mitigation requirements would be achieved within Spring Canyon through at least 0.36 acre of wetland creation (establishment) and at least 0.37 acre of wetland enhancement (rehabilitation) to create wetland function and values consistent with the requirements of the City's Biology Guidelines. An additional 0.43 acre of wetland creation (establishment) is proposed to satisfy RWQCB mitigation requirements for impacts to non-wetland waters/streambed and is not required by the City. As a project design feature, the Wetland Plan (see Attachment 18) identifies project design features including an additional 1.20 acres of weed control and implementation of creation, enhancement and weed control within a 3.46-acre area associated with the Nakano Wetland Plan (RECON 2024f). The Southwest Village Wetland Plan would require implementation of the 3.46-acre Nakano Plan area prior to implementation of the Southwest Village Plan area due to its upstream location. The first project to proceed (Nakano or Southwest Village) would implement all components of the Nakano Plan. The total proposed wetland creation/enhancement effort in addition to project design features are detailed in Attachment 18 would be in excess of City standard mitigation requirements.



Table 18b City of San Diego Wetland (Mule Fat and Southern Willow Scrub) Impacts and Required Mitigation			
Grading Phase	Impact (acres)	Mitigation Ratio	Mitigation Required
<b>Beyer Boulevard</b>			
Beyer Park	0.35	2:1 <sup>1</sup>	0.70
<b>Phase 4</b>			
Development Footprint	0.01	2:1 <sup>1</sup>	0.02
	<0.01 (159 sq. ft.)	3:1 <sup>1</sup>	0.01
<b>Total</b>	<b>0.36</b>		<b>0.73</b>
NOTE: Totals may not add due to rounding.			
<sup>1</sup> Beyer Park wetlands are classified as mule fat riparian scrub which requires a 2:1 mitigation ratio. The wetlands within Phase 4 includes 0.004 acre (159 sq. ft.) of southern willow scrub which would be mitigated at a 3:1 ratio, whereas the remaining resources within Phase 4 are mule fat scrub which would be mitigated at a 2:1 ratio.			

## b. Disturbed Wetlands and Vernal Pools

The project would result in significant impacts to vernal pools and disturbed wetlands as detailed in Table 18a. Mitigation for impacts to all vernal pool resources and disturbed wetlands (isolated ponding features) would be accomplished through vernal pool establishment and restoration within the proposed vernal pool and Quino checkerspot butterfly restoration area (see Figure 46). The impacts reported in Table 18c include both direct and indirect impacts to vernal pools and disturbed wetland resources because both would be mitigated in the same manner. Impacts and required mitigation for impacts to vernal pools and disturbed wetlands located within Southwind area are reported separately in Table 18c due to the requirement for mitigation in these areas to be implemented by the first project to proceed. As detailed in Table 18c, disturbed wetland direct impacts would total 0.11 acre and vernal pool direct impacts would total 0.85 for a total of 0.96 acre of direct vernal pool and disturbed wetland impacts which would require 1.92 acres of mitigation. As detailed in Section 7.2.2.3 and discussed in Section 8.2.6.3 below, the project would also result in an additional 0.13-acre impact of indirect impacts to vernal pools and disturbed wetland resources, including 0.07 acre of indirect impact to disturbed wetlands and 0.06 acre of indirect impact to vernal pools. Indirect impacts would be mitigated at a 2:1 ratio and would require 0.26 acre of mitigation. Direct and indirect impact totals and associated mitigation are provided in Table 18c. Direct impact mitigation ratios are detailed in Table 18a including impacts to the single vernal pool with button-celery that would be mitigated at a 3:1 ratio consistent with the requirements of the VPHCP. All remaining vernal pool and disturbed wetland direct and indirect impacts would be mitigated at a 2:1 ratio as required by the VPHCP. Based on the applied mitigation ratio, implementation of the project-level areas would require 2.18 acres of mitigation for direct and indirect impacts to vernal pools and disturbed wetlands, including mitigation for impacts from the Southwind project. However, mitigation within the Southwind project area would be implemented by the first project to proceed.



Table 18c Mitigation Summary for Direct and Indirect Impacts to City of San Diego Wetlands					
	Impact Summary				Total Mitigation Required <sup>1</sup>
	Disturbed Wetland		Vernal Pool		
	Impact (acres) <sup>1</sup>	Mitigation Required <sup>1</sup>	Impact (acres) <sup>1</sup>	Mitigation Required (acres) <sup>1</sup>	
<i>Direct Impact Summary<sup>1</sup></i>					
Southwind Direct Impacts	-		0.04	0.08	0.08
Development Footprint (all phases)	0.11	0.22	0.81	1.62	1.84
<i>Subtotal</i>	<i>0.11</i>	<i>0.22</i>	<i>0.85</i>	<i>1.70</i>	<i>1.92</i>
<i>Indirect Impact Summary<sup>3</sup></i>					
Southwind Indirect Impacts	-	-	0.036	0.07	0.07
Development Footprint (all phases)	0.07	0.14	0.024	0.05	0.17
<i>Subtotal</i>	<i>0.07</i>	<i>0.14</i>	<i>0.06</i>	<i>0.12</i>	<i>0.26</i>
Total Mitigation Requirement (direct + indirect impacts)					2.18
Total Mitigation Requirement without Southwind					2.10
NOTE: Totals may not add due to rounding.					
<sup>1</sup> Details of direct impacts are found in Table 18a.					
<sup>2</sup> Mitigation totals account for ratios detailed in Table 18a including a 3:1 ratio for 1 vernal pool with button celery.					
<sup>3</sup> Refer to Sections 7.2.2.3 and 8.2.6.3 for indirect impact discussion.					

As discussed in the wetland deviation analysis in Section 7.1.2.4, all vernal pools and disturbed wetlands (isolated ponding features) would be mitigated as vernal pools. The Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) illustrates the establishment, restoration, and enhancement methods that would occur within the vernal pool restoration areas and a maintenance and monitoring program which is required to ensure the success of the mitigation for impacted disturbed wetlands and vernal pools, including disturbed wetlands and vernal pools with fairy shrimp and one vernal pool containing San Diego button-celery.

As detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan, the restoration effort proposes to establish 3.86 acres of vernal pool basins and enhance 0.05 acre of existing vernal pool basins, which would provide an excess of 1.68 acres of vernal pool creation (including impacts from the Southwind project) and 0.05 acre of enhancement beyond the standard mitigation ratios required by the City. If Southwind were to proceed first and mitigate for impacts separately and elsewhere, there would be an excess of 1.76 acres. The excess vernal pool creation is planned in anticipation of higher RWQCB mitigation ratios for vernal pools.

The Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan would ensure that the created and enhanced vernal pools would provide long-term conservation value while contributing to the recovery of multiple VPHCP covered species. Restoration of vernal pools would be conducted within areas that are known to support vernal pools, while avoiding and enhancing existing pools. As discussed in the mitigation plan, mitigation for projects impacting vernal pools within the City shall include salvage of sensitive species from vernal pools to be impacted and introduction of salvaged material into restored vernal pool habitat where appropriate.



As impacts to vernal pool resources would be phased, mitigation would also occur in phases, roughly in three installations of 10 acres of vernal pool restoration for each phase.

A Habitat Management Plan (HMP) has also been prepared and discusses the perpetual long-term management of the vernal pool restoration areas (RECON 2024c; see Attachment 17). The HMP, which would be approved by the USACE, USFWS, RWQCB, and the City of San Diego, discusses the maintenance and monitoring plan for the vernal pool mitigation site and addresses:

1. Method of protecting the resources in perpetuity (i.e., covenant of easement dedication to the City of San Diego, or a deed restriction or other conservation mechanism consistent with California Civil Code Section 815, et seq. and/or Government Code Section 65870 and acceptable to the USACE, USFWS, and RWQCB;
2. Monitoring schedule;
3. Measures to prevent human and exotic species encroachment;
4. Funding mechanism (a non-wasting endowment or similar secure funding method in an amount approved by the USACE, USFWS, RWQCB, and the City of San Diego based on a Property Analysis Record (PAR3; Center for Natural Lands Management©), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the biological conservation easement areas by an agency, non-profit organization, or other entity approved by the USACE, USFWS, RWQCB, and the City of San Diego. The non-wasting endowment must be established prior to, or concurrent with implementation of long-term management; and
5. Contingency measures should problems occur.

### ***Vernal Pool Creation and Wetland Restoration***

Prior to issuance of land development permits including clearing, grubbing, grading, and/or construction permits that impact jurisdictional waters, the project applicant shall provide compensatory wetland mitigation resulting in no overall net loss of wetlands. A total of 0.73 acre of wetland mitigation shall be provided, at minimum consistent with the Wetland Plan (see Attachment 18). To ensure no net loss, this shall include a 1:1 creation or restoration component. Additionally, to compensate for direct and indirect impacts to vernal pool and disturbed wetland resources, the applicant shall implement the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) to implement vernal pool creation including a minimum of 2.15 acres or 2.00 acres (without Southwind mitigation). The first project to proceed within the Southwind project areas (see Figure 22) would be required to mitigate.

Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits that impact jurisdictional waters, the project applicant shall obtain all necessary permits from USACE, RWQCB, and CDFW, and shall mitigate impacts pursuant to the City's MSCP Subarea Plan and VPHCP and in accordance with the terms and conditions of all required permits. Areas under the jurisdictional authority of USACE, RWQCB, and CDFW shall be delineated on all grading plans.



The applicant shall submit a Final Wetlands Mitigation and Monitoring Plan and Final Vernal Pool Mitigation and Monitoring Plan to the satisfaction of the City, USACE, RWQCB, and CDFW. The plan shall include, at a minimum, an implementation strategy; appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; a five-year maintenance, monitoring, and reporting program; an estimated completion time; and contingency measures and shall identify a long-term funding source. A Wetland Plan and Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan have been prepared. The project applicant shall also be required to implement the Wetlands Mitigation and Monitoring Plan and Vernal Pool Mitigation and Monitoring Plan subject to the oversight and approval of the Development Services Department director (or their designee), USACE, RWQCB, and CDFW.

Should the purchase of additional mitigation credits be necessary to satisfy permit conditions from USACE, RWQCB, and/or CDFW, applicant shall secure mitigation credits within an agency-approved conservation bank in accordance with the terms and conditions of all required permits. The applicant is required to present proof of mitigation credit purchase to the applicable Wetland Agencies prior to issuance of any land development permits.

#### **8.2.5.2 Other Agency Jurisdictional Resources (CDFW, RWQCB and USACE)**

Mitigation for impacts to CDFW, RWQCB, and USACE jurisdictional resources would be significant. Direct impacts to the potential wetlands (mule fat scrub, southern willow scrub, disturbed southern willow scrub, disturbed riparian and disturbed wetlands), vernal pools, and natural flood channels (non-wetland waters/streambed), within the project-level areas are reported in Tables 11a-11d and the location of impacts are presented in Figures 41 through 43. Direct impacts to jurisdictional resources would be addressed through applicable permitting through USACE, CDFW, and RWQCB. The following mitigation measure would be required to ensure impacts to CDFW, RWQCB, and USACE jurisdictional resources are reduced to less than significant.

##### ***Wetland Permits***

Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits by the City that impact jurisdictional waters, the project applicant shall obtain all necessary permits from USACE, RWQCB, and CDFW, and shall mitigate impacts in accordance with the terms and conditions of all required permits. Areas under the jurisdictional authority of USACE, RWQCB, and CDFW shall be delineated on all grading plans. The mitigation for these agencies is anticipated to follow the same restoration approach as described above for the City proposed wetland mitigation, although higher mitigation ratios may be required by these agencies.

#### **8.2.6 Indirect Impacts**

The OMCP FEIR addressed indirect impacts in both the Land Use and Biological Resources sections of the FEIR. The OMCP FEIR found potentially significant indirect impacts related to development occurring adjacent to the MHPA. Additionally, potential indirect impacts were identified related to the issues of invasive plants and noise generation. The OMCP FEIR identified Mitigation Framework LU-2, which requires implementation of the City's MHPA Land Use Adjacency Guidelines. As the City requires implementation of the MHPA Land Use Adjacency Guidelines as standard conditions



of approval for projects adjacent to the MHPA, the OMCP FEIR Mitigation Framework LU-2 would be implemented as a condition of the project.

