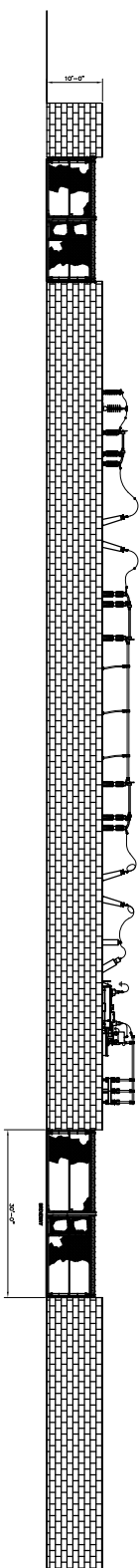
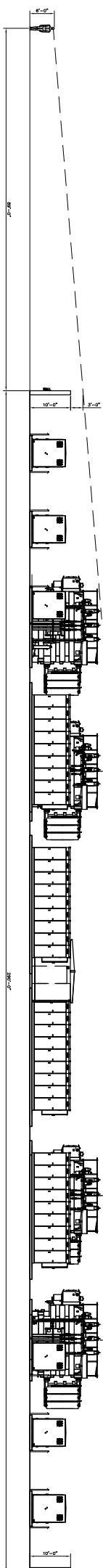
Oct 14, 2016 - 10:12:35

[illegible]

HOLE COORDS (INCHES)	
X-COORD	Y-COORD
27.50	0.00
19.45	19.45
0.00	27.50

NOTES:

1. BASE PLATE THICKNESS = 2.250"
2. BASE PLATE ALLOWABLE STRESS (KSI) = 50
3. ANGLES ARE MEASURED CLOCKWISE FROM 0 DEGREES
4. MAXIMUM BOLT CIRCLE DIAMETER = 55.00"
5. MAXIMUM GAGE TEMPLATE DIAMETER = 61.00"

BASE PLATE / ANCHORAGE CHARACTERISTICS

MAR 28 2014

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER W. BUNKER
C80841
EXP. 3-31-15
CIVIL
STATE OF CALIFORNIA

<u>ORDER</u>	<u>PROJECT</u>	<u>FILE ID</u>	<u>SCALE</u>	<u>DATE</u>	<u>ENGR</u>	valmont 
250024	250024	40ft_pol	NONE	03/20/14	CWB1	
DESCRIPTION BLACK & VEATCH 40' POLE, SITE: STANDARD 40FT MONOPOLE, SAN DIEGO, CA						

40'- 0.00"

39'- 0.00"

35'- 0.00"

31'- 0.00"

4'- 0.00"

0'- 0.00"
(TOP OF BASE PLATE)

1

2

3

4

5

6

7

SECTION INFORMATION					
ITEM ID	LENGTH	BASE OD	TOP OD	THK	MATL
1	40'- 0.00"	48.00"	36.00"	0.375"	50 KSI

REVISIONS

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

PRELIMINARY DESIGN

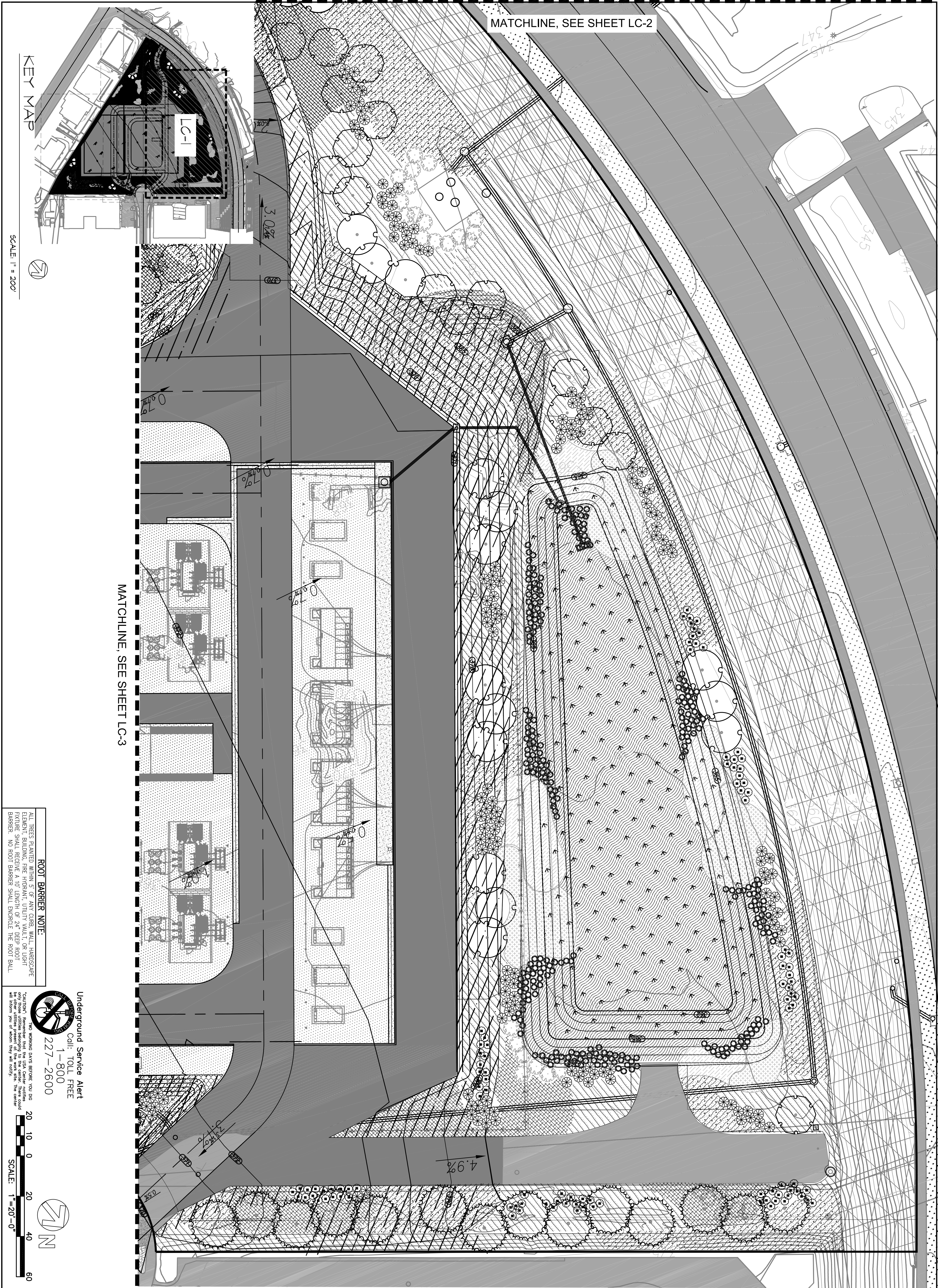
COMMUNICATION MONOPOLE ELEVATION

DRAWN BY: AMJ	DATE: 11/3/13	SCALE: NONE	W.O.: ---
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APPROVED BY:	DATE:	
CAD NO.: LPS805	PLOT SCALE:	1 = 1

CP-3-603

Oct 14, 2013 - 16:35:08



MATCHLINE, SEE SHEET LC-2

MATCHLINE, SEE SHEET LC-3

KEY MAP

SCALE: 1" = 200'

ROOT BARRIER NOTE:

ALL TREES PLANTED WITHIN 5' OF ANY CURB, WALL, HATCHESCAPE ELEMENT, BUILDING, FIRE HYDRANT, UTILITY VAULT, OR LIGHT FIXTURE SHALL RECEIVE A 10' LENGTH OF 24" DEEP ROOT BARRIER. NO ROOT BARRIER SHALL ENCRIRCLE THE ROOT BALL.



Underground Service Alert
Call: TOLL FREE
1-800
227-2600

"CAUTION": Two working days before, you dig only those utilities belonging to the center. There could be other utilities in the area. The center will show you of when they will notify.

