



# HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT



P.O. BOX 1030  
Eureka, California 95502  
phone (707) 443-0801  
fax (707) 443-0800

## PERMIT APPLICATION

Date Filed \_\_\_\_\_

General Information	For Commission Use
1.) Name, Address, phone # and email of Developer, Project Sponsor and Legal Owner: Pacific Gas & Electric 611 Bollinger Canyon Rd. San Ramon, CA 94583 Ph: (925) 328-5113	A. Application No. _____  Application Type: Franchise <input type="checkbox"/> Permit <input type="checkbox"/> Lease <input type="checkbox"/>
2.) Address of Project and Assessor's block, lot and Parcel Number: See Attachment 1 - Supplemental Information Sheet.	B. Date Received by Harbor District
3.) Contact person Name, Address, phone #  Sean Poirier, Pacific Gas & Electric 611 Bollinger Canyon Rd, San Ramon, CA 94583 Ph: (925) 328-5113 Email: SMPX@pge.com	C. Date Accepted for filing by Commission
4.) Attach list of names and addresses of all adjoining property owners. See Attach 1.	D. Date of Public Notice
5.) List and describe any other related Project Permits & Other Public Approvals required, including those required by City, Regional, State & Federal Agencies.  See Attachment 1 - Supplemental Information Sheet.	E. Date of Environmental Compliance
6.) Existing City/County Zoning See Attachment 1 - Supplemental Information	F. Date of Public Notice
7.) Proposed Site Use (Project Title): PG&E R-354, R-519, and RT-102 Pipeline Repairs Project	G. Date of Public Hearings
	H. Date of Commission Action  Approval: _____ Conditional _____ Disapproval _____
	I. Expiration Date
	Comments

## Describe proposed project

Please see Attachment 2 - Preliminary Project Description.

Answer all questions completely on a separate page. If the question does not apply to your project, so indicate by marking N.A. Contact Harbor District Office with questions.

### PROJECT DESCRIPTION

8. Site Size
9. Square Footage
10. Number of floors of construction
11. Amount of off-street parking provided
12. Attach plans
13. Proposed scheduling
14. Associated projects
15. Anticipated incremental development
16. If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected.
17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities
18. If industrial, indicate type, estimated per shift employment & loading facilities.
19. If institutional, indicate the major function, estimated per shift employment, occupancy, loading facilities, and community benefits derived from the project.
20. If the project involves a variance, conditional use or recognizing application, state this and indicate clearly why the application is required.

Are the following items applicable to the project or its effects? Answer yes or no.  
Discuss all items answered yes.

21. Change in existing features of any bays, tidelands, beaches, lakes or hills, or substantial alteration of ground contours.
22. Change in scenic views or vistas from existing residential areas or public lands or roads.
23. Change in pattern, scale or character of general area of project.
24. Significant amounts of solid waste or litter.
25. Change in dust, ash, smoke, fumes or odors in vicinity.
26. Change in ocean, bay, lake, stream or ground water quality or quantity, or alteration of existing drainage patterns.
27. Substantial change in existing noise or vibration levels in the vicinity.
  - A. During Construction
  - B. During Project Utilization
28. Site on filled land or on slope of 10% or more.

29. Use of disposal or potentially hazardous materials, such as toxic substances, flammable or explosives.
30. Substantial change in municipal services demand (police, fire, water, sewage, etc.)
31. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).
32. Relationship to larger project or series of projects

ENVIRONMENTAL SETTING:

33. Describe the project site as it exists before the project including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site and the use of the structures. Attach photographs of the site. Photos will be accepted.
34. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.) intensity of land use (one-family, apartment houses, shops, department stores, etc.) and the scale of development (height, frontage, set-back, rear yard, etc.) Attach photographs of the vicinity. Photos accepted.

----- Questions 35; and 36 MUST BE ANSWERED! -----

35. How will the proposed use or activity promote the public health, safety, comfort, and convenience?
36. How is the requested grant, permit, franchise, lease, right, or privilege required by the public convenience and necessity?

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37. Financial statement:

- A. Estimated project cost. \$2,522,000.00
- B. How will the project be financed?

38. Describe fully directions necessary to arrive at project site.
  39. The Applicant agrees to as a condition of the permit being issued, to indemnify and hold harmless the Humboldt Bay, Harbor Recreation and Conservation District from any and all claims, demands, or liabilities for attorneys' fees obtained from or against demands for attorney's fees, costs of suit, and costs of administrative records made against District by any and all third parties as a result of third party environmental actions against District arising out of the subject matter of this application and permit, including, but not limited to, attorney's fees, costs of suit, and costs of administrative records obtained by or awarded to third parties pursuant to the California Code of Civil Procedure Section 1021.5 or any other applicable local, state, or federal laws, whether such attorneys' fees, costs of suit, and costs of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial, appeal, or arbitration of claims for attorneys' fees and costs of administrative records in connection with the subject matter of this application and permit
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## NOTE

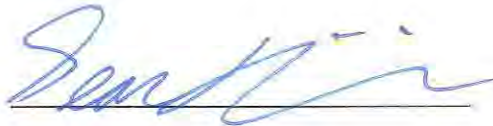
The District hereby advises the Applicant that, under California Public Resources Code (PRC) Section 21089, the District when a lead agency under the California Environmental Quality Act (CEQA) of 1970, as amended, pertaining to an Environmental Impact Report (EIR) or a Negative Declaration (MND/ND) may charge and collect from the Applicant a reasonable fee in order to recover the estimated costs incurred by the District in preparing an EIR or MND/ND for the project and the procedures necessary for PRC compliance on the Applicants project.

In the event your project contains an analysis of issues pertaining to CEQA, for which District staff is not competent to independently review, or District requires the same in preparation of an EIR or MND/ND for the project, the District may retain a reviewing consultant to evaluate the content of the Administrative-Draft EIR and Final EIR or MND/ND with respect to these issues. The cost of such reviewing consultant services shall be borne by the Applicant.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. And I agree to indemnify the District as described in part 39 of this application.

Dated: \_\_\_\_\_

4/23/19



For \_\_\_\_\_

## **ATTACHMENT 1**

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### **APPLICATION SUPPLEMENTAL INFORMATION SHEET**

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**APPLICATION SUPPLEMENTAL INFORMATION SHEET**  
**PACIFIC GAS AND ELECTRIC (PG&E) PIPELINE R-354, R-519, AND RT-102**  
**PIPELINE REPAIRS PROJECT**  
**HUMBOLDT BAY HARBOR, RECREATION, AND CONSERVATION DISTRICT**  
**DEVELOPMENT PERMIT APPLICATION**

**Question 4:** Table 1 provides the assessor's parcel number (APN) and the names and addresses of the property owners for the properties on which the PG&E Pipeline easements occur.

Table 1. APN and Property Owner Information		
	APN	Property Owner
<b>R-354 Decommissioning and Removal at Freshwater Slough</b>		
	017-121-005	Ray & Jen Christie 3725 Park Street Eureka, CA 95501
	014-301-003	William F. Cody 3725 Park Street Eureka, CA 95501
	017-131-003	Nylander Ryan & Molly Trust 3800 Park Street Eureka, CA 95501
<b>R-519 Replacement at Ryan Slough</b>		
	017-151-005	Kristen M Dorna 4639 Myrtle Ave Eureka, 95503
	017-151-004	Humboldt County Myrtle Ave. Eureka, 95503
	017-151-007	Humboldt County Myrtle Ave. Eureka, 95503
	016-171-004	2419 Oakridge Terrance Eureka, CA 95501
<b>RT-102 Sinkhole Repair at Ryan Creek</b>		
	017-031-013	County of Humboldt Myrtletown, CA

**Question 5:** Table 2 indicates the other agency permits and approvals expected to be required for the PG&E R-354, R-519, and RT-102 Pipeline Repairs Project.

<b>Table 2. Anticipated Regulatory Permit Requirements for the Eureka Project Bundle</b>				
<b>Agency</b>	<b>Permit / Approval</b>	<b>R-354 Site</b>	<b>R-519 Site</b>	<b>RT-102 Site</b>
<b>Federal Agencies</b>				
U.S. Army Corps of Engineers	Section 404 Clean Water Act and/or Section 10 Rivers and Harbors Act	NWP-12 (Utility Line Activities)  NWP 13 (Bank Stabilization)	NWP-12 (Utility Line Activities)	NWP-7 (Outfall Structures) NWP-3 (Maintenance)
U.S. Fish and Wildlife Service	Federal Endangered Species Act	Section 7 Consultation	Section 7 Consultation	Section 7 Consultation
National Marine Fisheries Service	Federal Endangered Species Act / Essential Fish Habitat Review (Magnuson-Stevens Act)	Section 7 Consultation / EFH Review	Section 7 Consultation / EFH Review	Section 7 Consultation / EFH Review
<b>State Agencies</b>				
California Coastal Commission	Coastal Zone Management Act	Coastal Development Permit	Coastal Development Permit	Coastal Development Permit
California Department of Fish and Wildlife	Section 1600 California Fish and Game Code	Streambed Alteration Agreement	Streambed Alteration Agreement	Streambed Alteration Agreement
Regional Water Quality Control Board	Section 401 Clean Water Act / Porter-Cologne Water Quality Act	Water Quality Certification	Water Quality Certification	Water Quality Certification
<b>Local Agencies</b>				
Humboldt Bay Harbor Recreation and Conservation District	Humboldt Bay Management Plan	Harbor District Development Permit	Harbor District Development Permit	N/A (located outside primary area of concern)

**Question 6:**

The R-354 Pipeline Decommissioning and Removal Site on Freshwater Slough is zoned Agricultural Exclusive and Natural Resources in the Humboldt County General Plan (Humboldt County, 2017).

The R-519 Pipeline Replacement Site on Ryan Slough is zoned Agricultural Exclusive, Natural Resources, and Residential Low Density in the Humboldt County General Plan.

The RT-102 Sinkhole Repair at Ryan Creek is zoned Public Lands, Timber Lands, and Agricultural Exclusive Density in the Humboldt County General Plan.

**Question 8: Site Size.**

A study area was identified for each site that included all areas potentially needed for project construction, access, and staging based on the preliminary project plans. The study areas defined the total areas included in biological resource studies, preliminary aquatic resource delineations, and other technical studies needed for the purposes of project planning and environmental permitting. Following are the current study areas defined for each site:

The total study area for the R-354 Site is 4.38 acres.

The study area for the R-519 Site is 37.9 acres.

The RT-102 Site is 2.64 acres.

The total area impacted by the proposed project has not yet been determined and the study areas identified may be slightly modified as project planning progresses and access routes and staging areas are refined.

**Question 9: Square Footage.** Not Applicable.

**Question 10: Number of Floors Constructed.** Not Applicable.

**Question 11: Amount of Off-street Park Provided.** Not Applicable.

**Question 12: Attach Plans.** 30% Design Plans are included in Attachment 2 – Preliminary Project Description.

**Question 13: Proposed Schedule.** Construction of the Project is currently scheduled for completion during the Aquatic Work Window between July 1 and October 15, 2020. In water work will be conducted to the extent feasible in August 2020.

**Question 14: Associated Projects.** Not Applicable.

**Question 15: Anticipated Incremental Development.** Not Applicable.

**Question 16: Residential Building Development Details.** Not Applicable.

**Question 17: Commercial Building Development Details.** Not Applicable.

**Question 18: Industrial Building Development Details.** Not Applicable.

**Question 19: Institutional Building Development Details.** Not Applicable.

**Question 20: Variance, Conditional Use, Recognizing Application.** Not Applicable.

**Question 21: Will there be a change in existing features of any bays, tidelands, beaches, lakes or hills, or substantial alteration of ground contours?**

R-354 Decommissioning and Removal at Freshwater Slough

The proposed activities at the R-354 site on Freshwater Slough would result in the alteration of existing conditions through the removal of a segment of pipeline that is exposed on the north bank of Freshwater Slough and the removal of a concrete slab (remnant seepage wall) that is exposed on the north bank of Freshwater Slough. After removal of the abandoned and exposed facilities,

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rock would be placed along approximately 150-foot linear portion of the levee along the north bank of Freshwater Slough for bank stabilization and erosion protection. Please see Attachment 2 – Preliminary Project Description for additional details and 30% design drawings.

#### R-519 Pipeline Replacement at Ryan Slough

The proposed activities at the R-519 site on Ryan Slough would result in the alteration of existing conditions through the removal of an exposed pipeline segment in Ryan Slough. After replacement and removal of the existing underwater exposed pipeline, the slough banks would be recontoured and restored to pre-project conditions; therefore, no alteration of existing natural features of Ryan Slough would occur at this site. Please see Attachment 2 – Preliminary Project Description for additional details and 30% design drawings.

#### RT-102 Sinkhole Repair at Ryan Creek

The proposed activities at the RT-102 site on Ryan Creek would result in the alteration of existing site conditions through the excavation, repair, backfill and recontouring of two sinkholes currently open on the pipeline alignment. Repair activities at this location also involve the creation of a low flow swale crossing and drainage outfall into Ryan Creek. Please see Attachment 2 – Preliminary Project Description for additional details and 30% design drawings.

### **Question 22: Will there be a change in scenic views or vistas from existing residential areas or public lands or roads?**

#### R-354 Decommissioning and Removal at Freshwater Slough

The proposed pipeline decommissioning and removal and bank protection activities will result in a change to the viewshed on the north bank of Freshwater Slough to a single private property owner. Rock bank protection will be visible from certain areas on the property. This site is not accessible to the public (aside from kayak or canoe use on Freshwater Slough) and not visible from public roadways.

#### R-519 Pipeline Replacement at Ryan Slough

The R-519 site is visible from Myrtle Avenue at the bridge crossing over Ryan Slough. Restoration to pre-project conditions is proposed at this location. Therefore, there will be no change to the viewshed of this site upon project completion and after site restoration is complete.

#### RT-102 Sinkhole Repair at Ryan Creek

The proposed activities at the RT-102 site primarily involve excavation, backfill, and repair of two sinkholes that have developed over the pipeline near Ryan Creek. Construction of a low flow swale to convey water from the existing drainage to an outfall on Ryan Creek will create a change in the viewshed of this location. The site is within County owned property in the McKay Community Forest; however, the site is not currently open for public use or accessible to the public. The site is also not visible from any residential properties or from any public roadways.

### **Question 23: Will there be a change in pattern, scale or character of general area of the project?**

There will be no substantial change to the pattern, scale or character of the general project area at any of these site locations. Placement of rock bank protection on the levee north of Freshwater

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Slough will result in minor changes to the flow pattern at this location (change from exiting eroded mud bank to protected rock levee). The total area of bank protection is approximately 150 linear feet and will not change the overall character of this location.

**Question 24: Will the project generate significant amounts of solid waste or litter?**

The proposed removal, replacement, and repair activities proposed as part of this project will not generate significant amounts of solid waste or litter. Debris associated with removal of the old pipeline facilities will be hauled away and properly disposed.

**Question 25: Will the project create a change in dust, ash, smoke, fumes or odors in the vicinity?**

The proposed removal, replacement, and repair activities proposed as part of this project will not generate substantial dust, ash, smoke, or fumes. Air quality issues such as dust suppression and equipment exhaust will be analyzed during CEQA review of the proposed Project.

**Question 26: Will the project create a change in ocean, bay, lake, stream or ground water quality or quantity, or alteration of existing drainage patterns?**

The proposed project will generate temporary and localized turbidity during in-water work that could contribute to reduced water quality at the work location. Avoidance and minimization measures, such as use of silt curtains and implementation of a turbidity monitoring plan will minimize the temporary and localized effect of increased turbidity.

There will be a slight reduction in ground water quantity during excavation at the project site. Terrestrial excavation areas will require dewatering during construction, which is expected to be temporary and short term. Ground water will be collected and hauled away or treated and discharged in accordance with regulatory requirements.

There will be no impact to ocean, bay, or ground water quality as a result of this project and there will be no alteration of waterways or drainage patterns in Freshwater Slough, Ryan Slough, or Ryan Creek. A small tributary stream to Ryan Creek would be altered to flow through a created low flow swale at the RT-102 location to prevent erosional patterns currently creating sinkholes along the pipeline alignment.

**Question 27: Will the project create a substantial change in existing noise or vibration levels in the vicinity during construction or during project utilization?**

The proposed project will generate temporary noise associated with standard construction equipment. No pile driving or other high impact noise operations are proposed. Temporary construction related noise will be analyzed in more detail during CEQA review of the proposed Project. There will be no change in noise after the project is completed.

