

**Phase I Archaeological Survey Inventory Results
for the
Bowerman Power Renewable Natural Gas Plant Project
Orange County, California**

Prepared for:

OC Waste & Recycling
601 N. Ross Street, 5th Floor
Santa Ana, CA 92701

Prepared by:



TETRA TECH

Tetra Tech, Inc.
17885 Von Karman Ave. Suite 500
Irvine, CA 92614

Author:

Jenna Farrell, MA RPA, Principal Archaeologist

July 2024

MANAGEMENT SUMMARY

This technical report provides the non-confidential information included in the Phase I Archaeological Inventory Results for Bowerman Power LFG, LLC's (Bowerman Power) proposed Bowerman Power Renewable Natural Gas Plant Project (Project). Confidential archaeological and tribal cultural resource locational information has not been included in this report as it is restricted and confidential in order to prevent desecration, vandalism, artifact looting or hunting, and to protect landowners from trespass. The following laws protect such resources: California State Government Code Section 6254.10: Exempts archaeological sites from the California Public Records Act, making their locations confidential; Executive Order 13007: Restricts public access to archaeological and TCP locations; National Historic Preservation Act Section 304: Restricts public access to archaeological and Traditional Cultural Property (TCP) locations; Archaeological Resources Protection Act Section 9(a): Restricts public access to archaeological and TCP locations. In addition, Under California Assembly Bill 52 (AB 52), tribal information provided during consultation is considered confidential and cannot be publicly disclosed without the written consent of the tribe involved. To access confidential cultural resource information, one must meet the Secretary of the Interior Standards under Archaeology, History, or Architecture or have permission with the consulting Tribe.

The proposed Project is located at the Frank R. Bowerman Landfill at 11002 Bee Canyon Access Road in unincorporated Orange County, California, north and within the sphere of influence of the city of Irvine. The Project involves constructing a renewable natural gas plant (Project site) and a new SoCal Gas pipeline (Project pipeline route) connecting the processing plant to an existing SoCal Gas pipeline at the corner of Portola Parkway and Jeffrey Road. OC Waste & Recycling is the lead agency for the preparation of the California Environmental Quality Act environmental document for the proposed Project. The Phase I Archaeological Inventory included a Phase I record search, archaeological field survey, preliminary reporting, and this technical report.

A cultural resource records review through the California Historical Resources Information Center's South-Central Coastal Information Center, a Native American Heritage Commission Sacred Lands File search, and a pedestrian archaeological field survey (surface) was conducted for the proposed Project site and pipeline route. A Tetra Tech, Inc. archaeologist conducted a Phase I Archaeological Field Survey on September 26, 2023 and on March 7, 2024. The field survey resulted in the updating of three previously recorded archaeological sites.

Project Summary

County: Orange

USGS 7.5' quadrangle: El Toro

Owner: OCWR

Survey Type: Intensive Pedestrian Field Survey and Reconnaissance

Surveyed Acres: under 10 acres

Date of Survey: September 26, 2023, and March 7, 2024

Field Crew: Jenna Farrell, MA RPA (Principal Investigator), Astrid Molina, BA (Field Technician), Cris Crump, BA (Archaeological Field Technician)

Field Survey Results: Updated Previously Recorded Sites: All three sites are recommended not eligible to the California Register of Historical Resources.

Historical Resources within Project: None

Management Recommendations: Cultural Resource Environmental Training, Archaeological and Native American Monitoring, Monitoring and Inadvertent Discovery Plan

TABLE OF CONTENTS

MANAGEMENT SUMMARY	i
1.0 INTRODUCTION.....	1-1
1.1 Project Description and Location.....	1-1
1.2 Area of Potential significant impact	1-20
1.3 Regulatory Compliance.....	1-20
1.3.1 State.....	1-20
1.3.2 Local	1-23
2.0 ENVIRONMENTAL SETTING	2-1
2.1 Natural Setting	2-1
2.1.1 Vegetation.....	2-2
2.1.2 Wildlife	2-3
3.0 CULTURAL CONTEXT	3-1
3.1 Prehistoric Overview	3-1
3.2 Ethnographic Overview	3-1
3.3 Historic Overview	3-2
3.4 Record Search Methods and Results.....	3-3
3.4.1 Orange County Geneal Plan Sensitivity Map.....	3-4
3.4.2 Historic U.S. Geological Survey Map and General Land Office Plat Map and Historic Aerial Review.....	3-4
3.4.3 Federal Land Patent Review	3-5
3.5 Native American heritage commission sacred land file search and AB52 Consultation.....	3-5
3.6 SoCalGas Consultation.....	3-6
4.0 FIELD INVENTORY METHODOLOGY AND RESULTS.....	4-1
4.1 Field Survey Methods	4-1
4.2 Field Survey Results	4-2
5.0 CONCLUSION AND RECOMMENDATIONS	5-1
6.0 REFERENCES.....	6-1

LIST OF APPENDICES

Appendix A

Native American Heritage Commission Sacred Lands File

LIST OF FIGURES

Figure 1-1	Project Vicinity	1-4
Figure 1-2	Project RNG Plant Site and Borrow Area Locations (aerial)	1-5
Figure 1-3	Project RNG Plant Site and Borrow Locations (topographic).....	1-6
Figure 1-4	Pipeline Route	1-7
Figure 1-5	Project Site Parcels.....	1-19
Figure 4-1.	Overview of Project site and examined area	4-2

LIST OF TABLES

Table 3-1.	Historic Aerial Imagery and Map Review.....	3-4
------------	---	-----

ACRONYMS AND ABBREVIATIONS

Bowerman Power	Bowerman Power LFG, LLC (Project Proponent)
BP	before present
CEQA	California Environmental Quality Act
County	Orange County
CRHR	California Register of Historical Resources
FRB	Frank R. Bowerman
HDD	horizontal directional drilling
Lead Agency	OC Waste & Recycling
MLD	Most Likely Descendent
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
OCWR	OC Waste & Recycling
Plan	Monitoring and Inadvertent Discovery Plan
POR	Point of Receipt
PRC	Public Resource Code
Project	Bowerman Power Renewable Natural Gas Plant Project
RNG	renewable natural gas
scfm	standard cubic feet per minute
SLF	Sacred Lands File
SCCIC	South-Central Coastal Information Center
Tetra Tech	Tetra Tech, Inc.
USGS	U.S. Geological Survey

1.0 INTRODUCTION

This technical report provides the non-confidential information included in the Phase I Archaeological Inventory Results for Bowerman Power's proposed Bowerman Renewable Natural Gas Plant Project (Project). Bowerman Power is working with OC Waste & Recycling (OCWR) to develop a renewable natural gas (RNG) production plant (Plant) at the Frank R. Bowerman (FRB) Landfill, to be known as the Bowerman Power Renewable Natural Gas Plant Project (Project). The RNG Plant will be designed to produce RNG from landfill gas (LFG) that is produced by the FRB Landfill and deliver it to SoCal Gas.

This technical report provides the Phase I Archaeological Inventory Results for Bowerman Power's proposed Project. The lead agency is OCWR. This report was prepared to partially fulfill compliance with the California Environmental Quality Act (CEQA) and other applicable state regulations and policies.

The Phase I Archaeological Inventory included a Phase I record search, archaeological field survey, and preliminary reporting. This inventory was performed in coordination with Bowerman Power, OCWR, and interested tribes. This report was prepared under the guidelines of the Secretary of Interior Standards and Guidelines and the Office of Historic Preservation's Archeological Resource Management Reports (ARMR): A Draft Recommended Contents and Format (SHPO 1990).

1.1 PROJECT DESCRIPTION AND LOCATION

The proposed Project involves constructing a RNG Plant (Project site) and a new SoCal Gas pipeline (Project pipeline route) connecting the processing plant to an existing SoCal Gas pipeline at the corner of Portola Parkway and Jeffrey Road. See Figures 1-1 through 1-4 for project maps. OCWR is the lead agency for the preparation of the CEQA environmental document for the proposed Project.

Bowerman Power is working with OCWR to develop an RNG Plant at the FRB Landfill. The RNG Plant will be designed to process a portion of the excess LFG that has not been processed at the Bowerman Power Plant and would otherwise require incineration at the existing adjacent flare station and then deliver the processed RNG to SoCal Gas. The RNG Plant layout will comprise the process equipment area and the control and electric buildings.

The RNG Plant

The RNG Plant site involves 3.5 acres of part of the undeveloped land leased to Bowerman Power by OCWR. This land is adjacent to the existing 19.6-megawatt landfill gas to energy facility and flare station on land planned for the development of a future FRB Master Development Plan Landfill phase. The RNG Plant will be designed to process a maximum of 6,000 scfm of raw LFG at the inlet. The process will remove nitrogen, oxygen, carbon dioxide,

sulfur hydroxide, volatile organic chemicals, hydrogen sulfide, as well as other minor impurities to meet the gas specifications of SoCal Gas.

The approximately 3.5-acre Project site will require grading for the approximately 2.3-acre RNG Plant pad. The pad will be composed of approximately 1.38 acres concrete and 0.92 acre graded land. The pad is expected to require approximately 70,000 cubic yards of fill material, which will be extracted from an existing soil stockpile area within the FRB Landfill boundaries. The soil stockpile area was previously graded as part of FRB Landfill Master Development Plan development and is currently used as the soil stockpile area for the soils excavated as part of the Phase VIIIA development.

SoCalGas will develop a POR facility that will receive RNG from the plant, odorize, compress, and insert the RNG into its pipeline. A 250-gallon odorant tank will be installed in the POR facility. SoCal Gas will construct a new 12-inch-diameter pipeline to convey the RNG from the POR on the Project site to the existing SoCal Gas pipeline at the corner of Portola Parkway and Jeffrey Road (see Figures 1-2 through 1-4).

SoCal Gas Pipeline Construction

Construction of the new SoCal Gas pipeline route will take place along Bee Canyon Access Road and Portola Parkway (see Figures 1-2 through 1-4). The majority of the pipeline installation construction activities will use open-trench techniques within the paved sections of the roadways, with horizontal directional drilling techniques in some locations. The construction work area along the proposed pipelines will be approximately 50 feet wide. The disturbance for trenching activities will be approximately 30 inches wide with an average depth of 6 feet.

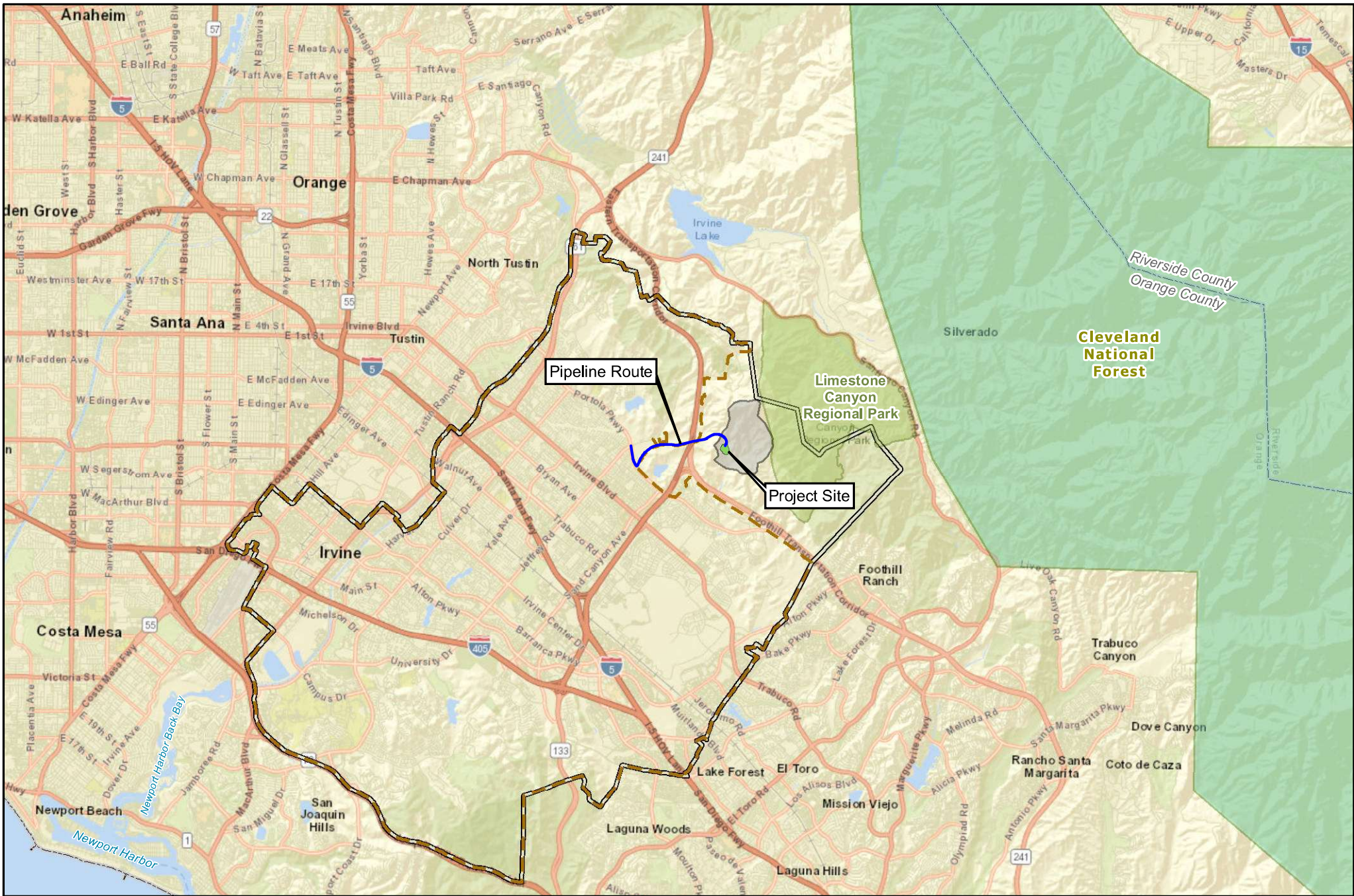
SoCalGas plans to perform a horizontal directional drilling (HDD) operation along Bee Canyon Access Road to install approximately 1,300 feet of 12.7-inch steel pipeline beneath the Highway 241 Transportation Corridor. The entry and exit workspaces will be located on private property outside of Caltrans Right of Way (see Figure 1-4, Sheets 4 and 5, and Figure 1-5). The HDD entry workspace will be approximately 150 feet x 100 feet in size and located within the “dirt lot” adjacent to the west-bound lane of Bee Canyon Access Road, approximately 600 feet northeast from the center of the “Bee Canyon Access Rd. Bridge” or Bridge #55-785. The HDD exit workspace will be approximately 150 feet x 60 feet in size and will be located along Bee Canyon Access Road, approximately 800 feet southwest from the center of the “Bee Canyon Access Rd. Bridge.” The maximum excavation depths for both the HDD entry and exit workspaces should not exceed 10 feet.

