

**OTAY HILLS CONSTRUCTION AGGREGATE AND INERT
DEBRIS ENGINEERED FILL OPERATION PROJECT**

APPENDIX K

CONCEPTUAL FIRE PROTECTION PLAN

for the

**PUBLIC REVIEW
DRAFT ENVIRONMENTAL IMPACT REPORT**

PDS2004-3300-04-004 (MUP);
PDS2004-3310-04-001 (RP);
PDS2010-3813-10-002 (SPA);
LOG No. 04-190-04

JUNE 2020

Prepared for:

COUNTY OF SAN DIEGO
PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310
SAN DIEGO, CALIFORNIA 92123



Environmental & Mine Permitting Services

February 12, 2020

County of San Diego
Planning & Development Services
5510 Overland Avenue, Suite 110
San Diego, CA 92123

San Diego County Fire Authority
5510 Overland Avenue, Suite 250
San Diego, CA 92123

SUBJECT: FIRE PROTECTION PLAN - LETTER REPORT
Otay Hills Construction Aggregate & IDEFO Project
PDS2004-3300-04-004 (MUP), PDS2004-3310-04-001 (RP),
PDS2010-3813-10-002 (SPA)
APNs 648-050-13, 14, 648-080-13, 14, 25, 648-040-39, 40, 55

This Fire Protection Plan (FPP) - Letter Report is submitted pursuant to Chapter 49 of the County Consolidated Fire Code, to address the adverse environmental effects that a proposed project may have from wildland fire and to provide mitigation of those impacts to ensure that the project does not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

1. PROJECT DESCRIPTION:

This is the Conceptual Fire Protection/Vegetation Management Plan for the Otay Hills Quarry project in Otay Mesa, California. The project is being processed by the County of San Diego under the following project numbers: PDS2004-3300-04-004 (MUP), PDS2004-3310-04-001 (RP), PDS2010-3813-10-002 (SPA). This plan is required by the San Diego County Fire Authority (SDCFA) and the County of San Diego Planning and Development Services (PDS). The plan was prepared by Travis A. Jokerst, EnviroMINE, with assistance from Gerald G. Coalson, Fire Captain (Ret.), CA Department of Forestry and Fire. The scope of the plan is limited to addressing and pursuing mitigation of the wildland fire threat to and from a structure, compliance with Chapter 49 of the Fire Code; "Fire Protection Plan; Urban-Wildland Interface areas" and the requirements of the SDCFA and the PDS. Any recommendations are subject to any legal environmental, cultural or resource laws or constraints, and the plan is subject to approval of the SDCFA and the PDS.

This project is within the San Diego County Fire Authority. The site will be used as a rock quarry for construction aggregates and as an Inert Debris Engineered Fill Operation (IDEFO). Approximately 105 acres of vegetation will be cleared for quarry operations, therefore decreasing fire risk. Structures on the site will consist of mining and processing equipment, lab, equipment maintenance shop, and a modular office trailer. As shown on the map in Appendix C, the office will be located near a property line shared by neighboring land that is already developed. Other inhabited structures would include an equipment maintenance shop (10,330 SF) and lab (1,000 SF). The equipment maintenance shop will consist of metal-sided or concrete tilt up construction and will include large roll-up doors. Therefore, the shop will not be fully enclosed during regular business hours. The lab will be used for various materials testing for the duration of the operation and will include fire sprinklers. An SDG&E access road (14'-wide decomposed granite) would be located between the lab and the eastern project boundary. Existing vegetation near the proposed trailer and processing equipment will be cleared in preparation of mining activity. As such, a buffer will surround the proposed structures. Therefore, it is unlikely that a vegetation fire would affect structures on the site and a spread model will not be necessary for the project.

The project is a proposal to establish a mineral resource recovery operation and associated activities to create much needed construction aggregates and materials.