**Question 28: Does the site occur on filled land or on a slope of 10% or more?**

None of the three sites occur on a slope of 10% or more, except for specific locations on the banks of Freshwater Slough and Ryan Slough. No permanent or structural development will occur on these bank slope locations. The levee on the north bank of Freshwater Slough is presumably comprised of fill material; however, no permanent or structural development will occur on the levee. Rock armoring is proposed to protect the waterside of the levee from further erosion.

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**Question 29: Does the project involve use or disposal of potentially hazardous materials, such as toxic substances, flammable or explosives?**

The pipeline removal associated with decommissioning activities at R-354 and replacement activities at R-519 involves removal of natural gas pipelines that are exposed in waterways. These pipelines will be pigged, flushed, and cleaned prior to removal and are not expected to release any potentially hazardous materials. Hazardous materials will be more fully evaluated during CEQA review of the proposed Project and measures, including standards for pigging and cleaning of the pipelines, will be implemented.

**Question 30: Does the project involve substantial change in municipal services demand (police, fire, water, sewage, etc.)?**

This project involves the repair, replacement, and removal of existing gas transmission facilities, and will not result in a change in municipal services demand.

**Question 31: Does the project substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.)?**

There will be no increase in fossil fuel consumption as a result of completion of this project. Replacement of the pipeline at R-519 will result in replacement of same size diameter pipeline and will not result in any expansion of use.

**Question 32: What is the project relationship to larger project or series of projects?**

These projects are proposed as maintenance and repair to existing PG&E pipeline facilities in the region. There may be other similar projects that occur as a result of maintenance of PG&E facilities in the region; however, there are no other specific pipeline repairs associated with these projects proposed in the immediate vicinity of these sites.

**ENVIRONMENTAL SETTING**

**Question 33: Describe the project site as it exists before the project including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site and the use of the structures. Attach photographs of the site.**

Please see Attachment 2 – Preliminary Project Description for some detail of existing site conditions. Biological technical studies are currently in progress and as such, are not yet available. These studies and reports will be provided as supporting documentation to this application when available.

**Question 34: Describe the surrounding properties, including information on plants and animals, and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.) intensity of land use (one-family, apartment houses, shops, department stores, etc.) and the scale of development (height, frontage, set-back, rear yard, etc.). Attach photographs of the vicinity.**

The proposed project does not involve residential or commercial development that would impact surrounding properties. Not applicable.

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**Question 35: How will the proposed use or activity promote the public health, safety, comfort, and convenience?**

These projects involve the repair, replacement, and removal of pipeline facilities. The maintenance and repair of pipeline infrastructure and facilities benefits the health and safety of the community.

**Question 36: How is the requested grant, permit, franchise, lease, right, or privilege required by the public convenience and necessity?**

Maintenance of pipeline infrastructure allows for continued safe and reliable delivery of natural gas services to the communities in the project region.

**Question 37: Financial Statement:**

**A. Estimated Project Cost:**                      \$2,522,000.00

**B. Project Financing:**

The project will be financed by PG&E.

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## **ATTACHMENT 2**

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### **PRELIMINARY PROJECT DESCRIPTION**



**PRELIMINARY PROJECT DESCRIPTION**  
**PG&E PIPELINE MAINTENANCE PROJECTS – R-519, R-354 AND RT-102**

**1. PROJECT OVERVIEW**

In Eureka, California, Pacific Gas & Electric (PG&E) owns and operates three gas transmission pipelines that cross creeks or sloughs, or are located alongside a creek, and that require replacement, decommissioning or remediation. In the interest of expediting and optimizing the regulatory permit application and approval process for these three projects PG&E proposes to combine these three projects into a single project (bundled).

To start the planning and regulatory permitting process, PG&E would like to present a preliminary description of the three projects and obtain agency feedback and direction that will be incorporated into PG&E's final planning and regulatory permitting application.

The three projects comprising the bundled project consist of:

- **R-519 – Line 137C Ryan Slough Crossing Replacement** – The existing 4-inch diameter gas transmission pipeline is exposed on the slough bed where it crosses Ryan Slough. PG&E proposes to replace this existing 4-inch diameter pipeline with a new 4-inch diameter pipeline that will cross underneath the slough bed at a depth of 10-feet or more. Once the replacement pipeline crossing is installed the existing crossing will be decommissioned with the crossing removed its entirety to locations in the banks of either shoreline where the crossing is already buried 5-feet or below existing contours.
- **R-354 – Line 137B Freshwater Slough Crossing Decommissioning** – At this location an existing 8-inch diameter gas transmission pipeline was replaced by a horizontal directionally drilled crossing in 2008 and the original crossing was retired in place. However, since 2008 the north landing of this retired crossing has become exposed due to erosion of the earthen levee in which the north landing of this crossing was buried. PG&E proposes to slurry the pipeline, abandon in place the south landing and slough crossing portions of this pipeline where it is buried greater than 5-feet below the slough bed, and remove the northern landing down to 5-feet below the slough bed. As well, PG&E proposes to abandon the north landing through the levee and into the adjacent field. Post abandonment, EConcrete shoreline stabilization mats will be placed on the northern levee bank in an effort to arrest the erosion of the levee. A small sink hole located behind the north abutment of a private bridge that crosses the slough near the retired pipeline crossing will also be repaired.
- **RT-102 – Line 177A Ryan Creek Erosion Remediation** – The linear, buried alignment of this 12-inch diameter gas transmission pipeline is located inside of a retired railroad right-of-way (earthen berm). This project does not involve a water crossing. The pipeline has become exposed inside of a sink hole in the earthen berm due to stormwater runoff from a seasonal stream coming off of a slope that borders the earthen berm. The earthen berm is apparently founded on a "redwood road" compromised of redwood timber and planking. The stormwater is apparently running underneath the earth berm through the underlying redwood road and has undermined the pipeline at this location. PG&E proposes to excavate the berm at this site, cut and remove the redwood road from underneath the pipeline, backfill with engineered fill, and install a low flow swale to facilitate runoff across the berm and into adjacent Ryan Creek.



All three projects involve work in or on the shoreline of California streams and require specialized marine planning and regulatory permitting expertise. See Figure 1 – Project Geographic Locations. All three projects can be performed in sequence to help minimize impacts to the environment and local property and residents.

## **2. PROJECT DESCRIPTIONS**

Following are synopses of the three projects comprising the “Eureka Bundle. These synopses include a brief description of the project location, the facilities involved, the project objectives, anticipated project work elements and proposed final dispositions.

### **2.1 R-519 – L137C Ryan Slough Crossing Replacement Project Description**

**2.1.1 Location** - The R-519 project is in Eureka, California in Humboldt County where L-137C crosses the Ryan Slough, just to the north of the Myrtle Avenue bridge. The general worksite is in a rural setting approximately 1.32 miles south of Humboldt Bay and along the north side of Myrtle Avenue, a relatively busy, paved 2-lane roadway that runs in an east-west direction. The nearest home is located approximately 150 feet west of the planned west worksite and is relatively hidden from the worksite by mature trees.

**2.1.2 Facilities** - The PG&E L-137C Ryan Slough crossing is located on the north side of Myrtle Avenue at the Myrtle Avenue bridge over Ryan Slough. The existing facilities consist of a 4-inch nominal steel pipe crossing that is currently exposed on the slough-bed of Ryan Slough. This crossing is to be replaced with a new 4-inch diameter steel crossing installed using “pilot tube method” (PTM) technology at an elevation 10 feet or below the existing slough bed. The existing 4-inch pipe crossing is to be decommissioned and removed once the replacement crossing has been installed and tied into the existing carrier pipeline.

See Drawings T-1, T-2, T-3 and D-1 for a site map, plan and profile of the existing crossing, plan and profile of the proposed replacement alignment, and details of the existing crossing removal.

**2.1.3 Work Elements** - For purposes of this preliminary project description, the “work elements” are defined as those elements of work that will constitute the project description on which the project’s regulatory permits will be based. The final design, means and methods for these work elements will be identified during the pre-application planning and permitting process:

- **Installation and Removal of a PTM Jacking Shaft and Receiving Shaft** - Jacking and receiving shafts (temporary excavated pits) shall be constructed at predetermined locations on either shoreline to support pilot tube method installation of the replacement crossing. The shafts shall be constructed from sheet piling, auger method, or other method suitable for eliminating or minimizing groundwater flow. These shafts shall range from approximately 30 to 35 feet in depth. These shafts shall be decommissioned upon completion of the new crossing installation and the areas restored to pre-construction contours and conditions.
- **Installation of New Crossing Using PTM** - The replacement 4-inch diameter crossing shall be installed using pilot tube method. The new crossing shall be installed from the jacking shaft constructed on the eastern shoreline to the receiving shaft on the western shoreline.

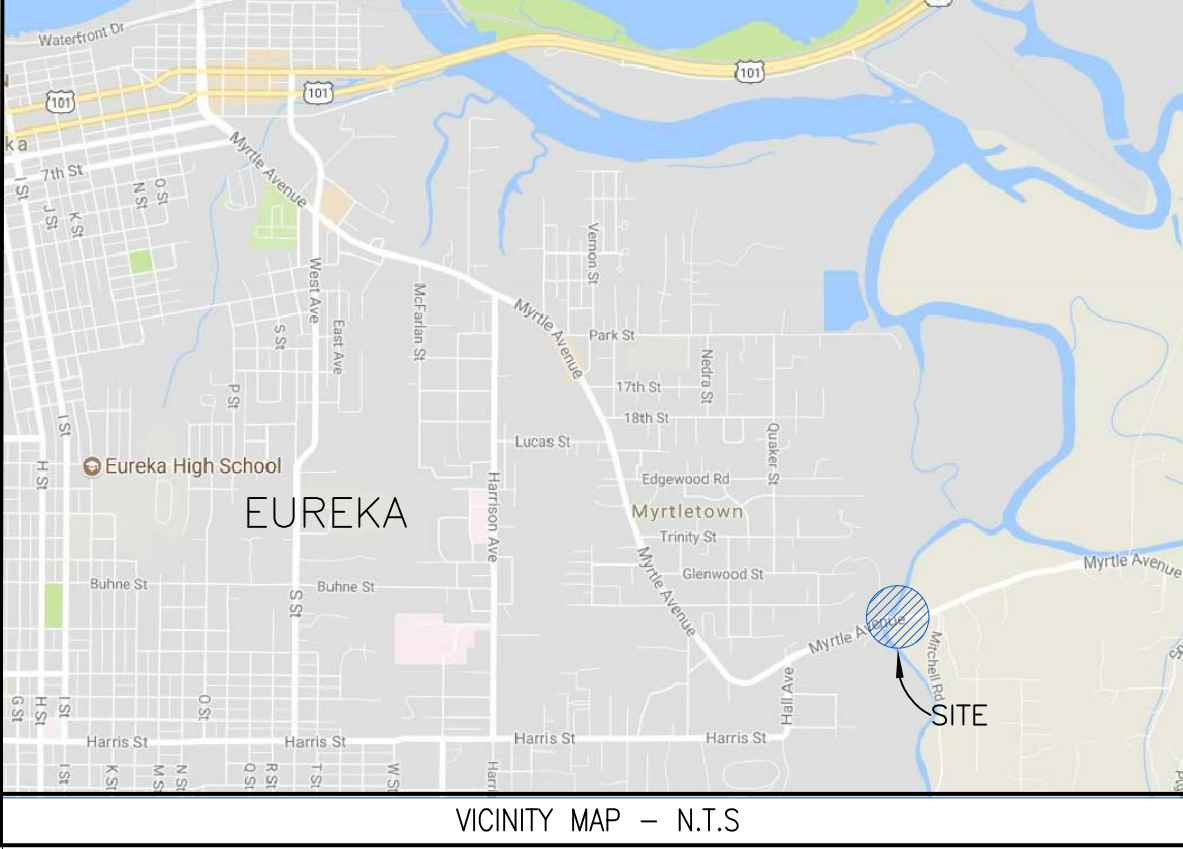






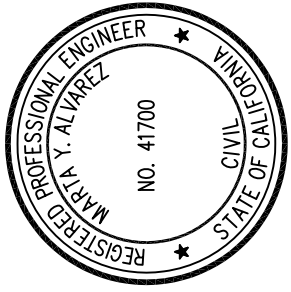


Map Legend	
	EXISTING GAS LINE
	PROPOSED GAS LINE
	BOREHOLE
	BOREHOLES K-1 & K-2
	TOPOGRAPHY LINE
	BATHY LINE
	SHORELINE
	OVERHEAD ELECTRICAL LINE
	ELECTRICAL POLE
	UNDERGROUND COMMUNICATIONS LINE
	POINT
	BEGINNING





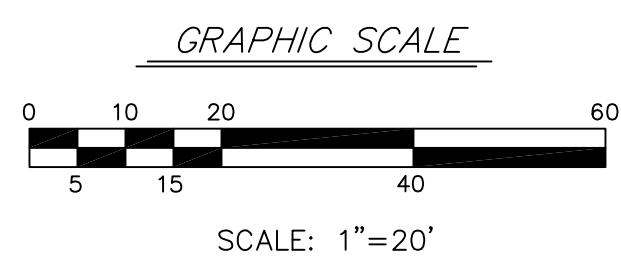
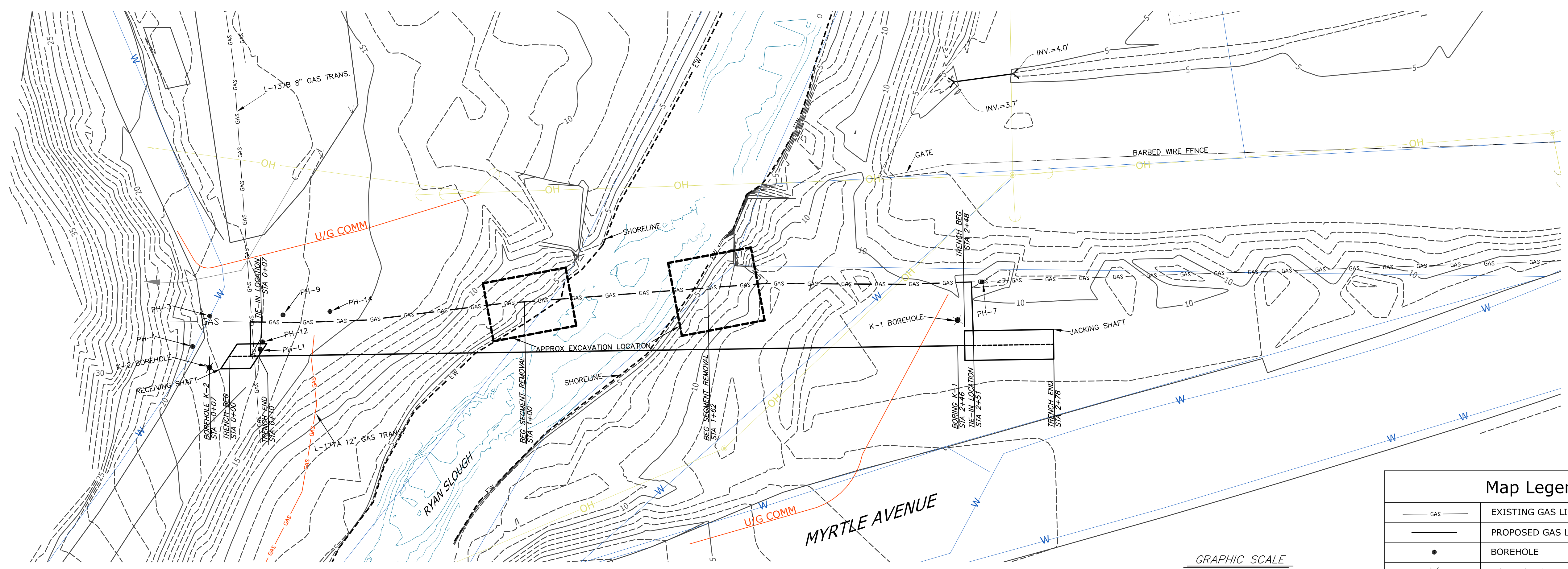
**LONGITUDE 123, INC.**  
Civil Engineering & Land Surveying  
1887 Morse Avenue, Suite A - Ukiah, CA 95505  
18033 Geddis Street - Northridge, CA 91324  
TEL: (805) 640-9364  
FAX: (805) 677-4721  
Email: yee-my@pacbell.net