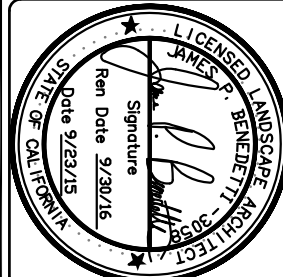


SCALE: 1" = 20'-0"

1ST SUBMITTAL
XX/XX/XX

REVISIONS

OCEAN RANCH SUBSTATION
ROCKY POINT DRIVE
OCEANSIDE, CA 92056
APN 161-512-2600 & 161-512-2700



JPBLA

JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE., SUITE 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Sheet Title:
LANDSCAPE
CONCEPT
PLAN

Job No.:
2015-31

Date:
12/3/15

Reviewed By:
JPB

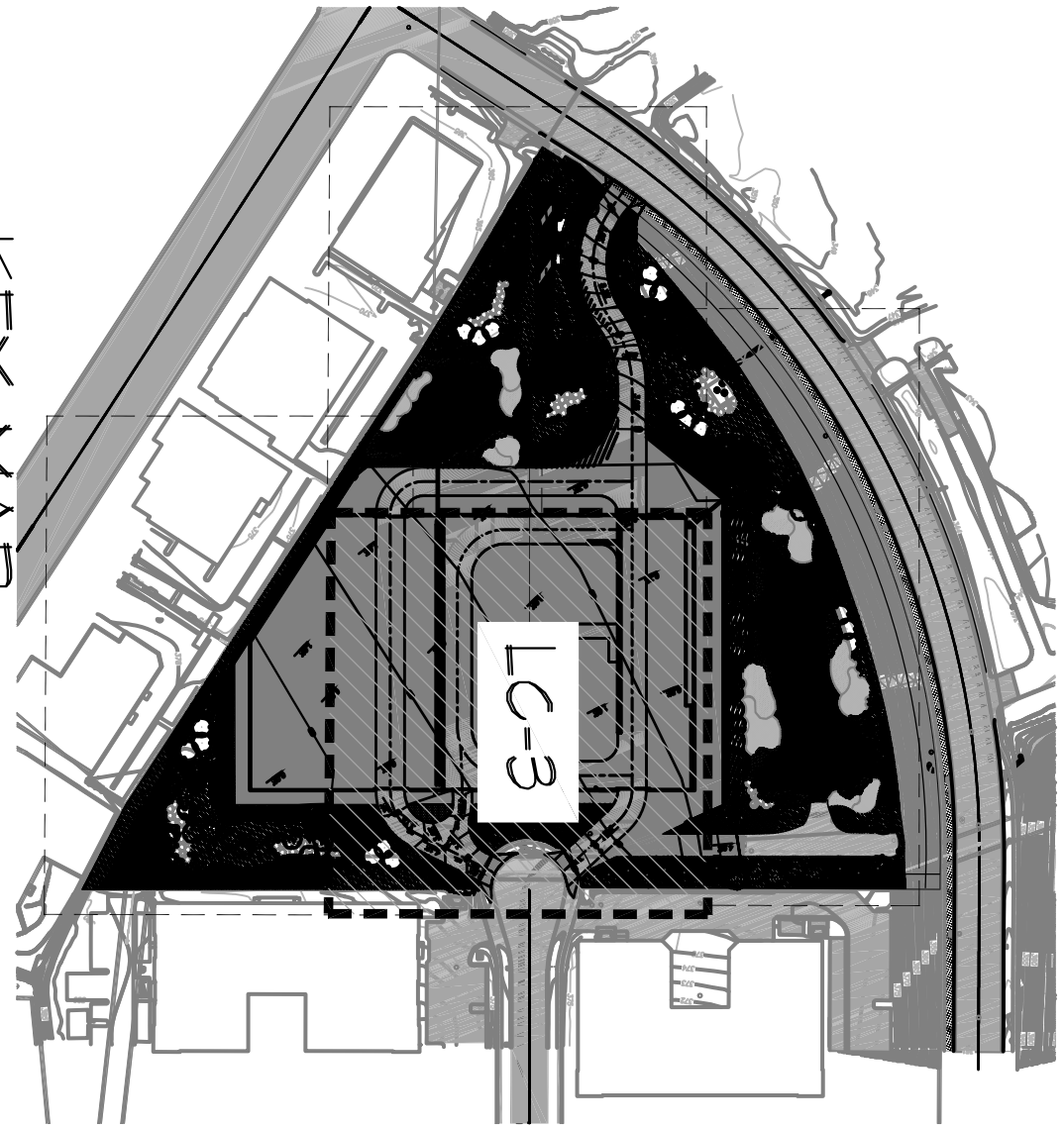
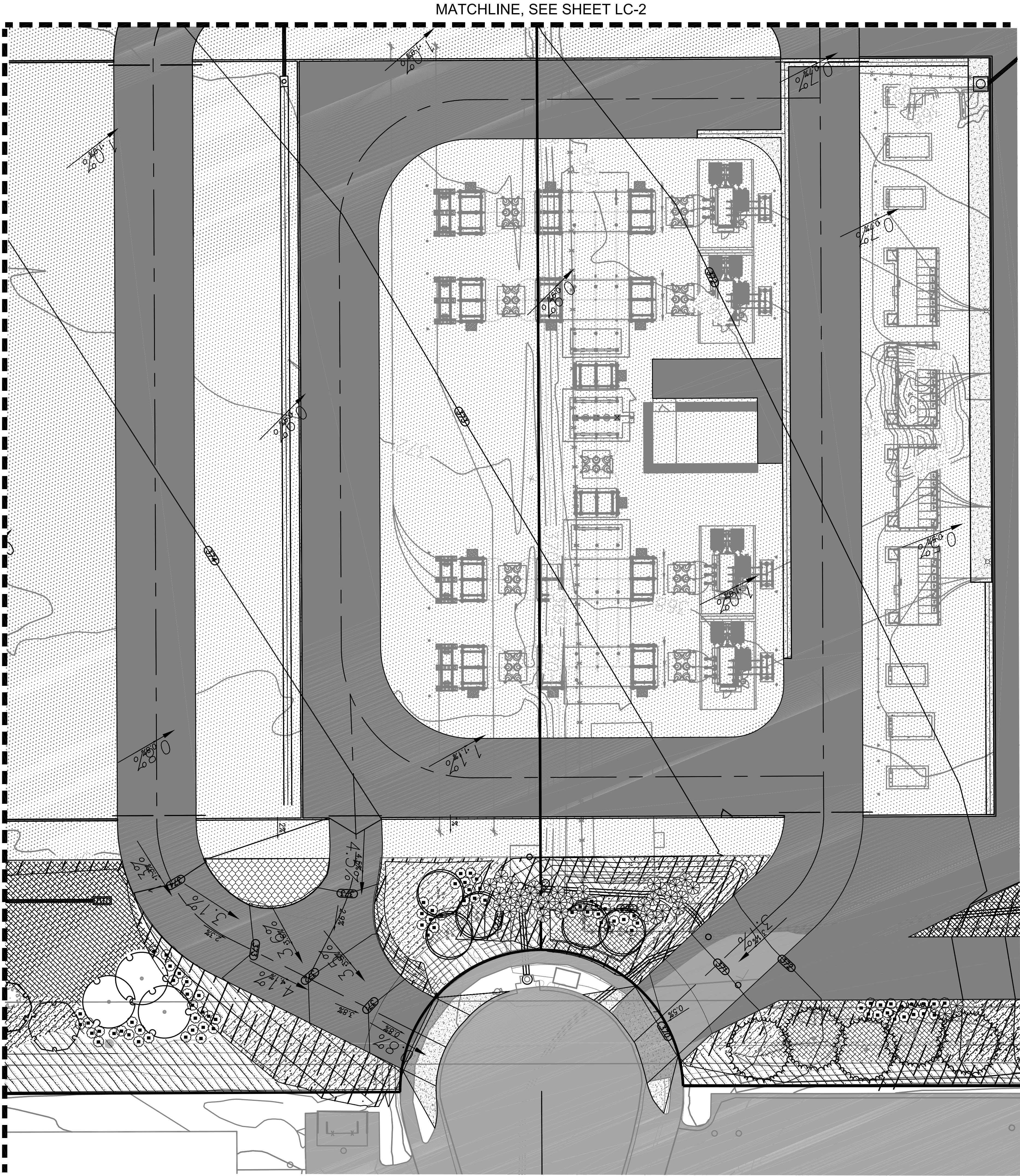
Drawn:
KCK

Phase:

Sheet:

LC-1

Of 4 Sheets



KEY MAP

SCALE: 1" = 200'



MATCHLINE, SEE SHEET LC-4

ROOT BARRIER NOTE:

ALL TREES PLANTED WITHIN 5' OF ANY CURB, WALL, HARDSCAPE ELEMENT, BUILDING, FIRE HYDRANT, UTILITY VAULT, OR LIGHT FIXTURE SHALL RECEIVE A 10' LENGTH OF 24" DEEP ROOT BARRIER. NO ROOT BARRIER SHALL ENCOPILE THE ROOT BALL.