During and after mineral resource recovery operations, the open pit will serve as a receiver site for inert debris such as concrete, asphalt, rock, and soil. Anticipated operations at the site will include phased recovery of rock resources, materials processing, recycling of concrete and asphalt products, a concrete batch plant, a cement treated base plant, an asphalt batch plant, and an Inert Debris Engineered Fill Operation (IDEFO). A modular trailer will be used as an office on the site. Refer to the project phasing map for information about the size of the equipment and office trailer. The proposed project would be located on relatively undisturbed lands at the extreme eastern end of Otay Mesa. Mitigation requirements for habitat disturbance will be determined through the environmental review process. It is anticipated that mitigation will be in the form of habitat conservation and reclamation on, or adjacent to the project site.

There are no plans to subdivide the property and there will be no residences constructed on the site.

Closest SDCFA fire station is Station 43, 150 La Media Road.

Closest public water supply system is approximately 500 feet from the proposed plant.

2. ENVIRONMENTAL SETTING:

Location

The Otay Hills property is located in portions of Sections 29 and 32, Township 18 South, Range 1 East, San Diego County, California. The site is located at the eastern extension of Otay Mesa on the southwestern flank of the San Ysidro Mountains. The site is 2.5 miles northeast of the Otay Mesa Border Crossing and 8.5 miles east of the Interstate

805/905 interchange. The extractive operations area consists of 105 acres and it includes portions of 8 irregularly shaped parcels.

Access to the site is gained from Interstate 805 by turning east on to Interstate 905/Otay Mesa Road. Follow Otay Mesa Road for approximately 4 miles to the intersection with Otay Mesa Road and Highway 905, where the highway turns to the south. Turning left (north), Otay Mesa Road then turns east again and continues approximately 1.5 miles where it intersects with and terminates at Alta Road. Turning north for approximately

Topography

Topography at the site is generally hilly and steep. Slopes vary from near 40% at the eastern side of the property to less than 15% in the center of Phase 1. Elevations range from 800 feet above sea level at the extreme eastern side of the site to 570 feet above sea level at the southern end of the site. Hills are separated by steep but generally shallow canyons.

Geology

The project site is located in the western portion of the Peninsular Ranges batholith. The Peninsular Ranges batholith extends from the Santa Ana Mountains southward through San Diego County, into Baja California. Rock types within the batholith are generally pre-batholithic, volcanic and metavolcanic rocks in the western portion; to metasedimentary rocks in the eastern portion.

The property is underlain by Jurassic-aged Santiago Peak Volcanics, which is proposed to be the primary source of aggregates, and alluvial deposits. The Santiago Peak Formation is mostly volcanic and ranges in composition from basalt to rhyolite but is predominantly dacite and andesite. The succession also includes a wide variety of breccia, agglomerate, volcanic conglomerate, fine-grained tuff and tuff breccia. Highly silicified rock, probably tuff, and a variety of dark, dense, fine-grained hornfels occur locally.

The metavolcanic rocks onsite belong to a group called ignimbrites, which formed from superheated volcanic ash and steam. Typically, these rocks are very hard; however, local faulting and subsequent jointing and fracturing have reduced their massivity. The Tertiary-aged Otay Formation is exposed along the western flank of the site. Here, this nonmarine sedimentary formation overlies the Santiago Peak Formation as a narrow wedge, which grows in depth as it extends to the west. This formation is composed of light-gray and light-brown, moderately well-sorted, poorly indurated, massive sandstone and claystone. The sandstone is locally cemented but generally it is weakly cemented. The claystone is waxy and composed almost exclusively of bentonite. The exposed part of the Otay Formation has been correlated with the Miocene-Pliocene Las Glorias Member of the Rosarito Beach Formation in Baja California (Kennedy, 1973). The topographic expression developed on these beds is rolling and subdued.

Flammable Vegetation on Site

Vegetation is primarily chaparral that has recovered from two large wild land fires. One of these fires occurred in the late 1990's and another, the "Otay Fire"; Oct. 26, 2003; 43,000 acres. The result is chaparral generally under 6 feet in height and widely spaced.