The HDD process can be divided into four main phases: pilot hole, reaming, swabbing, and pullback. The pilot hole will be approximately 10-inch in diameter and will drill a complete profile from entry to exit locations. During the reaming and swabbing phases, the pilot hole will be expanded to a minimum of 18 inches. The final hole size will be determined by the HDD contractor. Prior to the pullback phase, the steel pipeline will be hydrostatically tested and upon completion, will be pulled into the hole. A bentonite mixture will be placed downhole to solidify

and fill the void space and cap the ends of the entry and exit holes. The approved material will be determined by the drilling contractor and any permitting conditions. The specific construction approach for the crossing of the Highway 241 Transportation Corridor is preliminary and subject to change depending on permitting conditions and requirements.

Project Location

The Project site is generally bound by Bee Canyon Access Road to the north and northeast, the existing Bowerman Power Plant (a landfill gas to energy plant) and flare station to the west, and open space and roads to the south (Figure 1-2). The site is located within the U.S. Geological Survey (USGS) El Toro 7.5-Minute Topographic Quadrangle Map (Figure 1-3) and is not within the Public Land Survey System sections. The proposed north to west trending Project pipeline route connecting the proposed RNG Plant to the existing SoCal Gas interconnection is within the existing Bee Canyon Access Road. At the intersection of Bee Canyon Access Road and Portola Parkway, the Project pipeline route continues north within Portola Parkway Road and terminates at the intersection of Portola Parkway and Jeffrey Road (Figures 1-2 and 1-4). Surrounding land uses consist of other areas of the Frank R. Bowerman (FRB) Landfill, open space, residential uses, and highways and roads.



- City of Irvine Boundary
- City of Irvine Sphere of Influence
- Bowerman Landfill
- National Forest
- Regional Park

NOT FOR CONSTRUCTION

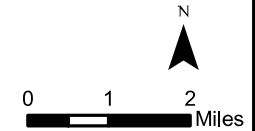


Figure 1-1
Project Vicinity

Bowerman Power RNG Plant Project
Orange County, CA



- ▬ Project Lease Boundary
- ▬ Pipeline Route
- Project Site
- Bowerman Landfill Soil Stockpile Area
- Bowerman Landfill
- HDD Location
- Disturbed Area for Grading Replanted for Fire Fuel Modification
- Fuel Modification Area
- Temporary Disturbed Area for Trenching

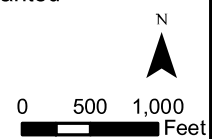
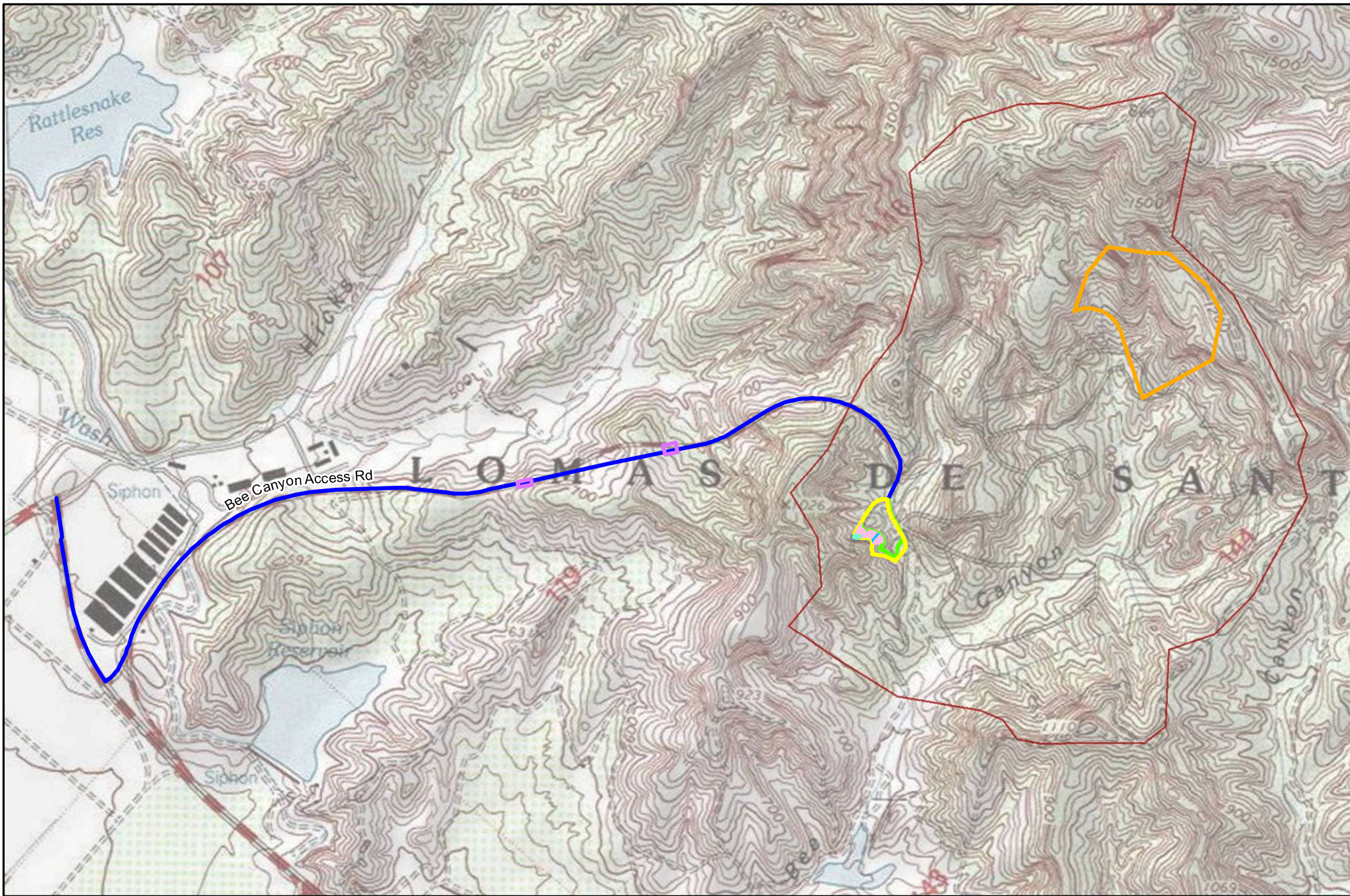


Figure 1-2
Project RNG Plant Site and
Borrow Area Locations (aerial)

Bowerman Power RNG Plant Project
Orange County, CA

NOT FOR CONSTRUCTION



- Project Lease Boundary
 - Pipeline Route
 - Project Site
 - Bowerman Landfill Soil Stockpile Area
 - Bowerman Landfill
 - HDD Location
 - Disturbed Area for Grading Replanted for Fire Fuel Modification
 - Fuel Modification Area
 - Temporary Disturbed Area for Trenching
- NOT FOR CONSTRUCTION

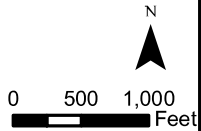
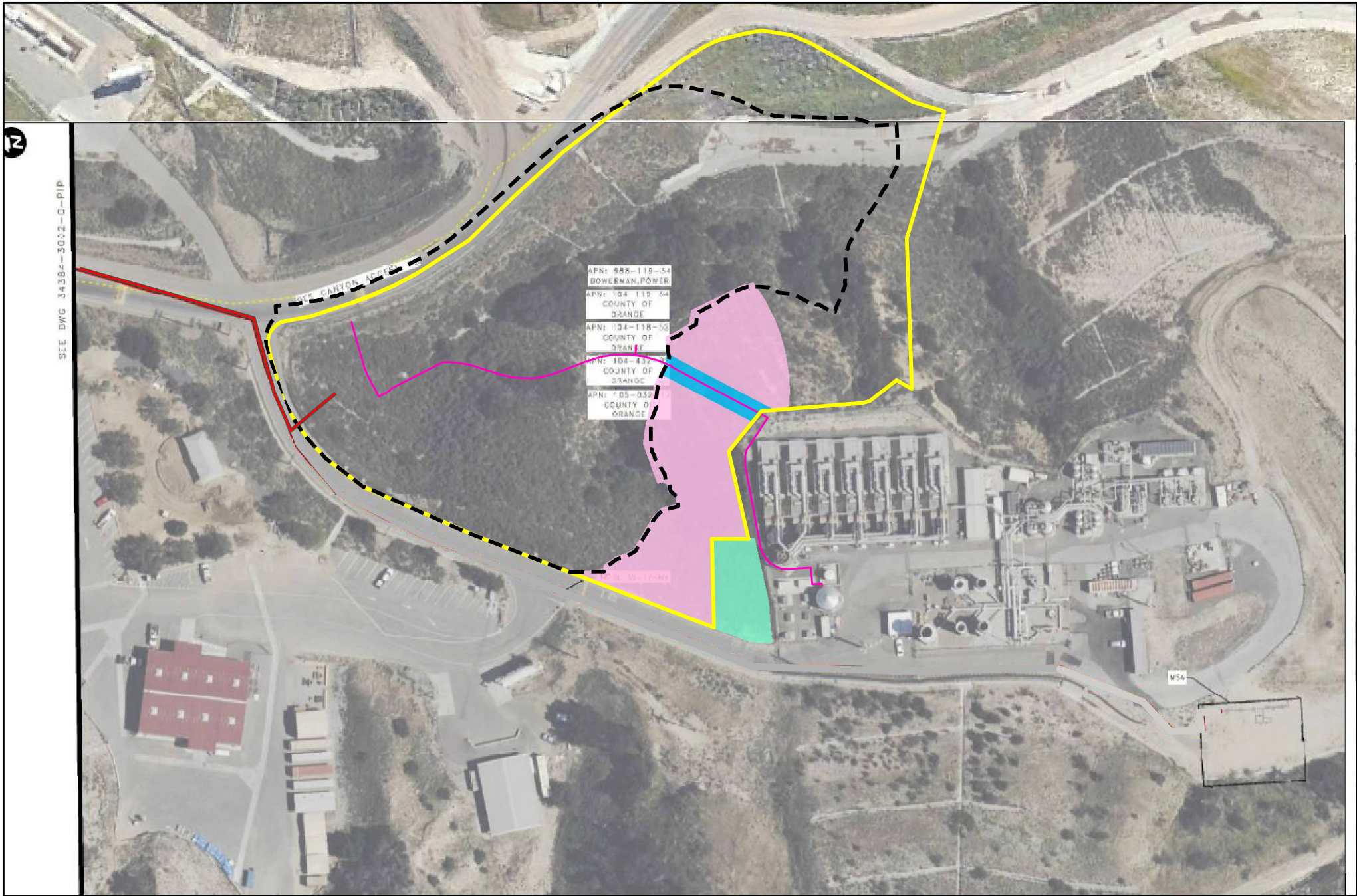


Figure 1-3
 Project RNG Plant Site and
 Borrow Area Locations (topographic)

Bowerman Power RNG Plant Project
 Orange County, CA



- Pipeline Route
- Project Lease Boundary
- Project Site
- Fire Water Line
- Disturbed Area for Grading Replanted for Fire Fuel Modification
- Fuel Modification Area
- Temporary Disturbed Area for Trenching