PACIFIC GAS & ELECTRIC CO.  
R-519 L-137C MPO.26  
RYAN SLOUGH CROSSING  
REPLACEMENT & DECOMMISSIONING  
EUREKA, CA

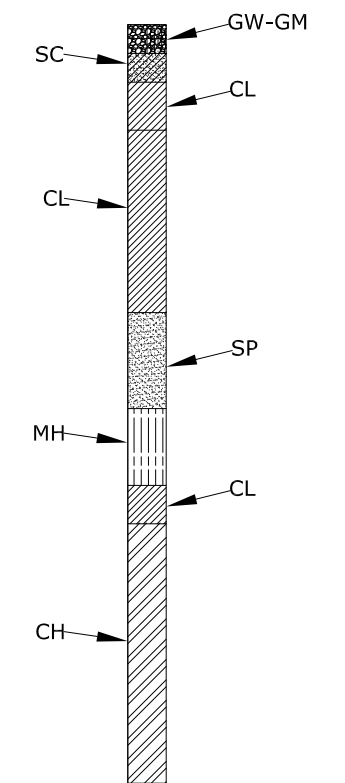
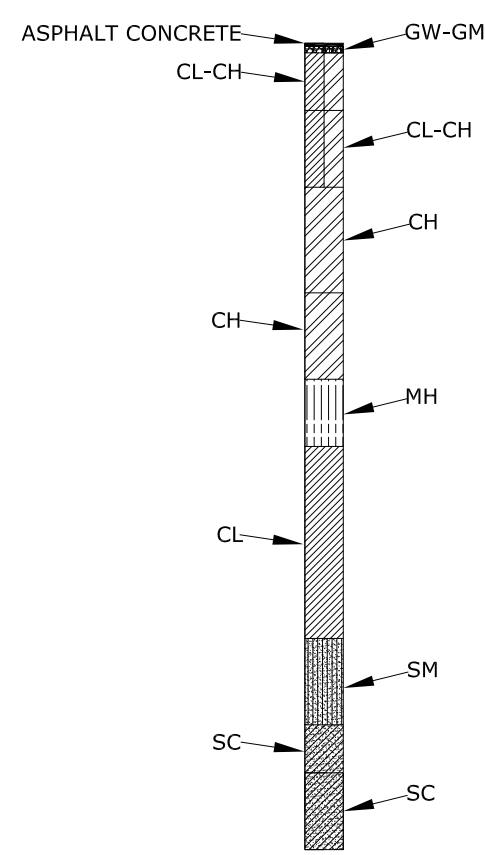
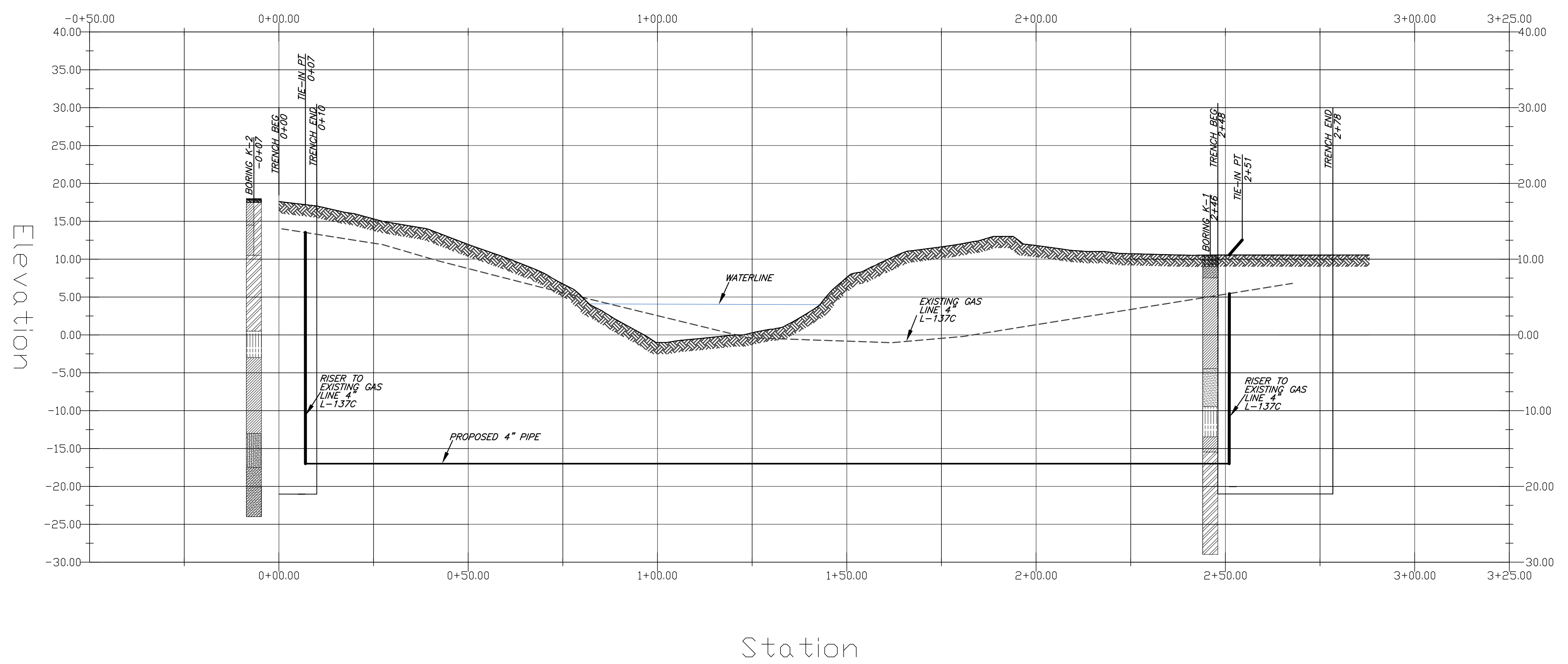
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DRAWING NO. D13003-02						
SHEET NAME: COVER						
Sheet NO. T-1						





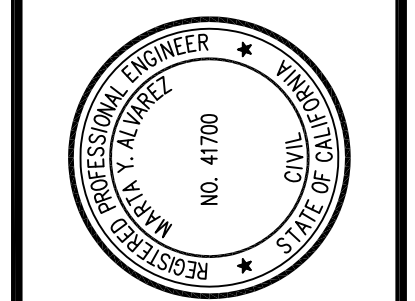
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	PROPOSED GAS LINE
	BOREHOLE
	BOREHOLES K-1 & K-2
	TOPOGRAPHY LINE
	BATHY LINE
	SHORELINE
	OVERHEAD ELECTRICAL LINE
	ELECTRICAL POLE
	UNDERGROUND COMMUNICATIONS LINE
	POINT
	BEGINNING

**PROFILE VIEW AT REPLACEMENT ALIGNMENT**  
HORIZONTAL: 1"=20'  
VERTICAL: 1"=10'



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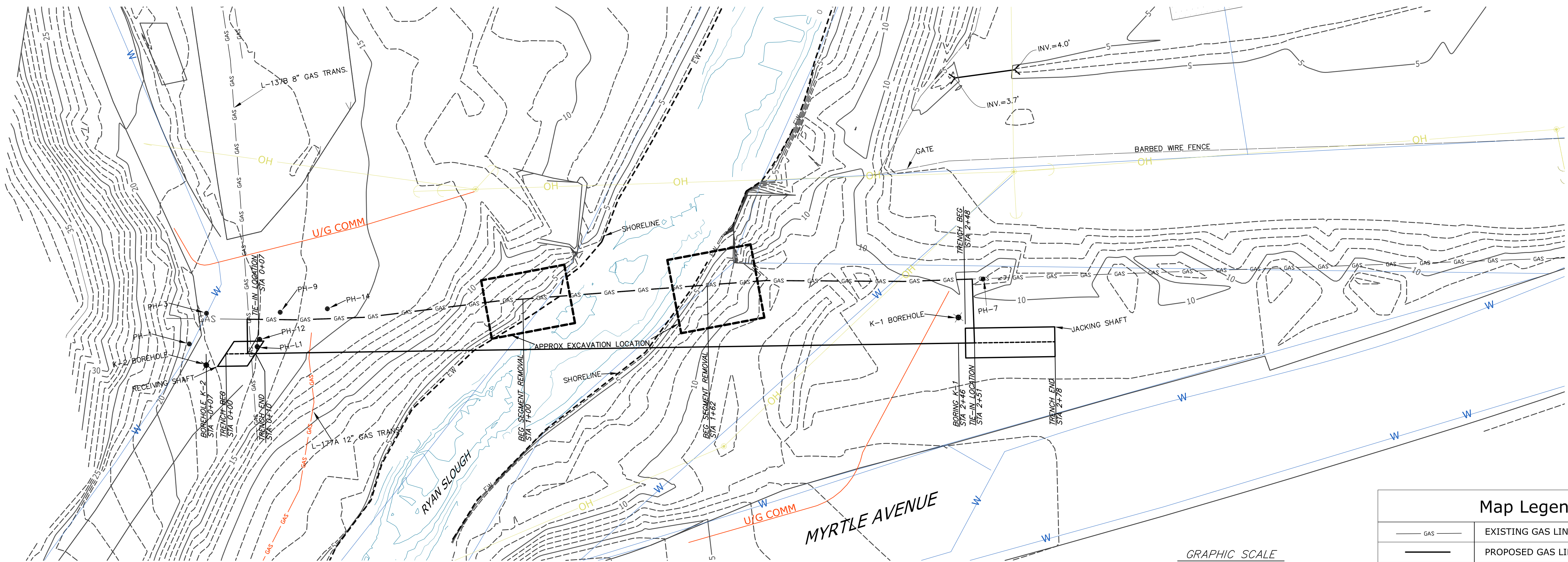


PACIFIC GAS & ELECTRIC CO.  
R-519 L-137C MP0.26  
RYAN SLOUGH CROSSING  
REPLACEMENT & DECOMMISSIONING  
EUREKA, CA

REVISIONS:		DATE:	DESCRIPTION:	DRAWN:	CHECKED:	APPROVED:
No.	A	11/17/12		TH	MS	
DRAWING NO. D13003-02						
SHEET NAME: PLAN & PROFILE 1						
Sheet NO. T-2						

**NOTES:**  
BORING HOLE LOCATION AND SOIL INFORMATION  
OBTAINED FROM BORING LOG K-1 AND BORING  
LONG K-2 CONDUCTED BY KLEINFELDER ON  
11/27/12

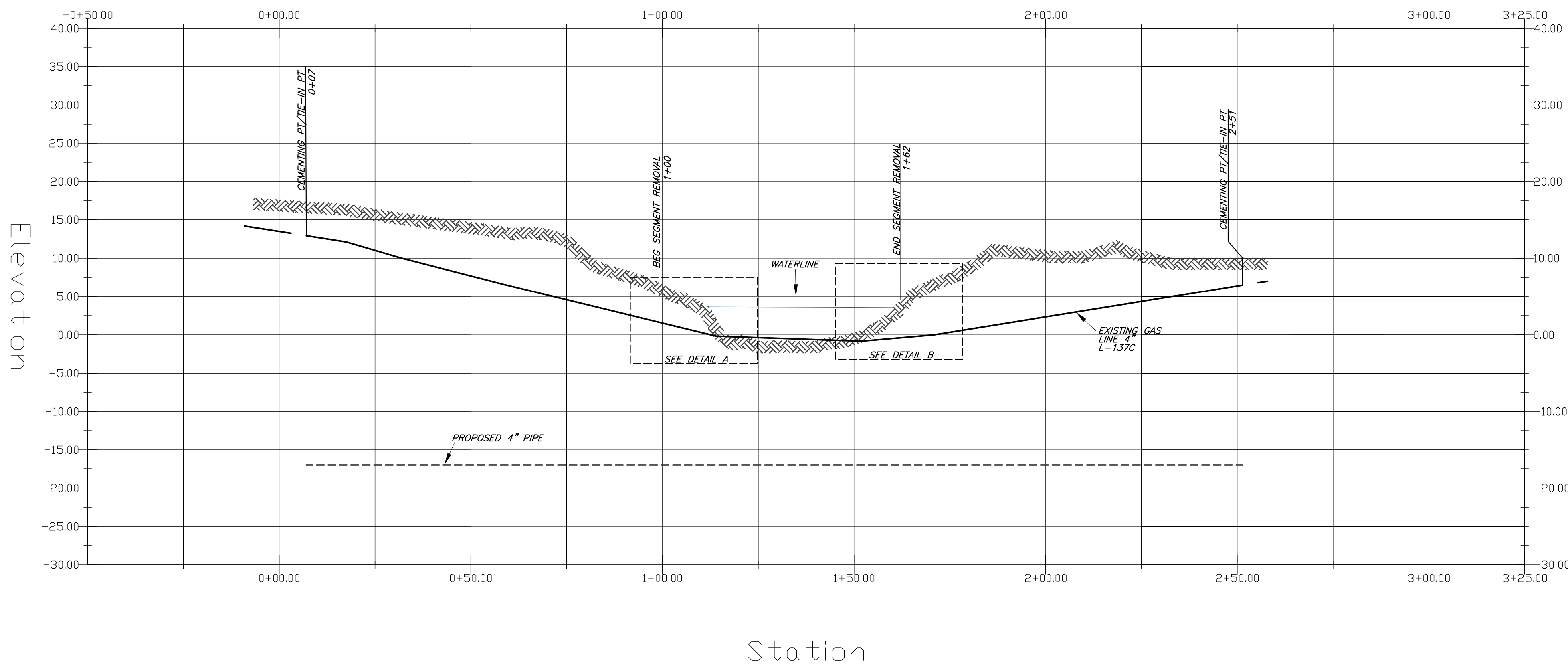




PROFILE VIEW AT EXISTING CROSSING ALIGNMENT

HORIZONTAL: 1"=20'

VERTICAL: 1"=10'



Map Legend	
	EXISTING GAS LINE
	PROPOSED GAS LINE
	BOREHOLE
	BOREHOLES K-1 & K-2
	TOPOGRAPHY LINE
	BATHY LINE
	SHORELINE
	OVERHEAD ELECTRICAL LINE
	ELECTRICAL POLE
	UNDERGROUND COMMUNICATIONS LINE
	POINT
	BEGINNING

REV. NO.	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
1	11/17/17		TH	MS	
2					
3					
4					
5					

