Attachment C – Fire Prevention Plan and Spill Prevention Control and Response Plan

Construction Fire Prevention Plan
Humboldt Bay – Humboldt #1 60 kV Reconductoring Project

Submitted to:
California Public Utilities Commission

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1.0 CONSTRUCTION FIRE PREVENTION PLAN DEFINITIONS

a. **Adjective Rating Zone:** An area whose boundaries are designated by the California Department of Forestry and Fire Protection and USFS for the purpose of establishing a fire-danger rating based on local fire conditions.
b. **Applicant-proposed Mitigation Measures (AMM)**: Measures proposed by PG&E in the Initial Study/Mitigated Negative Declaration, to mitigate project related impacts.
c. **Construction Fire Prevention Plan:** Also known as the Fire Plan**.** The Fire Plan is developed and implemented by PG&E and its construction contractor to provide fire prevention guidance for a specific construction project.
d. **Fire Adjective Index (FAI) Rating:** A rating used by fire agencies within the State of California to determine the risk of fire and its likely behavior.
e. **Fire Coordinator (FC):** A PG&E Construction Inspector who serves as liaison or agency representative to the fire agencies and other emergency services during an emergency and with other fire related activities in non-emergency situations.
f. **Fire Hazard Coordinator (FHC):** The foreman for each individual crew shall be the designated FHC for that crew, and shall be responsible for assessing work areas for fire hazards prior to work beginning in each area, as well as communicating with the FC.
g. **Fire Season:** April 1st to December 1st, but could be year round based on the current year's designation.
h. **Foot Patrol:** Foot patrol(s) are personnel who are assigned the responsibility and accountability to ensure that risk mitigation and fire preparedness measures are implemented, immediate detection of a fire, and to coordinate with emergency response personnel in the event of a fire.
i. **Job Site Analysis (JSA):** Daily safety discussion and form to be filled out by each individual crew working on the Project.
j. **Local Responsibility Areas**: Areas include incorporated cities, cultivated agriculture lands, and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.
k. **Project:** "Project" may be used interchangeably in place of the formal name of the project in the construction fire prevention plan.
l. **Red Flag Warning (RFW):** A Red Flag Warning is issued for a stated period of time by the National Weather Service (NWS) using pre-determined criteria to identify particularly critical danger in a particular geographic area. Red Flag Warnings and other information on current California fire weather can be found online here: https://www.wrh.noaa.gov/fire2/cafw/.
m. **State Responsibility Areas:** Areas where the State (CAL FIRE) has financial responsibility for wildland fire protection.

2.0 PROJECT DESCRIPTION

The California Public Utilities Commission (CPUC) approved the Final Mitigated Negative Declaration (MND) for the Humboldt Bay-Humboldt #1 60 kV Reconductoring Project (Project) and approved the Project in a decision (A.19-02-004) issued on April 17, 2020. The decision grants PG&E a Permit to Construct (PTC) the Project. The Project will maintain electric transmission system reliability in the City of Eureka and surrounding areas by replacing the conductor (reconductoring) and replacing poles on approximately 7.8 miles of the Humboldt Bay-Humboldt #1 60 kV Power Line (HB-H #1 line), a single-circuit power line in Humboldt County.

The Project will replace the existing conductor (reconductor) with weather-resistant, heavier conductor and supporting structures to reduce the frequency of outages, complete necessary maintenance, and address an existing curtailment issue to reinforce the existing power line system. Along the beginning 0.6 mile of the Project alignment, the HB-H #1 line runs parallel to the Humboldt Bay-Eureka 60 kV Power Line (HB-E line). Along that segment, PG&E also will reconductor the HB-E line and install the new wire onto one shared tubular steel pole (TSP) and shared transmission towers to reduce the number of structures in wetland areas. In addition, PG&E will remove one pole from the Humboldt Bay-Humboldt #2 60 kV Power Line (HB-H #2) and will move the existing conductor onto a shared TSP. Modifications made to HB-H #1, HB-E, and HB-H #2 lines comprise the proposed Project. No substation work is anticipated as part of this Project, with the possible exception of some minor changes to the switches inside Humboldt Bay Substation and Humboldt Substation. The existing HB-H #1 line is located within existing PG&E right-of-way (ROW) and PG&E easements. Temporary construction easements accommodate pull sites, staging areas, and landing zones located outside of existing easements or ROWs.

Fire Jurisdiction

The Project traverses portions of the City of Eureka and unincorporated areas of Humboldt County, and is located in both a Local Responsibility Area (LRA) and a State Responsibility Area (SRA). LRAs include incorporated cities and densely populated areas. Fire protection within these areas is typically provided by city fire departments, fire protection districts, counties, and by the California Department of Forestry and Fire Protection (CAL FIRE) under contract to local governments. A SRA is the official boundary where the State of California (through CAL FIRE) has the primary legal and financial responsibility for the prevention and suppression of wildland fires. Approximately 3.6 miles of the Project alignment is located within a SRA and approximately 4.2 miles of the Project are located within an LRA.