NOT FOR CONSTRUCTION

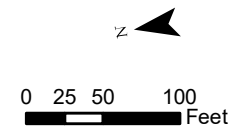
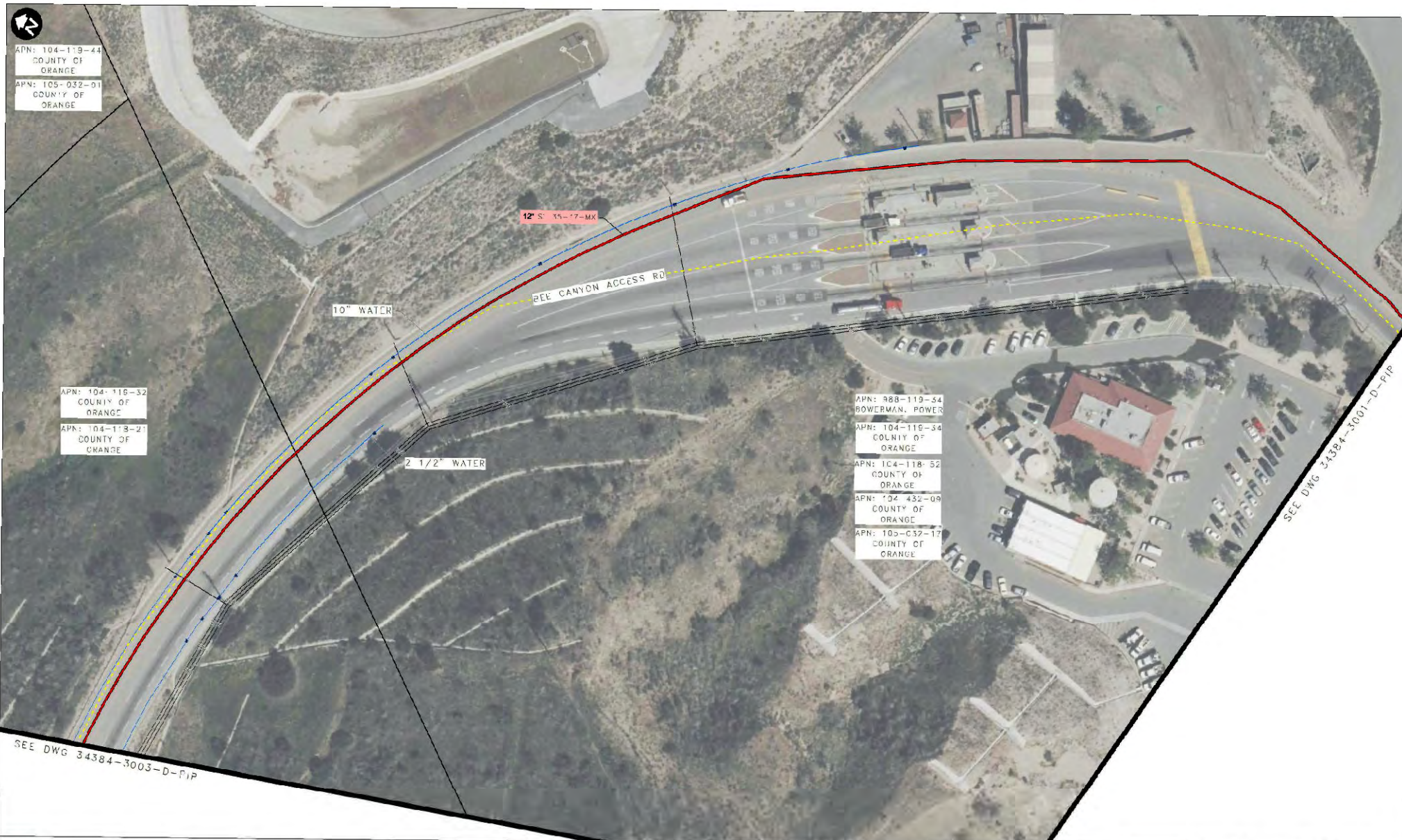


Figure 1-4.1
Pipeline Route
 Sheet 1 of 12

 Bowerman Power RNG Plant Project
 Orange County, CA

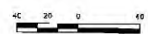


APN: 104-119-44
COUNTY OF ORANGE
APN: 105-032-01
COUNTY OF ORANGE

APN: 104-116-32
COUNTY OF ORANGE
APN: 104-113-21
COUNTY OF ORANGE

APN: 988-119-54
BOWERMAN, POWER
APN: 104-116-34
COUNTY OF ORANGE
APN: 104-118-52
COUNTY OF ORANGE
APN: 102-432-09
COUNTY OF ORANGE
APN: 100-C32-17
COUNTY OF ORANGE

LEGEND
 SL 35-17-MX NEW PIPELINE
 ROAD CENTRLINE
 PARCELS



DATE	BY	CHKD	DATE
08/11/23	S. NIKS	08/11/23	
08/11/23	M. SWEET	08/11/23	
08/11/23	D. TORRES	08/11/23	
08/11/23	P. APPEL	08/11/23	
08/11/23	S. HODGES	08/11/23	



SL 35-17-MX NEW PIPELINE
 BEE CANYON ACCESS RD
 ROUTE MAP
 11002 BEE CANYON ACCESS RD



Pipeline Route
 NOT FOR CONSTRUCTION

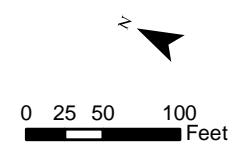


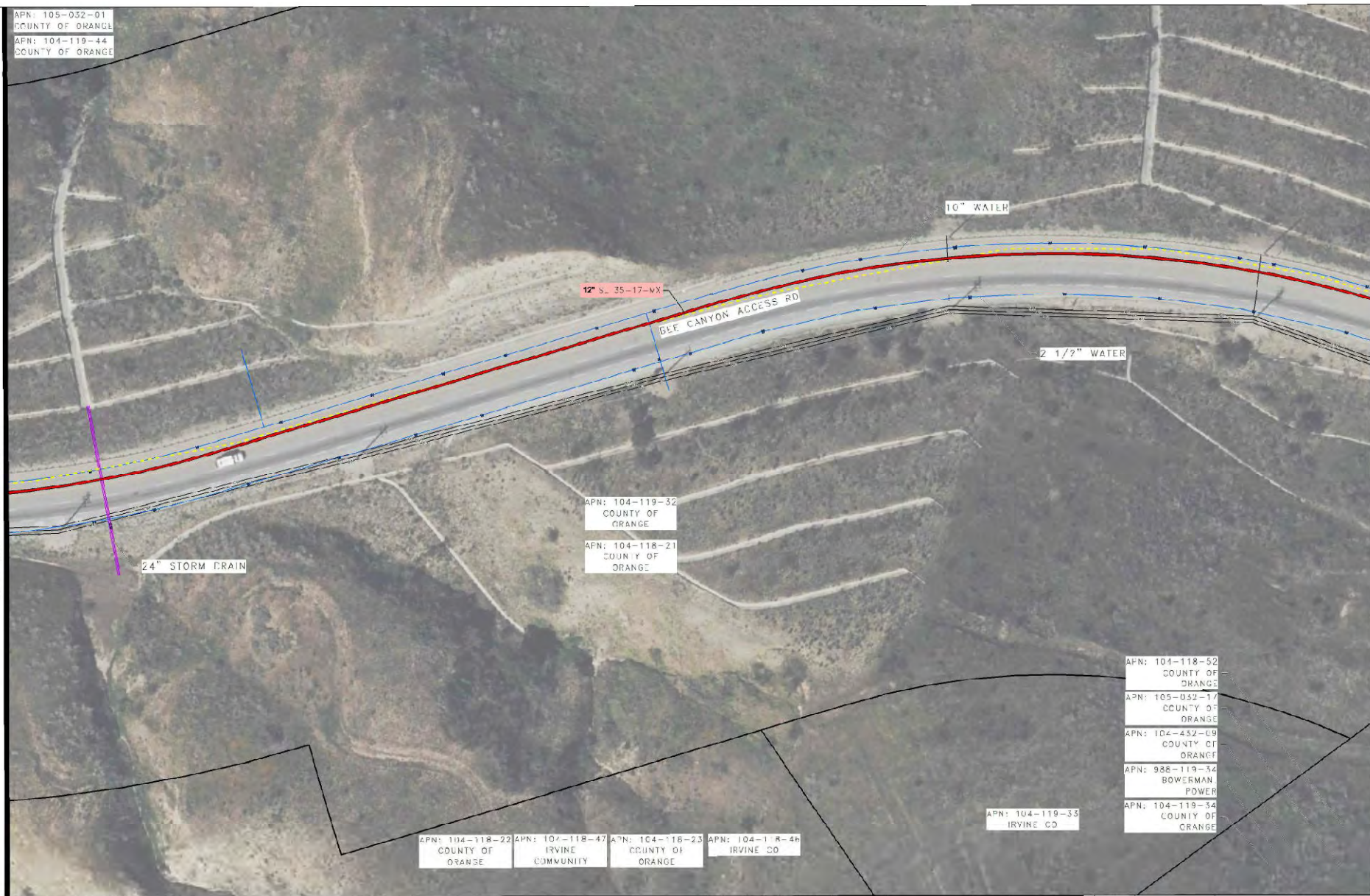
Figure 1-4.2
 Pipeline Route
 Sheet 2 of 12
 Bowerman Power RNG Plant Project
 Orange County, CA



APN: 105-032-01
COUNTY OF ORANGE
APN: 104-119-44
COUNTY OF ORANGE

SEE DWG 34384-30C4-2-F-P

SEE DWG 34384-30D2-D-PIP



APN: 104-119-32
COUNTY OF ORANGE
APN: 104-118-21
COUNTY OF ORANGE

APN: 104-118-52
COUNTY OF ORANGE
APN: 105-052-1/
COUNTY OF ORANGE
APN: 104-452-09
COUNTY OF ORANGE
APN: 988-119-54
BOWERMAN
POWER
APN: 104-119-54
COUNTY OF ORANGE

APN: 104-118-22 COUNTY OF ORANGE
APN: 107-118-47 IRVINE COMMUNITY
APN: 104-116-23 COUNTY OF ORANGE
APN: 104-118-48 IRVINE CO

APN: 104-119-35
IRVINE CO

LEGEND
— SL 35-17-MX NEW PIPELINE

NO.	DATE	BY	CHKD.
1	08/11/22	S. JAVR	
2	09/11/22	J. MCDONALD	
3	09/11/22	D. TORRES	
4	09/11/22	P. DEBORA	



SL 35-17-MX NEW PIPELINE
BEE CANYON ACCESS RD
ROUTE MAP



— Pipeline Route

NOT FOR CONSTRUCTION

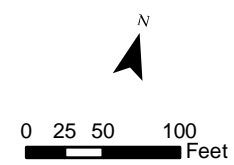
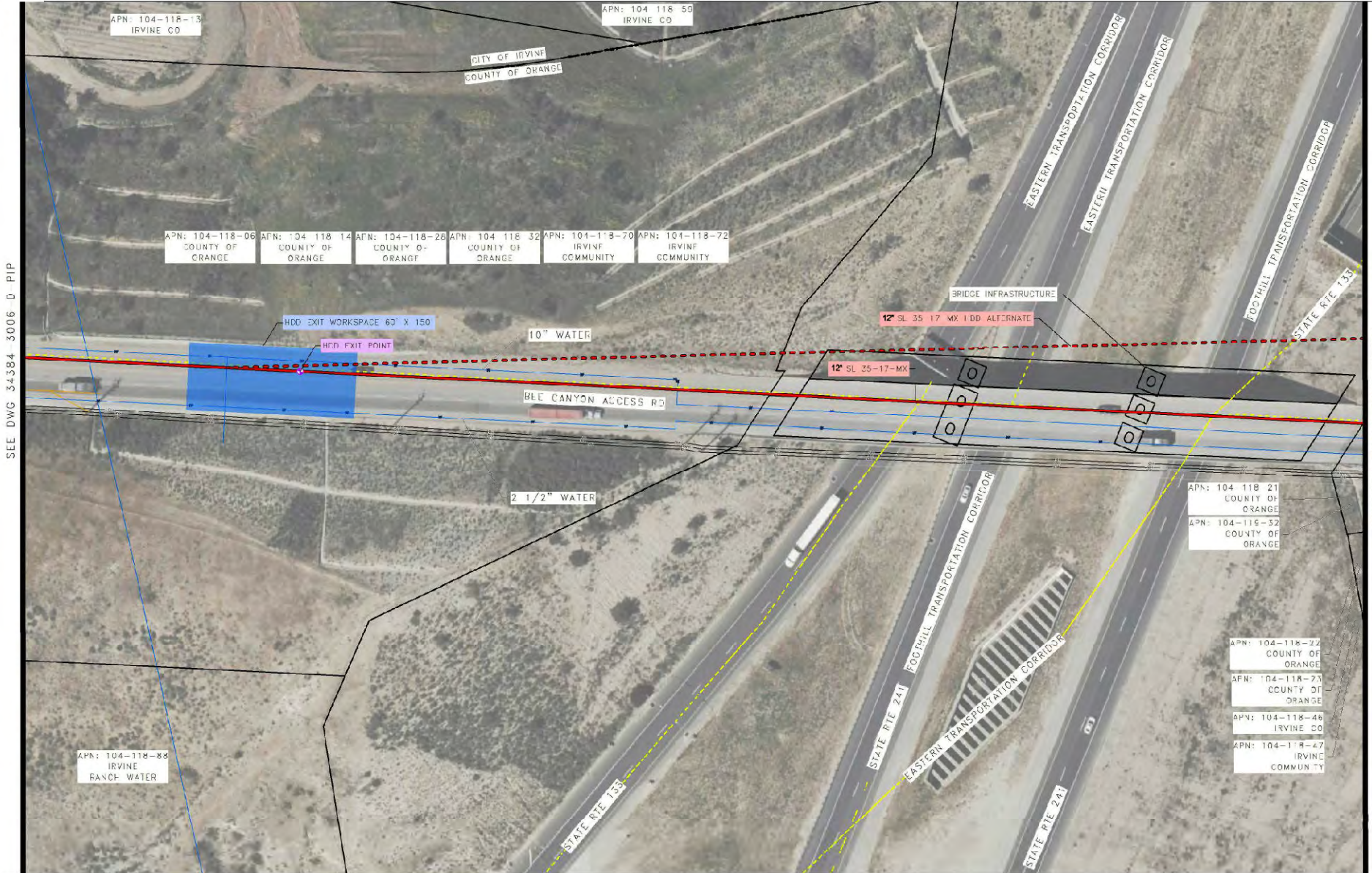