### 8.2.6.1 Sensitive Plants and Vegetation Communities

As detailed in Section 6.2.1.2.d and 7.2.2.1, indirect impacts to sensitive plants and vegetation communities would be avoided through implementation of MHPA Land Use Adjacency Guidelines and implementation of BMPs which would avoid potential indirect impacts related to drainage, dust, toxins, runoff, and invasive species. During construction, biological monitoring, installation of temporary fencing during construction would ensure indirect effects are avoided. Additionally, the project's landscape plans are designed to ensure only native plants are located adjacent to open space areas, to avoid introduction of invasives into the surrounding open space areas. Indirect impacts to sensitive vegetation communities would be less than significant with implementation of the MHPA Land Use Adjacency Guidelines and BMPs. Indirect impacts to sensitive plants associated with trail restoration efforts would be mitigated by the measure detailed in Section 8.2.3. Additionally, indirect impacts to thread-leaved brodiaea during restoration activities would be mitigated by the measure detailed in Section 8.2.3.4.

### 8.2.6.2 Sensitive Wildlife

As discussed in Section 7.2.2.2, indirect impacts to sensitive wildlife would be significant for the following species: Quino checkerspot butterfly, coastal California gnatcatcher, coastal cactus wren, least Bell's vireo, burrowing owl, western spadefoot, San Diego and Riverside fairy shrimp, Crotch's bumble bee, and nesting avian species. Impacts to the remaining sensitive wildlife would be less than significant. These impacts are discussed below.

#### a. Quino Checkerspot Butterfly

As detailed in Section 7.2.2.1, introduction of non-native species associated with the project development area would be avoided through compliance with the Specific Plan plant palette which requires native plantings adjacent to open space within the development footprint.

Indirect impacts to Quino checkerspot butterfly would be mitigated through the measures detailed in Section 8.2.4.2 and 8.2.7. Additionally, within the vernal pool preserve where the majority of suitable habitat is present, only native species would be planted, including Quino checkerspot butterfly host and nectar plants (see Attachment 14). During all construction and restoration activities, avoidance measures would be implemented to ensure Quino checkerspot butterfly host and nectar plants are protected including implementation of BMPs such as silt fences and watering to avoid dust generation. Indirect impacts to Quino checkerspot butterfly would be avoided in areas adjacent to proposed grading through implementation of dust control measures, erosion control, and fencing to demark the limits of disturbance. Additionally, prior to formalizing any primitive trails (e.g., narrowing the trail to 4 feet and restoring disturbed habitats surrounding the trail), sensitive plant survey updates would be conducted to ensure avoidance of sensitive plant species including host and nectar plants. Where needed to protect sensitive areas, peeler pole fencing and/or buffering sensitive plants from the trail would be implemented. With implementation of these



measures, indirect impacts to Quino checkerspot butterfly would be mitigated to less than significant.

### **b. Coastal California Gnatcatcher**

As this species is present within the MHPA adjacent to the project-level analysis area including along the Beyer Boulevard extension, the EVA road, and restoration lands, indirect noise impacts from construction and restoration could occur if the activity is proposed during the breeding season, which would be significant. Implementation of the MSCP Land Use Adjacency Guidelines as noted in Section 6.2.1.2.d and implementation of noise measures identified in Section 8.2.4.5 above would mitigate this impact and reduce it to less than significant.

Significant indirect impacts from Beyer Boulevard operational noise may occur to approximately 0.09-acre area of suitable habitat (Diegan coastal sage scrub) based on noise modeling. This includes a small area that would be exposed to noise levels above 60 dB contour (see Figure 47). This impact would be mitigated at a 1:1 ratio through habitat preservation totaling 0.18 acre sensitive upland habitats in the MHPA. The excess upland mitigation of 7.71 acres as detailed in Section 8.2.2 (see Table 15a), would mitigate these impacts, with up-tiering to maritime succulent scrub.

### **c. Coastal Cactus Wren**

Indirect impacts to coastal cactus wren may result from edge effects associated with development and construction would be mitigated by the following:

- Implementation of proper BMPs, including dust control through the use of a water truck, erosion control devices (straw wattles, gravel bags, etc.), and silt fencing around the construction boundary.
- Installation of the proposed masonry fencing and wildlife fencing as project design features would serve to preclude unwanted entry by pedestrians and domestic animals.

The remaining area of coastal cactus wren habitat would continue to be large enough to support at least three nesting pairs of species (personal communication with Kris Preston on May 12, 2023). Thus, there would be a sufficient block of suitable habitat remaining after construction of the roadway to continue to support the species in this location.

Indirect impacts associated with construction and restoration noise would be addressed through implementation of the Breeding Season Avoidance/Preconstruction Survey mitigation measure provided in Section 8.2.4.9 and noise measures identified in Section 8.2.4.5 above which would mitigate this impact and reduce it to less than significant.

Significant indirect impacts from Beyer Boulevard operational noise to an approximately 0.46-acre area of suitable habitat (maritime succulent scrub) would be mitigated by providing cactus wren habitat restoration at a 1:1 ratio with 1.09 acres as detailed in Section 8.2.4.7 and Attachment 13.



#### **d. Least Bell's Vireo**

Indirect impacts to least Bell's vireo are not anticipated from construction given that the occupied habitat within Beyer Boulevard footprint would be removed completely and the species would not be subject to construction or operational noise impacts.

Indirect impacts associated with restoration noise may occur if these activities are conducted during this species' breeding season. Occupied suitable habitat for this species occurs adjacent to the restoration area which is likely to cause noise levels within these adjacent habitat areas to exceed 60 dB(A) average sound level ( $L_{eq}$ ), or ambient if greater, which would be considered a significant indirect impact requiring mitigation. These impacts would be addressed through implementation of the mitigation measure provided in Section 8.2.4.4.

#### **e Burrowing Owl**

Indirect noise impacts to burrowing owl during construction or restoration would be mitigated through compliance with City standard conditions which require avoidance of construction during the breeding season of February 1–August 31. If construction or restoration must occur during this period, preconstruction survey mitigation measures provided in Section 8.2.4.6 would be completed, and if needed, noise reduction measures would be implemented in accordance with the City's Biology Guidelines.