Biological surveys also identified seven sensitive vegetation communities on the proposed site. These communities are mule fat scrub, cismontane alkali marsh, native grassland, Diegan coastal sage scrub (including disturbed), chamise chaparral, southern mixed chaparral, and non-native grassland. Of these habitats, Diegan coastal sage scrub is dominant on the project site. Typical species found within DCSS habitat include California sagebrush, lemonadeberry, California buckwheat, and laurel sumac. The biological habitats are in a recovery phase from a fire that swept through the majority of the site in the late 1990s. There are also some areas of disturbed habitat due to existing dirt roads that are used by off-road vehicles.

Within the seven vegetation communities identified on the site, a number of sensitive species were identified and mapped. One federally listed threatened and state listed endangered plant species, Otay tarplant was observed on the proposed site. Also, the variegated dudleya, San Diego goldenstar, San Diego barrel cactus, San Diego marshelder, Tecate cypress, San Diego needlegrass, western dichondra, southwestern spiny rush, San Diego viguiera, and ashy spike-moss species exist in the project area and are considered Species of Special Concern. These eleven species are listed as sensitive plant species by the County's Biological Mitigation Ordinance (BMO).

Climate

Santa Ana conditions are common and are likely the most extreme fire weather to be encountered in this area. These conditions are characterized by low humidity, warm temperatures and high winds, generally from the north or east. Santa Ana conditions are caused by an arrangement of high pressure zones over the deserts of Nevada, Utah and/or Arizona and frequently (but not always) a low pressure zone over the near Pacific. Fires occurring under these conditions are propelled by low fuel moistures and high winds. They will most often spread to the south or west.

3. PROJECT EXPOSURE TO WILDLAND FIRES:

Water Supply

Water will be supplied to this site by Otay Water District (See attached Service Availability Form). Some of the portable equipment, such as the recycle plant, primary crusher, and stockpiles, will move about the site as the project progresses, and therefore, a hydrant will only be required at the nearest intersection to the site. If other hydrants are required, their location(s) will be determined at a later time. Fire hydrants shall be of an approved type and have one 4" outlet and one 2.5" outlet, unless otherwise specified by Fire Chief. Fire hydrants will have a 3' by 3' gravel (for dry barrel hydrant) or concrete

pad at base for weed control. Reflective blue dot hydrant markers will be located in the center of the road to indicate location of a hydrant.

The required Fire Hydrants shall be installed and operable prior to introduction of combustible material on site. Hydrants shall be located along fire access roadways as determined by the Fire Marshal to meet operational needs, at intersections, at cul-de-sacs, and at intervals pursuant to the County and Consolidated Fire Code. Required fireflow in water main is 2500 gallons per minute.

Fire Access Roads

Access roads will comply with the California Fire Code, County Fire Code and County Consolidated Fire Code, and will be provided when the closest exterior wall of the first floor of any structure is beyond 150' from the closest Fire Department vehicle access. All fire apparatus access roads are to be a minimum of 24 feet wide and should be all weather and meet RFPD and PDS requirements for fire access. Access roads shall be in and usable before combustible construction occurs on site. There shall be no overhanging canopies. There shall be no road grades over 15%, unless approved by Fire Chief and mitigated (20% max). Dead end access roads beyond 150' will have an approved turnaround. Angle of departure and approach to be approved by Fire Chief (Fire Code maximum=7 degrees).

- A. Automatic gates will comply with the Fire Code. All roads will have 10' to 30' clearance of flammable vegetation on each side.
- B. All gates on access roads will have KNOX (or equivalent) emergency key operated switches overriding all command functions and opening the gate. Gates to be to SDCFA and PDS approval. The key switch shall be dual keyed or have dual switches to allow law enforcement access.
- C. Additional access, remote from the primary access, will be provided as required by the Fire Code, based on parcel size, unless waived by the Fire Chief.

Fire Code maximum length thresholds for dead-end roads:

Parcels zones less than 1 acre	800'
Parcels zoned for 1 acre to 4.99 acres	1,320'
Parcels zoned for 5 acres to 19.99 acres	2,640'
Parcels zoned for 20 acres or larger	5,280'

Setback from Property Lines

The minimum setback from any property line in high hazard areas is 30 feet. The proposed structures for this project would comply with this requirement.