Figure 1-4.3
Pipeline Route
Sheet 3 of 12

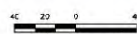
Bowerman Power RNG Plant Project
Orange County, CA



SEE DWG 34384-3006-D-PIP

SEE DWG 34384-3004-D-PIP

- LEGEND**
- SL 35-17-MX PIPELINE 110D ALT
 - SL 35-17-MX NEW PIPELINE
 - CITY/COUNTY LIMITS
 - ROAD CENTERLINE
 - PARCELS



NO.	DATE	BY	CHKD	APP'D	DESCRIPTION
1	08/11/22	S. AVON			DESIGNED
2	08/11/22	J. MICHIEL			DRAWN
3	08/11/22	B. TERRES			CHECKED
4	08/11/22	M. P. ZOGAN			SEC APP'D
5	08/11/22	B. HOOPER			SEC END APP'D



SL 35-17-MX NEW PIPELINE
BEE CANYON ACCESS RD
ROUTE MAP
IRVINE, CA



— Pipeline Route

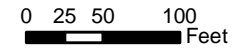


Figure 1-4.5
Pipeline Route
Sheet 5 of 12

Bowerman Power RNG Plant Project
Orange County, CA

NOT FOR CONSTRUCTION



SEE DWG 34384-3007-D-PIP

SEE DWG 34384-3005-D-PIP

APN: 104-118-09
IRVINE CO

APN: 104-118-13
IRVINE CD

CITY OF IRVINE
COUNTY OF ORANGE

78" WATER

39" WATER

12" SL 35-17-MX

10" WATER

SEE CANYON ACCESS RD

2 1/2" WATER

APN: 104-118-06
COUNTY OF ORANGE

APN: 104-118-14
COUNTY OF ORANGE

APN: 104-118-26
COUNTY OF ORANGE

APN: 104-118-32
COUNTY OF ORANGE

APN: 104-118-70
IRVINE COMMUNITY

APN: 104-118-72
IRVINE COMMUNITY

APN: 104-118-25
IRVINE RANCH WATER

APN: 104-118-30
IRVINE RANCH WATER

APN: 104-118-21
IRVINE RANCH WATER

APN: 104-118-92
IRVINE RANCH WATER

APN: 104-118-89
IRVINE RANCH WATER

APN: 104-118-88
IRVINE RANCH WATER

- LEGEND**
- SL 35-17-MX NEW PIPELINE
 - - - CITY/COUNTY LIMITS
 - ROAD CENTERLINE



NO.	DATE	BY	DESCRIPTION
1	08/11/22	S. JON	ISSUED FOR PER. QUA.
2	08/11/22	C. MICHAEL	REVISED PIPING 10 PER QUA.
3	08/11/22	E. TRAVIS	REVISION: FTR 10E, REVISE
4	08/11/22	P. BROOKA	REVISED PIPING 10 PER QUA.
5	08/11/22	D. HOOPER	REVISED PIPING 10 PER QUA.



SL 35-17-MX NEW PIPELINE
BLL CANYON ACCESS RD
ROUTE MAP

11000 BCL CANYON ACCESS RD, IRVINE, CA



— Pipeline Route

NOT FOR CONSTRUCTION

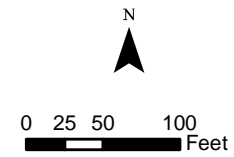
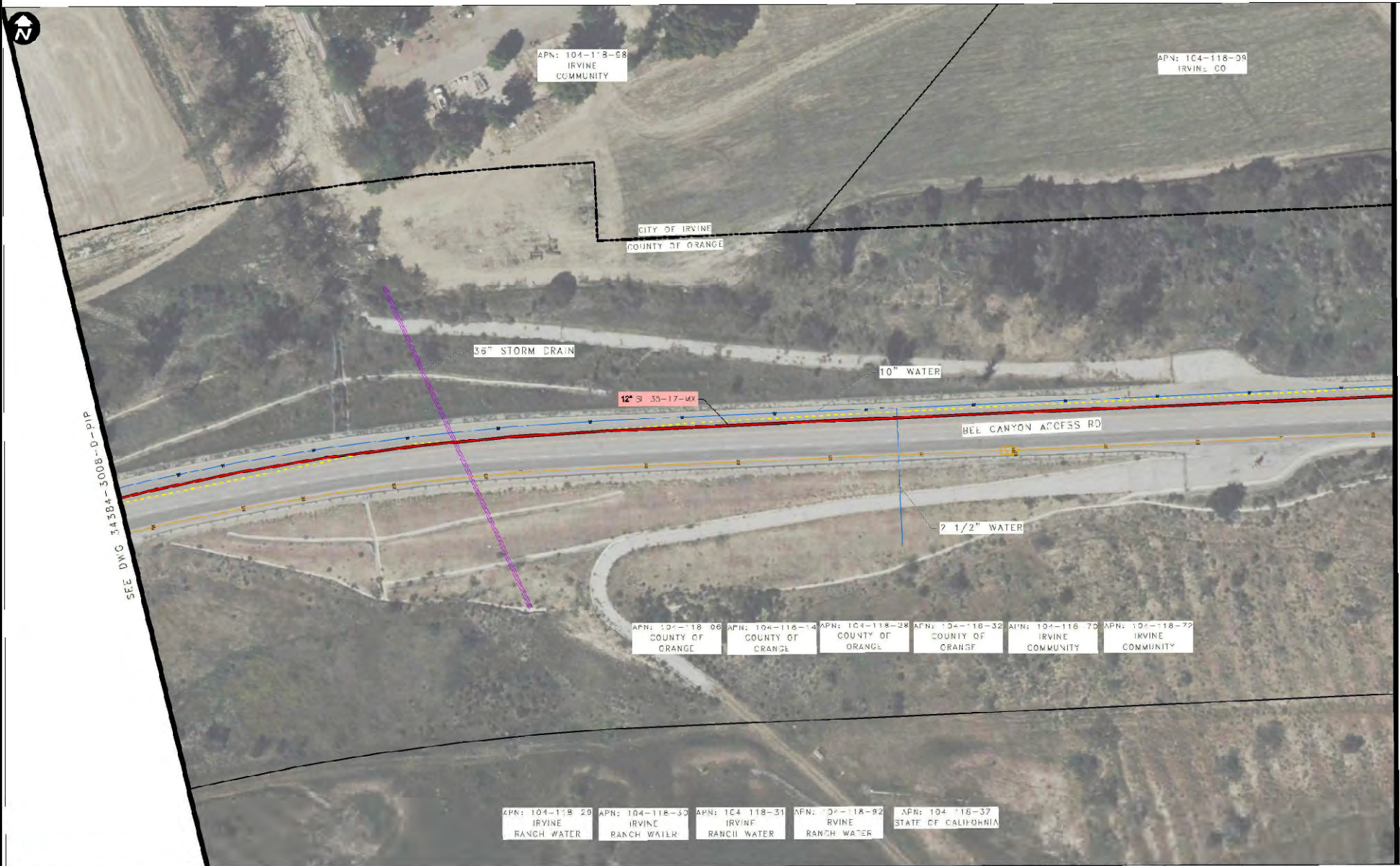


Figure 1-4.6
Pipeline Route
Sheet 6 of 12

Bowerman Power RNG Plant Project
Orange County, CA



SEE DWG 34384-5008-D-PIP

SEE DWG 34384-3006-D-PIP

LEGEND
 — SL 35-17-MX NEW PIPELINE
 - - - CITY/COUNTY LIMITS

BY	DATE
DESIGNED: S. ANON	06/11/22
DRAWN: J. NEOMEL	06/11/22
CHECKED: B. TORRES	06/11/22
PROJ. MGR: P. DISHAW	06/11/22



SL 35-17-MX NEW PIPELINE
 BEE CANYON ACCESS RD
 ROUTE MAP



— Pipeline Route

NOT FOR CONSTRUCTION

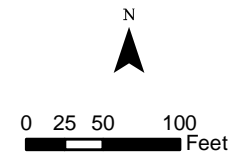


Figure 1-4.7
 Pipeline Route
 Sheet 7 of 12

Bowerman Power RNG Plant Project
 Orange County, CA

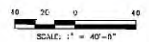


SEE DWG 34384-3010-D-PIP



SEE DWG 34384-3008-D-PIP

- LEGEND**
- SL 35-17-MX NEW PIPELINE
 - CITY/COUNTY LIMITS
 - ROAD CENTERLINE
 - PARCELS



SL 35-17-MX NEW PIPELINE
BEE CANYON ACCESS RD
ROUTE MAP



— Pipeline Route

NOT FOR CONSTRUCTION

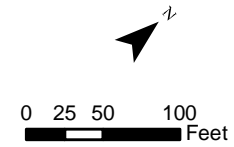
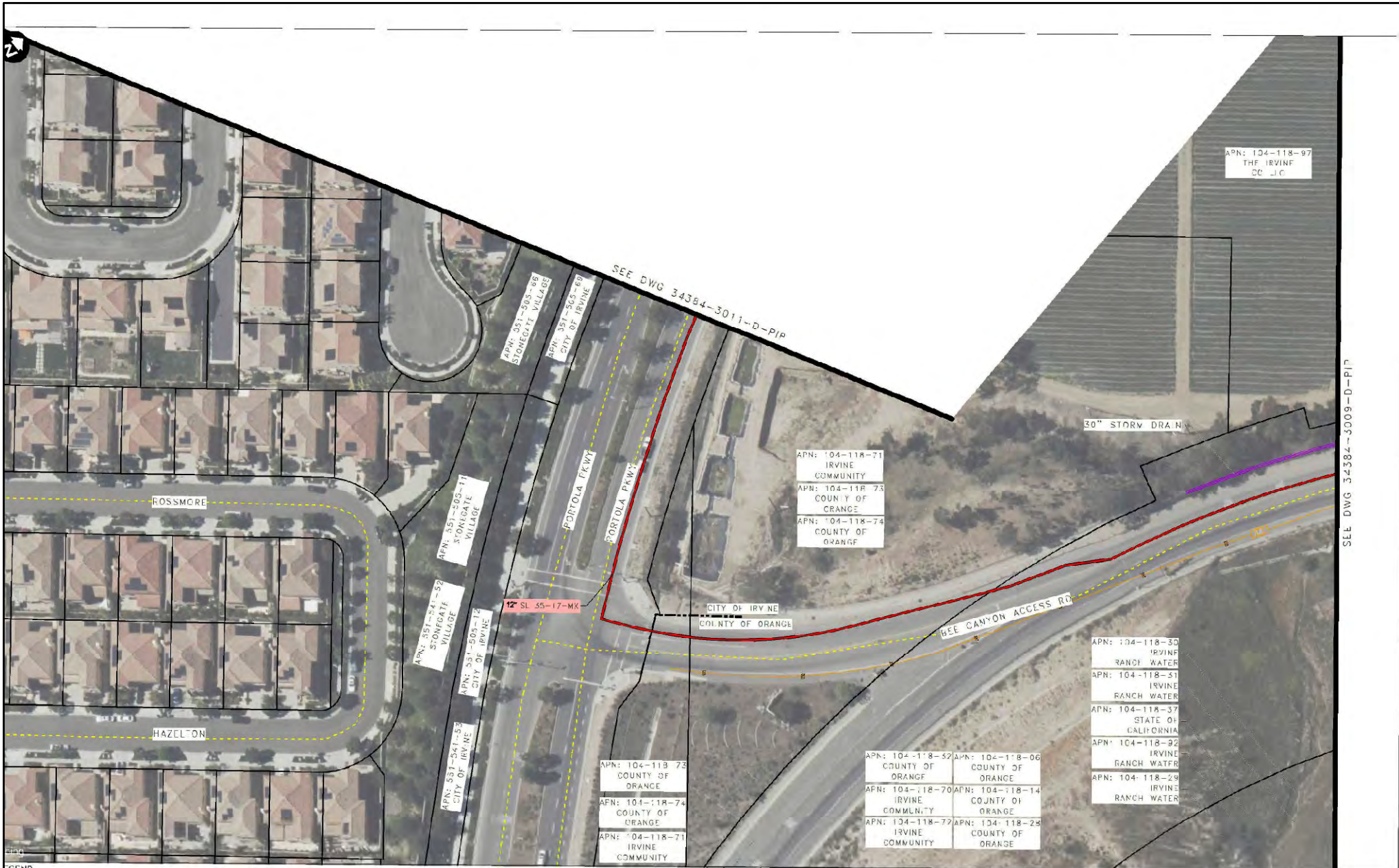
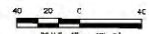


Figure 1-4.9
Pipeline Route
Sheet 9 of 12

Bowerman Power RNG Plant Project
Orange County, CA



LEGEND
 — SL 35-17-MX NEW PIPELINE
 - - - CITY/COUNTY LIMITS
 - - - ROAD CENTERLINE
 ■ PARCELS



NO.	DATE	BY	DATE
1	08/11/22	SPENCER, S. AUGH	08/11/22
2	08/11/22	DRAME, M. MICHAEL	08/11/22
3	08/11/22	CHEN, E. TERRY	08/11/22
4	08/11/22	PROJ APPR. P. BROSZAK	08/11/22
5	08/11/22	8998 ADJ. 300 CHD APPR. H. HICKER	08/11/22
6	08/11/22	8998 ADJ. 300 CHD APPR. H. HICKER	08/11/22