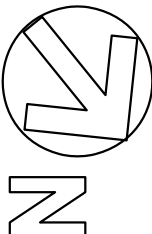


Underground Service Alert
Call: TOLL FREE
1-800
227-2600

TWO WORKING DAYS BEFORE YOU DIG
"CAUTION" markers shall be placed around the perimeter of the excavation. These markers shall be placed at the center of the excavation. The center of the excavation shall be marked with a flag. The center of the excavation shall be marked with a flag.



SCALE: 1"=20'-0"



REVISIONS

1ST SUBMITTAL
XX/XX/XX

Phase:

Date: 12/3/15

Reviewed By: JPB

Drawn: KOK

Job No.: 2015-31

Sheet Title:
LANDSCAPE
CONCEPT
PLAN

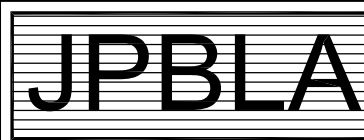
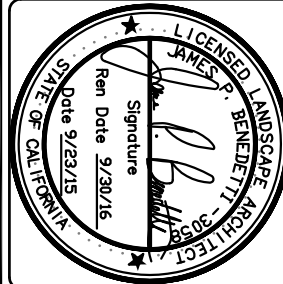
Sheet:

LC-3

Of 4 Sheets

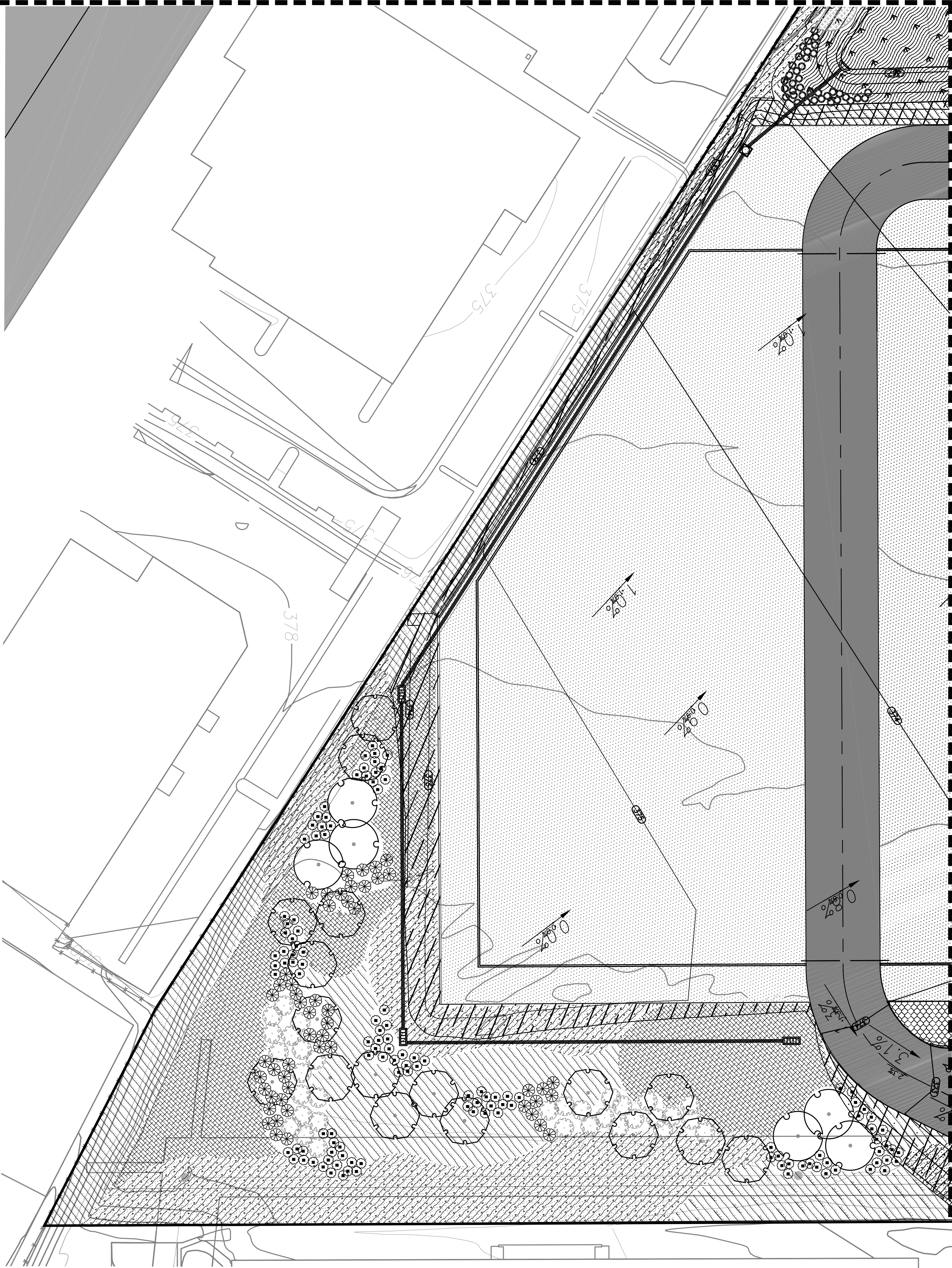
OCEAN RANCH SUBSTATION
ROCKY POINT DRIVE
OCEANSIDE, CA 92056
APN 161-512-2600 & 161-512-2700

It is the responsibility of the landscape architect to ensure that the landscape design is in accordance with the applicable codes and standards. The landscape architect shall be responsible for the design and construction of the landscape. The landscape architect shall be responsible for the design and construction of the landscape.

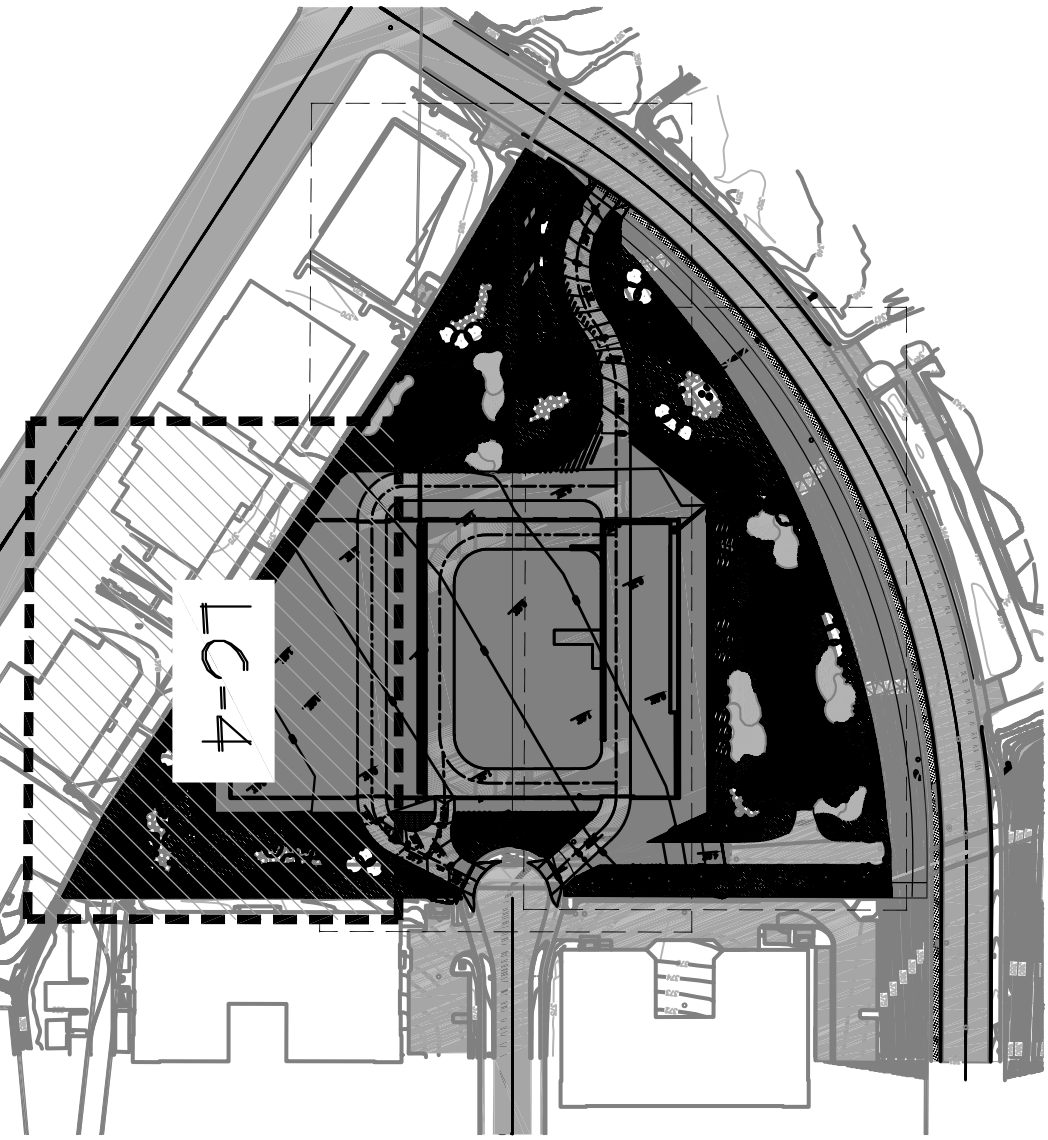


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ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