#### **f. Western Spadefoot**

Indirect impacts to this species during enhancement of jurisdictional resources within the 100-foot trail corridor and during other restoration activities where ponding basins are present would be significant and mitigated through implementation of required VPHCP avoidance and minimization measures detailed in Section 6.2.2.2.a and measures detailed in Section 8.2.4.3 which limit activity to times of the year when no ponding is present. The Trails Restoration Plan (see Attachment 1) and Vernal Pool Restoration Plan (see Attachment 14) require that no enhancement activities occur within vernal pools when ponded, surveying to identify any occupied pools within and adjacent to the restoration area, and marking/fencing any occupied pools to protect from adjacent restoration activities. Implementation of these measures would avoid indirect impacts to western spadefoot.

#### **g. San Diego and Riverside Fairy Shrimp**

As detailed in Section 7.2.2.2.g, implementation of grading within the project-level areas would result in indirect impacts to a total of 0.13 acre of vernal pools and disturbed wetlands either containing or assumed to contain San Diego fairy shrimp. This would be considered a significant indirect impact to San Diego fairy shrimp. Indirect impacts to San Diego fairy shrimp would be mitigated at a 2:1 ratio through inoculation of created vernal pools, as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14). Implementation of the mitigation detailed in Section 8.2.4.1 and Section 8.2.5.1.b (see Table 18c) would ensure indirect impacts to vernal pools and disturbed wetlands containing or assumed to contain San Diego fairy shrimp would be reduced to less than significant.



Indirect impacts could also potentially occur to San Diego and Riverside fairy shrimp during enhancement of jurisdictional resources within the 100-foot trail corridor or during vernal pool restoration activities, if work were to occur when ponding is present. These would be significant and mitigated through implementation of required VPHCP avoidance and minimization measures detailed in Section 6.2.2.2.a and measures detailed in the Trails Restoration Plan (see Attachment 1) and vernal pool restoration plan (see Attachment 14) which requires that no enhancement activities occur within vernal pools when ponded, surveying to identify any occupied pools within and adjacent to the restoration area, and marking/fencing any occupied pools to protect from adjacent restoration activities. Implementation of these measures would mitigate potential indirect impacts to San Diego and Riverside fairy shrimp during restoration activities.

#### **h. Crotch's Bumble Bee**

Indirect impacts to Crotch's bumble bee would be mitigated through implementation of the mitigation measures detailed in Section 8.2.4.8. These measures are also incorporated into the project's restoration plans (see Attachments 1, 13, 14, 15, and 18). Indirect impacts such as introduction of non-native species would be avoided through compliance with the Specific Plan plant palette which requires native plantings adjacent to open space. Additionally, within the vernal pool preserve where the majority of suitable habitat is present, only native species would be planted, suitable as Crotch's bumble bee nectar plants. Indirect impacts to Crotch's bumble bee would also be avoided in areas adjacent to proposed grading through implementation of dust control measures, erosion control, and fencing to demark the limits of disturbance which is required by the MHPA Land Use Adjacency Guidelines. Additionally, prior to formalizing any primitive trails (e.g., narrowing the trail to 4 feet and restoring disturbed habitats surrounding the trail), sensitive plant survey updates would be conducted to ensure avoidance of sensitive plant species including significant nectar resources. Where needed to protect sensitive areas, peeler pole fencing and/or buffering sensitive plants from the trail would be implemented as a project design feature (see Section 1.3.2.6.a). With implementation of these measures, indirect impacts to Crotch's bumble bee would be mitigated to less than significant.

#### **i. Nesting Avian Species**

Potential indirect noise impacts to nesting Cooper's hawk, northern harrier, white-tailed kite, merlin, California horned lark, loggerhead shrike, yellow warbler, yellow-breasted chat, southern California rufous-crowned sparrow, grasshopper sparrow, and Bell's sage sparrow would be addressed through implementation of the Breeding Season Avoidance/Preconstruction Survey mitigation measure provided in Section 8.2.4.9 and species-specific ASMDs. Implementation of species-specific conditions of coverage would be assured through conditions of project approval. ASMDs for MSCP covered species, least Bell's vireo, Cooper's hawk, southern California rufous-crowned sparrow, northern harrier, coastal California gnatcatcher, burrowing owl, and coastal cactus wren would also be implemented as detailed in Section 6.2.1.2.g.

#### **j. Other Sensitive Species**

Indirect impacts to sensitive wildlife present within the open space areas located along the proposed Beyer Boulevard extension would additionally be avoided through project design features such as



wildlife fencing that would deter trespass into the surrounding open space. No primitive trails are located along the Beyer Boulevard alignment, which would avoid human use impact within wildlife use areas. Additionally, very limited primitive trails are proposed within the surrounding open space and only where existing disturbance is present.

### 8.2.6.3 Jurisdictional Resources

As detailed in Section 7.2.2.3, implementation of grading within the project-level areas would result in indirect impacts to a total of 0.13 acre of vernal pools and disturbed wetlands. Of this total, 0.036 acre of vernal pools (see Figure 48.2) are located within the Southwind property. If the Southwind project were to proceed first, these impacts would be mitigated by another party. No additional indirect impacts would be associated with the Candlelight project area. These indirect impacts would be considered significant. Indirect impacts to disturbed wetlands and vernal pools, would be mitigated the same way as direct impacts, through vernal pool creation, as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14). As summarized in Table 18c, indirect impacts to vernal pools and disturbed wetlands would total 0.13 acre and would be mitigated at a 2:1 ratio, for a total of 0.26 acre of required mitigation. If the Southwind project were to proceed first, mitigation obligations would be reduced by a total of 0.07 acre due to mitigation being completed by another party. Implementation of the mitigation detailed in Section 8.2.5.1 (see Table 18c) would ensure indirect impacts to vernal pools and disturbed wetlands would be reduced to less than significant.

## 8.2.7 Restoration Implementation

The following general measures shall be incorporated into restoration plans, and would be implemented for all restoration activities:

### *Mitigation Area Design*

- A. Permanent protective fencing and/or use of other measures approved by the City would be implemented, if warranted, to deter human and pet access to on-site habitat. Due to the remote nature of the mitigation area, fencing may not be needed; however, the need would be assessed based on evidence of human use in the surrounding area and coordination with the USBP. Signage for the mitigation area would be posted and maintained at conspicuous locations. The requirement for fencing and/or other preventative measures is further discussed in Section 4.3.2.