SL 35-17-MX NEW PIPELINE
 BEE CANYON ACCESS RD & PORTOLA PKWY
 ROUTE MAP
 11002 BEE CANYON ACCESS RD. IRVINE, CA



— Pipeline Route
 NOT FOR CONSTRUCTION

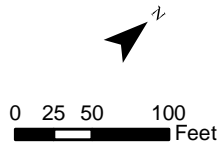


Figure 1-4.10
 Pipeline Route
 Sheet 10 of 12
 Bowerman Power RNG Plant Project
 Orange County, CA



SEE DWG 34384-3012-D-PIP

APN: 104-118-97
THF IRVINE
CO LLC

APN: 104-118-74
COUNTY OF
ORANGE
APN: 104-118-75
COUNTY OF
ORANGE
APN: 104-118-71
IRVINE
COMMUNITY

814-D-0102-046545
SUN ESES

12' SL 35-17-MX

PORTOLA PKWY

PORTOLA PKWY

APN: 551-505-69
CITY OF IRVINE

APN: 551-505-97
STONEGATE
VILLAGE

APN: 551-505-86
STONEGATE
VILLAGE

APN: 551-556-76
CITY OF IRVINE

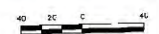
APN: 551-556-77
STONEGATE
VILLAGE

APN: 551-505-68
STONEGATE
VILLAGE

APN: 551-506-81
STONEGATE
VILLAGE

APN: 551-556-79
STONEGATE
VILLAGE

LEGEND
— SL 35-17-MX NEW PIPELINE
— ROAD CENTERLINE



NO.	DATE	BY	CHKD.	APP.	DESCRIPTION
1	06/11/22	DR	DR	DR	DESIGN
2	08/11/22	DR	DR	DR	REVISION
3	08/11/22	DR	DR	DR	REVISION
4	08/11/22	DR	DR	DR	REVISION
5	08/11/22	DR	DR	DR	REVISION
6	08/11/22	DR	DR	DR	REVISION
7	08/11/22	DR	DR	DR	REVISION
8	08/11/22	DR	DR	DR	REVISION
9	08/11/22	DR	DR	DR	REVISION
10	08/11/22	DR	DR	DR	REVISION



SL 35-17-MX PIPELINE
PORTOLA PKWY
ROUTE MAP



— Pipeline Route

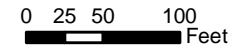


Figure 1-4.11
Pipeline Route
Sheet 11 of 12

Bowerman Power RNG Plant Project
Orange County, CA

NOT FOR CONSTRUCTION



SEE DWG 34384-3011-D-PIP



- Pipeline Route
- Project Site

NOT FOR CONSTRUCTION

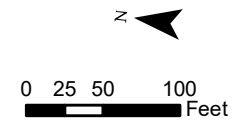
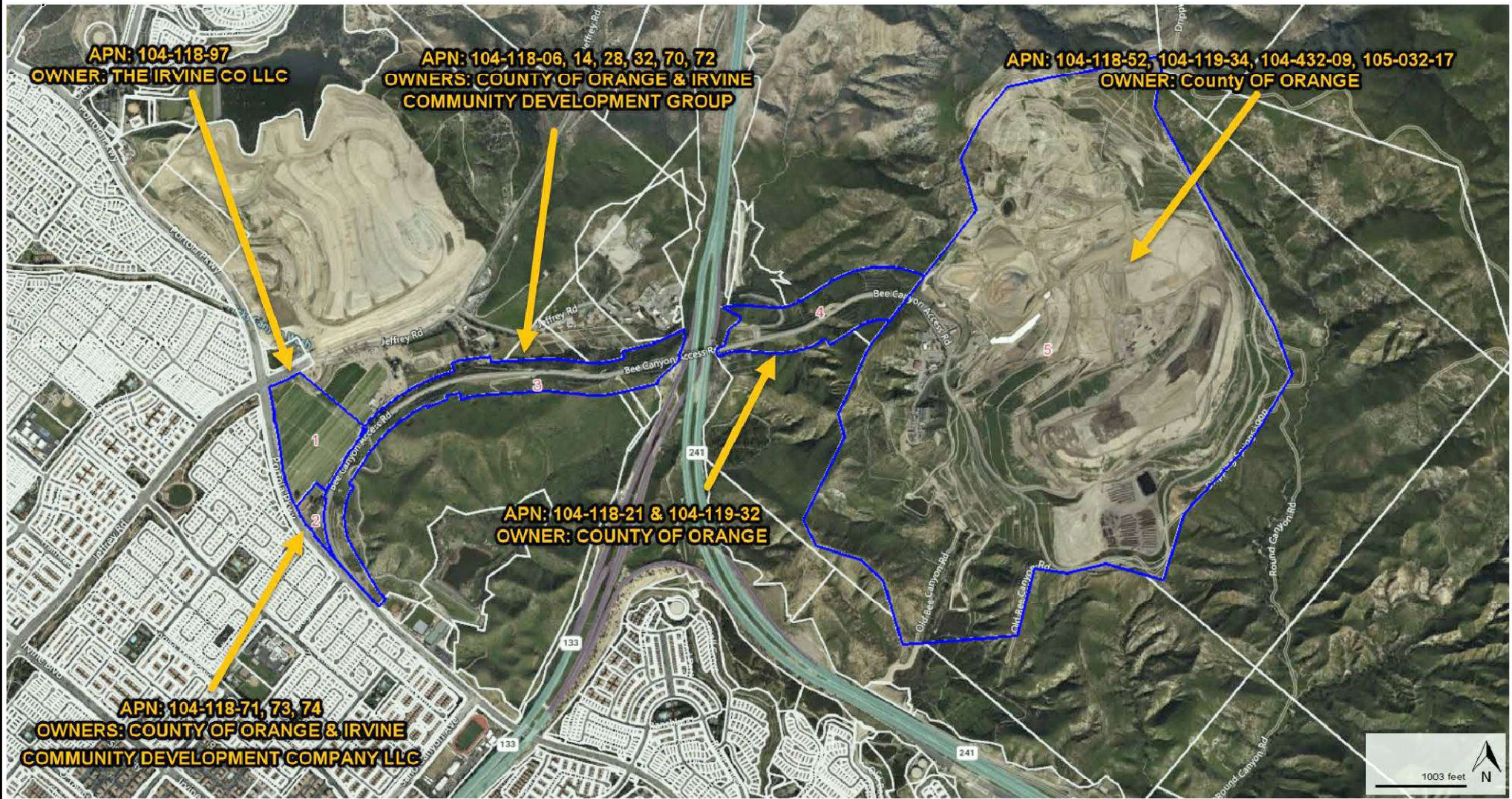


Figure 1-4.12
Pipeline Route
Sheet 12 of 12

Bowerman Power RNG Plant Project
Orange County, CA



NOT FOR CONSTRUCTION

Figure 1-5
Project Site Parcels

Bowerman Power RNG Plant Project
Orange County, CA

1.2 AREA OF POTENTIAL SIGNIFICANT IMPACT

The Project site for the proposed RNG Plant site is approximately 3.5 acres and situated in a partially undeveloped area within the FRB Landfill property, see Figure 1-5. The proposed construction of the Project site will consist of grading activities requiring a small number of on-site cuts (slope preparation) and then a large amount of engineered fill will be placed to create the pad area on which the RNG Plant will be constructed. The fill will be extracted from the existing FRB Landfill Soil Stockpile Area that was previously disturbed and used routinely for the deposition of fill materials. See Figures 1-2 and 1-3.

The Project pipeline route is approximately 2 miles long and within the existing three-lane Bee Canyon Access Road and approximately 0.4 mile long and within the existing two-lane Portola Parkway. All construction and laydown areas (defined as the work area and will be 50 feet in width) will take place within the existing road right of way. Construction of the pipeline will consist of the installation of a 12-inch pipe by excavating a pipeline trench approximately 30 inches in width and an average of 6 feet in depth.

1.3 REGULATORY COMPLIANCE

1.3.1 State

California Environmental Quality Act

CEQA (Section 21084.1) requires a lead agency to determine whether a project could have a substantial adverse change in the significance of a historical resource or tribal cultural resources (Section 21084.2).

Under CEQA (Section 15064.5 (a)), a historical resource (e.g., building, structure, or archaeological resource) shall include resource that is listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR), or a resource listed in a local register or landmark, identified as significant in a historical resource survey (meeting the requirements of Section 5024.1(g) of the Public Resource Code [PRC]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (Section 15064.5[a][3]). Under the California Code of Regulations, Title 14, Chapter 11.5, properties listed on or formally determined to be eligible for listing in the National Register of Historic Places (NRHP) are automatically listed in the CRHR. A resource is generally considered to be historically significant under CEQA if it meets the following criteria for listing in the CRHR (PRC SS5024.1, Title 14, Code of Regulations, Section 4852):

- A. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).

- B. Associated with the lives of persons important to local, California or national history (Criterion 2).
- C. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).
- D. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation (Criterion 4).

Under PRC Section 21074:

(a) tribal cultural resources are:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following:

- (A) Included or determined to be eligible for the inclusion in the CRHR, or;
- (B) Included in a local register of historical resources as defined by subdivision (k) of Section 5020.1 (designated or recognized historically significant by a local government pursuant to local ordinances or resolution).

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

California Health and Safety Code, Section 7050.5

Section 7050.5 (a) states that it is a misdemeanor (except as provided in Section 5097.99, see below) to knowingly mutilate or disinter, wantonly disturb, or willfully remove any human remains in or from any location other than a dedicated cemetery without the authority of law. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the Public Resources Code or to any person authorized to implement Section 5097.98 of the Public Resources Code. Section 7050.5 (b) requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner of the County (in which the human remains are discovered) can determine whether the remains are subject to the coroner’s authority. The coroner shall make their determination within two working days from the time the person responsible for the excavation, or that person’s authorized representative, notifies the coroner of the discovery of human remains. Per Section 7050.5 (c), if the coroner determines the remains are not subject to their

authority and recognizes the remains to be Native American or has reason to believe they are those of a Native American, the coroner shall contact, by telephone within 24 hours, the California Native American Heritage Commission (NAHC).

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The Act requires that upon discovery of human remains, construction or excavation activity cease and that the county coroner be notified. If the remains are Native American, the coroner must notify the NAHC. The NAHC will then identify and notify a most likely descendant. The Act stipulates the procedures the most likely descendant may follow for treating or disposing of the remains and associated grave goods.

California Public Resource Code, Section 5097.5 and 5097.99

Section 5097.5 of the Code states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

As used in this section, "public lands" means lands owned by, or under the jurisdiction of the state or any city, county, district, authority, public corporation, or any agency thereof.

Section 5097.99 of the Code states:

(a) No person shall obtain or possess any Native American artifacts or human remains which are taken from a Native American grave or cairn on or after January 1, 1984, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (l) of Section 5097.94 or pursuant to Section 5097.98.

(b) Any person who knowingly or willfully obtains or possesses any Native American artifacts or human remains which are taken from a Native American grave or cairn after January 1, 1988, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (l) of Section 5097.94 or pursuant to Section 5097.98, is guilty of a felony which is punishable by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code.

(c) Any person who removes, without authority of law, any Native American artifacts or human remains from a Native American grave or cairn with an intent to sell or dissect or with malice or wantonness is guilty of a felony which is punishable by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code.

Assembly Bill 52

Under CEQA, Assembly Bill 52 (Section 5, 21080.3.1) requires a lead agency to consult with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project if:

1. A Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe; and
2. The California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

Consultations may include a brief description of the proposed project and its location, the lead agency contact information, the type of environmental review necessary, the significance of tribal cultural resources, and the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. Consultation, if requested, must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report, if required for a project.

1.3.2 Local

The applicable land use plan for the project area is the Orange County General Plan (Orange County 2012). The current plan, amended in 2012, Chapter VI Resource Element section provides for a comprehensive, framework designed to protect Orange County's cultural resources through goals, policies, and objectives. The Orange County General Plan goals, objectives, and policies specific to archaeology are as follows:

Goal 2: To encourage through a resource management effort the preservation of the county's cultural and historic heritage.

Objective

- 2.1: Promote the preservation and use of buildings, sites, structures, objects, and districts of importance in Orange County through the administration of planning, environmental, and resource management programs.
- 2.2: Take all reasonable and proper steps to achieve the preservation of archaeological and paleontological remains, or their recovery and analysis to preserve cultural, scientific, and educational values.
- 2.3: Take all reasonable and proper steps to achieve the preservation and use of significant historic resources including properties of historic, historic architectural, historic archaeological, and/or historic preservation value.
- 2.4: Provide assistance to County agencies in evaluating the cultural environmental impact of proposed projects and reviewing Environmental Impact Reports.
- 2.5: Provide incentives to encourage greater private sector participation in historic preservation.

Policies: The following policies addressing archaeological, paleontological, and historical resources shall be implemented at appropriate stage(s) of planning, coordinated with the processing of a project application, as follows:

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

Archaeological Resources Policies:

1. To identify archaeological resources through literature and records research and surface surveys.
2. To evaluate archaeological resources through subsurface testing to determine significance and extent [as appropriate].
3. To observe and collect archaeological resources during the grading of a project.
4. To preserve archaeological resources by:
 - a. Maintaining them in an undisturbed condition, or
 - b. Excavating and salvaging materials and information in a scientific manner.

2.0 ENVIRONMENTAL SETTING

The Project is situated within Bee Canyon and the hills along the western flank of the Santa Ana Mountains, this area is ecological diverse, and a summary of the natural setting is provided below. Note: the vegetation section was extracted from the biological survey report for the Project (Tetra Tech, Inc. 2023).