MATCHLINE, SEE SHEET LC-3



MATCHLINE, SEE SHEET LC-2



KEY MAP

SCALE: 1" = 200'



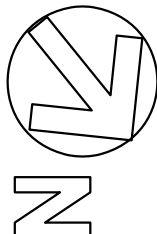
ROOT BARRIER NOTE:

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Underground Service Alert
Call: TOLL FREE
1-800-227-2600

"CAUTION" Two working days before you dig only those utilities belonging to the center. There could be other utilities in the area that you are not shown on the map. Dig with caution.

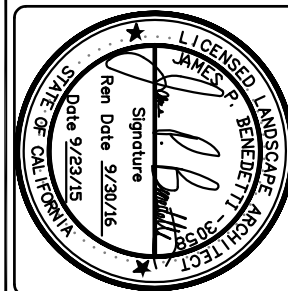


Sheet: LC-4

1ST SUBMITTAL
XX/XX/XX

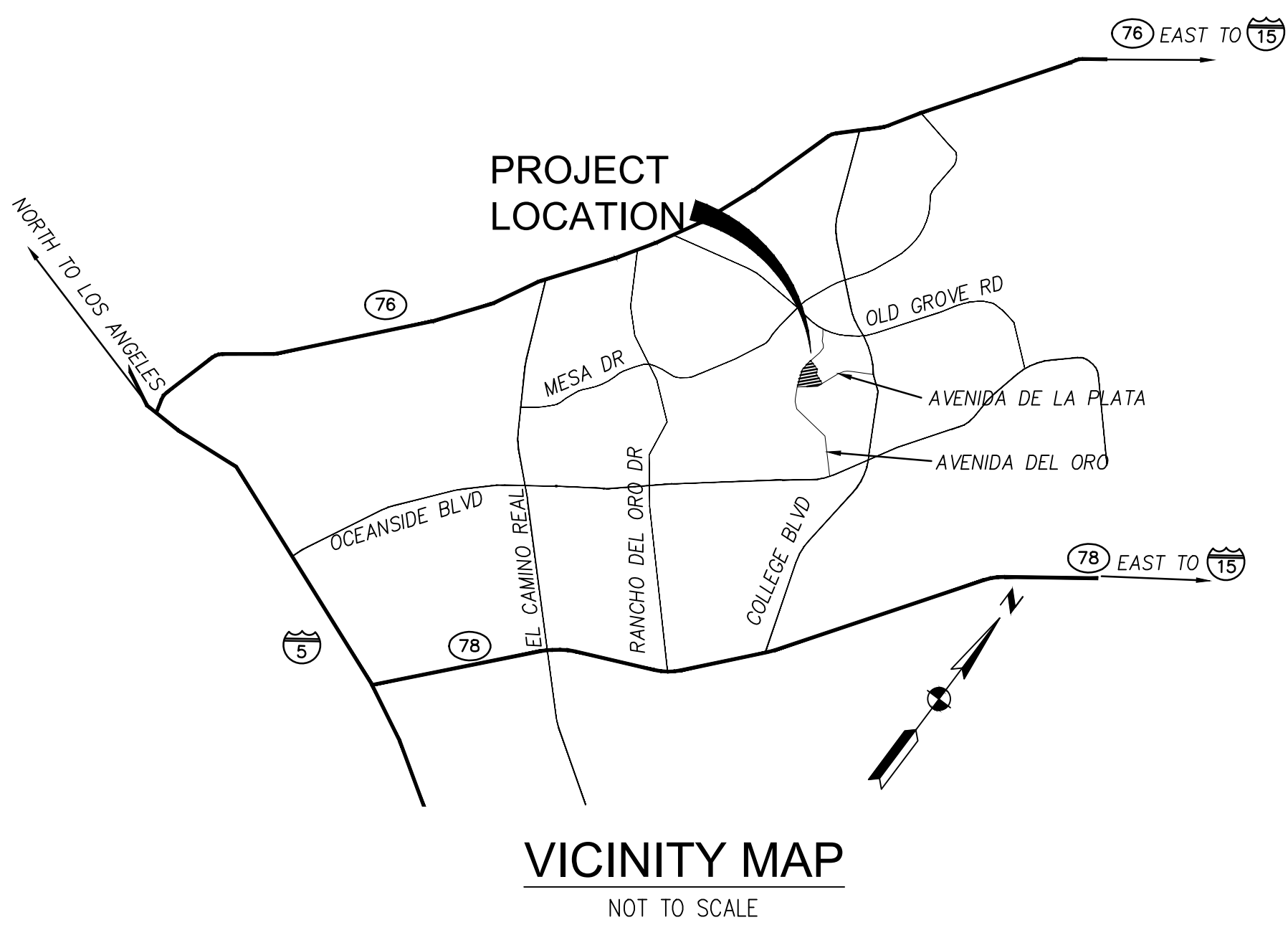
REVISIONS

OCEAN RANCH SUBSTATION
ROCKY POINT DRIVE
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JPBLA

JAMES P. BENEDETTI
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ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645



SAN DIEGO GAS & ELECTRIC COMPANY				
SAN DIEGO, CALIFORNIA				
OCEAN RANCH SUBSTATION				
PRELIMINARY CIVIL DEVELOPMENT PLAN				
DRAWN BY: KH	DATE: 10/17/16	SCALE: 1" = 50'	M.O.	REV. E
CHECKED BY: PH	DATE: 10/17/16			
APPROVED BY:	DATE:			
CAD NO.: OCEAN RANCH.DWG	PLOT SCALE:	1 = 1		

ESP – 113.1 (Revised)

Electric Standard Practice – 113.1 SDG&E Operations and Maintenance Wildland Fire Prevention Plan

Electric Distribution Engineering has published this standard with revisions and additions made by the SDG&E Fire Program Manager.

 Changes and Additions highlighted in **YELLOW**

If you have any questions regarding this Standard Practice, please contact:

◆ Hal Mortier at (858) 654-8683 or HMortier@semprautilities.com

DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JULY 26, 2016
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS AND MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>1.0 PURPOSE</p> <p>1.1 Southern California presents a dangerous natural wildland fuel scenario and explosive fire weather potential. The period for active fire conditions can exist all year long depending on rainfall totals and other dynamic weather factors. The fall months and at times extending into early winter historically host the region's largest fires. Extended dry periods can bring us into or back into critical fire conditions essentially any time of the year. SDG&E facilities, equipment, and activities can present a potential wildland fire ignition risk which must be minimized to the extent reasonably possible. In the event a fire occurs, we must also be equipped to suppress small fires, thus potentially preventing a major fire. Most importantly, we must provide the resources and training necessary to keep our employees safe while working in the wildland areas. This plan is for all system Operations & Maintenance work and can be used for low complexity Construction projects when additional mitigation is not required (see 4.7 SDG&E PROJECT SPECIFIC FIRE PLANS). The intent of this document is to formalize procedures and routine practices that will:</p> <p>1.1.1 Assist SDG&E employees in their understanding of fire prevention and to improve their ability to prevent the start of any fire. The emphasis will be on wildland fires, especially during the critical times of the year when the fire risk is high.</p> <p>1.1.2 Set standards for fire tools and equipment to be present in vehicles and at work sites. This will assist with rapid response to small fires in the event one should occur.</p> <p>1.1.3 Incorporate State, Federal, and local requirements into our standard way of doing business to provide compliance with rules and regulations on a daily basis no matter where work is taking place. This would include, but not be limited to: pertinent laws, Forest Standard Practice Regulations, and "Special Use Permit" or "Right of Way" fire related requirements.</p> <p>1.1.4 Define or reference restrictions mandated by "Red Flag Warnings", "Project Activity Levels", or other unique fire danger scenarios. Provide the means for determining when these restrictions are in effect, what activities they prohibit, the precise locations to which they apply; and identify the notification procedures for all affected employees and contractors. (See TMC-1320)</p> <p>1.1.5 Ensure that our employees and contractors have positive communication for reporting fires and initiating assistance. Dialing 911 is the primary means for reporting emergencies.</p> <p>1.1.6 Discuss procedure to identify when a Construction project specific "Fire Plan" is required and the process for developing the document.</p> <p>1.1.7 Share some common sense practices, with regards to fire safety, that should be used in all activities to reduce the risk of fires and to prevent injury to employees as a result of fire.</p> <p>1.1.8 Introduce and require the use of the "Fire Potential Index" to determine when additional fire risk mitigation measures are advised or required.</p> <p>2.0 APPLICABILITY</p> <p>2.1 This applies to SDG&E field personnel who will work in the wildland areas of the service territory. This also includes Distribution and Transmission operating personnel who will be involved with field personnel in regards to safety, system reliability and/or restoration. Contractors performing work for SDG&E will be expected to comply with this Standard Practice as it relates to their activities.</p>		
ISSUED BY HAL MORTIER	APPROVED BY MAURIZIO DE JULIO	

DEPARTMENT	DIVISION	EFFECTIVE DATE
TRANS. & DISTRIB. ENGINEERING	DISTRIBUTION ENGINEERING	JULY 26, 2016
SECTION		
GENERAL PRACTICES		
SUBJECT TITLE		
SDG&E OPERATIONS AND MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>3.0 DEFINITIONS</p> <p>3.1 “At Risk” Activities: Activities that present a risk of igniting a wildfire</p> <p>3.2 Wildland Areas: This term refers to any area within the SDG&E service territory that has wildland fuels available for ignition.</p> <p>3.3 Fire Threat Zone (FTZ): This is a CALFIRE developed rating of wildland threat based on a combination of potential fire behavior (fuel rank) and expected fire frequency. SDG&E has established practices within the FTZ on how SDG&E constructs facilities and also determines certain construction practices to be used within the FTZ. See attachment 1.</p> <p>3.4 SDG&E High Risk Fire Areas (HRFA): This area will be an assortment of GIS polygons that represent the zones of greatest concern within the SDG&E service territory, blending fuels, topography, wind, and system information. (The areas can change annually and the map will be labeled with the appropriate year, “SDG&E 20XX Highest Risk Fire Area” and is always a subset of the Fire Threat Zone). The HRFA helps to determine how SDG&E operates the electric system, as a function of weather conditions. See attachment 1.</p> <p>3.5 Fire Season: Fire season is no longer officially designated by the wildland fire agencies. California is considered to be in fire season on a yearlong basis. CAL FIRE adjusts its staffing patterns as fire conditions moderate or escalate and this can be used as an indicator of potential fire activity.</p> <p>3.6 Fire Potential Index (FPI) (1-17): This is a comprehensive assessment of fire risk, used as a tool for making operation & maintenance decisions related to fire prevention. The tool converts environmental, statistical, and scientific data into an easily understood forecast of short-term fire threat. The index is generated for a seven day forecast period for an assortment of geographic areas within the service territory. The 7-day forecast is used for planning purposes while the daily FPI is used for work activities. The FPI is used to determine the fire potential range for each day (Normal, Elevated, or Extreme), definitions of each to follow.</p> <p>3.6.1 Normal Fire Potential (1-11): It is considered “Normal” when the FPI is green. All O&M activities can take place in the wildland areas of the service territory without additional risk mitigation, as long as baseline fire equipment is available as prescribed in this plan. Note: the baseline fire equipment requirements meet or exceed all local, state, & federal requirements for working in the wildland areas.</p> <p>3.6.2 Elevated Fire Potential (12-14): It is considered “Elevated” when the FPI is either yellow or orange. Certain “at risk” O&M activities (as identified in the matrix, attachment 2) will require additional risk mitigation (as prescribed in the matrix, see attachment 2) to perform those work activities.</p> <p>3.6.3 Extreme Fire Potential (15-17): It is considered “Extreme” when the FPI is red. No “at risk” activities should be conducted except for those activities which if, left undone present a greater risk than that involved with their accomplishment. Consultation with the On-duty Fire Coordinator is required to help make that determination and identify additional mitigation required to reduce risk.</p>		
ISSUED BY	APPROVED BY	
HAL MORTIER	MAURIZIO DE JULIO	








DEPARTMENT	DIVISION	EFFECTIVE DATE
TRANS. & DISTRIB. ENGINEERING	DISTRIBUTION ENGINEERING	JULY 26, 2016
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SDG&E OPERATIONS AND MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>3.7 Red Flag Warning (RFW): The National Weather Service will declare a RFW when conditions are expected to meet either of the following criteria:</p> <p>3.7.1 Relative humidity is 15% or less with sustained winds equal to or greater than 25 mph, or frequent gusts equal to or greater than 35 mph for a period of 6 hrs or more. This RFW (based on wind/relative humidity) will be considered "Extreme" operating condition regardless of the FPI for that time period and have the same restrictions described for "Extreme".</p> <p>3.7.2 Dry lightning is for a lightning event that is not accompanied by enough precipitation to significantly wet fuels that have been identified as critically dry. This is common within the inland and mountain zones. This RFW (based only on dry lightning) will be assessed by Meteorology and Fire Coordination to determine the appropriate operating condition related to actual weather conditions, and Grid and Dist. Ops. will notify field personnel.</p> <p>3.8 Project Activity Level (PAL): This term is specific to the Cleveland National Forest (CNF) and only applies to work within the boundaries of the CNF. When conducting work on the CNF it is each crew member's responsibility to know the PAL level and adhere to any additional work restrictions or mitigation measures.</p> <p>3.9 Fire Tools:</p> <p>3.9.1 Shovel: standard round point shovel with overall length of at least 46".</p> <p>3.9.2 Pulaski: an axe-like fire hand tool used for cutting, chopping or grubbing.</p> <p>3.9.3 McLeod: a fire hand tool used for raking and scraping.</p> <p>3.9.4 Backpack pump: is a portable 5 gallon water pack with hose and nozzle used for extinguishing Class A (common combustibles) fires and primarily wildland fires. They can be rubber collapsible packs or stainless steel canisters.</p> <p>3.9.5 Fire box: can be placed in a staging area or worksite to supplement available fire suppression equipment when necessary due to excessive work activity. It generally contains additional hand tools and/or backpack pumps as deemed appropriate.</p> <p>3.10 Major Operations Work Area: It will be considered a major operations work area when work activities or staging of resources will be concentrated in and out of a staging facility. These work sites are typically large in size and include but are not limited to construction yards, fly yards, substation pads and any other area where construction work will be concentrated.</p> <p>3.11 Fire Patrol:</p> <p>3.11.1 A <i>designated</i> "Fire Patrol" is a member of a work crew assigned the responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should one occur. This can be accomplished co-laterally with other work duties.</p> <p>3.11.2 A <i>dedicated</i> "Fire Patrol" is a person(s) assigned the responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should one occur. This will be their sole duty while serving as a dedicated Fire Patrol.</p>		
ISSUED BY	APPROVED BY	
HAL MORTIER	MAURIZIO DE JULIO	

DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JULY 26, 2016
SECTION GENERAL PRACTICES		
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<p>3.12 SDG&E Fire Coordinator (FC): The SDG&E Fire Coordinator serves as a conduit or liaison to the emergency service agencies for the utilities for everyday operations as well as emergency incidents. The FC will help the emergency service agencies obtain their needs related to the utility and represent the utility needs to the emergency service agencies.</p> <p>3.13 SDG&E Incident Commander (IC): SDG&E will follow Incident Command System protocols on all emergency incidents. SDG&E will positively identify a single point of contact for all SDG&E resources (people and equipment) on any emergency incident. The appropriate line authority will identify who the SDG&E IC will be on moderate or complex incidents. "First- in" supervisor will generally be the IC on low complexity incidents. The IC will coordinate SDG&E activities with the overall Incident Commander, usually a jurisdictional fire chief.</p> <p>3.14 Operations & Maintenance (O&M): O&M refers to post construction care and maintenance of SDG&E facilities.</p> <p>4.0 PROCEDURE</p> <p>4.1 General: SDG&E personnel will be committed to the following three step process for reducing the fire risk and exposure involved with potential wildland fires related to our work activities or equipment;</p> <p>4.1.1 Fire Prevention: all work activities taking place in the wildland areas of our service territory will be assessed with regard to fire risk during standard safety tailboard sessions. Those activities that pose risk and can be excluded will be. Those that cannot be eliminated will incorporate appropriate mitigation measures to reduce the risk where possible, and in those cases where all risk cannot be eliminated the following steps will be in place.</p> <p>4.1.2 Immediate or Early Fire Detection: SDG&E enhances the ability of its crews to detect fire at its earliest stages by assigning designated (co-lateral duty) and dedicated Fire Patrols (sole duty) as well as training all personnel to establish good situational awareness during "Normal", "Elevated", and "Extreme" operating conditions.</p> <p>4.1.3 Rapid Extinguishment: prescribed fire tools and equipment will be available within 50' of worksite and immediately available for rapid extinguishment of any ignition.</p> <p>4.2 Tools & Equipment: When working in the FTZ (identified on Attachment 1); the following tools and equipment are required as a minimum and will be carried on the vehicles as described. If work is in a wildland area outside the FTZ it is recommended you use these same standards. This does not apply to transient traffic driving on primary road beds through the wildland areas. These items will meet the California Forest Practice Rules; Public Resource Code Division 4, Chapter 6. Making this equipment available at your work sites will also meet the majority of the requirements mandated by the wildland fire agencies within the company service territory.</p> <p>Some additional project specific or weather specific requirements may be necessary and will be discussed in the following section of this plan. Please note that if your work project is over 50' from the vehicle location, the mandated equipment should be removed from the vehicle and staged at the work site.</p>		
ISSUED BY HAL MORTIER	APPROVED BY MAURIZIO DE JULIO	









DEPARTMENT	DIVISION	EFFECTIVE DATE
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SDG&E OPERATIONS AND MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>4.2.1 Passenger Vehicles (performing work in the wildland areas):</p> <p>4.2.1.1 1 round point shovel with overall length of at least 46"</p> <p>4.2.1.2 1 serviceable fire extinguisher, minimum U.L. rated "2 BC"; rating found on fire extinguisher label (a "2" rated extinguisher will put out approx. 2 sq. ft. of combustible material and BC indicates it will work on flammable liquids and is non-conductive for electrical fires)</p> <p>4.2.2 Trucks & 4 Wheel Drive Vehicles;</p> <p>4.2.2.1 1 round point shovel with overall length of at least 46"</p> <p>4.2.2.2 1 Pulaski</p> <p>4.2.2.3 1 (5) gallon backpack pump</p> <p>4.2.3 Heavy Machinery or Equipment (including tub grinders, whole tree chippers, drilling rigs, tractors, etc.);</p> <p>4.2.3.1 1 round point shovel with overall length of at least 46"</p> <p>4.2.3.2 1 Pulaski</p> <p>4.2.3.3 1 (5) gallon backpack pump</p> <p>4.2.4 Chain Saw Use;</p> <p>4.2.4.1 1 shovel within 25 feet of the chainsaw operation with unrestricted access to the tool.</p> <p>4.2.4.2 1 serviceable UL rated 2BC fire extinguisher in their immediate possession.</p> <p>4.2.5 Major Operations Work Area (When vehicle equipment does not meet the needs of the work area a Fire Box or equivalent should be located on site and be accessible to all personnel and there should be enough total tools to outfit number of personnel on scene);</p> <p>4.2.5.1 1 (5) gallon backpack pump</p> <p>4.2.5.2 2 Pulaskis</p> <p>4.2.5.3 2 McLeod fire tools</p> <p>4.2.5.4 Round point shovels 46" (enough to outfit remaining personnel)</p> <p>4.3 Fire Risk & Mitigation Matrix: The following matrix is designed to blend the fire risk associated with a specific work activity with the fire potential index for the day to establish the proper fire prevention measures required in each scenario. Most of the work activities can be done daily simply by having the required equipment from section 4.2 available, serviceable, and proximate to work site. Some activities involve more risk and may require additional mitigation measures. The fire potential is determined by the daily Fire Potential Index. Green on the FPI is considered Normal Fire Potential. Under Normal the baseline tool & equipment requirements from section 4.2 suffice, except for specifically noted exceptions. Elevated Fire Potential is when the FPI is in the yellow/orange range and certain work activities may require additional mitigation measures in order to proceed with the work; again refer to matrix. <i>The supervisor responsible for the work activity will document how the additional mitigation will be met for the day's activities. This can be done in conjunction with normal tailboard documentation or as separate documentation.</i></p>		
ISSUED BY	APPROVED BY	
HAL MORTIER	MAURIZIO DE JULIO	

<small>DEPARTMENT</small> TRANS. & DISTRIB. ENGINEERING	<small>DIVISION</small> DISTRIBUTION ENGINEERING	<small>EFFECTIVE DATE</small> JULY 26, 2016						
<small>SECTION</small> GENERAL PRACTICES								
<small>SUBJECT TITLE</small> SDG&E OPERATIONS AND MAINTENANCE WILDLAND FIRE PREVENTION PLAN								
<p> Extreme Fire Potential is the red on the FPI and most work activities will cease, except where not performing the work creates a greater risk than doing so. In those cases where work will be done, consult with On-duty Fire Coordinator ((858) 503-5152) and check matrix to see if additional mitigation is required. The supervisor responsible for the work activities will document that work has in fact ceased or why it was acceptable to continue. If Fire Coordination is consulted they too will document when a joint decision to continue work is made. </p> <table border="1" style="margin: 20px auto; width: 80%; border-collapse: collapse; text-align: center;"> <tr> <td style="background-color: #cccccc;">Normal</td> <td style="background-color: #cccccc;">Elevated</td> <td style="background-color: #cccccc;">Extreme</td> </tr> <tr> <td style="background-color: #00ff00;">< 12</td> <td style="background-color: #ffff00;">12-14</td> <td style="background-color: #ff0000;">15-17</td> </tr> </table>			Normal	Elevated	Extreme	< 12	12-14	15-17
Normal	Elevated	Extreme						
< 12	12-14	15-17						
<small>ISSUED BY</small> HAL MORTIER	<small>APPROVED BY</small> MAURIZIO DE JULIO							

DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JULY 26, 2016
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS AND MAINTENANCE WILDLAND FIRE PREVENTION PLAN		

FIRE RISK & MITIGATION MATRIX				
<p>The work activity described can be performed to the operating level indicated unless specifically noted that it cannot, or by meeting the minimum additional mitigation requirements indicated for that level. This assumes the baseline tool requirements from section 4.2 are available, serviceable, and proximate to work site. <i>Note; a "designated" Fire Patrol can have co-lateral duties, whereas a "dedicated" Fire Patrol is committed to fire prevention duties and responsibilities.</i> The criterion for EXTREME is to do only the work where not performing the work creates a greater risk than doing so. Consult Fire Coordination for special mitigation requirements.</p>				
Work Activity	Work Activity Description	NORMAL Operating Conditions	ELEVATED Operating Conditions	EXTREME Operating Conditions
<i>Vehicle, Roads, Inspections</i>				
Vehicle travel	On paved roads or improved roads with no vegetation on roadbed			
Vehicle travel	Off road vehicle travel and un-maintained roadbeds		Must designate a Fire Patrol (Document)	Permitted only for work that meets the extreme criteria and must have a dedicated Fire Patrol
Inspections	Ground, aerial, security, climbing, vegetation, and weed control inspections			Must follow vehicle travel rules above.
Access Road Maintenance	Vegetation removal, water bars, culvert cleaning/repair, grading		Must designate a Fire Patrol (Document) and 150 gal. of water and equipment for its use	Not Permitted