Building Construction

Building construction at the site must comply with the County Fire Code and County Consolidated Fire Code. Also, all structures shall comply with the ignition-resistive construction requirements: Wildland-Urban Interface areas of Chapter 7A of the County Building Code. However, the site will not be used for residential purposes and the construction of permanent buildings is not proposed. The structures that will be used at the site consist of a modular office trailer, equipment maintenance shop and lab, and aggregate processing equipment. All temporary and permanent buildings will comply with Chapter 7A of the County Building Code.

Fire Protection Systems

All structures greater than 500 square feet will be equipped with automatic fire sprinkler systems designed and installed per the appropriate National Fire Protection Association (NFPA) standard. All earthmoving equipment working in proximity of vegetation are to have at a minimum one multi-purpose (2A:10B:C) fire extinguisher installed on the equipment.

Defensible Space

A minimum 100-foot Fuel Management Zone will be established and maintained around all inhabited structures. No off-site clearing is required or authorized. Existing vegetation adjacent to the proposed trailer and processing equipment will be cleared in preparation of mining activity. A buffer, or vegetation management zone, will surround all inhabited structures. Therefore, it is unlikely that a vegetation fire would affect structures. The vegetation management zone will begin at the structures and extend out on all sides to the unmodified vegetation. There shall also be a vegetation management zone around retention basins that are within the project site. Vegetation management zones must be installed at the time of construction and shall be maintained annually, prior to May 1, on an ongoing basis.

Vegetation Management

Prescribed Defensible Space (fuel management zones) will be maintained by the property owners at least annually or more often as needed. Boundaries of fuel management zones will be clearly and permanently marked. Plants used in the Defensible Space will be from an approved fire resistant planting materials list that is maintained by County of San Diego, Planning and Development Services.

Fire Behavior Computer Modeling

Based on preliminary evaluation by the County Fire Marshal, Computer Fire Behavior Modeling is not required for this FPP – Letter Report.

(To Be Signed Upon Approval)

Travis A. Jokerst, Project Manager, EnviroMINE

Prepared By (Signature)

Printed Name

Title

(To Be Signed Upon Approval)

Arnold Veldkamp, Superior Ready Mix Concrete

Property Owner (Signature)

Printed Name

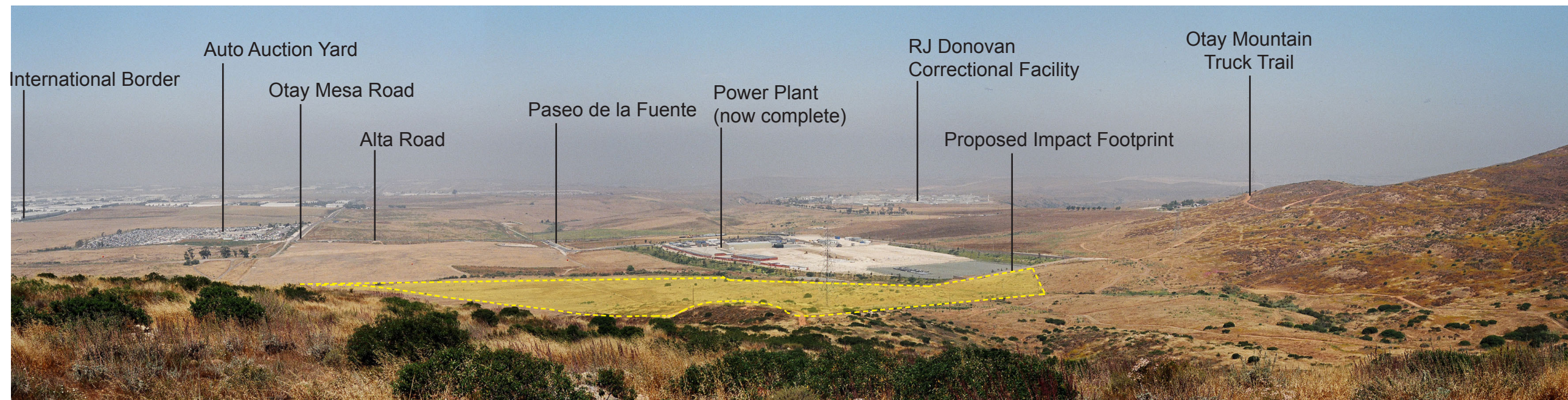
APPENDIX:

- A. Photo of site
- B. Site Plan/ Tract map
- C. Vegetation Management zone drawing
- D. Service Availability Form - Water

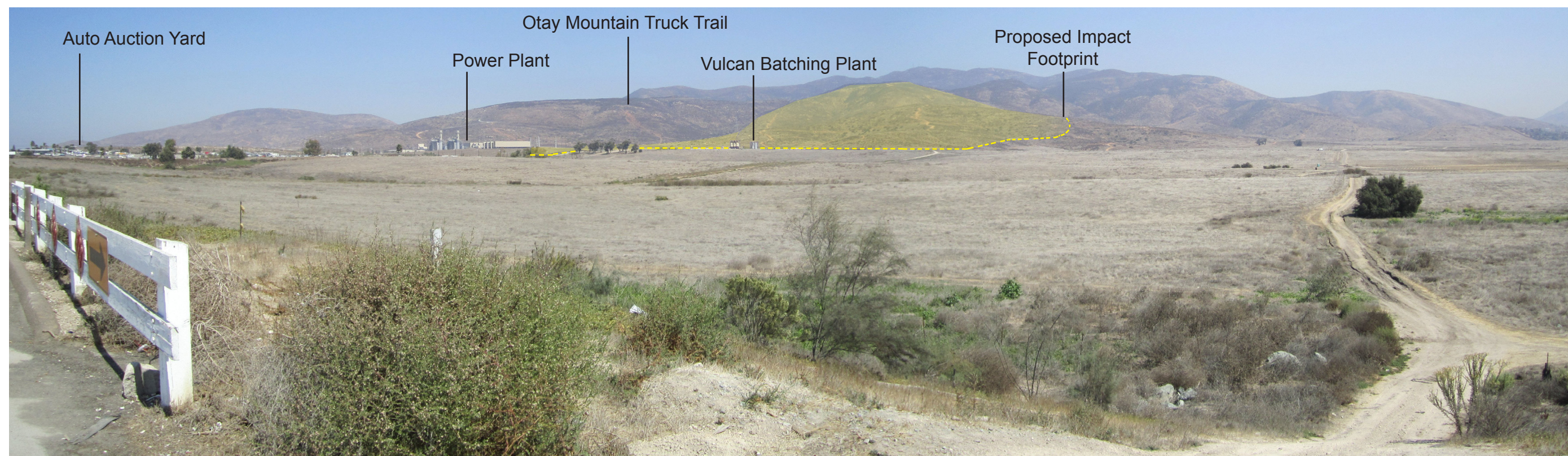
Appendix A

Photos of Site

(Visual/Community Character Analysis - Helix Environmental Planning)



Typical View 1: View westward from a hill abutting the project impact footprint. Terrain between viewpoint and project impact footprint would be in permanent open space. (2005)



