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PROJECT MEMORANDUM

PG&E EMBARCADERO-POTRERO 230 KV TRANSMISSION PROJECT

To:Billie Blanchard, Project Manager, CPUCFrom:Vida Strong, Aspen Project ManagerDate:March 25, 2015Subject:Monitoring Report #27 – March 16, 2015 to March 22, 2015

This report provides a summary of the construction and compliance activities associated with the PG&E Embarcadero-Potrero (E-P) 230 kV Transmission Project.

A summary of the Notices to Proceed (NTPs) for construction and Minor Project Change (MPC) activities are provided in Tables 1 and 2, respectively (below).

CPUC Environmental Monitor (EM): Jody Fessler.

CPUC NTPs

E-P Potrero Switchyard Site Preparation

NTP #1 was issued on August 21, 2014 for the site preparation of the Potrero Switchyard on 23rd Street adjacent to the existing Potrero Substation on the corner of 23rd Street and Illinois Street in San Francisco. NTP #1 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

- 1. Overaa conducted housekeeping and dust control activities Monday through Friday.
- 2. Overaa and Proven built a stabilized ramp for truck access on Tuesday (see Figure 1).
- 3. PSC conducted housekeeping and dust control activities on Monday and Tuesday.
- 4. PSC hauled off sediment for disposal on Tuesday.
- 5. Proven conducted excavation activities Monday, Tuesday, and Friday.
- 6. Proven graded the excavation walls on Wednesday and Thursday.
- 7. Philip West Industrial Services hauled excavated soils to approved disposal facilities Thursday and Friday.
- 8. Penecore Drilling installed vapor wells in the excavation on Friday.
- 9. Street sweeping occurred Monday through Friday.
- 10. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

- 1. Air quality monitoring was conducted by ERM Monday through Friday.
- Cultural monitoring was conducted Monday through Friday. On March 16th, 17th and 19th, cultural constituents were observed, documented, and collected. On March 20th, cultural constituents were observed, documented, but not collected.
- 3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.

- 4. Nesting bird surveys were conducted Monday, Wednesday, and Friday; and nesting bird sweeps were conducted Tuesday and Thursday.
- 5. PG&E's Environmental Inspectors noted no compliance issues at this location.

E-P Horizontal Directional Drill (HDD) Construction

NTP #2 was issued on August 28, 2014 for the HDD Construction on Spear Street, at the northern end of the project, and 23rd Street, at the southern end of the project, in San Francisco. Both HDDs would terminate within the San Francisco Bay and will be tied together in the future via a subsea cable. NTP #2 included conditions that had to be satisfied prior to the start of construction, as well as prior to the start of any work in the Bay.

Summary of Activity at the Northern Bore (Spear Street):

1. The HDD work is complete and HDD Company demobilized from the site during Week #26.

Summary of Activity at the Southern Bore (23rd Street):

1. The HDD work is complete and HDD Company demobilized from the site during Week #26.

E-P Underground Duct Bank Construction

NTP #3 was issued on October 9, 2014 for the underground duct bank and vault installation component of the Embarcadero-Potrero 230 kV Transmission Project between the horizontal directional drill (HDD) transition on Spear Street to the Embarcadero Substation on Folsom Street in the northern section, and between the HDD transition on 23rd Street to the Potrero Switchyard in the southern section, in the City of San Francisco. NTP #3 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity for the Duct Bank North (Folsom St. and Spear St.):

- 1. Underground Construction Co. installed beams in the duct bank trench on Folsom Street on Monday.
- 2. Underground Construction Co. conducted duct bank excavation and installed shoring in the trench on Folsom Street Monday through Thursday.
- 3. Underground Construction Co. installed base rock in duct bank trench on Folsom Street Monday and Tuesday.
- 4. Underground Construction poured slurry behind shoring in the duct bank trench on Folsom Street on Wednesday.
- 5. Underground Construction Co. dewatered the duct bank trench on Folsom Street Monday and Wednesday through Saturday.
- 6. Underground Construction Co. installed rebar in the duct bank trench on Folsom Street Tuesday through Saturday (see Figure 2).
- 7. Underground Construction Co. poured slurry in the Caltrans right-of-way on Folsom Street on Friday.
- 8. Underground Construction Co. welded and grinded beams at the vault excavation on Spear Street on Monday.
- 9. Underground Construction Co. removed shoring beams at the vault excavation on Spear Street on Tuesday.
- 10. Underground Construction Co. conducted vault excavation on Spear Street on Tuesday.
- 11. Underground Construction Co. dewatered vault excavation on Spear Street on Friday.