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<i>Equipment Maintenance</i>				
Insulator Washing	Conducted on existing access roads with Insulator Wash Rig (1,000 gal.)			Not Permitted
Equipment Replacement	Mechanical replacement of system equipment; i.e. insulators, fuses, etc. ON paved roads or improved roads with no vegetation on roadbed		Must designate a Fire Patrol (Document)	Permitted only for work that meets the extreme criteria and must have a dedicated Fire Patrol
Equipment Replacement	Mechanical replacement of system equipment; i.e. insulators, fuses, etc. Off road vehicle travel and on unmaintained roadbeds		Must designate a Fire Patrol (Document)	Permitted only for work that meets the extreme criteria and must have a dedicated Fire Patrol
Conductor Replacement	Replacement of conductor with all activities conducted ON paved roads or improved roads with no vegetation on roadbed		Must designate a Fire Patrol (Document)	Not Permitted
Conductor Replacement	Replacement of conductor with all activities conducted Off road vehicle travel and on unmaintained roadbeds		Must have dedicated Fire Patrol and 150 gal. of water and equipment for its use	Not Permitted
Pole Replacement / Pole hole digging	Replacement of existing power pole ON paved roads or improved roads with no vegetation on roadbed		Must designate a Fire Patrol (Document)	Not Permitted
Pole Replacement / Pole hole digging	Replacement of existing power pole Off road vehicle travel and on unmaintained roadbeds		Must designate a Fire Patrol (Document) and 150 gal. of water and equipment for its use	Not Permitted
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Activities not covered by the <i>Matrix</i> that do not fit with an identified work activity require consultation with the On-duty Fire Coordinator for approval and/or additional mitigation requirements.																																																	
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<p>4.3.1 Optional considerations for particularly hazardous or high risk areas where additional mitigation measures are warranted (<i>discuss with On-duty Fire Coordinator</i>)</p> <p>4.3.1.1 Small fire engine or patrol unit with minimum 150 gallons of water</p> <p>4.3.1.2 Cache of fire hose and related accessories</p> <p>4.3.1.3 Water supply; water tender, truck, or hydrant (1500 gal. recommended)</p> <p>4.3.1.4 Dozer or tractor, capable of producing fire line</p> <p>4.3.2 Helicopter Operations: Helicopter staging areas will be treated similar to other staging areas with enough fire equipment for personnel on site or fire box available on major operations. On Incidental Landing Areas (ILA's) adequate firefighting equipment shall be carried on the helicopter for the number of personnel working on the ground at those sites.</p> <p>4.4 General Fire Prevention Considerations:</p> <p>4.4.1 It is required on projects in the SDG&E FTZ (and recommended in any wildland area) to conduct a formal "tailboard" safety session all fire concerns. All fire concerns will be documented, including designated or dedicated fire patrol, mitigation measures taken, and extinguishment plans for any at risk work for the day.</p> <p>4.4.2 Smoke only in designated smoking areas or in a 10' clearing void of all grass or other vegetation.</p> <p>4.4.3 Idling your vehicle in areas of brush, grass, or other vegetation is prohibited. When parking in these areas; shut off vehicle and check vehicle undercarriage for any threat of fire ignition.</p> <p>4.4.4 When driving over grass meadows or areas of low vegetation, have a designated Fire Patrol follow along with fire tools available to extinguish an inadvertent fire start. If traveling alone, you become the designated fire patrol, frequent observations of the ground behind you should be made with fire tools ready and available and this should not be done in elevated or extreme conditions.</p> <p>4.4.5 At work sites have all required tools available and within 50' of the work activity. Tools should be serviceable and ready for use.</p> <p>4.4.6 When using any piece of equipment capable of producing sparks and/or which has an exposed exhaust system, provide an area with 10' clearance or equivalent from the heat source and at a minimum assign and document a designated Fire Patrol during elevated and extreme conditions.</p> <p>4.4.7 All internal combustion engines shall have approved spark arresters.</p> <p>4.4.7.1 Engines used to provide motive power for trucks, tractors, buses, and passenger vehicles, except motorcycles, are exempt if the exhaust system is equipped with a muffler.</p> <p>4.4.7.2 Turbocharged engines are exempt.</p> <p>4.4.8 When it is possible, wet down adjacent vegetation when performing at risk work in the wildland areas.</p> <p>4.4.9 Consider work hour restrictions in the wildland areas avoiding particularly hazardous work during the hottest portions of the day.</p>		
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<p>4.4.10 When it is possible, wet down adjacent vegetation when performing at risk work in the wildland areas.</p> <p>4.4.11 Consider work hour restrictions in the wildland areas avoiding particularly hazardous work during the hottest portions of the day.</p> <p>4.5 General Fire Safety Considerations: As previously indicated, fire prevention is the primary focus of all of our efforts. We do carry the proper equipment to rapidly extinguish a witnessed ignition or very small fire that is within our capabilities to take action on. If at any time the fire becomes unmanageable or unsafe for you to continue your suppression actions, you should stop and retreat to a safe area. If work activities require personnel to perform utility related work adjacent to or near an uncontrolled wildfire the following considerations become important for your safety (See below).</p> <p>4.5.1 Use proper Personal Protective Equipment (P.P.E.), standard SDG&E requirements apply. When working within or adjacent to uncontrolled fire perimeter company issued fire resistant clothing should be worn.</p> <p>4.5.2 When working on or adjacent to a wildland fire, positive communications must be maintained internally using SDG&E work protocols. It is critical that employees have the ability to communicate with fire agencies for reporting fires and for the exchange of critical information for the duration of an incident. Cross communication with the fire agencies is the responsibility of the SDG&E Incident Commander (single point of contact assigned to manage all SDG&E resources), the Fire Coordinator (FC), or the On- Site (pre-designated work supervisor for affected area) Supervisor in the absence of a Fire Coordinator or SDG&E Incident Commander.</p> <p>4.5.3 Know what the fire is doing at all times, observe personally or be in direct communication with a competent person (IC, FC, or On-Site Supervisor) who is monitoring fire activity.</p> <p>4.5.4 Work within the Incident Command System (ICS) while assigned to a fire incident. Understand the chain of command for the incident and who you are accountable to. Check in and check out when entering an uncontrolled fire perimeter after it is determined to be safe by the IC, FC, or on-site SDG&E Single Point of Contact.</p> <p>4.5.5 Pre-evaluate and designate safety zones (areas large enough to provide a safe retreat) and escape routes (safe access to these safety zones) when working in the wildland areas during high fire danger days.</p> <p>4.5.6 Get proper rest and adequate water during extended fire activity to avoid fatigue and help prevent accidents and/or injuries.</p> <p>4.5.7 Exercise extreme caution when driving within a fire area and/or smoky conditions. Be aware of falling rocks, trees, and other debris as well as road obstructions and other traffic. Keep driving speeds down when visibility is limited.</p>		
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<p>4.6 Red Flag Warnings/Extreme Fire Potential Index: Red Flag Warnings (RFW) are issued by the National Weather Service. Its intent is to pass along critical fire weather information to users and occupants in the wildland areas to bring about more prudent actions in all of their wildland related activities. There are currently two basic criteria (see definitions under RFW) for establishing a RFW. One is wind related, along with extreme dryness, and this RFW will be considered "Extreme" operating condition automatically and all work activity will cease except for such work that without performing it would create a greater risk. The second RFW criterion is lightning related and is issued when areas of "dry" lightning are imminent. During this type of RFW, Fire Coordination and Meteorology will confer to determine the operating condition for the duration of the RFW. RFW are generally issued for various weather zones that transect the SDG&E service territory. The wind/relative humidity RFW will apply to all identified weather zones within SDG&E service territory and can be expanded to exclude weather zones if necessary after consultation between Fire Coordination and Meteorology. Extreme FPI is issued by SDG&E Meteorology group. In either case work restrictions likely apply, see 4.3. Supervisors will retain authority to allow (exempt) work necessary to mitigate an immediate fire risk. The supervisor will be required to document the exemption. If required the On-duty Fire Coordinator can provide assistance with the decision and documentation process. During pre-event conference calls Fire Coordination will remind affected parties of work restrictions as they relate to the particular event.</p> <p>4.7 Project Activity Levels: The United States Forest Service has a program it utilizes to reduce the risk of fire on National Forest land, particularly in the timber or mountain areas. It is referred to as Project Activity Levels (PALS). Each day at 4:00 p.m. the PAL will be announced for the following day. It may be different for different geographical areas in the county. IT ONLY APPLIES TO THE CLEVELAND NATIONAL FOREST. This information is available by calling (619) 557-5262. The PAL index will determine what activities can be done on the forest the following day and what risk mitigation can be done to be allowed to do additional work activities. The CNF O&M Fire Prevention plan must be followed when working on USFS lands (contact On-Duty FC for current version: (858) 503-5152).</p> <p>4.8 SDG&E Project Specific Fire Plans: This Wildland Fire Prevention plan will be sufficient for most routine day to day work activities performed in the wildland by all SDG&E employees and contractors. For projects outside of normal work activities or for an activity that seems to be especially hazardous the Fire Coordination group should be consulted. The FC will make a determination whether this Wildland Fire Prevention plan is sufficient for the prescribed work, this plan with some minor additional mitigation will suffice, or if a project specific Fire Prevention Plan is required. If required the FC will work with the Project Manager or representative to develop the required plan, follow it through to approval, and monitor compliance with the plan as appropriate. On major projects there may be additional requirements assessed by the CPUC or a jurisdictional fire agency that will be incorporated as required into the project specific Fire Prevention Plan.</p> <p>4.9 Other Critical Fire Danger Proclamations: The Fire Chiefs with jurisdictional responsibility for a given area have the authority to proclaim certain restrictions in extreme fire conditions or when they are experiencing a critical shortage of resources. These cases will be very rare and it will be incumbent on them to insure we are informed of any temporary changes in fire restrictions for a particular area. Upon notification we would be required to comply as appropriate.</p>		
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<p>4.10 Fire Related Training: It is mandatory that all field going employees have basic wildland fire prevention training on an annual basis. If an employee who does not have wildland fire prevention training chooses to go to the field they will be escorted by someone who has had the training and has the required tools for both employees. . Wildland Fire Prevention training (SFUGN103) will be incorporated into annual Compliance Training and documented through using this process. The training can be accomplished in one hour at a routine safety meeting just prior to fire season or schedule sessions specifically for this purpose. For those employees who are likely to be asked to work within or immediately adjacent to an uncontrolled fire area, the following additional training is recommended: Two hours total consisting of Fire Safety, Incident Command System, and basic fire behavior training. For supervisors, managers, and company officers, who could be assigned as the SDG&E Incident Commander or EOC "Officer in Charge" on a major incident, additional advanced ICS training is recommended. The Fire Coordinator group will provide this training or assist with arranging qualified instruction. The FC may bring in additional qualified instructors, or qualify additional SDG&E employees as instructors, using the "train the trainer" approach to assist with this effort. Documentation of this training shall be done by the work supervisors and recorded in the employee's training records.</p> <p>4.11 EOC and Control Centers:</p> <p>4.11.1 Service Dispatch, Electric Distribution Operations, Electric Grid Operations, and the EOC play a vital role in any fire emergency. Communications with these groups, when applicable, is critical. Provide information updates and feedback to each of these groups as their areas of responsibility becomes affected. This should continue through the duration of the incident. As this standard practice governs the fire prevention aspects of an event, Distribution Operations and Grid Operations manage the System Operation and all protocols in TSP-1320, DOP3013, & ESP109 must be complied with.</p> <p>4.11.2 Early notification to the EOC of potential activation is recommended when appropriate. Notification procedures are identified in ESP 113 FIRE COORDINATION and should be followed as prescribed.</p> <p>4.12 Fire Coordination: SDG&E has (6) full-time Fire Coordinators and additional qualified assistance within the company. They are essentially the liaison for the company to the Emergency Response agencies. Questions related to this plan or request assistance on any emergency should be made through the FC group.</p> <p>5.0 REFERENCES</p> <p>5.1 State Forest Standard Practice Act: http://www.fire.ca.gov/resource_mgt/downloads/2015%20FP%20Rulebook_with%20TRA%20No%201_Final.pdf</p> <p>5.2 TMC 1320 (aka DOP3013, ESP109 – SDG&E Fire Conditions)</p> <p>5.3 ESP 113 – FIRE COORDINATION</p> <p>5.4 Power Line Fire Prevention Field Guide – 2008 edition http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fppguidepdf126.pdf</p>		
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6.0 REVISION HISTORY