2.1 PROJECT LOCATION

The Project is located in unincorporated Humboldt County and the City of Eureka. The Project begins at Humboldt Bay Substation located south of Eureka and west of Spruce Point in an industrial area west of Highway 101. From Humboldt Bay Substation, the Project heads northeast through unincorporated Humboldt County, traverses four waterways (Buhne Slough, Elk River,

Martin Slough, and Ryan Slough) and approximately 0.4-mile within the City of Eureka, then back through Humboldt County, terminating at Humboldt Substation located east of Eureka near Myrtle Avenue. The line crosses intertidal wetlands, floodplains, multiple roads (including Highway 101), agricultural lands, the McKay Community Forest and nearby recreational facilities, and residential areas in unincorporated Humboldt County and the City of Eureka.

2.2 PROJECT COMPONENTS

The following is a summary of construction activities planned at each of the three components:

HB-H #1 Line Reconductoring

- Replace 7.8 miles of bare single-circuit 60 kV conductors and insulators with a larger-diameter aluminum, specular conductor.
- Remove six wood poles from wetland areas and replace 90 existing wood poles with approximately 52 wood poles and 38 light duty steel (LDS) poles, one TSP, and four lattice steel towers (LSTs).
- Replace eight LDS poles with five wood poles and three LDS poles;
- Add one new wood interset pole with down guys.
- Reframe or replace insulators on approximately 10 existing poles to meet current General Order (GO) 95 requirements.
- Replace an existing manual switch with a supervisory control and data acquisition (SCADA) switch on a new-engineered direct embedded steel pole, replacing a wood pole.
- Replace seven existing stub wood poles with seven new wood stub poles.
- Shorten four wood poles (with distribution underbuild); and transfer existing distribution lines, communication facilities, and streetlights from existing poles to new poles or structures, as necessary.

HB-E Line Reconductoring

- Relocate the first span of the HB-E line immediately east of Humboldt Bay Substation to a new TSP with HB-H #2 line, co-locate the HB-E line with the HB-H #1 line on its four new LSTs, and replace the existing conductor.
- Remove seven wood poles and shorten three wood poles (with distribution underbuild).

HB-H #2 Line Relocation

- Remove a single wood pole and move the line onto the new double circuit TSP on the HB-E line.

2.3 PROJECT SCHEDULE

Vegetation management activities are anticipated to occur in September/October 2021. Construction is anticipated to begin in spring 2022, or as soon as possible thereafter, and be completed within six to eight months. With few exceptions, the HB – H #1 line cannot be removed from service during the winter season. Structure and pole installation, line reconductoring, and pole removal are expected to be performed over approximately six to eight months. Reconductoring and pole and tower installation activities in wetland areas will generally occur in the dry season beginning in June. Reconductoring will begin along sections of the line when new poles have been installed over an approximate 1-mile length.

3.0 PROJECT FIRE RISKS AND FIRE PREVENTION MEASURES

During the construction phase of the Project, PG&E and its contractors will implement the fire prevention measures listed below. In addition, daily procedures and restrictions will be followed, based on PG&E's Fire Adjective Index (Attachment 1).

1. **Required Minimum Fire Tools**- No person operating under this Fire Plan shall use or operate any combustion engine in any operation located on or near any forest, brush, or grass-covered land without providing and maintaining, ***for firefighting purposes only, suitable and serviceable tools in the amounts, manner and location prescribed as follows:***
   1.1. ***Fire Tools***: A sufficient amount of serviceable fire tools shall be at a reasonable distance and available to each employee at the operation to fight fire. Examples of such tools: backpack fire pump, axes, McLeod fire tools, and shovels. *Reasonable distance (e.g, roughly 50 feet or less) means central location or nearest vehicle access.*
   1.2. ***Serviceable chainsaw***: three and one-half (3.5) or more horsepower with a cutting bar 20 inches in length or longer **shall** be immediately available within the operating area.
   1.3. ***Vehicle Fire Tools***: Each passenger vehicle used on such operation (i.e., Crew Truck) **shall** be equipped with at least one shovel, one axe, one fire extinguisher to extinguish vehicle/equipment related fires (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.) or better, and one backpack fire pump or 2.5-gallon pressurized water extinguisher. Note: any privately-owned vehicles operated on or near any forest, brush, or grass-covered land, including unmaintained landscaping, within the project area must have the same tools as other project vehicles.
   1.4. ***Fire Tender***. If warranted during periods of high fire risk and in areas with dry vegetation, a water tender (150-gallon capacity or greater and equipped with a 50-foot hose) shall be positioned near high fire risk activities.