### *During Mitigation Implementation*

- A. The qualified restoration specialist that has been approved by the City shall be on-site as needed during implementation activities to ensure compliance with all mitigation measures identified in the CEQA environmental document. The restoration specialist will perform the following duties:



1. Oversee installation of and inspect the fencing (if needed) and erosion control measures as needed, to ensure that any breaks in the fence or erosion control measures are repaired immediately.
  2. Periodically monitor the work area to ensure that work activities do not generate disturbances to adjacent habitats.
  3. Train all installation/maintenance contractor personnel on the biological resources associated with this project. At a minimum, training will include discussions of (1) the purpose for resource protection; (2) native and non-native species; (3) environmentally responsible restoration practices as outlined in measures 4, 5, and 6 below; (4) the protocol to resolve conflicts that may arise at any time during the restoration process; and (5) the general provisions of the project's mitigation monitoring and reporting program, the need to adhere to the provisions of the federal Endangered Species Act, and the penalties associated with violating the federal Endangered Species Act.
  4. Submit a final as-built report within 60 days following completion of implementation. The final report will include as-built drawings with an overlay of habitat that was restored and other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with all conservation measures was achieved.
- B. The following conditions would be implemented during project implementation:
1. Employees would strictly limit their activities, vehicles, equipment, and implementation materials to the fenced project footprint.
  2. The mitigation area would be kept as clean of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the sites.
  3. Disposal or temporary placement of brush or other debris would be limited to areas within the fenced project footprint.
- C. All equipment maintenance and staging, and any other such activities will occur in designated areas as approved by the project biologist. These designated areas would be in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering the habitats. Contractor equipment should be checked for leaks prior to operation and repaired, as necessary. A spill kit for each piece of construction equipment should be on-site to be used in the event of a spill.
- D. To avoid any direct impacts to any species identified as a listed, candidate, sensitive, or special status species in the MSCP, removal of habitat that supports active nests in the mitigation area should occur outside the breeding season for these species (February 1 to September 15). To avoid indirect impacts to least Bell's vireo nesting within Spring Canyon and coastal California gnatcatcher nesting within the adjacent maritime succulent scrub, any work that may cause noise in excess of 60 A-weighted decibels hourly average, or the ambient if it is greater, shall be avoided during the breeding season for this species



(March 1–August 15). If removal of habitat in the mitigation area must occur during the breeding season, a qualified biologist shall conduct a pre-implementation survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-implementation survey shall be conducted within 3 calendar days prior to the start of restoration activities (including removal of vegetation). The applicant shall submit the results of the pre-implementation survey to the City for review and approval prior to initiating any restoration activities. If nesting birds are detected, a letter report in conformance with the City's Biology Guidelines (i.e., appropriate follow-up surveys, monitoring schedules, work and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report shall be submitted to the City for review and approval and implemented to the City's satisfaction. The City's Mitigation Monitoring Coordinator shall verify and approve that all measures identified in the report are in place prior to and/or during implementation.

## 8.2.8 Wildlife Corridors

The OMCP FEIR addressed the topic of wildlife corridors as part of an analysis of migratory wildlife. OMCP Mitigation Framework BIO-2 required biological analysis to "identify the limits of any identified local-scale wildlife corridors or habitat linkages..." As detailed in Section 5.6.1 and 5.6.2, wildlife movement studies were completed to evaluate wildlife usage and corridors within and surrounding the Specific Plan area. As detailed in Section 7.3, potential impacts to wildlife corridors resulting from implementation of project-level areas would be primarily related to the construction of Beyer Boulevard. With implementation of project design features detailed in Section 1.3.2.3.b, implementation of a Long-Term Management and Monitoring Plan (see Attachment 16) for a period of 10 years, along with funding to support the management and monitoring of the wildlife features impacts to wildlife corridors would be less than significant.

## 8.2.9 Land Use Consistency-Otay Mesa Community Plan

As detailed in Section 7.4.1, implementation of the Specific Plan would not conflict with any policies of the OMCP related to biological resources. Impacts related to conflicts with environmental policies of the OMCP would be less than significant.

As detailed in Section 7.4.2, implementation of the project-level areas would not conflict with any policies of the OMCP related to biological resources. Impacts related to conflicts with environmental policies of the OMCP would be less than significant.

## 8.2.10 Project Requirements

The remaining lands between the development footprint and the parcel boundaries associated with the VTM (5.32 acres) would be placed in a covenant of easement (see Figure 50) per Section 143.0140(a) of the City's Municipal Code ESL regulation (City of San Diego 2022). These lands are not proposed as mitigation but would be protected from future development and managed in accordance with the covenant of easement.



## 9.0 Significance after Mitigation

### 9.1 Program-level Significance

Impacts related to consistency with the MSCP and VPHCP, wildlife corridors, and land use consistency at the program-level were found less than significant without mitigation and, therefore, are not discussed further in this section.

#### 9.1.1 Sensitive Vegetation Communities, Plants and Wildlife Species

As detailed in Section 7.1.1.1 and 7.1.1.2, impacts to sensitive vegetation communities, plants, and wildlife species associated with future development within the program-level areas would be considered significant. Future development would be required to implement the Specific Plan Mitigation Framework SP-BIO-1 and SP-BIO-2, which requires site-specific biological surveys to determine the potential for sensitive vegetation communities, plant and wildlife species, along with the requirement for site-specific mitigation, if necessary, to reduce impacts to sensitive species or habitats. Implementation of these measures would require site specific application of the City's Biology Guidelines, the MSCP, the VPHCP, ESL regulations which would ensure project-specific mitigation measures are identified to reduce impacts to less than significant. Therefore, with implementation SP-BIO-1 and SP-BIO-2, impacts to sensitive vegetation communities, and plants and wildlife species would be less than significant. This conclusion is consistent with the findings of the OMCP FEIR.

#### 9.1.2 Jurisdictional Resources

As detailed in Section 7.1.1.3, impacts to jurisdictional resources within the program-level areas would be significant. Compliance with City regulations and policies, ESL Regulations, the MSCP Subarea Plan, VPHCP, the City's Biology Guidelines, and implementation of SP-BIO-3 would serve to reduce impacts to wetlands, vernal pools, and other jurisdictional resources at the program-level to below a level of significance because they would require a no-net loss of resources. With implementation of City regulations and policies, ESL Regulations, the MSCP Subarea Plan, VPHCP, the City's Biology Guidelines, and SP-BIO-3, impacts would be reduced to less than significant. This conclusion is consistent with the findings of the OMCP FEIR.