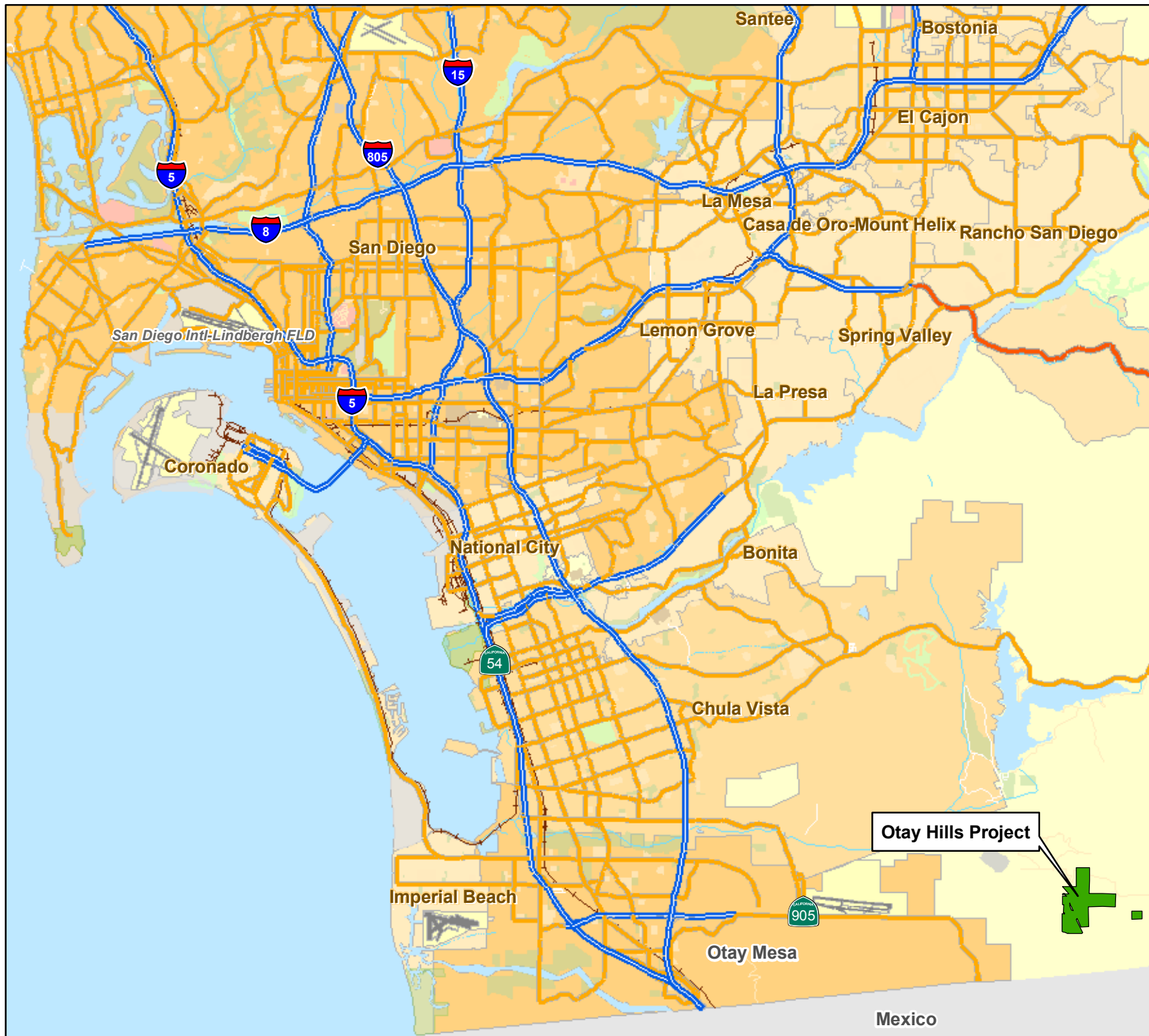
Typical View 2: View northeast toward the project impact footprint from the eastern terminus of Airway Road showing grasslands and mountains. (2011)