- 12. Underground Construction Co. potholed for utilities at the HDPE transition on Spear Street on Monday.
- 13. Underground Construction Co. drove piles at the HDPE transition on Spear Street on Tuesday.
- 14. Underground Construction Co. saw cut pavement on Spear Street Tuesday and Thursday.
- 15. Underground Construction Co. removed asphalt at the HDPE transition on Spear Street Tuesday through Thursday.
- 16. Underground Construction Co. excavated at the HDPE transition on Spear Street Wednesday through Saturday (see Figure 3).
- 17. Clean Harbors delivered and staged roll off bins in secondary containment at Spear Street cul-de-sac on Monday and Tuesday.
- 18. Street sweeping occurred Monday through Saturday.
- 19. No construction activities occurred on Sunday.

Environmental Compliance:

- 1. Cultural monitoring was conducted Monday through Saturday. On March 16th and 17th, cultural constituents were observed, documented, but not collected. On March 18th, cultural constituents were observed, documented, and one item collected. On March 20th and 21st, cultural constituents were observed, documented, and collected.
- 2. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Saturday, including SWPPP inspections.
- 3. Nesting bird surveys were conducted Monday and Friday, and nesting bird sweeps were conducted Monday through Thursday and Saturday. Signs were installed around the Anna's hummingbird nest stating "Sensitive Resource Area: Nesting Bird".
- 4. PG&E's Environmental Inspectors noted one compliance issues at this location. On March 18th and 19th, the PG&E Environmental Inspector observed several drums holding hazardous materials (i.e. labeled oil and oily rags) were without secondary containment. The PG&E Environmental Inspector informed the PG&E and BVCI Inspectors and recommended that the drums be placed in secondary containment or removed from the site. HDD Co. had left them on site and BVCI requested they be removed. On March 19th, HDD Co. removed the hazardous material drums from the project.

Summary of Activity for the Duct Bank South (23rd Street):

- 1. West Coast Drilling drilled pier holes at the vault location on Monday and Tuesday.
- 2. Underground Construction Co. conducted vault excavation Wednesday, Friday, and Saturday.
- 3. Underground Construction loaded trucks for sediment disposal at the vault location on Wednesday.
- 4. Underground Construction Co. removed old pipe from the vault excavation on Wednesday.
- 5. Underground Construction Co. installed shoring in the vault excavation on Thursday.
- 6. Underground Construction Co. excavated for the water line replacement Monday through Friday.
- 7. Underground Construction Co. installed new pipe for the water line replacement Monday through Wednesday (see Figure 4).
- 8. Underground Construction Co. potholed for utilities for the water line replacement Wednesday through Friday.
- 9. Underground Construction Co. backfilled the trench for the water line replacement on Friday.
- 10. Street sweeping occurred Monday through Saturday.

- 11. Fencing was installed around the open trench at the end of each day.
- 12. No construction activities occurred on Sunday.

Environmental Compliance:

- 1. Cultural monitoring was conducted Monday through Saturday. March 17th through 20th, cultural constituents were observed, documented, and but not collected.
- 2. Air quality monitoring was conducted by ERM Monday through Saturday.
- 3. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Saturday, including SWPPP inspections.
- 4. Nesting bird sweeps were conducted Monday through Saturday.
- 5. PG&E's Environmental Inspectors noted no compliance issues at this location.

E-P Submarine Rock and Debris Removal

NTP #4 was issued on November 21, 2014 for the rock removal obstructing the path of the submarine cable component of the Embarcadero-Potrero 230 kV Transmission Project along the submarine cable line and off shore of Pier 50 in the San Francisco Bay. NTP #4 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

1. No construction activity related to NTP #4 occurred during the subject week. Manson crews completed rock and debris removal during Week #14, except for several debris items that were too near the north end exit pits and the HDD work. These few items will be removed when the submarine cable installation begins June 1, 2015.