#### 9.1.3 Indirect Impacts

Indirect impacts to sensitive plans and vegetation communities, sensitive wildlife, and jurisdictional resources associate with future program-level development would be reduced to less than significant through implementation of the MHPA Land Use Adjacency Guidelines required as standard City conditions, in addition to implementation of SP-BIO-1, SP-BIO-2, and SP-BIO-3. Implementation of these measures would ensure indirect effects of future development are addressed through the requirement for project-level analysis and mitigation. With implementation



of the Specific Plan Mitigation Framework, indirect impacts would be reduced to less than significant. This conclusion is consistent with the findings of the OMCP FEIR.

## 9.2 Project-level Significance

Impacts related to consistency with the MSCP and VPHCP, wildlife corridors, and land use consistency at the project-level were found less than significant without mitigation and, therefore, are not discussed further in this section.

### 9.2.1 Sensitive Upland Habitats

The project would impact 37.59 acres of Tier I, 44.17 acres of Tier II, and 105.84 acres of Tier IIIb. Significant direct impact to sensitive upland habitats would be mitigated to less than significant through dedication of sensitive uplands of equal and/or higher biological value within proposed mitigation lands located within the MHPA. A minimum of 49.62 acres of Tier I, 47.38 acres of Tier II, and 56.23 acres of Tier IIIb would be required as mitigation. Specifically, the mitigation proposal includes preservation of 160.94 acres of sensitive uplands, consisting of 114.76 acres of Tier I, 27.29 acres of Tier II, and 18.89 acres of Tier IIIB (see Table 15a). This mitigation package includes 7.71 acres of excess mitigation beyond required mitigation ratios. In addition, impacts to 0.12 acre of native grassland would be mitigated through creation of an additional 0.12 acre within the Otay tarplant/native grassland mitigation area within the southeastern mitigation lands (see Attachment 15). Dedication of these mitigation lands to the City and completion of the native grassland restoration would ensure impacts to sensitive upland habitats would be mitigated to less than significant.

### 9.2.2 Sensitive Plants

Indirect impacts to sensitive plants associated with trail restoration efforts would be reduced to less than significant by the measure detailed in Section 8.2.3.

#### 9.2.2.1 San Diego Button Celery

Impacts to 28 San Diego button-celery would be mitigated through implementation salvage of impacted San Diego button-celery individuals and in-kind restoration as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (RECON 2020c; see Attachment 14). In addition, the 0.01 acre vernal pool supporting this species would be mitigated at a 3:1 ratio as part of the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14). Proposed salvage and restoration would ensure long term survival of the species would not be impacted and impacts to this species would be reduced to less than significant.

#### 9.2.2.2 Otay Tarplant

Impacts to approximately 1,900 Otay tarplant individuals within an approximately 0.21-acre area would be mitigated through implementation of a proposed Otay tarplant restoration area to be located within the MHPA lands south of the Specific Plan area, where suitable soils are present.



Mitigation would provide for a 4:1 replacement of impacted Otay tarplant, ensuring impacts would be fully mitigated to less than significant. The Otay Tarplant and Native Grassland Restoration Plan would ensure the mitigation site meets specified performance standards to ensure mitigation success (see Attachment 15; RECON 2024e). With implementation of the Otay Tarplant and Native Grassland Restoration Plan, impacts to Otay tarplant would be reduced to less than significant.

### 9.2.2.3 San Diego Barrel Cactus and Snake Cholla

Impacts to individual San Diego barrel cactus and snake cholla would be mitigated through salvage of impacted individuals and translocation into the proposed restoration areas as detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) and the Coastal Cactus Wren Mitigation Plan (see Attachment 13). Individual barrel cactus and snake cholla would be replaced at a 1:1 ratio. San Diego barrel cactus is an appropriate species for planting within upland areas and on the mima mounds near the vernal pools and both species are appropriate for planting within the coastal cactus wren habitat and translocation would be conducted accordingly. Salvage and translocation of impacted individuals would mitigate direct impacts to this species to less than significant.

### 9.2.2.4 Thread-leaved Brodiaea

Thread-leaved brodiaea were not detected during rare plant surveys; however, due to its moderate potential to occur, potentially significant impacts would be reduced to less than significant with mitigation requiring a focused rare plant survey to be conducted in the spring prior to the start of construction and restoration activities to identify any individuals. If present, the species would be salvaged for transplant which would reduce the impacts to less than significant.

## 9.2.3 Sensitive Wildlife

### 9.2.3.1 San Diego and Riverside Fairy Shrimp Species

Direct and indirect impacts to 1.33 acres of basins either supporting or assumed to support San Diego fairy shrimp (with Candlelight impact area) or a total of 1.06 acres (without Candlelight) would be required to be mitigated at a 2:1 ratio with a total of 2.66 acres of vernal pool surface area (with Candlelight) or 2.12 acres (without Candlelight mitigation). This acreage also encompasses mitigation for impacts to the one 0.03-acre vernal pool containing both San Diego and Riverside fairy shrimp. The project would mitigate for impacts to San Diego fairy shrimp species through a 2:1 inoculation of a minimum of 2.66 acres of vernal pool surface area (with Candlelight mitigation) or 2.12 acres (without Candlelight mitigation). Of those totals, one 0.03-acre vernal pool and one 0.17-acre seasonal basin ("VP12" per Alden 2013) within Candlelight would be impacted that also contains Riverside fairy shrimp. A minimum of 0.40 acre of that total would be inoculated with both San Diego fairy shrimp and Riverside fairy shrimp to mitigate for impacts to Riverside fairy shrimp. As detailed in the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14), a total of 3.86 acres of re-established vernal pools would be inoculated with both species, exceeding the 2:1 mitigation obligation. Inoculation of newly created vernal pools with these sensitive species consistent with the VPHCP would reduce impacts to less than significant. Potential indirect impacts



to San Diego and Riverside fairy shrimp during trail corridor or vernal pool restoration activities would be significant and mitigated through the implementation of required VPHCP avoidance and minimization measures detailed in Section 6.2.2.2.a and measures detailed the Trails Restoration Plan (see Attachment 1) and vernal pool restoration plan (see Attachment 14) which requires that no enhancement activities occur within vernal pools when ponded, surveying to identify any occupied pools within and adjacent to the restoration area, and marking/fencing any occupied pools to protect from adjacent restoration activities. Implementation of these measures would mitigate for indirect impacts to San Diego and Riverside fairy shrimp during restoration activities.