I:\Gis\SRM-01 Mining\Maps\VISUAL\Fig11_TypicalViews.indd -RK

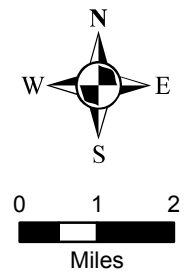
Typical Views

OTAY HILLS VISUAL/COMMUNITY CHARACTER ANALYSIS

Appendix B
Site Plan

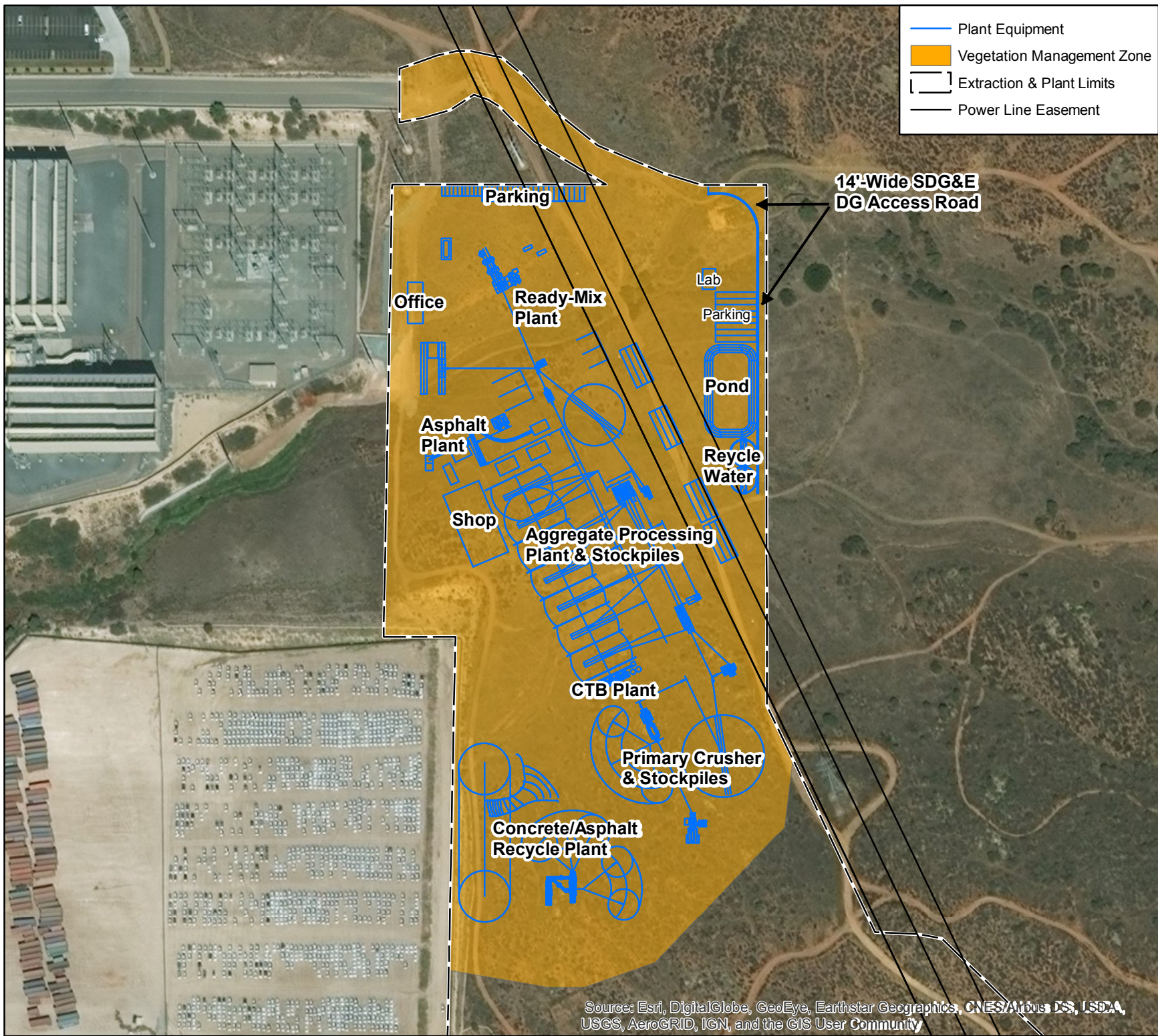


**Figure 1
Otay Hills
Project
Regional
Location
Map**

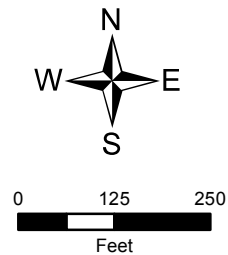


Otay Hills Project

Appendix C
Vegetation Management Zone Drawing



Vegetation Management Zones



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix D
Service Availability Form - Water