Effective Date:	Type Of Change	Brief Description of Change
26Jul2016	Revised	SDG&E Fire Program Manager has made minor changes to this standard. Revisions or additions highlighted in YELLOW . Removed Attachment 2, Project Specific Fire Plan Template.
8Jun2015	Revised	SDG&E Fire Program Manager updated all maps
25Jul2014	Revised	Revised by SDG&E Fire Program Manager
24Apr2013	Revised	Revised by SDG&E Fire Program Manager
05Jul2012	Revised	Revised by SDG&E Fire Program Manager

7.0 ATTACHMENTS

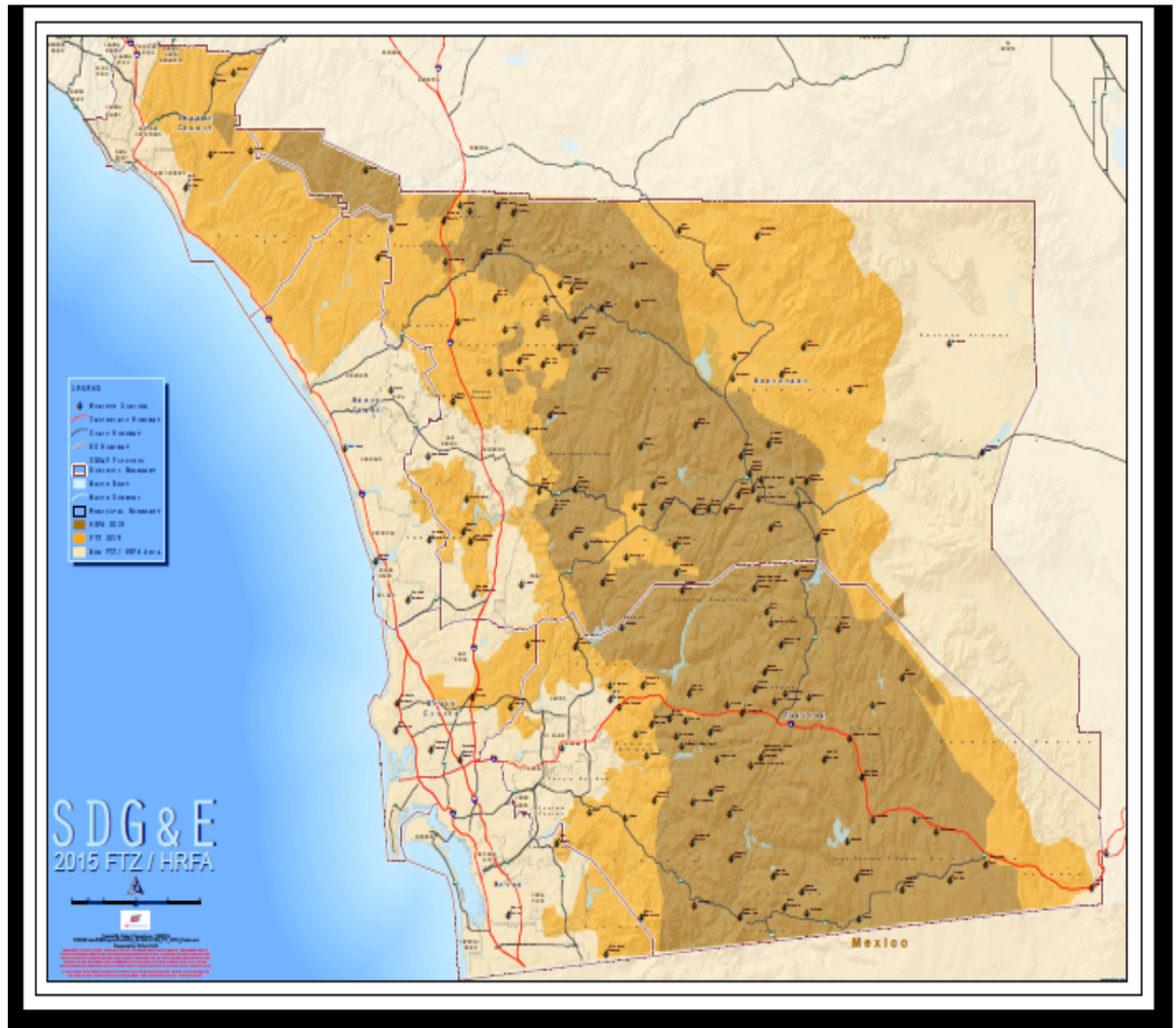
7.1 Attachment 1: Service Territory with SDG&E 2015 Highest Fire Risk Areas & FTZ

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Attachment 1:

Service Territory with SDG&E 2016 Highest Fire Risk Areas & FTZ



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