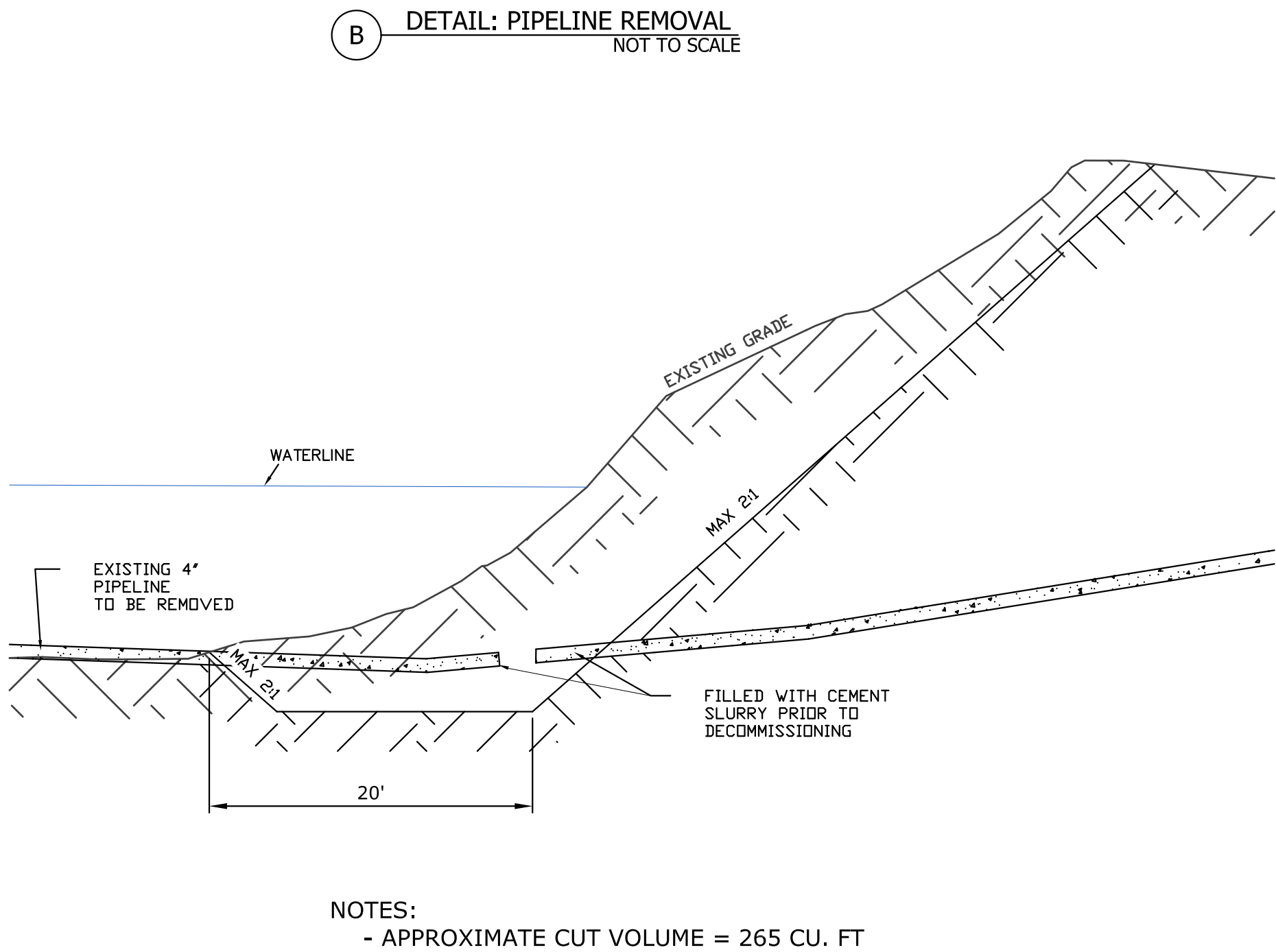
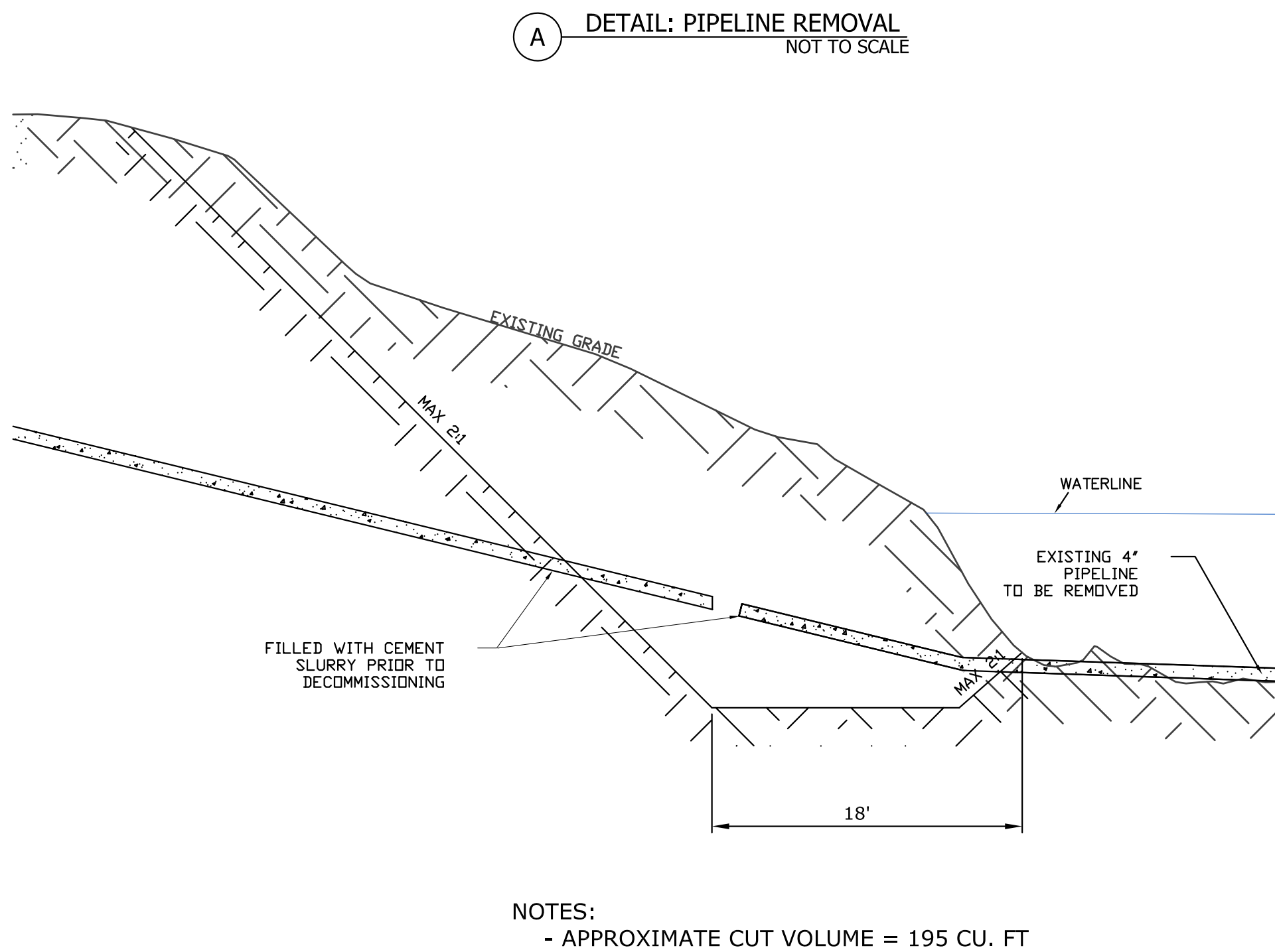
DRAWING NO.  
D13003-02

SHEET NAME:  
PLAN & PROFILE 2

Sheet NO.  
T-3  
3 OF 5

**NOTES:**  
BORING HOLE LOCATION AND SOIL INFORMATION  
OBTAINED FROM BORING LOG K-1 AND BORING  
LOG K-2 CONDUCTED BY KLEINFELDER ON  
11/27/12



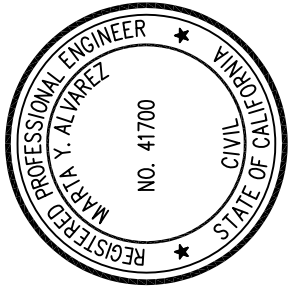


Map Legend	
	EXISTING GAS LINE
	PROPOSED GAS LINE
	BOREHOLE
	BOREHOLES K-1 & K-2
	TOPOGRAPHY LINE
	BATHY LINE
	SHORELINE
	OVERHEAD ELECTRICAL LINE
	ELECTRICAL POLE
	UNDERGROUND COMMUNICATIONS LINE
	POINT
	BEGINNING



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PACIFIC GAS & ELECTRIC CO.  
R-519 L-137C MP0.26  
RYAN SLOUGH CROSSING  
REPLACEMENT & DECOMMISSIONING  
EUREKA, CA

REVISIONS:		DATE:	DRAWN:	CHECKED:	APPROVED:
No.	DESCRIPTION				
A		11/17/17	TH	MS	
DRAWING NO. D13003-02					
SHEET NAME: DETAIL					
Sheet NO. D-1 3 OF 5					



- **Tie-In of New Crossing** - The new crossing shall be tied into the existing L-137C carrier pipeline at either side of the slough near the jacking and receiving shafts.
- **Pigging and Flushing of Retired Crossing** – Once the new crossing has been tied-in and completed the retired crossing shall be decommissioned. The decommissioning will start by pigging and flushing the retired pipeline to ensure that any TPH contamination of the water in the pipeline is less than 15 parts per million (PPM). Pigging and flushing will be accomplished from the western end of the retired crossing on the western bank to the eastern end of the retired crossing on the eastern bank. The wastewater will be captured by a vacuum truck at the northern worksite and transported to approved offsite treatment and disposal.
- **Cementing of Retired Crossing** – Typical regulatory protocols for abandoned-in-place shoreline ends or segments of submarine pipeline crossings in California are to install cement slurry plugs in all abandoned-in-place shoreline segments. Once the retired crossing has been pigged and flushed, and the flush water certified to less than 15 PPM TPH, the entire retired crossing segment will be filled with cement slurry from end to end.
- **Retired Pipeline Crossing Decommissioning** – Once the retired pipeline crossing has been filled with cement slurry, the pipeline crossing will be excavated at the shorelines of the slough back to a point in each bank where the pipeline reaches 5 feet or more of cover. The pipeline will be cut at these two points and the slough crossing segment will be removed.
- **Bank and Shoreline Restoration** – The shoreline excavations will be backfilled and compacted with excavation spoils to pre-construction contours. Rip-rap armor rock may also be installed in a protective layer on the shoreline to ensure the backfilled shoreline excavations do not erode.

## **2.2 R-354 – L137B Freshwater Slough Crossing Decommissioning Project Description**

**2.2.1 Location** - The R-354 project is located along Freshwater Slough, approximately 0.5 miles east of Eureka, California in Humboldt County. The location is approximately 0.5 miles upstream from its confluence with Eureka Slough that continues approximately an additional 1.7 miles northwest into Humboldt Bay. The Freshwater Slough flows from east to west at this location. A levee system is located on the northern shore of the slough.

**2.2.2 Facilities** - The retired PG&E L-137B gas transmission pipeline crossing is located approximately 25 feet east, or upstream, of a private wooden and steel bridge. The pipeline crossing was retired in 2008 but not decommissioned. The associated 'cutoff wall' (levee anti-seepage wall) was constructed as part of the original pipeline crossing. The original PG&E construction drawing shows that the cast-in-place concrete cutoff wall was constructed within the levee embankment and centered under its crown.

A privately owned wooden bridge is located approximately 25 feet downstream of the pipeline crossing and a bridge abutment with associated concrete wingwall are located along the northern bank of the slough. The bridge is constructed with 8 bents of 3 wooden piles each and spans approximately 134 feet across the slough, roughly perpendicular to the river flow.



The concrete abutment at the northern bridge touchdown is partially undermined and a small sink hole is visible directly behind the approximate center of the abutment. A coniferous tree is growing behind the east side of the wingwall of the abutment and leans towards the slough and over the wingwall. The tree roots have grown behind the wall and are visible.

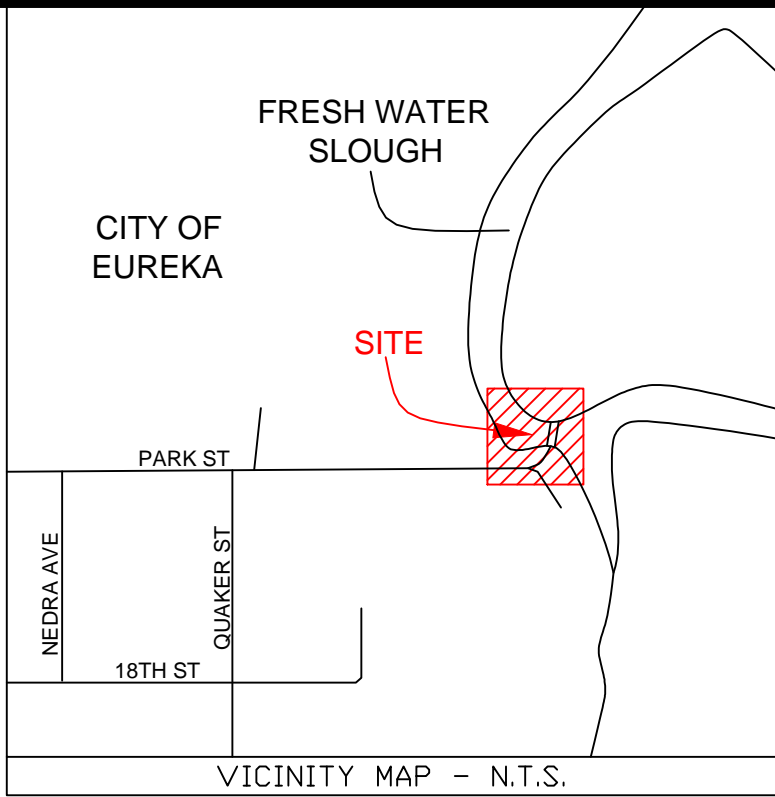
The south side of the bridge has riprap upstream, beneath and downstream of the south abutment. The north bank of the slough in this area has no revetment or erosion protection and appears to have been eroded by the water movement through the slough to approximately 50% of its original prism profile. An approximate 13-foot by 4.5-foot oval-shaped remnant of the concrete 'cutoff wall' lies on the river bank parallel to the surface, approximately 24 feet upstream of the north abutment of the bridge.

See Drawing T-1, T-2, D-1 and D-2 for a general site map, detailed site map, plan and profile of existing alignment and proposed features, and details.

**2.2.3 Work Elements** - For purposes of this preliminary project description, the "work elements" are defined as those elements of work that will constitute the project description on which the project's regulatory permits will be based. The final design, means and methods for these work elements will be identified during the planning and permitting process:

- **Pigging and Flushing** – Prior to removal, the pipeline crossing must be pigged and flushed to ensure that the any TPH contamination of the water in the retired pipeline crossing has a total petroleum hydrocarbon (TPH) content of less than 15 parts per million (PPM). Pigging and flushing will be accomplished from the southern end of the crossing (in the dirt lot south of the slough) to the cut end of the pipe protruding from the northern bank of the slough. The wastewater will be captured by a vacuum truck at the northern worksite and transported to approved offsite treatment and disposal.
- **Cementing** – Typical regulatory protocols for abandoned-in-place shoreline ends or segments of submarine pipeline crossings in California, and for pipeline segments abandoned-in-place in levees, is to install cement slurry plugs in all abandoned-in-place shoreline segments. Once the retired crossing has been pigged and flushed, and the flush water certified to less than 15 PPM TPH, the entire retired crossing will be filled with cement slurry from end to end.
- **Pipeline Southern Crossing Decommissioning** – Once the pipeline crossing has been filled with slurry, divers will excavate the slough bed around the northern end of the pipeline protruding from the northern bank. Divers will cut the pipeline at least 5 feet below the slough bed, recover the cut piece of pipe and then backfill the excavation with crushed rock. The reinforced concrete cutoff wall laying on the bank of the northern levee will also be removed during these decommissioning activities.
- **Pipeline Northern Crossing Decommissioning** – A slit trench will be excavated through the north levee and an approximately 50-foot section of the pipe will be cut and removed. The remaining pipe to the north will be capped and the trench backfilled and compacted to original contours and conditions.

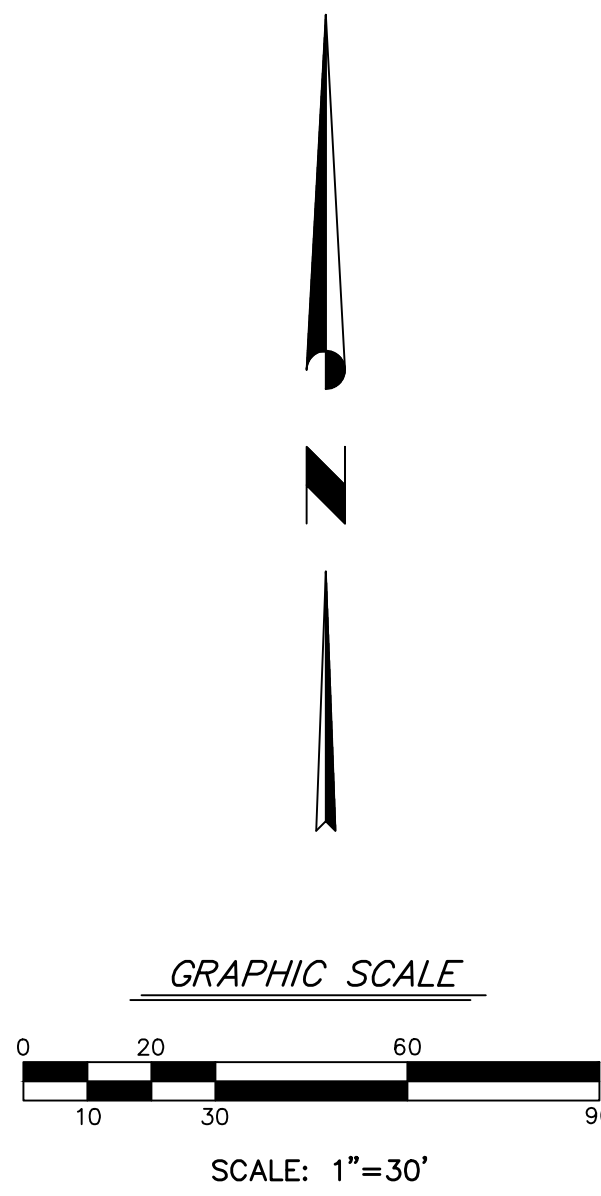




**SURVEY DATA:**  
BENCHMARK: LV0643  
DATUM: NAVD88  
ELEVATION: 9.09 FT  
SURVEY DATE: NOVEMBER 2018

**NOTES:**  
1); TOPOGRAPHIC SURVEY WAS MERGED WITH BATHYMETRIC SURVEY CONDUCTED BY eTRAC INC.  
2); REFER TO SHEET 4 OF 4 FOR MISCELLANEOUS CONSTRUCTION DETAILS AND NOTES.