County of San Diego, Planning & Development Services
PROJECT FACILITY AVAILABILITY - WATER
ZONING DIVISION

Please type or use pen		ORG _____		W
Superior Ready Mix Concrete, LP (760) 745-0556		ACCT _____		
Owner's Name Phone		ACT _____		
1508 W. Mission Road		TASK _____		
Owner's Mailing Address Street		DATE _____		
Escondido,	CA 92029	AMT \$ <u>75.00</u>		
City State Zip	DISTRICT CASHIER'S USE ONLY			

SECTION 1. PROJECT DESCRIPTION

TO BE COMPLETED BY APPLICANT

- A. ☐ Major Subdivision (TM) ☒ Specific Plan or Specific Plan Amendment
☐ Minor Subdivision (TPM) ☐ Certificate of Compliance: _____
☐ Boundary Adjustment
☐ Rezone (Reclassification) from _____ to _____ zone.
☒ Major Use Permit (MUP), purpose: Rock Quarry
☐ Time Extension... Case No. _____
☐ Expired Map... Case No. _____
☒ Other Reclamation Plan
- B. ☐ Residential Total number of dwelling units _____
☐ Commercial Gross floor area _____
☒ Industrial Gross floor area N/A
☐ Other Gross floor area _____
- C. ☒ Total Project acreage 105 Total number of lots 8
- D. Is the project proposing the use of groundwater? ☐ Yes ☒ No
Is the project proposing the use of reclaimed water? ☐ Yes ☒ No

Assessor's Parcel Number(s)
(Add extra if necessary)

648-050-13, -14	
648-080-13, -14, and -25	
648-040-39, -40, and -55	

Thomas Guide Page 1352 Grid E2
Eastern extent of Calzada De La Fuente, E. Otay Mesa
Project address Street
Otay
Community Planning Area/Subregion Zip

Owner/Applicant agrees to pay all necessary construction costs, dedicate all district required easements to extend service to the project and
COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: T. Arias Date: 12/17/2019
Address: 3511 Camino Del Rio South, Suite 403, San Diego, CA 92108 Phone: (619) 284-8515

(On completion of above, present to the district that provides water protection to complete Section 2 below.)

SECTION 2: FACILITY AVAILABILITY

TO BE COMPLETED BY DISTRICT

- District Name: OTAY WATER DISTRICT Service area: WATER I.D. 22
- A. ☒ Project is in the district.
☐ Project is not in the district but is within its Sphere of Influence boundary, owner must apply for annexation.
☐ Project is not in the district and is not within its Sphere of Influence boundary.
☐ The project is not located entirely within the district and a potential boundary issue exists with the _____ District.
- B. ☒ Facilities to serve the project ☒ ARE ☐ ARE NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the district. Explain in space below or on attached _____. (Number of sheets)
☐ Project will not be served for the following reason(s): _____
- C. ☒ District conditions are attached. Number of sheets attached: 10
☐ District has specific water reclamation conditions which are attached. Number of sheets attached: _____
☐ District will submit conditions at a later date.
- D. ☒ How far will the pipeline(s) have to be extended to serve the project? PROJECT CAN CONNECT TO EXISTING MAIN ON CALZADA DE LA FUENTE & ACCESS ROAD

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

Authorized Signature: Raise Arias Print Name Raise Arias
Print Title PERMIT TECH. Phone 619-670-4224 Date 1/15/20

NOTE: THIS DOCUMENT IS NOT A COMMITMENT OF SERVICE OR FACILITIES BY THE DISTRICT

On completion of Section 2 and 3 by the District, applicant is to submit this form with application to:
Planning & Development Services - Zoning Counter, 5510 Overland Ave, Suite 110, San Diego, CA 92123



PDS-399W (Rev. 09/21/2012)

THIS APPROVAL OF AVAILABILITY IS
SUBJECT TO ALL OTAY WATER DISTRICT
REQUIREMENTS IN EFFECT AT THE TIME OF
APPLICATION FOR SERVICE.