### 9.2.3.2 Quino Checkerspot Butterfly

Impacts to 0.93 acre of Quino checkerspot butterfly habitat would be reduced to less than significant through implementation of restoration and enhancement of host and nectar plant patches within the proposed vernal pool restoration area. A total of 1.89 acres of enhancement and preservation (see Figure 46) would be provided within the vernal pool restoration area. Implementation of the proposed Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) would ensure sufficient Quino checkerspot butterfly habitat would be restored to mitigate impacts to less than significant. During all construction and restoration activities, avoidance measures would be implemented to ensure Quino checkerspot butterfly host and nectar plants are protected including implementation of BMPs such as silt fences and watering to avoid dust generation. Indirect impacts to Quino checkerspot butterfly would be avoided in areas adjacent to proposed grading through implementation of dust control measures, erosion control, and fencing to demark the limits of disturbance. Additionally, prior to formalizing any primitive trails (e.g., narrowing the trail to 4 feet and restoring disturbed habitats surrounding the trail), and conducting other restoration activities, sensitive plant survey updates would be conducted to ensure avoidance of sensitive plant species including host and nectar plants. Where needed to protect sensitive areas, measures such as peeler pole fencing and/or buffering sensitive plants from the trail and restriction of herbicide application would be implemented. With implementation of these measures, indirect impacts to Quino checkerspot butterfly would be mitigated to less than significant.

The project would also obtain appropriate approvals from the USFWS.

### 9.2.3.3 Western Spadefoot

The project would directly and indirectly impact 1.33 acres of western spadefoot assumed occupied habitat (including habitat within Candlelight). Implementation of the vernal pool preserve restoration efforts would increase potential habitat for western spadefoot and would mitigate the impact to an estimated 1.33 acres of occupied habitat through vernal pool creation and translocation of western spadefoot eggs to the created pools during the restoration effort. As noted above, a total of 3.86 acre of vernal pool basins would be established within a 33.71-acre vernal pool restoration area which would provide suitable habitat for western spadefoot. In addition to the proposed vernal pool restoration area, other lands to be conserved as part of the project support existing populations of spadefoot toad as detailed on Figures 40.1 through 40.4. In addition, western spadefoot was detected in 23 basins covering 1.96 acres within parts of the survey area proposed to be preserved as a part of habitat-based mitigation. With implementation of proposed vernal pool



reestablishment and enhancement to expand spadefoot toad habitat in addition to conservation of existing populations within the mitigation lands, impacts would be reduced to less than significant.

Potentially significant impact during construction would be reduced to less than significant through implementation of pre-construction surveys and relocation of any eggs, tadpoles, or adults encountered. In addition, mitigation measures to be implemented during construction and restoration activities working outside of the wet season, having a biological monitor present, and realigning trail restoration areas or marking/fencing occupied ponds within or adjacent to restoration areas that would ensure impacts to the species are reduced to less than significant.

#### 9.2.3.4 Least Bell's Vireo

Potentially significant impacts to least Bell's vireo associated with wetland mitigation activities and construction would be reduced to less than significant through the mitigation requirement for pre-construction surveys for least Bell's vireo. The mitigation measure would require avoidance of the least Bell's vireo breeding season, or if the breeding season cannot be avoided, then avoidance measures must be implemented such as noise monitoring and attenuation. Implementation of these measures before and during construction and restoration implementation would ensure adverse impacts to least Bell's vireo during construction and restoration would be reduced to less than significant.

Loss of 0.28 acre of least Bell's vireo foraging habitat would be mitigated through preservation of approximately 0.31 acre of southern willow scrub and implementation of the Wetland Plan (see Attachment 18), which would restore 0.36 acre of riparian habitat, thus expanding and enhancing suitable least Bell's vireo habitat and reducing this impact to less than significant.

#### 9.2.3.5 Coastal California Gnatcatcher

Potentially significant impacts to coastal California gnatcatcher associated with construction operations within the MHPA would be reduced to less than significant through the mitigation requirement for pre-construction surveys for the gnatcatcher. The mitigation measure would require avoidance of the breeding season, or if the breeding season cannot be avoided, then other measures must be implemented such as noise monitoring and attenuation. Implementation of these measures before and during construction would ensure adverse impacts to the gnatcatcher during construction would be reduced to less than significant.

The project would directly impact approximately 27.25 acres of gnatcatcher nesting and foraging habitat within the MHPA, as well as indirectly impact 0.09 acre of habitat due to Beyer Road extension noise impacts. To mitigate for this loss of gnatcatcher habitat, the project would be required to provide a minimum of 54.5 acres of habitat-based mitigation, for a 2:1 ratio and 0.09 acre of habitat to mitigate the operational noise impact at a 1:1 mitigation ratio. To meet this mitigation requirements, the project would preserve 160.94 acres of sensitive upland vegetation communities through dedication to the City, including over 140 acres of coastal sage scrub and maritime succulent scrub, which would protect substantial foraging habitat and reduce this impact to less than significant. This habitat preservation area includes 7.71 acres beyond the minimum



required habitat preservation mitigation, which would also reduce the significant impact from operational noise impacts from Beyer Boulevard to less than significant.

### 9.2.3.6 Burrowing Owl

A potentially significant impact to burrowing owl during construction would be reduced to less than significant through implementation of mitigation including pre-construction burrowing owl surveys, consistent with the MSCP conditions of coverage for burrowing owl. Implementation of this mitigation would ensure that any burrowing owls that may take up residence within the planned grading areas are identified and relocated prior to any disturbance. If detected, a translocation plan will be required for any owls discovered within the impact area prior to or during construction, with coordination and the approval of the Wildlife Agencies, MSCP, and EAS. In addition, the project would install an artificial berm within the vernal pool mitigation area as a project design feature. With implementation of these measures, impacts to burrowing owl during construction would be reduced to less than significant.

Impacts to 103.77 acres of burrowing owl foraging habitat would be mitigated through implementation of 224 acres of habitat-based mitigation that would ensure adequate foraging potential is available within the proposed mitigation lands reducing this impact to less than significant.