- LEGEND**
- PROPOSED LAYDOWN AREA
  - PROPOSED DISTURBED AREA
  - R-354 ALIGNMENT - RETIRED
  - LEVEE ALIGNMENT
  - APPROXIMATE WET LAND LIMITS
  - MEAN HIGH WATER LINE
  - JOIN LINE OF TOP OF BANK & EXCAVATION PIT (±)



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OAKVIEW, CA 95022

EMAIL: MSTEFFY@LONGITUDE123.NET

REGISTERED PROFESSIONAL ENGINEER

STATE OF CALIFORNIA

NO. 41700

CIVIL

EXPIRATION DATE 12/31/2024

PG&E L-137B FRESHWATER SLOUGH

RETIRED CROSSING

DECOMMISSIONING PROJECT R-354

NO.	DATE	REVISIONS:	DESCRIPTION	DRAWN:	CHECKED:	APPROVED:
1	01/23/19		PRELIMINARY - MISC. REVISION	TRC	SA	XXX
2	03/19/19		ADDED PROPOSED 8" TP GAS MAIN PER "AS BUILT" PDF FILE B-MAP00191654	TRC	JEO	MYA
3	05/17/19		REPLACED ROCK LEVEE WITH CONCRETE MATS	CM	JEO	MYA

DRAWING NO.

1018-08

SHEET NAME:

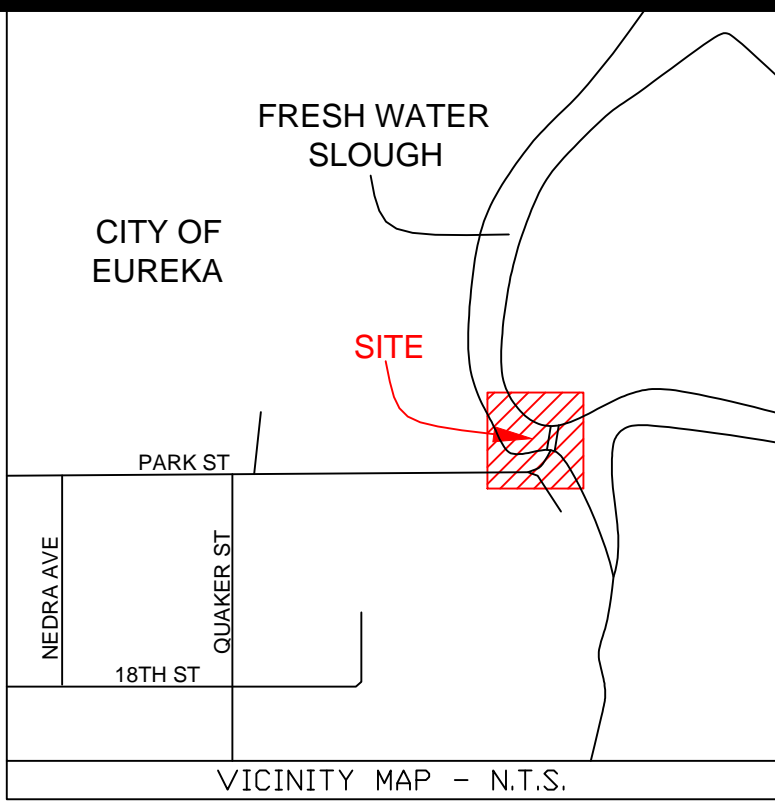
LOCATION MAP

Sheet No.

T-1

1 OF 4

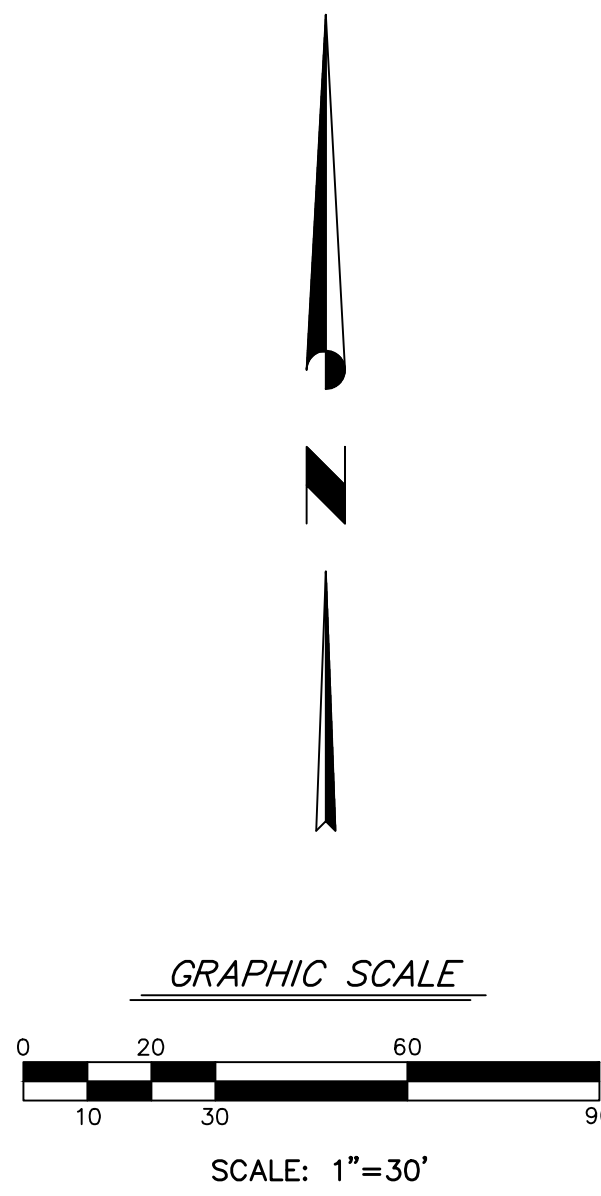




SURVEY DATA:  
BENCHMARK: LV0643  
DATUM: NAVD88  
ELEVATION: 9.09 FT  
SURVEY DATE: NOVEMBER 2018

NOTES:  
1); TOPOGRAPHIC SURVEY WAS MERGED WITH BATHYMETRIC SURVEY CONDUCTED BY eTRAC INC.  
2); REFER TO SHEET 4 OF 4 FOR MISCELLANEOUS CONSTRUCTION DETAILS AND NOTES.

- LEGEND**
- PROPOSED LAYDOWN AREA
  - PROPOSED DISTURBED AREA
  - R-354 ALIGNMENT - RETIRED
  - LEVEE ALIGNMENT
  - APPROXIMATE WET LAND LIMITS
  - MEAN HIGH WATER LINE
  - JOIN LINE OF TOP OF BANK & EXCAVATION PIT (±)



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1357 Morse Avenue, Suite A - Eureka, CA 95503  
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Email: yce@yceinc.com

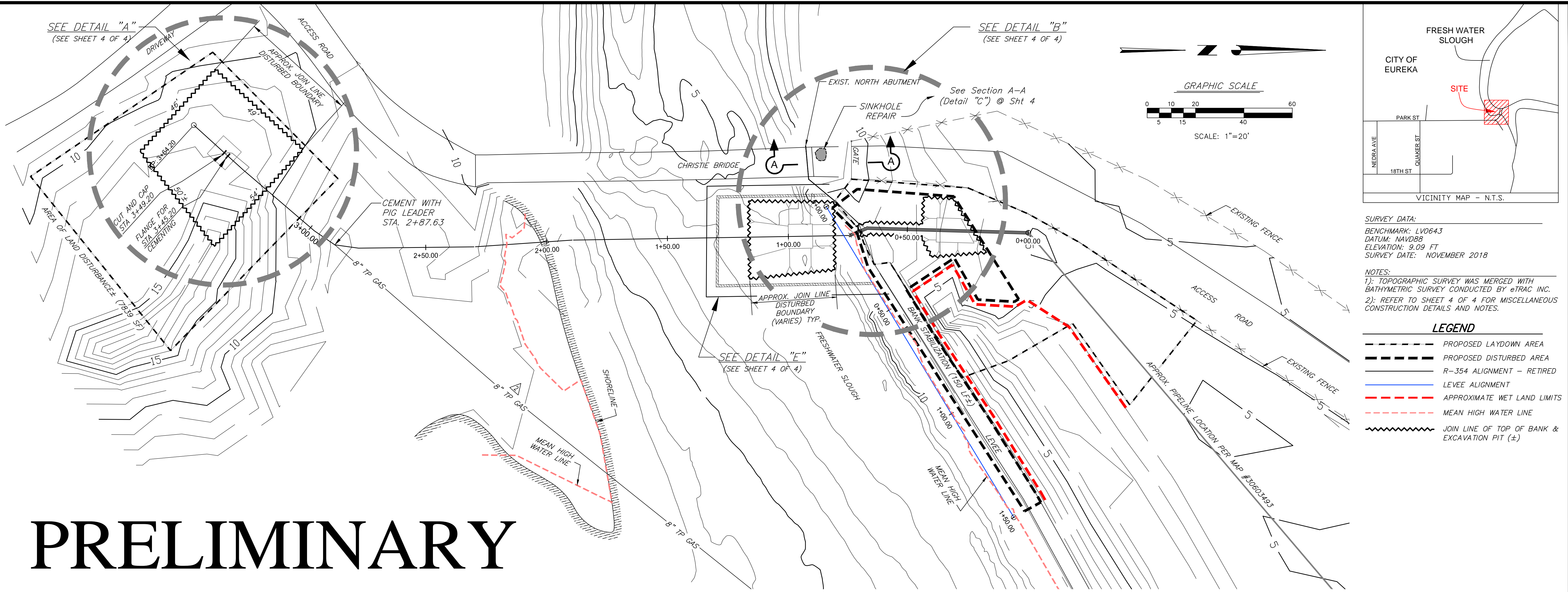
**LONGITUDE 123, INC.**  
2100 VALLEY MEADOW DRIVE  
OAKVIEW, CA 94022  
NO. 41700  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL  
STATE OF CALIF.

PG&E L-137B FRESHWATER SLOUGH  
RETIRED CROSSING  
DECOMMISSIONING PROJECT R-354

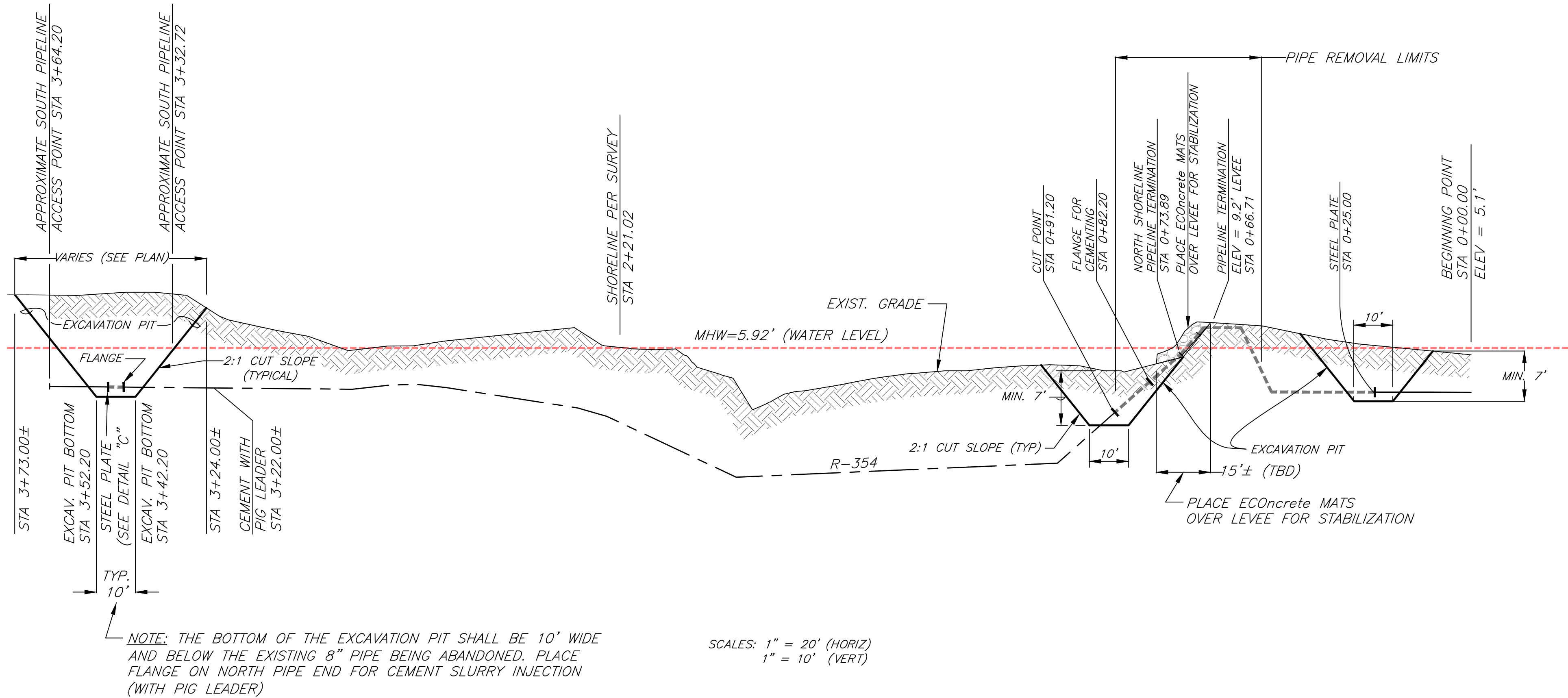
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3	05/17/19	REPLACED ROCK LEVEE WITH CONCRETE MATS	CM	JEQ	MYA

DRAWING NO. 1018-08  
SHEET NAME: SITE PLAN  
Sheet No. T-2  
2 OF 4

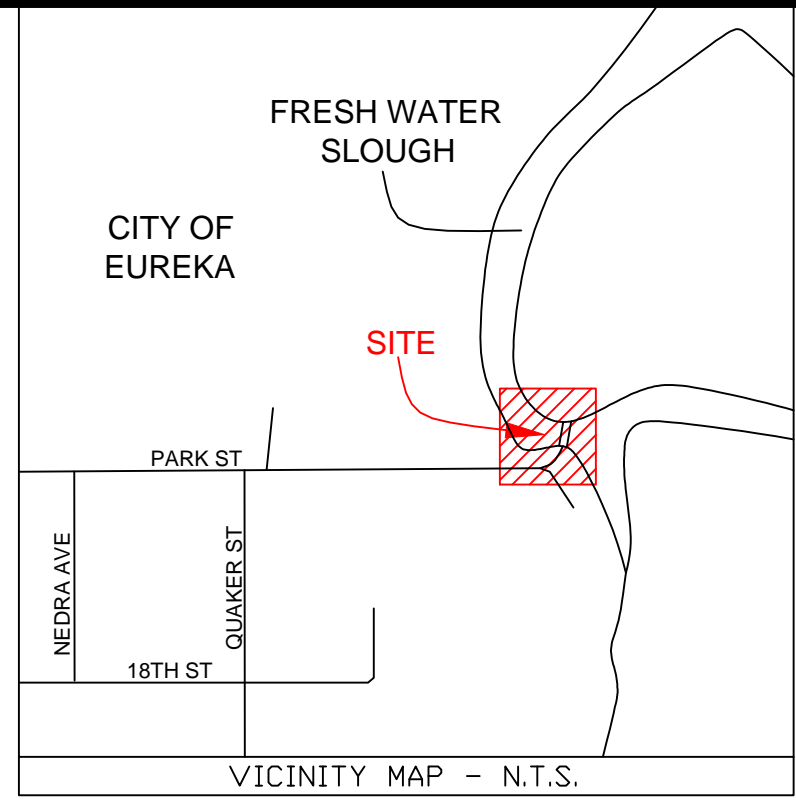




# PRELIMINARY



- ### R-354 ORDER OF COMPLETION
- 1) PIG AND FLUSH 8" PIPE FROM STA 3+45.20 TO STA 0+82.20.
  - 2) CEMENT 8" PIPE FROM STA 3+45.20 TO STA 0+82.20, INSTALL STEEL PLATES ON REMAINING ENDS, BACKFILL WITH SPOILS AND NATIVE SOILS.
  - 3) EXCAVATE SLOUGH BED, CUT AND REMOVE 8" PIPE FROM STA 0+91.20 TO STA 0+82.20, BACKFILL WITH CRUSHED ROCK.
  - 4) SLIT TRENCH LEVEE CROWN FROM STA 0+73.89 TO STA 0+40.00 AND EXCAVATE WORKING AREA FROM STA 0+40.00 TO STA 0+10.00.
  - 5) CUT AND REMOVE 8" PIPE FROM STA 0+73.89 TO STA 0+25.00, INSTALL STEEL PLATE ON REMAINING END, BACKFILL WITH SPOILS AND NATIVE SOILS.