2.1 NATURAL SETTING

The proposed Project is located within the Peninsular Ranges Geomorphic Province, which is a series of ranges separated by northwest trending valleys, almost parallel to faults branching from the San Andreas Fault. The Peninsular Ranges extend into lower California and are bound on the east by the Colorado Desert Geomorphic Province. The Los Angeles Basin and the Southern Channel Islands (Santa Catalina, Santa Barbara, San Clemente, and San Nicolas islands), together with the surrounding continental shelf, are included in this province (California Department of Conservation, California Geological Survey 2002). Specifically, the Project is situated along the western canyons and foothills of Loma Ridge within the northwestern flank of the Santa Ana Mountains (a northwest trending range). Elevations at Loma Ridge range from approximately 1,000 to 2,000 feet. Several ephemeral drainages are near the Project within Bee, Hicks, and Round Canyons. Santiago Creek is approximately 4 to 5 miles northeast and east of the Project, and Serrano and Aliso Creeks are about 4 to 6 miles south-southeast. Geological deposits within the Project site and Project pipeline route consist of mostly marine sedimentary rocks with an age range from Miocene epoch (5 million to 23 million years in age) back to the Eocene epoch (35 million to 55 million years old). The following formations are within the Project and adjacent areas (Morton 2004):

- Puente Formation (early Pliocene and Miocene). Marine sandstone, siltstone, and shale underlying most of the Puente Hills and extending into adjacent areas.
- Topanga Formation (middle Miocene). Marine sandstone, siltstone, and shale. At type locality, Topanga Canyon, unit contains middle Miocene fauna (fossils).
- Vaqueros Formation (early Miocene, Oligocene, and late Eocene). Predominantly sandstone, with thin-bedded shales and siltstones. Contains early Miocene shallow-water marine mega-fossil assemblages.
- Sespe Formation (early Miocene, Oligocene, and late Eocene). The Sespe formation can be varied in color from gray to red, is generally massive- to thick-bedded, nonmarine sandstones. In Sespe Creek, Ventura County, this formation conformably underlies marine sandstones of the Vaqueros formation. Continental vertebrate fossil collections originating from the Sespe formation range in age from Eocene to early Miocene.

The non-marine exception in these formations is the Sespe, which is also the underlying geology at the Project site. The pipeline originates in the Sespe formation but also crosses Vaqueros formation rocks as well as Quaternary sediments (both alluvial and landslide deposits).

Soils within the Project site and eastern most reach of the proposed SoCal Gas pipeline route consist of Calleguas clay loam from 0 to 7 inches in depth, and very channery clay loam from 11 to 15 inches, and bedrock from 15 to 59 inches (NRCS 2023). Soils within the Project pipeline route (from east to west) consist primarily of Anaheim clay from 0 to 26 inches, and weathered bedrock from 26 to 59 inches and a small segment of Cieneba sandy loam 0 to 17 inches and weathered bedrock from 17 to 59 inches; and Sorrento loam 0 to 12 inches, silt clay loam 12 to 67 inches, and sandy loam 62 to 72 inches at the very western terminus of the route (NRCS 2023).

2.1.1 Vegetation

Sagebrush Scrub (Project Site): Sagebrush scrub covers about 70 percent of the Project site. This habitat group has over 100 percent vegetation coverage. The dominant shrub within the habitat is California sagebrush (*Artemisia californica*). Interspersed within the California sagebrush are native species such as California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*) and brittlebrush (*Encelia farinosa*). Native succulent species like coast prickly pear (*Opuntia littoralis*), chalk dudleya (*Dudleya pulverulenta*), and lance-leaved dudleya (*Dudleya lanceolata*) are also found interspersed in this habitat. Rock outcrops are present at the top of some of the steep slopes in the sagebrush scrub, mostly bordering the existing facility to the west. Along the edges of this habitat and spaced between shrubs are patches of non-native species like Mediterranean hoary mustard (*Hirschfeldia incana*) and prickly lettuce (*Lactuca serriola*). Immediately surrounding the existing facility are non-native grass species, such as oat (*Avena* sp.). There is no tree canopy within this habitat. Within the sagebrush scrub and along the margins of the coast live oak (*Quercus agrifolia*) habitat are populations of a California native rare plant, intermediate mariposa lily (*Calochortus weedii* var. *intermedius*).

Coast Live Oak (Project Site): Along the slope, coast live oak dominates the tree canopy. The tree understory is comprised of non-native grasses, like ripgut grass (*Bromus diandrus*) and foxtail chess (*Bromus madritensis*), and sparse coverage of low-growing sagebrush scrub species, like California buckwheat.

Developed (Project Site): A concrete channel runs from north to south at the base of the slope and along the roadside of Bee Canyon Access Road. Water run-off from the existing landfill gas-to energy facility is fed into the channel through smaller concrete channels and culverts at the north end of the channel. The channel bed is filled with soil debris. The channel feeds into an isolated evaporation/collection pool south of the existing facility.

Pipeline Developed: This area encompasses Bee Canyon Access Road, Portola Parkway, and any structures in and along the road, such as fencing and gates.

Pipeline Disturbed: These areas include hardpan pads along the roadside of Bee Canyon Access Road. These pads are vegetated with primarily non-native ruderal species like Mediterranean hoary mustard. Also, colonizing shrubs of California sagebrush grow on the

pads. There is also a portion of the roadside (north of Portola Parkway), which is habitat disturbed by current agricultural practices.

Pipeline Sagebrush Scrub: This habitat is on a slope and is covered by California buckwheat and California sagebrush. One-foot-wide, unvegetated concrete channels run along the roadside and through this habitat.

Pipeline Disturbed Sagebrush Scrub: Along the north side of Bee Canyon Access Road, towards the end of the proposed pipeline that opens up to Portola Parkway, is a gravel pad covered in low-growing (under 1-foot) California buckwheat. Interspersed within the buckwheat are ruderal species such as Mediterranean hoary mustard and clustered tarweed (*Deinandra fasciculata*). This area appears to be disturbed by adjacent construction activities.

Pipeline Eucalyptus: A strip of eucalyptus (*Eucalyptus* sp.) grove habitat runs along the north side of Bee Canyon Access Road. Eucalyptus trees over 15-feet tall dominate the tree canopy. Eucalyptus trees under 8-feet, annual grasses, and leaf litter dominate the ground canopy.

Pipeline Ornamental Trees: Along the south side of Portola Parkway are trees planted for roadside beautification. Tree species include acacias (*Acacia* sp.), conifers (*Pinus* sp.), and redwood (*Sequoia* sp.) species. Within the ROW are paved sidewalks and utility boxes.

2.1.2 Wildlife

The Santa Ana Mountain region supports a variety of wildlife such as mule deer (*Odocoileus hemionus*), desert cottontail, (*Sylvilagus audubonii*), California ground squirrel (*Otospermophilus beecheyi*), mountain lion (*Felix concolor*), bobcat (*Lynx rufus*), coyotes (*Canis latrans*), and other small animals and rodents (Alden et al. 1998). Several avian species inhabited the region such as the greater roadrunner (*Geococcyx californianus*), red tailed hawk (*Buteo jamaicensis*), turkey vulture, (*Cathartes aura*), canyon wren (*Catherpes mexicanus*), and several others (Alden et al. 1998).

Species that once inhabited the Santa Ana Mountain region included California grizzly bear (*Ursus arctos californicus*), gray wolf (*Canis lupus*), pronghorn antelope (*Antilocarpa americana*), and the California condor (*Gymnogyps californianus*). The last California grizzly bear was killed in Orange County in 1903 (Orange County 2023).

Prehistoric populations used a variety of mineral, faunal and floral resources for subsistence, medicinal, religious, and utilitarian purposes.

3.0 CULTURAL CONTEXT

The following includes a literature review of available data for the Project, record search and historic aerial and map review, and the results of the NAHC sacred lands file search.

3.1 PREHISTORIC OVERVIEW

There is no single cultural historical framework that encompasses the entire prehistoric record for southern California. Several key archaeologists have contributed to the development and chronological framework throughout regions of southern California such as Wallace (1955), Warren (1968), Warren and Crabtree (1986), Moratto (1984), Chartkoff and Chartkoff (1984), Byrd and Raab (2007), and several others. The prehistory of the southern California region has been generally summarized within four major horizons or cultural periods and a brief summary is provided below: Horizon 1 – Early Period (12,000 to 7,500 years before present [BP]), Horizon II – Millingstone Horizon (7,500 to 3,000 BP), Horizon III – Intermediate Cultures (3,000 to 1,000 BP), and Horizon IV – Late Prehistoric (1,000 BP to European historic contact).

Horizon I – Early Period (Early Holocene: 12,000 to 7,500 years BP) characterized by small mobile groups that utilized lithic tools such as stemmed projectile points, fluted projectile, crescent, scrapers, and choppers.

Horizon II – Millingstone Horizon (Middle Holocene: 7,500 to 3,000 BP) characterized by the extensive use of milling stones (manos and metates) to process small, hard seeds from plants associated with shrub-scrub communities and littoral zone resource exploitation.

Horizon III – Intermediate Culture (Middle Holocene: 3,000 to 1,000 BP) is characterized by mixed subsistence strategy of plant exploitation (increased use of pestles for larger, hard seeds) and the hunting of terrestrial and marine resources.

Horizon IV – Late Prehistoric (Late Holocene: 1,000 BP to European historic contact) is characterized by an increasing human population and associated expansion of cultural practices, and the use of the bow and arrow, pottery, shell fishhooks, use of asphaltum, and decorative shell and bone ornaments were all typical during this time.

3.2 ETHNOGRAPHIC OVERVIEW

It should be noted that the summary below is drawn from studies conducted by 19th and 20th century Euro-American ethnographers and does not necessarily include a Tribal perspective of their culture.

The Project area is also within the ethnographic territory traditionally inhabited by the Kizh (Kisiannos) (Stickel 2016, Strong 1987, Johnston 1962, McCawley 1996). The Kizh occupied most of Los Angeles and Orange counties, parts of Riverside and San Bernardino counties, including the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers, the Los

Angeles basin to the Santa Monica and Santa Ana mountains, along the coast from Aliso Creek in the south to Topanga Creek in the north, and the Channel Islands such as San Clemente, San Nicolas, and Santa Catalina (Bean and Smith 1978; Kroeber 1925).

Kizh are a member of the Cupan languages in the Takic family, part of the Uto-Aztecan linguistic stock. There were up to six different dialects spoken throughout the Kizh territory. Settlement patterns on the mainland were located near water sources and exhibit a logistical mobility with large villages and smaller satellite camps occupied seasonally. Structures were domed, circular structures with tule, fern, or Carrizo thatching and sweathouses were small, semicircular, earth-covered buildings (Bean and Smith 1978). Although it is unknown exactly how many people inhabited the area, it is estimated that at least 50 to 100 villages occupied the mainland and coastal region, with village populations ranging from 50 to 200 individuals (Bean and Smith 1978). The Kizh were fisher-hunter-gatherers and exploited a variety of coastal bay, littoral, riverine, and inland floral and faunal resources available within the diverse ecological zones of their territory (i.e., coastal plain, rivers, foothills, mountains, and ocean). Subsistence resources included items such as several species of oak trees, grasses, sage bushes, rabbits, deer, fish, shellfish, and other terrestrial and marine mammals. The Kizh would move seasonally throughout the region, between mountain and coastal locales, to hunt terrestrial and sea mammals and to collect terrestrial flora and intertidal species. In 1771, the San Gabriel mission was established, and the Spanish began to enslave and force the Kizh into the mission system. The Spanish changed the Kizh ancestral name to Gabrieleño (Stickel 2016; Bean and Smith 1978). By 1800, many of the Kizh were missionized and many had succumbed to the harsh conditions of the mission system, introduced diseases or conflicts, or fled the area (Bean and Smith 1978). Nineteenth century Euro-American ethnographers changed the spelling of Gabrieleño to an English spelling of Gabrielino. However, the ancestral Kizh name was used to refer to the Kizh by other surrounding Tribes in Southern California at the time of historic contact (Strong 1987, Bean and Smith 1978, Johnston 1962, McCawley 1996). Currently, the Kizh Nation (historically, also known as the San Gabriel Band of Mission Indians) are a state of California recognized tribe and their tribal office is located in Los Angeles, California.

3.3 HISTORIC OVERVIEW

European settlement began in 1771, when Spanish missionaries began to settle along the California coast and adjacent inland areas. Following the Mexican-American War and secularization of the nearby missions in 1834, the region was transferred to private landowners (ranchos) who established a primary economy of cattle ranching. Specifically, in the Project area Lomas de Santiago. Don Theodocio Yorba was granted Lomas de Santiago on May 26, 1846. The rancho was later sold to William Wolfskill in 1860 (also see Section 3.4.2). After the fall of the rancho system, European settlers purchased substantial land holdings in the area. The Flint, Bixby, & Company (sheep ranching business) acquired Rancho San Joaquin and Lomas de Santiago in 1864 (Los Angeles Times 1987). James Irvine I was a silent partner in the land acquisition and established the Irvine Ranch (Irvine Historical Society 2023). James' son, James Irvine II, would later inherit the land in 1892 and bought out the other partners, and

established the Irvine Company (Irvine Historical Society 2023). The local economy included large-scale farming and fruit orchards and sheep and cattle ranching. In 1889, the Orange County seat was located in Santa Ana and this further stimulated the development of businesses, stores, financial institutions and hotels serving the regional metropolitan population. Orchards and crops were plentiful and buying and selling of goods and land became the number one enterprise. By the 1930s, the Irvine Company implemented several irrigation projects to provide a stable source of water to the agricultural areas (Irvine Historical Society 2023). Urban development (e.g., residential subdivisions and commercial) began to take root in the 1920s through current times. Today, Orange County is densely developed with urban uses and limited vacant land. The FRB Landfill was constructed in the 1980s and opened in 1990 (OCWR 2023).