### 9.2.3.7 Coastal Cactus Wren

Significant direct impacts to 0.63 acre of coastal cactus wren suitable habitat and operational noise impacts to 0.46 acre assumed to be occupied would be reduced to less than significant through implementation of a translocation and restoration effort within a 2.54-acre area as detailed in the coastal cactus wren mitigation plan (see Attachment 13). Overall, the 1.09 acres of cactus wren habitat restoration within Furby North Preserve and additional upland sensitive habitats would reduce impacts to below a level of significance. Potentially significant impacts to nesting coastal cactus wren impacts during construction would be reduced to less than significant through the requirement for pre-construction surveys as detailed in Section 8.2.4.7.

The project also would mitigate for the loss of 20 acres of potential foraging habitat for this species in the vicinity of the Beyer Boulevard project component through the habitat-based mitigation via preservation of 160.94 acres of sensitive uplands, as detailed in Section 8.2.2. The dedication of these lands to the City would protect substantial foraging habitat reducing this impact to less than significant.

### 9.2.3.8 Crotch's Bumble Bee

Potentially significant impacts to Crotch's bumble bee during construction would be mitigated to less than significant through the implementation of appropriate focused surveys prior to construction as outlined in Section 8.2.3.6.

Impacts to approximately 190 acres of potential foraging and nesting habitat, including approximately 42 acres that supports moderate to high cover of nectar resources, would be mitigated via preservation of 169.94 acres of upland, wetland, and disturbed vegetation



communities and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland mitigation plan areas, all suitable for foraging by this species. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for this species. This habitat preservation would reduce the impact to foraging and nesting habitat to less than significant.

Additionally, additional coordination and an incidental take permit from CDFW would be required which may result in different or additional mitigation requirements. The ITP shall be obtained prior to issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits. Take of any endangered, threatened, candidate species that results from the project is prohibited, except as authorized by State law (California Fish and Game Code §§ 86, 2062, 2067, 2068, 2080, 2085; California Code of Regulations, Title 14, § 786.9) under the CESA.

With implementation of these measures and coordination and permitting with CDFW, impacts to Crotch's bumble bee would be reduced to less than significant.

### 9.2.3.9 Nesting Avian Species

Potentially significant impacts to nesting avian species including northern harrier, Cooper's hawk, white-tailed kite, merlin, California horned lark, loggerhead shrike, yellow warbler, yellow-breasted chat, grasshopper sparrow, Bell's sage sparrow, and southern California rufous-crowned sparrow during construction would be reduced to less than significant through implementation of the requirement for pre-construction bird surveys during the breeding seasons of these species via mitigation and ASMD compliance. The measure would ensure impacts are reduced to less than significant because it would ensure no take of birds or eggs or disturbance of breeding activities occurs through required surveys, monitoring and avoidance measures. Implementation of species-specific conditions of coverage would be assured through conditions of project approval. ASMDs for MSCP covered species, least Bell's vireo, Cooper's hawk, southern California rufous-crowned sparrow, northern harrier, coastal California gnatcatcher, burrowing owl, and coastal cactus wren would also be implemented as detailed in Section 6.2.1.2.g.

In addition, habitat-based mitigation via preservation of 160.94 acres of sensitive vegetation communities as described in Section 8.2.2 and approximately 36 acres of lands within the wetland, vernal pool, and Otay tarplant/native grassland plan areas would reduce impacts to up to 190 acres of foraging habitat for Cooper's hawk, white-tailed kite, northern harrier, and southern California rufous-crowned sparrow. In addition, there are several project design features that include habitat restoration of approximately 17 acres, i.e., trail restoration and wetland plan areas, that would provide additional habitat for these species. Therefore, this mitigation would reduce impacts to less than significant.

### 9.2.3.10 MSCP Covered Reptiles

Direct and indirect impacts to orange-throated whiptail and coast horned lizard would not reduce their populations to less than self-sustaining and would not be significant; however, implementation of species-specific conditions of coverage would be assured through conditions of project approval and ASMDs would be implemented as detailed in Section 6.2.1.2.g.



## 9.2.4 Jurisdictional Resources

Impacts to 0.36 acre of wetland resources with a riparian function would be fully mitigated to less than significant through implementation of wetland restoration and enhancement in Spring Canyon providing a minimum 2:1 ratio, with a 1:1 component constituting wetland creation/establishment and the remaining proposed as enhancement. The detailed mitigation components in addition to project design features that would be implemented are detailed in the Southwest Village Wetland Plan (see Attachment 18) which would ensure a no-net loss of wetland resources. Wetland impacts within the Southwind property would be mitigated by the first project to proceed and, if completed by Southwest Village, mitigation would include wetland restoration in Spring Canyon.

Significant direct and indirect impacts to 1.09 acres of vernal pool and disturbed wetland resources would be mitigated at a 2:1 mitigation ratio (3:1 for the 0.01 vernal pool that supports San Diego button-celery) for a minimum mitigation requirement of 2.18 acres (with Southwind) or 2.10 acres (without Southwind). This would be met through implementation of the Vernal Pool and Quino Checkerspot Butterfly Mitigation Plan (see Attachment 14) which proposes to establish 3.86 acres of vernal pool basins and enhance 0.05 acre of existing vernal pool basins, which would provide an excess of 1.68 acres of vernal pool creation (including impacts from the Southwind project) and 0.05 acre of enhancement beyond the standard mitigation ratios required by the City. If Southwind (as detailed in Table 18a) were to proceed first and mitigate for impacts separately and elsewhere, there would be an excess of 1.76 acres. This plan demonstrates consistency with the City's VPHCP, ensuring that impacts to vernal pools would be mitigated consistently with the City's long term regional conservation planning for this species. Additionally, long term management requirements within the vernal pool preserve is detailed in the Habitat Management Plan (see Attachment 17). Implementation of these plans as mitigation for impacts to vernal pools would ensure resources are fully mitigated and impacts would be reduced to less than significant.

Impacts to USACE, CDFW and RWQCB wetlands and USACE non-wetland waters of the U.S. and CDFW streambed would be accomplished in a similar manner through wetland and vernal pool restoration and creation (see Section 8.2.5). However, mitigation requirements for each of these agencies would be determined through required wetland permitting as detailed in Section 8.2.5.2. With the implementation of the planned vernal pool and wetland mitigation effort and any additional mitigation required by wetland regulatory agencies, impacts to jurisdictional resources would be replaced to ensure no net loss, resulting in a less than significant impact.



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