**SURVEY DATA:**  
BENCHMARK: LV0643  
DATUM: NAVD83  
ELEVATION: 9.09 FT  
SURVEY DATE: NOVEMBER 2018

**NOTES:**  
1): TOPOGRAPHIC SURVEY WAS MERGED WITH BATHYMETRIC SURVEY CONDUCTED BY eTRAC INC.  
2): REFER TO SHEET 4 OF 4 FOR MISCELLANEOUS CONSTRUCTION DETAILS AND NOTES.

- ### LEGEND
- PROPOSED LAYDOWN AREA
  - PROPOSED DISTURBED AREA
  - R-354 ALIGNMENT - RETIRED
  - LEVEE ALIGNMENT
  - APPROXIMATE WET LAND LIMITS
  - MEAN HIGH WATER LINE
  - JOIN LINE OF TOP OF BANK & EXCAVATION PIT (±)

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**PG&E L-137B FRESHWATER SLOUGH  
RETIRED CROSSING  
DECOMMISSIONING PROJECT R-354**

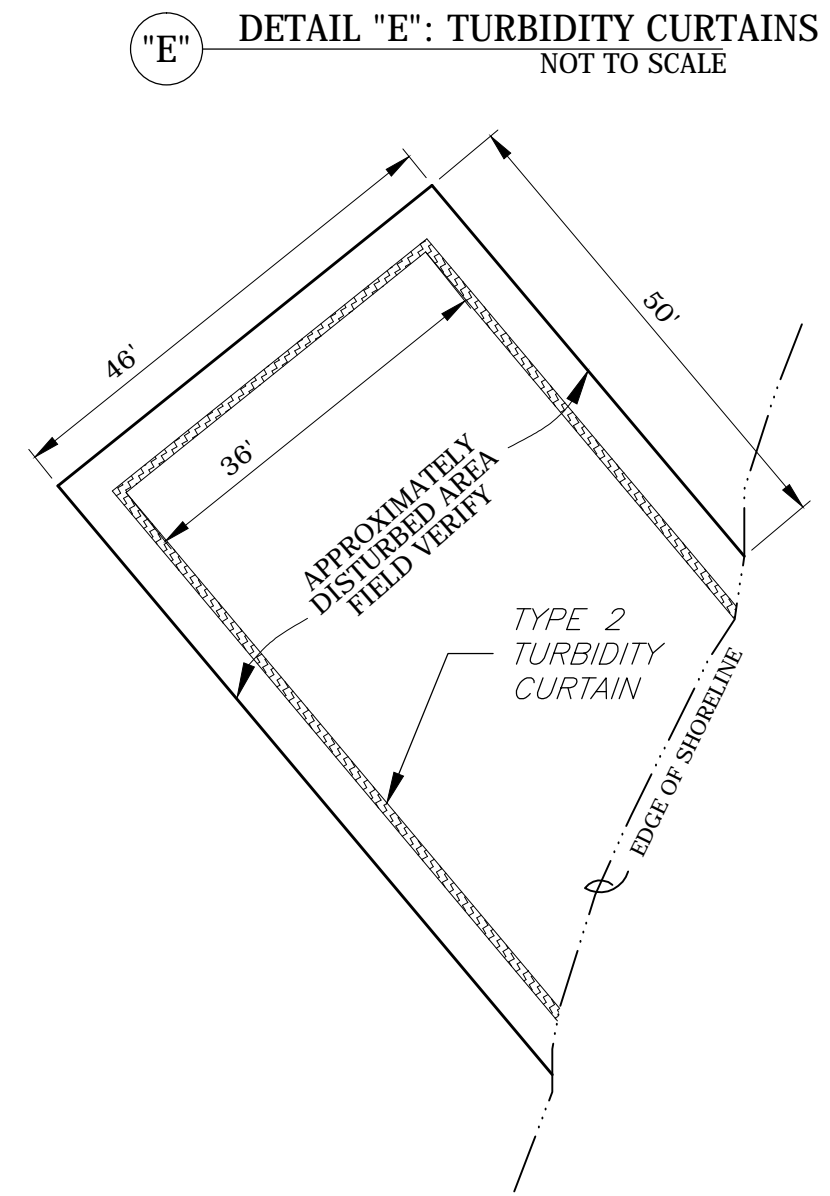
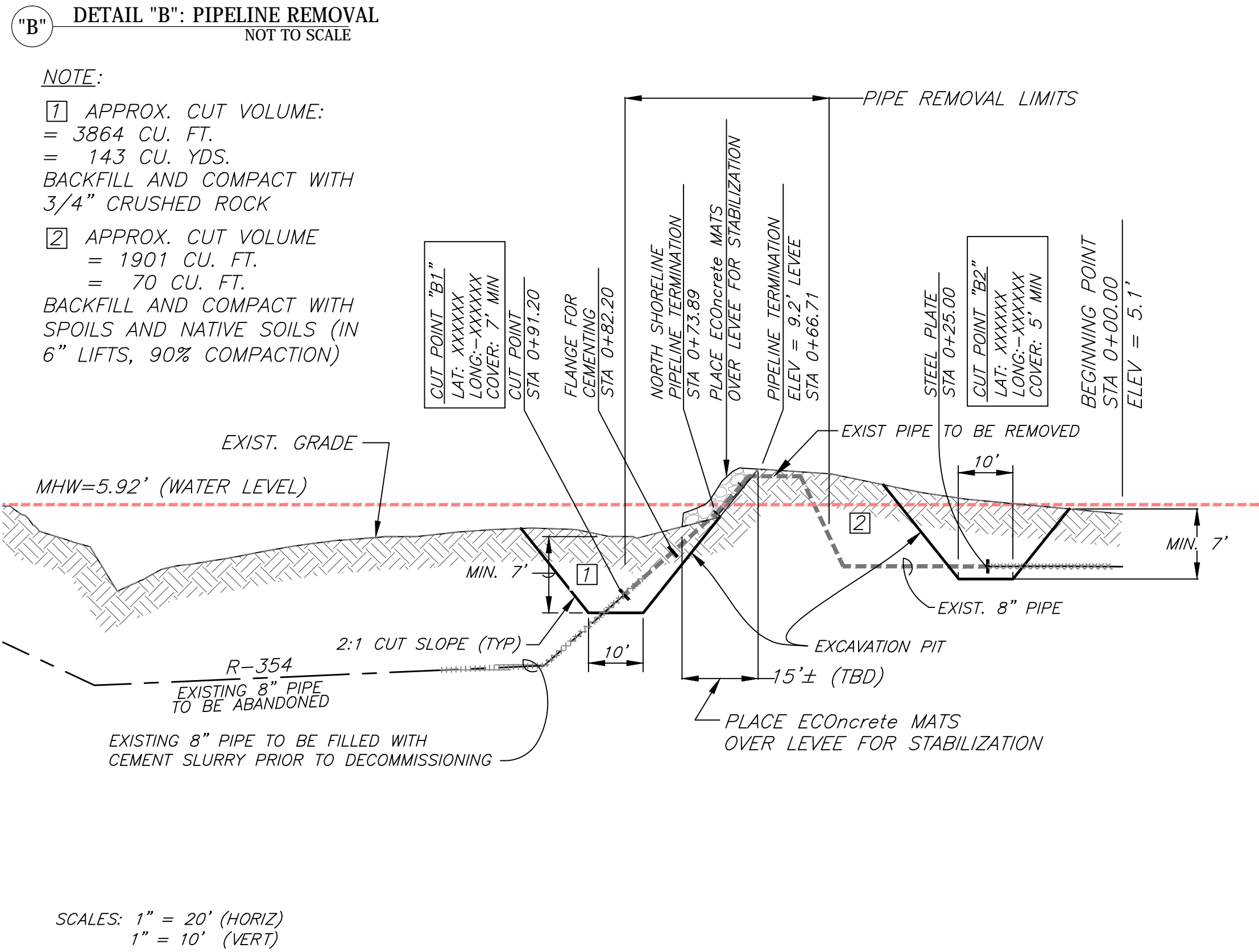
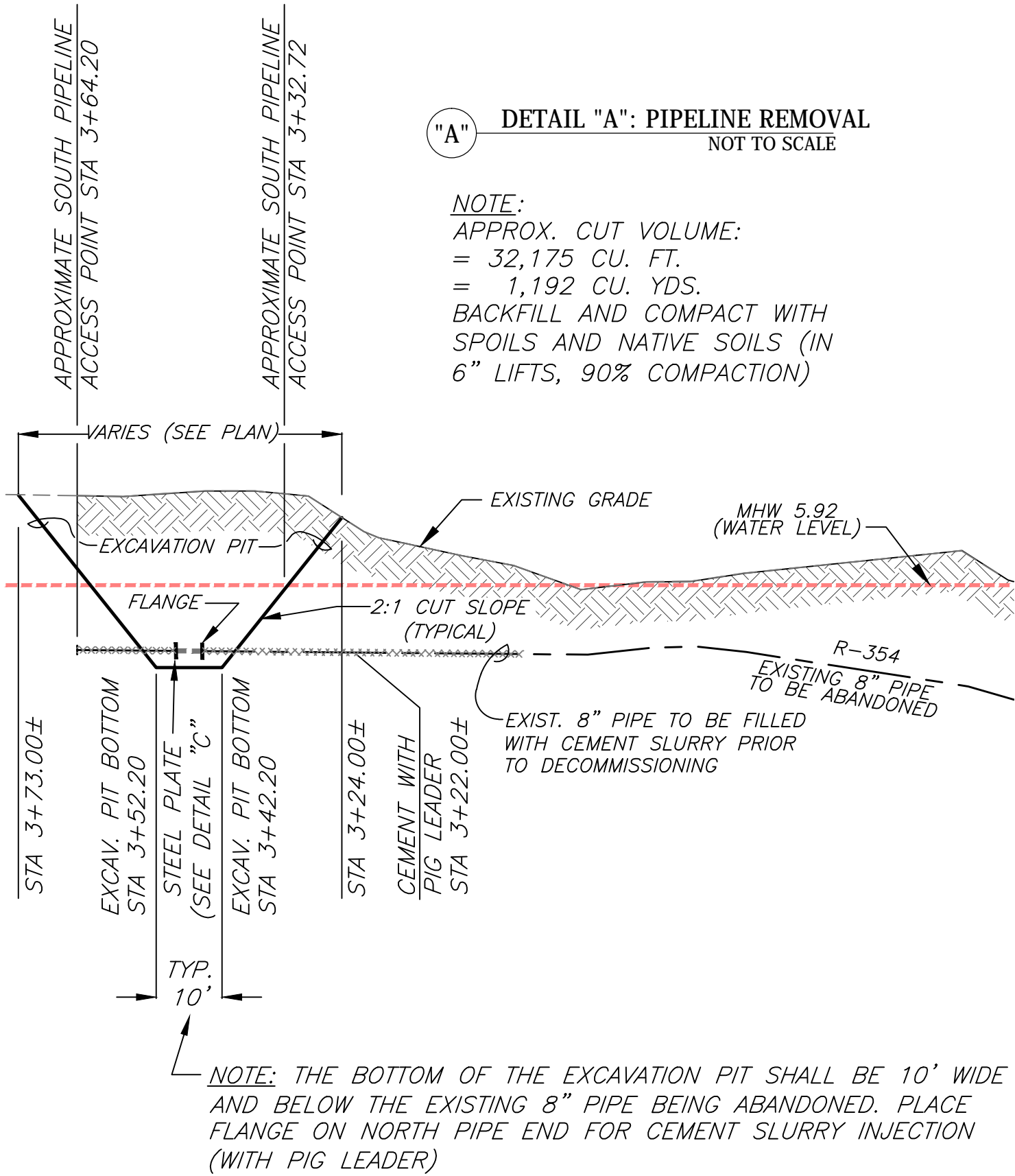
REVISIONS:	
NO.	DATE
1	01/27/19
2	03/19/19
3	05/17/19

DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
01/27/19	PRELIMINARY - MISC. REVISION	TRC	SA	XXX
03/19/19	ADDED PROPOSED 8" TP GAS MAIN PER "AS BUILT" PDF FILE B-MAP00191654	TRC	JEO	MYA
05/17/19	REPLACED ROCK LEVEE WITH ECONCRETE MATS	CM	JEO	MYA

DRAWING NO. 1018-08  
SHEET NAME: PLAN AND PROFILE  
Sheet No. **D-1**

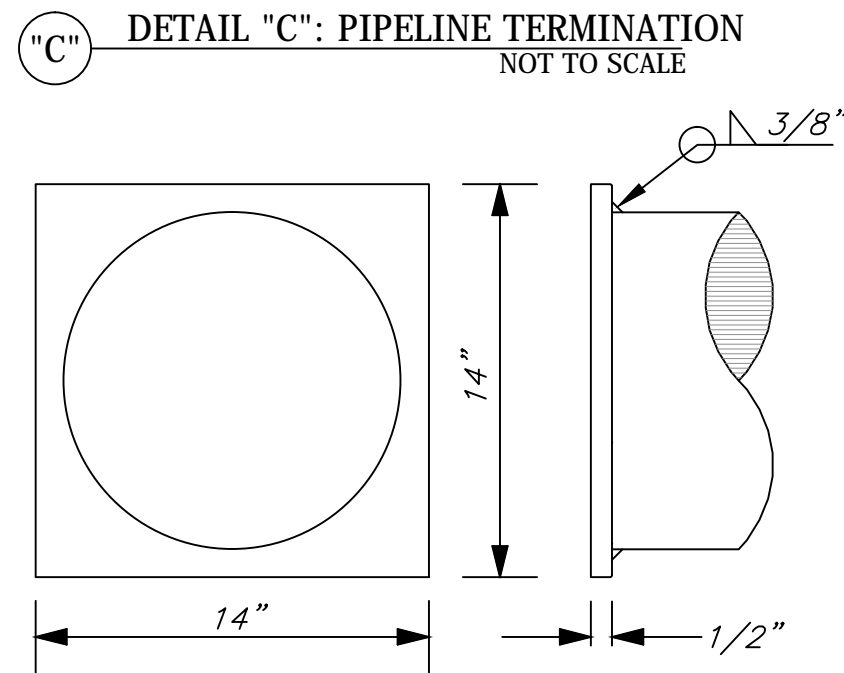
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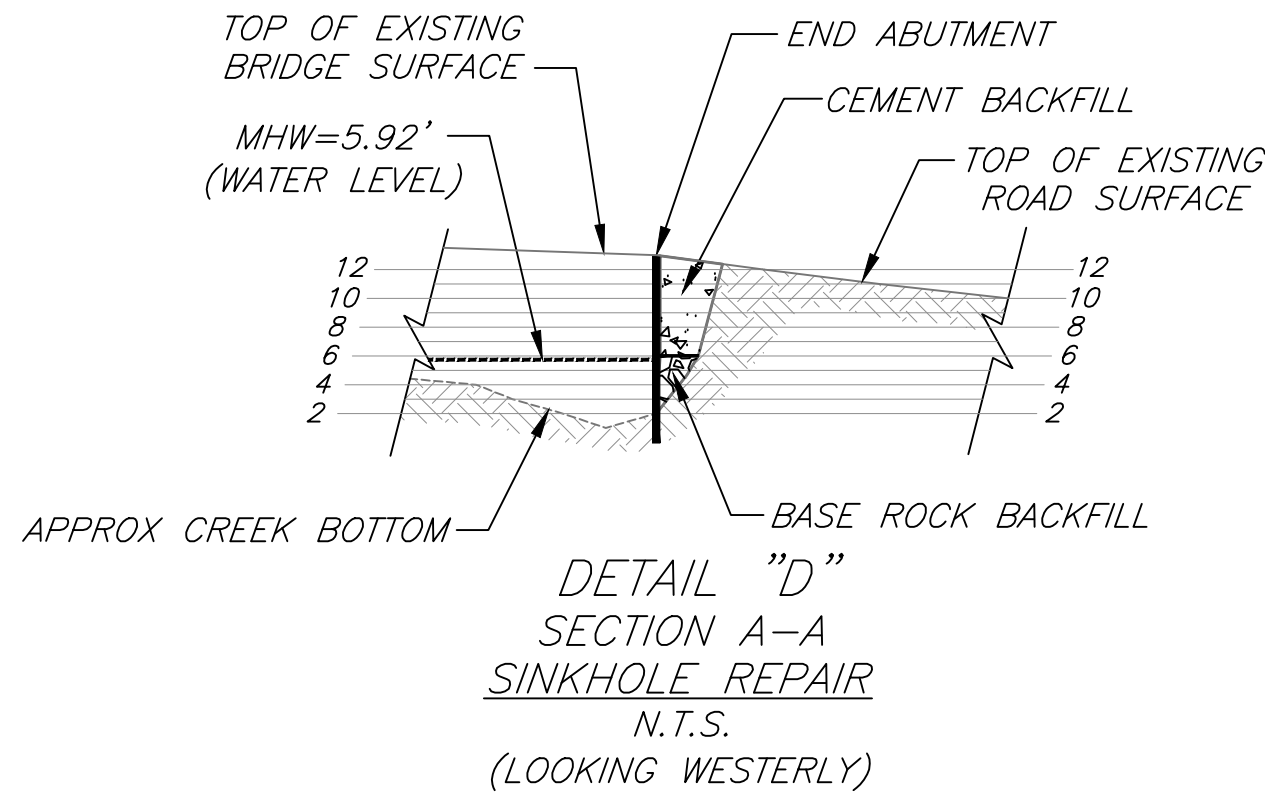