3.4 RECORD SEARCH METHODS AND RESULTS

A record search of the cultural resources site and project file collection at the South-Central Coastal Information Center (SCCIC), California State University, Fullerton, of the California Historical Resources Information System, was conducted on August 23, 2023 (Record Search File No.: 24773.11195, results are confidential and not included in this report). As part of this records search, the CHRIS database of survey reports and overviews was consulted, as well as documented cultural resources, cultural landscapes, and ethnic resources. Additionally, the search included a review of the following publications and lists: NRHP and CRHR. In addition, Tetra Tech staff reviewed ethnographic information, historical literature, historical maps and plats, and local historic resource inventories, and the Orange County General Plan sensitivity map. The SCCIC records search focused specifically on the proposed Project site and Project pipeline route and a quarter mile (0.25 mile) buffer extending from the Project site boundary (see Figure 1-4). In addition, the Orange County General Plan's County Archaeological Sensitivity map was also reviewed.

The SCCIC record search results identified 21 previously conducted cultural resource studies that overlap and are within the Project site and Project pipeline route. Previous reports OR-00305, OR-02225, OR-02534, OR-00847, OR-02935 and OR-04534 are within the Project site. Previous reports OR-00305, OR-02225, OR-02534 and OR-00847 are within the Project pipeline route; and reports OR-00648, OR-01214, OR-02342, OR-02845, OR-02935, OR-03824, OR-04534, OR1426, OR1557, OR252, OR253, OR859, and OR861 overlap with the Project pipeline route. These studies were conducted between 1978 and 2010 and consist of overviews, archaeological testing, excavation, and field surveys. Eleven previously conducted cultural resource studies were identified within 0.25 mile of the Project site and Project pipeline route. Five previously recorded cultural resources were identified but none of these five sites are adjacent to the Project site or pipeline linear route).

3.4.1 Orange County General Plan Sensitivity Map

The County of Orange General Plan states that sub-surface resources such as archaeological and paleontological sites are abundant in Orange County. Based on the County of Orange General Plan Prehistoric Archaeology sensitivity map, the proposed Project site and Project pipeline route is located in areas mapped for prehistoric archaeological sensitivity (Orange County 2012).

3.4.2 Historic U.S. Geological Survey Map and General Land Office Plat Map and Historic Aerial Review

A review of historic maps and aerial imagery provides information regarding potential unrecorded historic features or sites within the Project Area. Based on the historic maps and aerial imagery review, the Project site and Project pipeline route appear relatively undeveloped until the 1980s. Based on aerial imagery, the areas near the southern portion of the Project pipeline route appear under agricultural use (row crops and orchards) from the 1940s to 1970s. By the 1980s, the FRB Landfill was under construction and Bee Canyon Access Road was improved (widened and paved) and the adjacent areas (including hillsides) were graded, cut, and terraced for erosion control with concrete culverts. The results of the review of available historic aerials, General Land Office plat maps, and USGS quadrangle maps are presented in Table 3-1 below.

Table 3-1. Historic Aerial Imagery and Map Review

Map Name	Date(s)	Author	Description
Aerial Imagery	1946	NETRonline	Project site and Project pipeline route appear as undeveloped land within hills and creeks. Agricultural land use is to the south in the valley.
Aerial Imagery	1952	NETRonline	Project site and Project pipeline route appear as undeveloped land within hills and creeks except the southernmost portion of the Project pipeline route appears as agricultural land. Agricultural land use is to the south, in the valley.
Aerial Imagery	1963, 1967, 1972	NETRonline	Project site appears as undeveloped land within hills. The southern portion of the Project pipeline route appears as agricultural land and an unnamed east to west trending dirt road appears to follow or is near the existing Bee Canyon Access Road. Agricultural land use is to the south, in the valley. No changes in 1967 or 1972. By the 1980s, Bee Canyon Access Road appears present and improved and large portions of land along the Project pipeline route appear graded and cleared of vegetation.
Aerial Imagery	1987	NETRonline	Project site: appears undeveloped, the surrounding area is developed as the FRB Landfill. Project pipeline route: By 1987, Bee Canyon Access Road has been improved and adjacent areas and hillsides along the entire road to the FRB Landfill appear graded, cleared of vegetation, and terraced with concrete culverts for erosion control. In addition, several orchards appear along the hillsides, north and south, of Bee Canyon Access Road.
GLO Plat Map	--	--	Not Available.
USGS 1:250,000, Southern California	1901		No buildings or features are illustrated in the project area.

Map Name	Date(s)	Author	Description
USGS 1:62,500 Santiago Peak, CA	1942	War Department Corps of Engineers, US Army	Project site and Project pipeline route: no buildings or features are illustrated. An unnamed road is illustrated near the southern portion of the Project pipeline route. The general area is labeled Lomas De Santiago.
USGS 1:24,000, El Toro, California	1947, 1956, 1960	USGS	Project site and Project pipeline route: no buildings or features are illustrated. The general area is labeled Lomas De Santiago.
USGS 1:24,000, El Toro, California	1968	USGS	Project site: no buildings or features are illustrated, undeveloped land. Project pipeline route: east to west trending two track road near southern portion of route (near current alignment of Bee Canyon Access Road). No other features or buildings illustrated.
USGS 1:24,000, El Toro, California	1997	USGS	Project site: undeveloped, landfill roads surround Project site. Project Pipeline route: Bee Canyon Access Road and Portola Parkway Road in current alignment. The general area is labeled: Lomas De Santiago.

GLO=General Land Office; USGS=U.S. Geological Survey; NETRonline <https://www.historicaerials.com/viewer>

3.4.3 Federal Land Patent Review

One early patent holder was identified within the nearby region of the proposed Project site and Project pipeline route for Township 5 South, Range 7 and 8 West, several sections. Under the Grant-Spanish/Mexican grant of 1851 (9 Atat. 631), Theodocio Yorba (or Teodosio) was granted Lomas de Santiago on May 26, 1846 (BLM 2023; Brigandi 2019). Based on the review of historic USGS topographical maps, Lomas de Santiago is a large area and is illustrated within the Project and surrounding areas. The rancho size was set at 47,200 acres by the U.S. Land Commission. This land was eventually acquired by James Irvine (1864: Bell 2013).

3.5 NATIVE AMERICAN HERITAGE COMMISSION SACRED LAND FILE SEARCH AND AB52 CONSULTATION

As part of the data collection, a NAHC Sacred Lands File Search was requested on July 20, 2023. The NAHC replied on August 21, 2023, and the results were negative (Appendix A). OCWR has initiated tribal consultation under Assembly Bill 52. Pursuant to notice provided on August 14, 2023, in accordance with PRC section 21080.3.1, the Kizh Nation (Tribe) requested consultation with Orange County in regard to the Project, by letter dated August 25, 2023 (sent via email). On October 12, 2023, the OCWR sent the Tribe the cultural resource memo and maps of the Project prior to the meeting. Following the meeting request, representatives from the Tribe and staff from OCWR engaged in consultation via telephone conference on October 17, 2023. Based on meeting results, the Tribal representatives consider the Project site and Project pipeline route sensitive for tribal cultural resources, the Tribe stated they would provide documentation of their proposed tribal cultural resources mitigation measures via email.

Therefore, OCWR has requested that tribal cultural resource mitigation measures be included in this document in an effort to assist in the protection of tribal cultural resources. The proposed measures are included in Section 5.0, and it should be noted that they were developed in light of not having yet received the Tribe's written documentation. In the event of an inadvertent

discovery or during monitoring, the Tribe may have additional protocols beyond what is provided in Section 5 and such protocols should be considered for Tribal cultural resources.

3.6 SOCALGAS CONSULTATION

Due to interagency Project activities, OCWR initiated consultation with SoCalGas on November 24, 2023. SoCalGas archaeologist Tricia Dodds provided comments on December 14, 2023 regarding cultural resources mitigation measures. SoCalGas comments are incorporated in the cultural resource and tribal cultural resource mitigation measures in Section 5.0.

4.0 FIELD INVENTORY METHODOLOGY AND RESULTS

4.1 FIELD SURVEY METHODS

A Phase I Archaeological Field Survey for the Project site and pipeline route was conducted on September 26, 2023 and March 7, 2024, by Tetra Tech's Principal Archaeologist Jenna Farrell, MA, RPA, and Archaeological Field Technicians, Astrid Molina, BA, and Cris Crump, BA. The Project site was visually inspected and photographed. This area was not systematically surveyed with linear transects. Meandering transects in accessible areas and visual spot checks were conducted as the Project site mostly contained 30 percent (or more) steep slopes with areas of dense vegetation that was impassible. A portion of the northeast corner of the Project site appeared recently graded, and the much of the southeast portion contained an existing erosion control drainage system of concrete culverts. The recently graded exposed soils were examined. No cultural material was observed within the Project site. See Figure 4-1.

The proposed Project pipeline route is within the existing Bee Canyon Access Road right-of-way. The road and road shoulder are paved with graveled pull-out areas. This road supports heavy equipment (dump trucks) travel to and from the FRB Landfill, large trucks continuously travel the route every day. All Project work and laydown areas will be maintained within the existing road right-of-way. Since the Project pipeline route is within a paved road and shoulder, and not natural ground surface visible, a reconnaissance level windshield (visual inspection) survey was conducted of the road. Areas with visible ground surface were inspected on foot along the pipeline route.



Figure 4-1. Overview of Project site and examined area. recently graded area with exposed soils and continues downslope; b. concrete culvert drainage system; c. over 30 percent slopes. Photograph taken from near intersection of Bee Canyon Access Road and an unnamed driveway to the FRB Landfill office (view south, image 3413).

4.2 FIELD SURVEY RESULTS

The entire Project site and pipeline were examined via field survey in accessible areas and visually examined in built areas or inaccessible areas. No cultural resource material was observed. Three previously recorded archaeological sites were field checked and have been impacted by modern development (infrastructure: development of the landfill, roads, and erosion maintenance) and are no longer extant.

5.0 CONCLUSION AND RECOMMENDATIONS

The SCCIC record search identified three previously recorded archaeological sites. The three previously recorded sites were field checked and are no longer extant within the Project due to past infrastructure development. No cultural resource material was observed during the field survey. Based on the background research and field survey, all three sites were impacted and appear destroyed because of this disturbance, no longer retain their integrity, and are recommended not eligible to the CRHR.

The development of the FRB Landfill and associated infrastructure has disturbed the natural surface and subsurface deposits of the proposed Project pipeline route and a small portion of the Project site. Although these soils are disturbed, they may still contain cultural material important to the tribe. In addition, intact cultural material may exist within undisturbed deposits.

Therefore, the following cultural resource and tribal cultural resource mitigation measures are recommended:

Cultural Resource Mitigation Measures

CR-01: Environmental Training – Prior to construction of the Project, a Secretary of Interior qualified archaeologist shall be retained by Bowerman Power to serve as the Project Archaeologist. Cultural resource awareness training will be provided by the Project Archaeologist that includes all applicable laws and penalties pertaining to disturbing cultural resources, a brief discussion of the prehistoric and historic regional context and archaeological sensitivity of the area, types of cultural resources found in the area, and instruction that Project workers will halt construction if a cultural resource is inadvertently discovered during construction, and Project personnel contact information in the event of an inadvertent discovery.

CR-02: Archaeological Monitoring – A qualified Archaeological monitor acceptable to the OCWR shall be retained by Bowerman Power prior to Project related ground disturbance. The selection of the qualified professional(s) shall be subject to OCWR acceptance based on generally accepted professional qualifications and certifications, as applicable. A qualified Archaeological Monitor will have at least a BS or BA degree in anthropology, archaeology, historic archaeology, or a related field and previous monitoring experience. The monitors will conduct on-site daily archaeological monitoring of construction ground disturbance. The Archaeological monitor will provide daily documentation of construction activity and any findings. The Archaeological monitor will prepare a daily monitoring log and submit it daily to the Project Archaeologist via email, briefly describing the field conditions, construction progress and activities, non-compliance activities, and record any finds of archaeological material. A final report summarizing the monitoring activities will be prepared by the Project Archaeologist.

CR-03: Monitoring and Inadvertent Discovery Plan – Prior to the start of construction, a Secretary of Interior qualified Project Archaeologist (retained by Bowerman Power) shall prepare

a Monitoring and Inadvertent Discovery Plan (Plan) for the Project. The Plan will be submitted to OCWR for review and approval prior to the start of construction. The Plan shall include at a minimum:

- Overview of mitigation measures and responsibility for compliance,
- Project description of construction activities and maps,
- Description of relevant laws and regulations,
- Brief cultural context information and types and description of cultural resources that could be inadvertently discovered,
- Description of how monitoring shall occur,
- The roles and responsibility of the Archaeological Monitor (e.g., authority to halt construction for an inadvertent discovery, daily monitoring, daily reporting, etc.) and Project Archaeologist (e.g., oversee monitors, response to inadvertent discovery, final reporting, etc.),
- Description of protocols in the event of an inadvertent discovery (i.e., halt work) and notification procedures and contact list, and
- Description of final monitoring report.
- Stop work protocols in the event of an inadvertent discovery of cultural resources. If a cultural resource is encountered within the new SoCalGas pipeline route, halt work protocols will include notifying the SoCalGas Project Archaeologist Ryan Glenn or SoCalGas Archaeologist Tricia Dodds and OCWR Environmental Engineering Specialist, Weena Dalby. See contact information below. Do not relocate cultural resources without consulting with a SoCalGas Archaeologist.