Environmental Compliance:

1. No compliance monitoring was conducted during the subject week.

Amador Staging and Laydown Yard

A Minor Project Change #1 was issued on July 23, 2014 for the use of the Amador Staging and Laydown Yard on Amador Street, San Francisco. The Minor Project Change #1 included conditions that had to be satisfied prior to the staging of equipment and materials at the yard.

Summary of Activity:

- 1. Office trailer use occurred Monday through Saturday at the yard.
- 2. Tailboard meetings occurred at the yard Monday through Saturday.
- 3. Clean Harbors removed a roll-off bin containing sediment for disposal on Monday and delivered new roll off bins.
- 4. No work occurred at the yard on Sunday.

Environmental Compliance:

- 1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Saturday, including SWPPP inspections.
- 2. Nesting bird surveys were conducted on Monday, Wednesday and Friday, and nesting bird sweeps were conducted Tuesday, Thursday and Saturday.
- 3. PG&E's Environmental Inspectors noted no compliance issues at this location.

Notices to Proceed

Table 1 summarizes the Notices to Proceed (NTP) for the Embarcadero-Potrero Project.

	Date	Date		
NTP #	Requested	Issued	Phase	Description
NTP #1	6/23/14	8/21/14	Potrero Site	Site preparation and excavation of the 230 kV
			Preparation	Potrero Switchyard site on 23 rd St., SF.
NTP #2	7/31/14	8/28/14	HDD	Horizontal directional drilling on Spear St. and
				23 rd St. connecting to the SF Bay.
NTP #3	9/18/14	10/09/14	Underground	Underground duct bank and vault installation
			Duct Bank and	between the HDD transition on Spear St. to
			Vaults	the Embarcadero Substation on Folsom St. in
				the northern section, and between the HDD
				transition on 23 rd St. to the Potrero
				Switchyard in the southern section, SF.
NTP #3	11/13/14	11/14/14	Underground	Trench from the new Potrero Switchyard to
MOD			Duct Bank and	the existing switchyard for the 230 kV/115 kV
			Vaults	connections across the Trans Bay Cable.
NTP #4	11/19/14	11/21/14	Subsea Cable	Rock and debris removal along subsea cable
				route.
NTP #5	2/19/15	Under	Potrero GIS	Construction of 230 kV Potrero gas-insulated
		Review	Switchgear	switchgear (GIS) building and cable tie-in
			Building	component at Potrero Switchyard.
NTP #6	2/19/15	Under	Submarine	Site preparation for submarine cable instal-
		Review	Cable	lation, laying the cable, and pulling the cable
				to land at either end.

Notice to Proceeds (NTPs) (Updated 03/25/15)

Table 1

Minor Project Changes

Table 2 summarizes the Minor Project Changes submitted for the Embarcadero-Potrero Project.

Table 2 Minor Project Changes (MPCs) (Updated 03/25/15)

	Date	Date		
MPC #	Requested	Issued	Phase	Description
MPC #1	7/16/14	7/23/14	Amador	Use of an existing staging and laydown yard
			Staging and	adjacent to Alternate Staging Area #3 (as
			Laydown Yard	identified in the IS/MND)on Amador St., SF.
MPC #2	12/31/14	1/5/15	Staging and	Use of an existing paved staging and laydown
			Laydown Yard	yard at 1215 Michigan Street, SF, two blocks
				from the Potrero Switchyard.

PROJECT PHOTOS



Figure 1 – New access ramp into work area being built at Potrero Switchyard, view southeast, March 17, 2015. Photo courtesy of PG&E.



Figure 2 – Dewatering and installing rebar in duct bank on Folsom Street. View north, March 21, 2015. Photo courtesy of PG&E.



Figure 3 – Excavating for duct bank at the HDPE transition on Spear Street. View east, March 21, 2015. Photo courtesy of PG&E.



Figure 4 – Underground duct bank and water line relocation work on 23rd Street. View west, March 18, 2015. Photo courtesy of PG&E.