**GENERAL NOTES:**

- 1): ACTUAL CUT POINT TO BE DETERMINED IN FIELD AT TIME OF DECOMMISSIONING. BY CONTRACTOR'S PROJECT MANAGER OR PG&E PROJECT ENGINEER. LOCATION OF FINAL CUT POINT TO BE DETERMINED BY DEPTH OF COVER (MINIMUM 5' OF COVER) AND AS CLOSE THE SHORELINE AS POSSIBLE WITHOUT DISTURBING SHORELINE HABITAT RESOURCES.
- 2): TOPOGRAPHIC SURVEY WAS MERGED WITH BATHYMETRIC SURVEY CONDUCTED BY eTRAC INC.
- 3): SURVEY DATA:  
BENCHMARK: LVO643  
DATUM: NAVD88  
ELEVATION: 9.09 FT  
SURVEY DATE: NOVEMBER 2018



- 1/2" A36 STEEL PLATE NOTES:**
- 1): WELDED STEEL CAPS ON ALL TERRESTRIAL PIPE ENDS TO BE ABANDONED IN PLACE.
  - 2): PIPE CAP MATERIALS 1/2" A36 STEEL PLATE, 14" X 14"
  - 3): ALL WELDING E7018



REVISIONS:		APPROVED:	
No.	DATE	DESCRIPTION	DATE
1	01/31/19	PRELIMINARY - MISC. REVISION	XXX
2	03/19/19	ADDED PROPOSED 8" TP C&G MAIN PER "AS BUILT" PDF FILE B-MAP00191654	MYA
3	05/17/19	REPLACED ROCK LEVEE WITH ECoConcrete MATS	MYA



- **Shoreline Stabilization Mats Installation** – EConcrete mats will be installed on the waterside slope and over the crown of the northern levee. EConcrete’s unique chemical and physical properties enhance the ability of the mattress to encourage growth of marine flora and fauna, increase species richness, reduce the dominance of invasive species and elevate biodiversity. The specific concrete matrix used for the casting will be defined according to the project’s distinct constructive and biological requirements. The mats are expected to extend approximately 150 feet from the eastern edge of the bridge abutment wing-wall. The mats are articulated and will generally contour to the as-found waterside slope. The mats will lay over the crown of the levee to reduce terrestrial erosion and secure the mats in place.
- **Abutment Backfill** – Fill the existing small void behind the abutment with rock backfill and then cement slurry.

## **2.3 RT-102 – L177A Ryan Creek Erosion Remediation Project Description**

**2.3.1 Location** - The RT-102 project is located west of Mitchell Road in Eureka, California, County of Humboldt along Ryan Creek, at PG&E L-177A MP 191.67. L-177A is a 12-inch diameter steel pipeline buried longitudinally in an earth berm that runs along the west side of Ryan Creek. The berm is the remains of a railroad track foundation (no track present) and was previously used as an off-road vehicle access road by Green Diamond Resource Company. The berm is apparently constructed on top of an abandoned redwood plank roadway. The property was purchased by Humboldt County in 2014 and is now known as the McKay Community Forest.

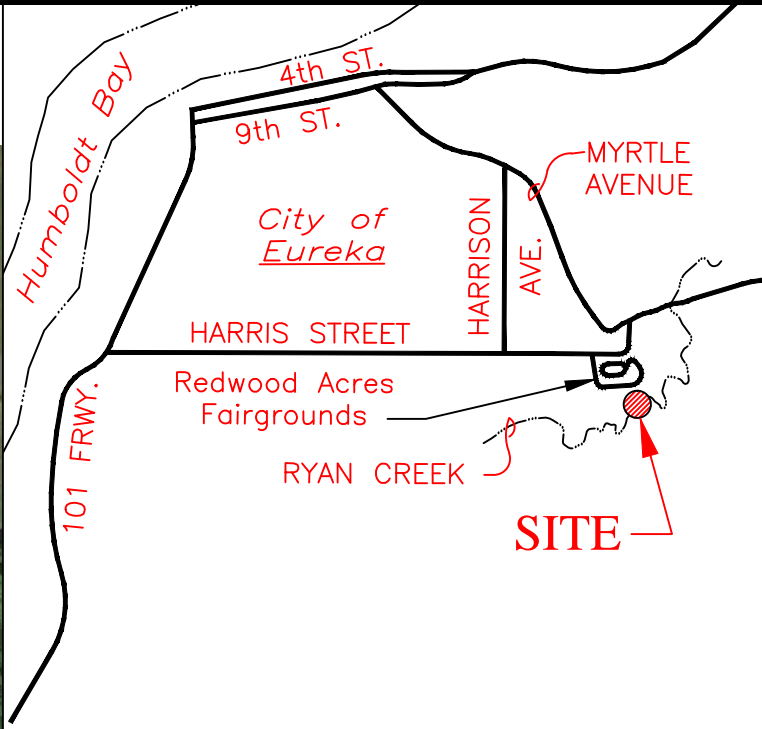
**2.3.2 Facilities** - L-177A is an active carrier pipeline that has become exposed in a sink hole that has developed in the berm. This large sink hole and two other smaller sink holes located near the larger sink hole are apparently the result of stormwater flows coming off the adjoining slope and eroding through the redwood plank roadway underlying the earth berm and into Ryan Creek.

See Drawings T-1, T-2 and T-3 for a site map, plan and profile, and construction details of the erosion area and remediation elements.

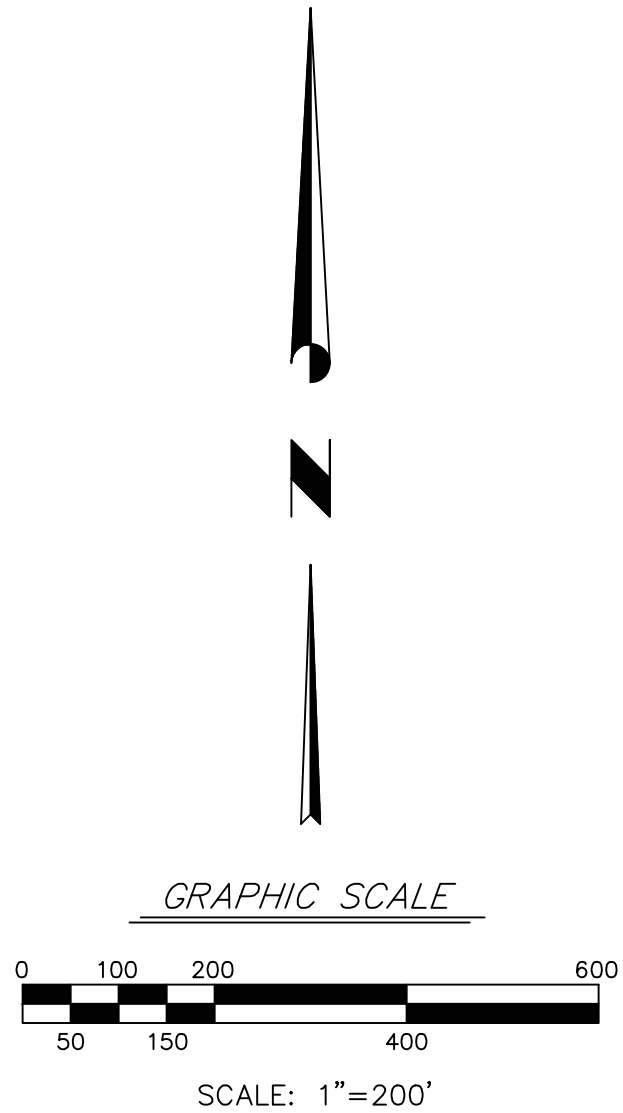
**2.2.3 Work Elements** - For purposes of this preliminary project description, the “work elements” are defined as those elements of work that will constitute the project description on which the project’s regulatory permits will be based. The final design, means and methods for these work elements will be identified during the planning and permitting process:

- **Excavate the Berm at the Sink Hole** – Excavate and open the berm across all three sinkholes to expose the pipeline and the wood sub-base underneath of it. Remove all timber and debris underlying the earth berm.
- **Install Anti-Corrosive Coating System on Exposed Pipeline** - If necessary, sandblast or descale the corroded areas of the exposed pipeline and coat.
- **Reconstruct the Berm at the Sink Hole Location** - Backfill and compact the berm in prescribed lifts in preparation for the installation of the low flow swale.
- **Construct a Low Flow Swale Crossing Across the Top of the Berm** - Construct the rock-based low flow swale across the top of the berm to the design specifications. This will include extending the Crossing west of the berm into the ravine area to properly channel the run-off from the ravine into Ryan Creek.





VICINITY MAP - N.T.S.



REVISIONS:			
No.	DATE	DESCRIPTION	APPROVED:
1	01/31/19	PRELIMINARY - MISC. REVISION	XXX
2	05/17/19	EXTENDED AL JWC S-LY, REMOVED 12" PIPE	MFA

DRAWING NO. 1018-08

SHEET NAME: LOCATION MAP

Sheet NO. T-1

PG&E PIPELINE RT-102  
PIPELINE EROSION REMEDIATION  
PROJECT

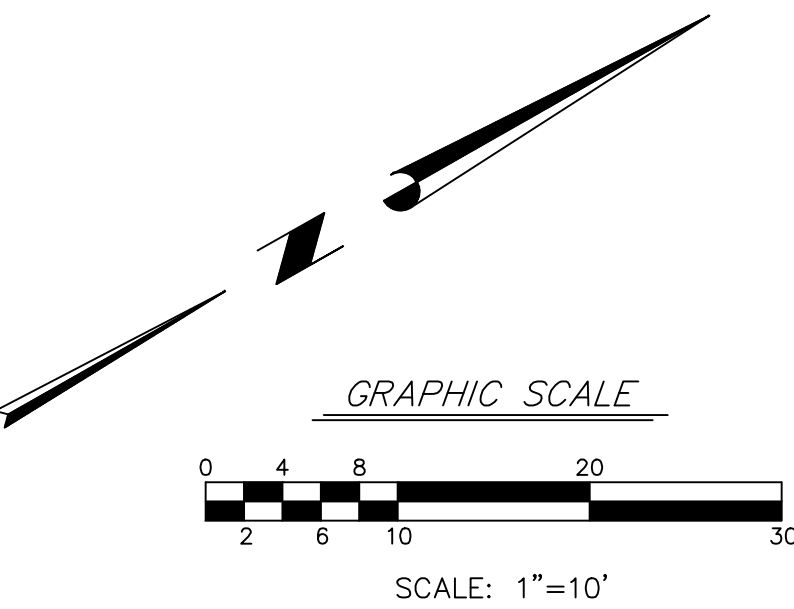


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Office: (805) 650-6995  
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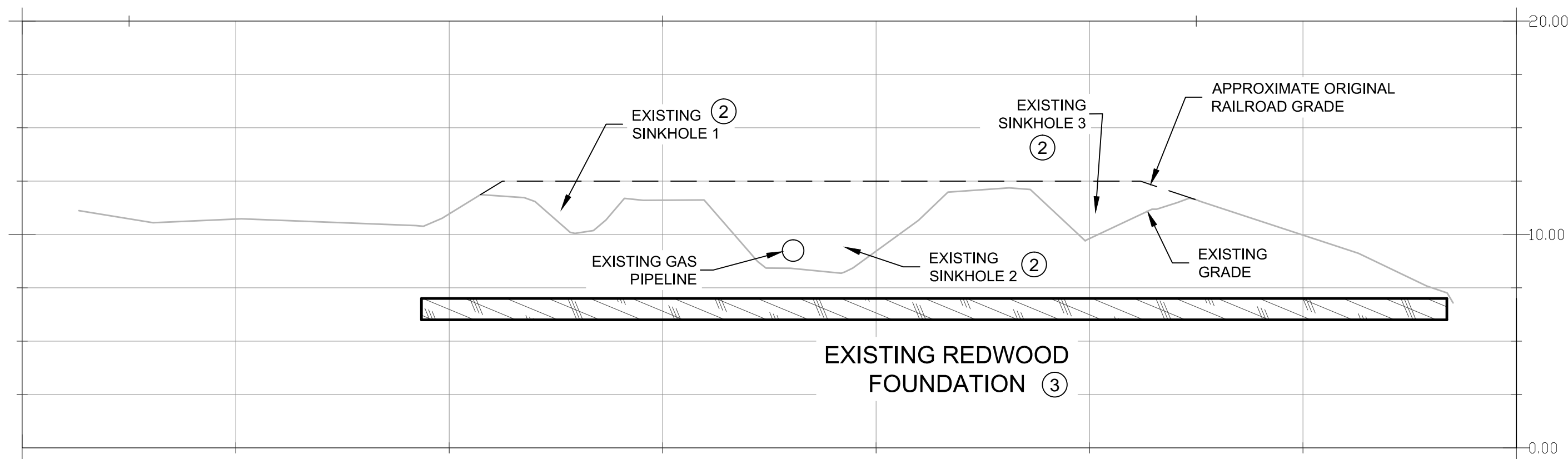
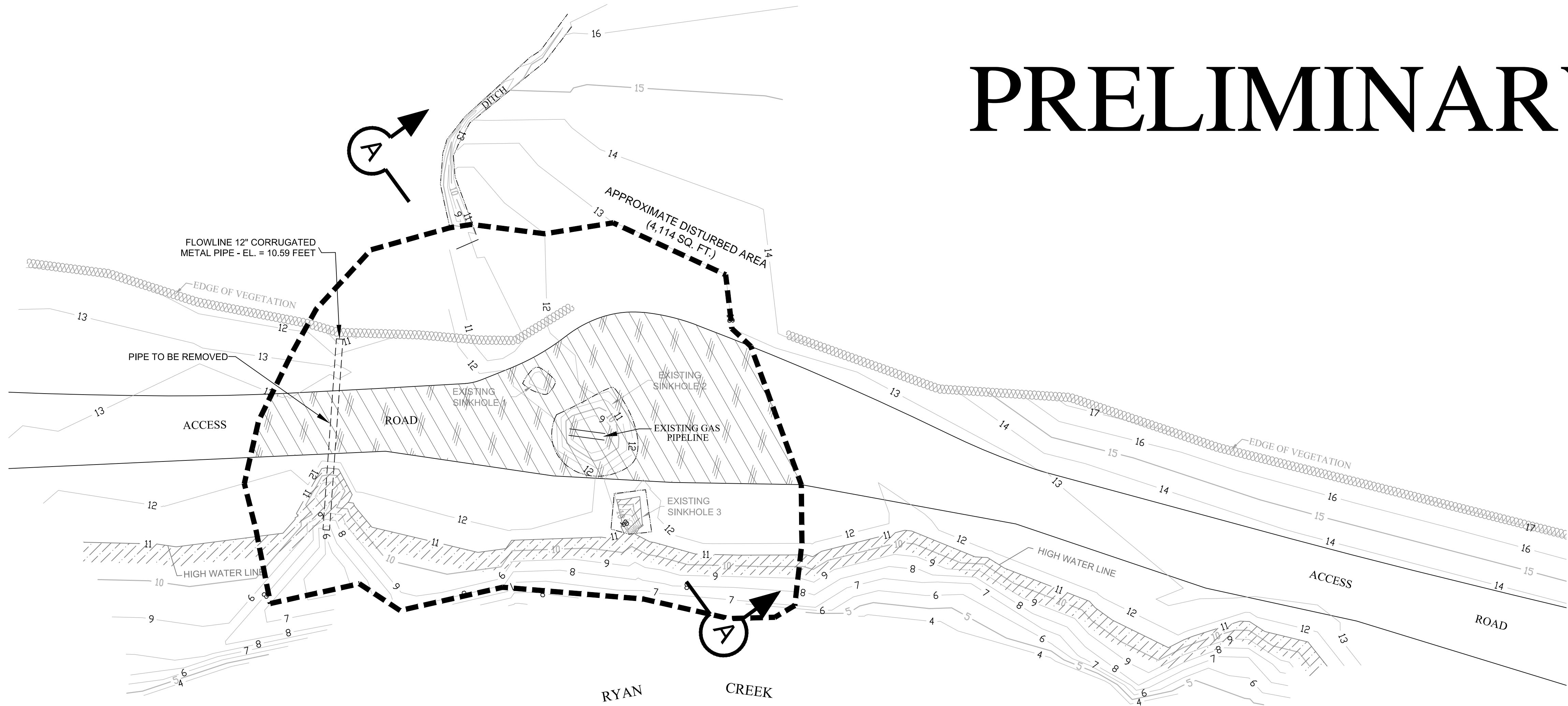




- LEGEND**
- PROPOSED LOW FLOW TRENCH
  - PROPOSED RIPRAP
  - EXISTING REDWOOD FOUNDATION
  - FLOW DIRECTION
  - DISTURBED AREA

- CONSTRUCTION NOTES**
- ② SINKHOLES TO BE EXCAVATED, BACKFILLED, AND COMPACTED DURING RECONSTRUCTION.
  - ③ EXISTING REDWOOD FOUNDATION TO BE REMOVED PRIOR TO BERM RECONSTRUCTION.