Existing regulations require that if human remains and/or cultural items defined by Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and an exclusion zone buffer of at least 200 feet around the extent of the discovery will be demarked and protected, and the Orange County Sheriff-Coroner Office (714) 647-7400, will be contacted immediately. In addition, contact and notify SoCalGas Project Archaeologist Ryan Glenn (425) 213-2349 (cell) and RGlenn1@scgcontractor.com or SoCalGas Archeologist Tricia Dodds (213) 290-7449 (cell) and TDodds@socalgas.com, and OCWR Sr. Environmental Planner, Environmental Engineering Specialist, Weena Dalby (949) 262-2433 and Weena.Dalby@ocwr.ocgov.com of the discovery. Do not take any photos of human remains or associated items, treat the remains with respect, and do not discuss on social media sources (i.e., Facebook, TikTok, Instagram, etc.) or other outlets, and treat the man bone or associated burial items.

If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the coroner will contact the NAHC by telephone within 24 hours. The NAHC shall immediately notify the person it believes to be the Most Likely Descendent (MLD) as stipulated by California PRC, Section 5097.98. The MLD(s), with the permission of the landowner and/or authorized representative, shall inspect the site of the discovered remains and recommend treatment regarding the remains and any associated grave goods. The MLD shall complete their

inspection and make their recommendations within 48 hours of notification by the NAHC. Any discovery of human remains would be treated in accordance with Section 5097.98 of the PRC and Section 7050.5 of the Health and Safety Code.

Tribal Cultural Resource Mitigation Measures

TCR-01: Should evidence of human remains be discovered during project construction, the Orange County Coroner (OCC) shall be immediately notified of the discovery. Evidence of human remains requires mandatory compliance with the provisions of State Health and Safety Code Section 7050.5, which restricts further disturbance in the vicinity of the discovery, defined herein as a 50-foot radius, until the OCC has made a determination within two business days of the origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be Native American, the OCC shall notify the Native American Heritage Commission (NAHC) within 24 hours that remains have been discovered. The NAHC shall determine the identity of the Most Likely Descendant (MLD). The MLD shall complete the inspection of the remains within 48 hours of notification by the NAHC. In addition, per CR-02, SoCalGas Project Archaeologist Ryan Glenn (425) 213-2349 (cell) and RGlenn1@scgcontractor.com or SoCalGas Archaeologist Tricia Dodds (213) 290-7449 (cell) and TDodds@socalgas.com will be notified of the discovery.

TCR-02: If unanticipated tribal cultural resources or deposits are discovered during earth-moving activities, the following measures will be implemented:

- All work will halt within a 200-foot radius of the discovery. a qualified professional archaeologist will assess the significance of the find (if a tribal cultural monitor is not present). If the resources are Native American in origin, the OCWR shall coordinate with the Tribe regarding evaluation, treatment, curation and preservation of these resources. The archaeologist will have the authority to modify the no-work radius as appropriate, using professional judgment in consultation with OCWR. Work will not continue within the no-work radius until the archaeologist conducts sufficient research, evidence and data collection to establish that the resource is either: (1) not cultural in origin; or (2) not potentially eligible for listing on the California Register of Historical Resources.

TCR-03: Tribal Cultural Resource Monitor: Prior to the issuance of any grading permit in which soil would be disturbed, Montauk shall provide evidence in the form of an executed Agreement to OCWR that they have retained a qualified Native American tribal monitor to provide third-party monitoring during excavation and grading activities and to recover and catalogue tribal resources as necessary. The tribal monitor shall be from or approved by the Kizh Nation. The agreement shall include (i) professional qualifications for the tribal cultural resource monitor(s); (ii) detailed scope of services to be provided including but not limited to pre-construction education, observation, evaluation, protection, salvage, notification, and/or curation requirements, as applicable, with final documentation/monitoring report to OCWR, as applicable; (iii) contact information; (iv) communication protocols between Contractor and Tribal

Cultural Resource Monitor; (v) acknowledgment that if the Kizh Nation monitor is not available, Montauk or their contractor as designee may contract with another qualified tribal monitor acceptable to the OCWR. The selection of the qualified professional(s) shall be subject to OCWR acceptance based on generally accepted professional qualifications and certifications, as applicable. The cover sheet of the grading plans shall include a note to identify that third party tribal monitoring is required during excavation and grading activities in accordance with the OCWR Agreement.

6.0 REFERENCES

- Alden, P., F. Heath, R. Keen, A. Leventer, W. Zomlefer
1998 *National Audubon Society Field Guide to California*. Chanticleer Press Inc., New York.
- Bean, L.B. and C.R. Smith
1978 Gabrieliño. In California. *Handbook of North American Indians*, Vol. 8, pp. 538-549, edited by W.L. D'Azevedo. Smithsonian Institution, Washington, D.C.
- Bell, Ellen
2013 Orange County Register. James Irvine I Left Lasting Legacy in Orange County Electronic document, <https://www.ocregister.com/2013/02/08/james-irvine-i-left-lasting-legacy-in-orange-county/> (accessed November 2023).
- Brigandi, Phil
2019 OC Historyland. Electronic Document, <https://www.ochistoryland.com/yorbaranchos> (accessed November 2023).
- Bureau of Land Management (BLM)
2023 General Land Office Records. Electronic document, <https://gloreCORDS.blm.gov/details/patent/default.aspx?accession=CACAAA%20084539&docClass=SER&sid=yzfl3qlq.4ct> (accessed November 2023).
- Byrd, Brian F. and L. Mark Raab
2007 Prehistory of the Southern Bight: Models for a New Millennium. In California Prehistory: Colonization, Culture, and Complexity, edited by Terry L. Jones and Kathryn A. Klar, pp. 215-227. Altamira Press.
- California Department of Conservation, California Geological Survey
2002 California Geomorphic Provinces. Note 36.
- Chartkoff, Kerry, and Joseph L. Chartkoff
1984 *The Archaeology of California*. Stanford University Press. Stanford, California.
- Irvine Historical Society
2023 The Irvine Ranch History, Irvine, California. Electronic document, <https://irvinehistory.org/wp-content/uploads/2020/10/James-Irvine-II-turns-Irvine-into-Agriculture-Treasure.pdf> (accessed November 2023).
- Johnston, Bernice
1962 California's Gabrielino Indians. Southwest Museum, Los Angeles, California
- Kroeber, A.L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78 (accessed January 2020).
- Los Angeles Times
1987 The Evolution of Orange County. Electronic document, <https://www.latimes.com/archives/la-xpm-1987-11-14-li-5323-story.html> Accessed November 2023.
- McCawley, William
1996 The First Angelinos, The Gabrielino Indians of Los Angeles. Malki Museum Press, Morongo Indian Reservation., California.

- Moratto, Michael J.
1984 *California Archaeology*. Academic Press, San Diego.
- Morton, D. M.
2004 Preliminary Geologic Map of the Santa Ana 30' by 60' Quadrangle, Southern California, Version 2. U.S.G.S. Open-File Report 99-172. Prepared in cooperation with the California Geological Survey.
- Natural Resource Conservation Service (NRCS)
2023 Web Soil Survey. Electronic document,
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx> (accessed November 2023).
- Orange County
2012 Orange County General Plan. Electronic Document,
<https://ocds.ocpublicworks.com/service-areas/oc-development-services/planning-development/codes-and-regulations/general-plan> (accessed November 2023).
2023 Headline History Orange County 1889 to 1909. Electronic document,
<https://www.ocalmanac.com/History/hi01e.htm> (accessed November 2023).
- OC Waste and Recycling (OCWR)
2023 Frank R. Bowerman Landfill. Electronic document,
<https://oclandfills.com/landfills/frank-r-bowerman-landfill> (accessed November 2023).
- Office of Historic Preservation (OHP)
1990 Archaeological Resource Management Reports (ARMR): Recommended Contents and format. Electronic document,
<https://ohp.parks.ca.gov/pages/1054/files/armr-remediated.pdf> (accessed November 2023).
- Scientific Resource Surveys, Inc. (SRS)
1978 Archaeological, Paleontological and Historical Report on the Proposed Bee and Round Canyons Landfill Disposal Station Located in the County of Orange, California. Report OR-00253. On file at the SCCIC.
- Stickle, Gary E.
2016 *Why the Original Indian Tribe of the Greater Los Angeles Area is Called Kizh Not TONGVA*. Kizh Tribal Press, San Gabriel, California.
- Strong, Duncan
1987 *Aboriginal Society in Southern California*. Malki Museum Press, Morongo Indian Reservation, Banning California
- Tetra Tech, Inc.
2023 Biological Survey Report for the Bowerman Power Renewable Natural Gas Plant Frank R. Bowerman Landfill, Orange County, California.
- Wallace, W.J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology*. 11:214-230.
- Warren, C.N.
1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, editor C. Irwin-Williams, pp.

1-14. Eastern New Mexico University Contributions in Anthropology 1(3).
Portales.

Warren, C.N. and R.H. Crabtree

1986 Prehistory of the Southwestern Area. In Great Basin, *Handbook of North American Indians*. Vol. II., pp. 183-193. W. C. Sturtevant, general Editor. Smithsonian Institution, Washington, D.C.

APPENDIX A
NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE

NATIVE AMERICAN HERITAGE COMMISSION

August 21, 2023

Jenna Farrell
Tetra Tech, Inc.

Via Email to: jenna.farrell@tetratech.com

Re: Bowerman Landfill RNG Facility Project, Orange County

Dear Ms. Farrell:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

Attachment



CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Vacant

COMMISSIONER
Vacant

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

**Native American Heritage Commission
Native American Contact List
Orange County
8/21/2023**

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Gabrieleno Band of Mission Indians - Kizh Nation	N	Andrew Salas, Chairperson	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	8/18/2023
Gabrieleno Band of Mission Indians - Kizh Nation	N	Christina Swindall Martinez, Secretary	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	8/18/2023
Gabrieleno/Tongva San Gabriel Band of Mission Indians	N	Anthony Morales, Chairperson	P.O. Box 693 San Gabriel, CA, 91778	(626) 483-3564	(626) 286-1262	GTTribalCouncil@aol.com	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Ventura	
Gabrielino /Tongva Nation	N	Sandonne Goad, Chairperson	106 1/2 Judge John Aliso St., #231 Los Angeles, CA, 90012	(951) 807-0479		sgoad@gabrielino-tongva.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Ventura	3/28/2023
Gabrielino Tongva Indians of California Tribal Council	N	Robert Dorame, Chairperson	P.O. Box 490 Bellflower, CA, 90707	(562) 761-6417	(562) 761-6417	gtongva@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	3/16/2023
Gabrielino Tongva Indians of California Tribal Council	N	Christina Conley, Cultural Resource Administrator	P.O. Box 941078 Simi Valley, CA, 93094	(626) 407-8761		christina.marsden@alumni.usc.edu	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	3/16/2023
Gabrielino-Tongva Tribe	N	Sam Durlap, Cultural Resource Director	P.O. Box 3919 Seal Beach, CA, 90740	(909) 262-9351		tongvatcr@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Ventura	5/30/2023
Gabrielino-Tongva Tribe	N	Charles Alvarez, Chairperson	23454 Vanowen Street West Hills, CA, 91307	(310) 403-6048		Chavez1956metro@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Ventura	5/30/2023
Juanero Band of Mission Indians Acjachemen Nation - Belardes	N	Joyce Perry, Cultural Resource Director	4955 Paseo Segovia Irvine, CA, 92603	(949) 293-8522		kaamalam@gmail.com	Juaneno	Los Angeles, Orange, Riverside, San Bernardino, San Diego	3/17/2023
Juanero Band of Mission Indians Acjachemen Nation 84A	N	Heidi Lucero, Chairperson, THPO	31411-A La Mataranza Street San Juan Capistrano, CA, 92675	(562) 879-2884		jbmian.chaiwoman@gmail.com	Juaneno	Los Angeles, Orange, Riverside, San Bernardino, San Diego	3/28/2023
Pala Band of Mission Indians	F	Shasta Gaughen, Tribal Historic Preservation Officer	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3515	(760) 742-3189	sgaughen@palatibe.com	Cupeno Luiseno	Orange, Riverside, San Bernardino, San Diego	3/23/2023
Pala Band of Mission Indians	F	Alexis Wallick, Assistant THPO	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3537		awallick@palatibe.com	Cupeno Luiseno	Orange, Riverside, San Bernardino, San Diego	3/23/2023
Santa Rosa Band of Cahuilla Indians	F	Lovina Redner, Tribal Chair	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	lsaul@santarosa-nsn.gov	Cahuilla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	
Soboba Band of Luiseno Indians	F	Joseph Ontiveros, Tribal Historic Preservation Officer	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-5279	(951) 654-4198	jointveros@soboba-nsn.gov	Cahuilla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	7/14/2023
Soboba Band of Luiseno Indians	F	Jessica Valdez, Cultural Resource Specialist	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-6261	(951) 654-4198	jvaldez@soboba-nsn.gov	Cahuilla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	7/14/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Bowerman Landfill RNG Facility Project, Orange County.

Record: PROJ-2023-004162
Report Type: List of Tribes
Counties: Orange
NANC Group: All