- RT-102 ORDER OF COMPLETION**
- 1) EXCAVATE BERM ACROSS PROJECT AREA.
  - 2) DEMOLISH AND REMOVE REDWOOD FOUNDATION.
  - 3) BACKFILL AND COMPACT BERM WITH SPOILS AND NATIVE SOILS.
  - 4) CONSTRUCT ARIZONA CROSSING OVER TOP OF BERM.



**SECTION A-A**  
SCALES: 1"=5'

PRELIMINARY

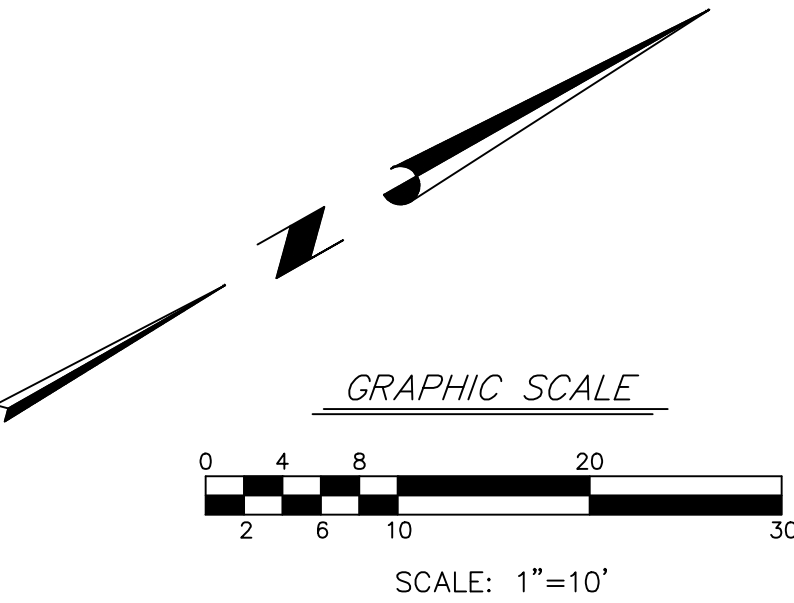
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No.	1	01/31/19	PRELIMINARY - MISC. REVISION	JED	SA	XXX
2	05/17/19	EXTENDED AZ LINE S-LY, REMOVED 12" PIPE		CM	JED	MFA

DRAWING NO. 1018-08

SHEET NAME:  
EXISTING CONDITION  
PLAN AND PROFILE

Sheet NO. T-2

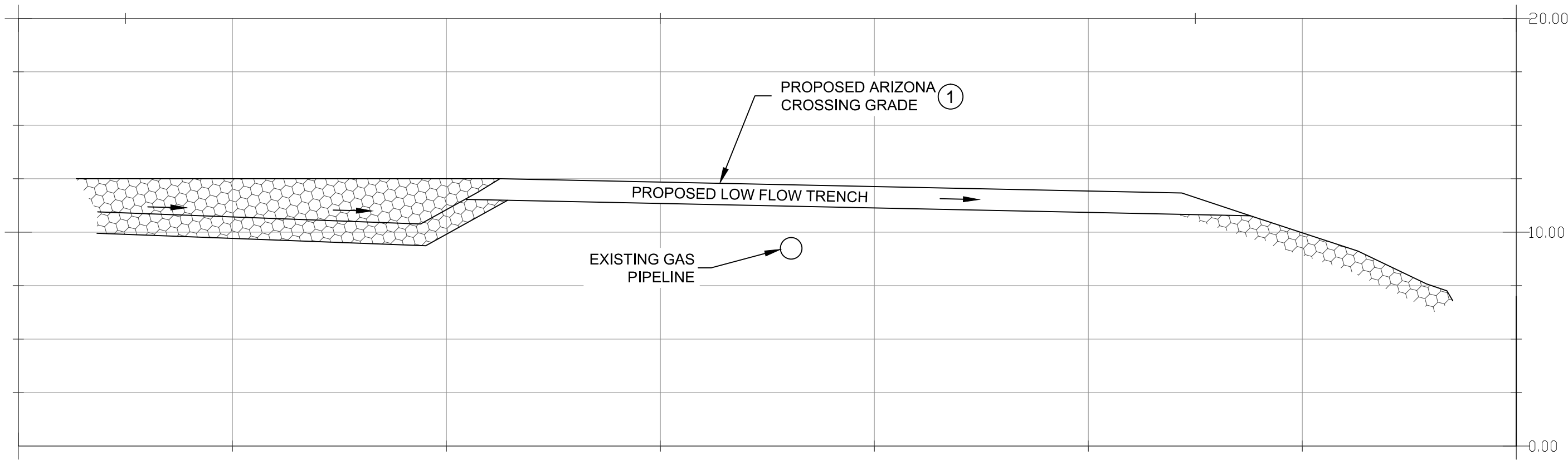
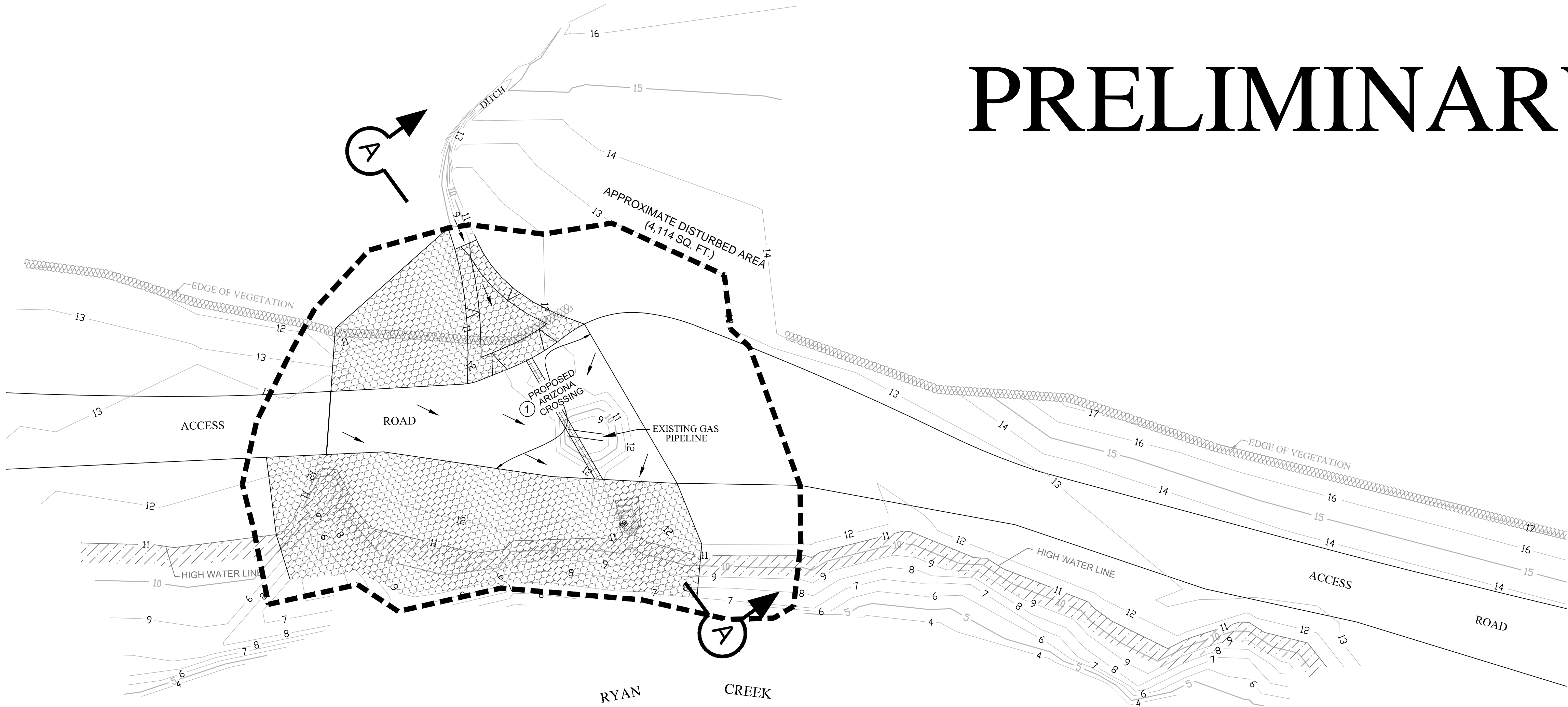




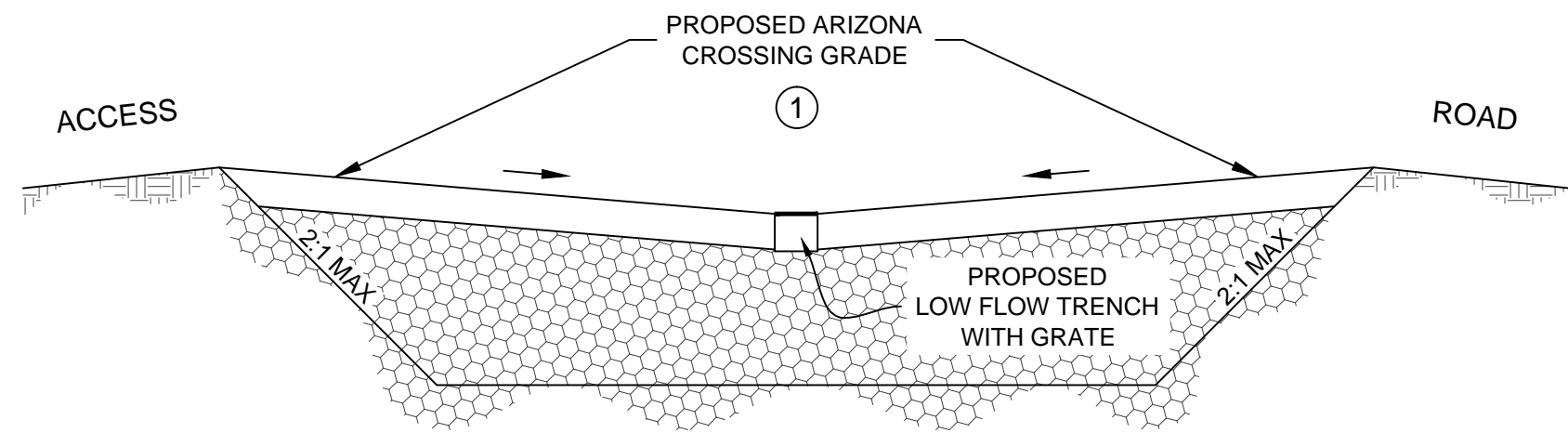
- LEGEND**
- PROPOSED LOW FLOW TRENCH
  - PROPOSED RIPRAP
  - EXISTING REDWOOD FOUNDATION
  - FLOW DIRECTION
  - DISTURBED AREA

- CONSTRUCTION NOTES**
- 1) PRELIMINARY DESIGN FOR ARIZONA CROSSING PER THE 4' X 2' CONCRETE BOX CULVERT SHOWN ON PACIFIC WATERSHED ASSOCIATES HYDROLOGY AND HYDRAULICS ANALYSIS WILL BE NEEDED TO FINALIZE THE ARIZONA CROSSING DESIGN, CONSTRUCTION MATERIAL, AND LOW FLOW PIPE SIZE AND QUANTITY. DESIGN SUBJECT TO CHANGE BASED ON STUDY.

- RT-102 ORDER OF COMPLETION**
- 1) EXCAVATE BERM ACROSS PROJECT AREA.
  - 2) DEMOLISH AND REMOVE REDWOOD FOUNDATION.
  - 3) BACKFILL AND COMPACT BERM WITH SPOILS AND NATIVE SOILS.
  - 4) CONSTRUCT ARIZONA CROSSING OVER TOP OF BERM.



**SECTION A-A**  
SCALES: 1"=5'



**DETAIL A: ARIZONA CROSSING PROFILE**  
N.T.S.

REVISIONS:		DATE:	DESCRIPTION:	DRAWN:	CHECKED:	APPROVED:
No.	1	01/31/19	PRELIMINARY - MISC. REVISION	JED	SA	XXX
2	05/17/19	EXTENDED AZ INVE S-LY, REMOVED 12" PIPE	CM	JED	MPA	

DRAWING NO. 1018-08

SHEET NAME:  
COMPLETE CONDITION  
PLAN AND PROFILE

Sheet NO. T-3



### 3. ANTICIPATED REGULATORY APPROVALS

We anticipate this project will require the regulatory approvals outlined in Table 1. Pre-application meetings with the regulatory agencies were held in April to solicit agency feedback regarding preliminary project design and potential environmental concerns. Agency pre-application meetings will help facilitate preparation of a complete permit application package and appropriately address environmental impacts.

<b>Table 1. Anticipated Regulatory Permit Requirements for the Eureka Project Bundle</b>				
<b>Agency</b>	<b>Permit / Approval</b>	<b>R-354 Site</b>	<b>R-519 Site</b>	<b>RT-102 Site</b>
<b>Federal Agencies</b>				
U.S. Army Corps of Engineers	Section 404 Clean Water Act and/or Section 10 Rivers and Harbors Act	NWP-12 (Utility Line Activities)  NWP 13 (Bank Stabilization)	NWP-12 (Utility Line Activities)	NWP-7 (Outfall Structures) NWP-3 (Maintenance)
U.S. Fish and Wildlife Service	Federal Endangered Species Act	Section 7 Consultation	Section 7 Consultation	Section 7 Consultation
National Marine Fisheries Service	Federal Endangered Species Act / Essential Fish Habitat Review (Magnuson-Stevens Act)	Section 7 Consultation / EFH Review	Section 7 Consultation / EFH Review	Section 7 Consultation / EFH Review
<b>State Agencies</b>				
California Coastal Commission	Coastal Zone Management Act	Coastal Development Permit	Coastal Development Permit	Coastal Development Permit
California Department of Fish and Wildlife	Section 1600 California Fish and Game Code	Streambed Alteration Agreement	Streambed Alteration Agreement	Streambed Alteration Agreement
Regional Water Quality Control Board	Section 401 Clean Water Act / Porter-Cologne Water Quality Act	Water Quality Certification	Water Quality Certification	Water Quality Certification
<b>Local Agencies</b>				
Humboldt Bay Harbor Recreation and Conservation District	Humboldt Bay Management Plan	Harbor District Development Permit	Harbor District Development Permit	N/A (located outside primary area of concern)

### 4. PROPOSED PERMITTING AND CONSTRUCTION SCHEDULE

PG&E intends to submit regulatory permit applications in summer 2019 once project design is complete. PG&E would like to complete the construction of these pipeline crossing maintenance projects during the July 1 to October 15 aquatic species work window in 2020.