1.5. ***Refueling***. Refueling shall occur in designated areas with appropriate measures in place to prevent spills and fires.

1.6. ***Portable Power Tools:*** No person operating under this Fire Plan shall operate any portable power tool powered by a gasoline-fueled internal combustion engine while operating near any forest, brush, or grass-covered land, without providing and maintaining within 25' of the work area with unrestricted access, for firefighting purposes; one serviceable round point shovel, and a backpack fire pump and/or 16 oz. personal fire extinguisher on each person operating a portable power tool. After immediate use the portable power tools shall be placed in an area/location free of combustible vegetation.

1.7. ***Heavy Equipment Fire Tools-*** Examples of applicable heavy equipment include, but are not limited to chippers, bulldozers, skid steers, graders, dump trucks, and track-mounted augers.

1.7.1. Each piece of heavy equipment used in such operations **shall** be equipped with one shovel and one fire extinguisher to extinguish vehicle/equipment related fire (e.g., Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 10 lbs.).

1.7.2. All operators shall have a functioning communications device (radio, cell phone, etc.) to maintain communication with groundmen, staging areas, landings, etc. at all times.

1.7.3. Additional fire suppression support such as water tenders or trailers may be required by the PG&E Work Supervisor depending on the time of year.

1.8. ***Masticators and Hot Saws***-

1.8.1. Whenever possible all masticators or hotsaws operating during fire season should be equipped with TriMax systems (or similar foaming extinguisher system). In lieu of an approved foaming system, the PG&E work supervisor may prescribe supplemental measures appropriate to reduce fire hazard for the project based on specific site conditions. Examples of in lieu measures are "skid-engine, water trailer, water tank, or water tender within 200 feet of operations at all times". All hot work shall comply with comply with California Fire Code Chapter 35.

1.8.2. All operators shall have a functioning communications device (radio, cell phone, etc.) to maintain communication with ground person, landings, etc. at all times.

1.8.3. A ground person may be required for masticator or hotsaw operations as determined by PG&E Work Supervisor and shall have reliable means to communicate with the operator (ie radio).

2. **Maintenance of Fire Tools/Equipment**: All equipment must be maintained in good working condition at all times (e.g., sharp chains, sharp cutting blades and firefighting tools, pumps and saws fueled and maintained in good working condition, water extinguishers filled, hose lays functioning, engine compartments free of debris, etcetera). Crew members must be trained to operate equipment properly. Training and maintenance records **shall** be made available to PG&E upon request. All motorized equipment should have a spark arrestor, per PRC 4442.

3. **Fire Hazard**: It is the responsibility of any person in charge of personnel working in a fire adjective rating zone to be aware of fire hazard rating. At all times during fire season the following prohibitions apply:
   3.1. ***Open Burning*** is prohibited.
   3.2. ***Welding/Grinding/Torch Cutting*** is only allowed when the following is met:
      3.2.1. Completed in an enclosed building, or
      3.2.2. Within an area cleared of all flammable material for a 50' radius or greater[1], but prohibited during Extreme or Red Flag Warning Fire Adjective Index.
   3.3. ***Smoking***- Smoking shall only be permitted as follows:
      3.3.1. In areas measuring a minimum of 20 feet in diameter that are void of all vegetative fuels (such as roads, landings, or manually cleared areas)
      3.3.2. In the cab of vehicles or equipment, provided that all smoking materials remain in the cab and are extinguished and disposed of appropriately.

4. Fire Patrols/Inspection
   4.1. ***Foot Patrols***- Persons conducting foot patrols shall have the following at all times (sample foot patrol log provided in Attachment 2):
      4.1.1. A Serviceable 5-gallon backpack pump filled with water, or personal fire extinguishers.
      4.1.2. A shovel or McLeod fire tool.
      4.1.3. Functioning communications equipment capable of summoning additional fire suppression resources and/or prompt reporting to the agency responsible for fire suppression (refer to Section 7.0, Communications Plan).
   4.2. ***Inspection of Work Areas***- FHC will assess each new work site for wildland fire risk prior to beginning work at that site. The results of the fire risk assessment will be documented in JSA forms and clearly communicated to all personnel working at the site.

5. **Ingress/Egress**: At all times roadways shall be left open and functional to allow for evacuation and fire agency response. No parking on roads or blocking of gates that will prevent ingress/egress; at least one lane of traffic will be left open Consideration shall be given to dry vegetation (brush, tall grasses, pine needles, redwood debris, etc.) on roads or parking areas and the concern for fire starts from catalytic converters/exhaust systems. Driving or parking on un-cleared areas with dry vegetation where the vehicle undercarriage can make continuous contact with combustible grasses or vegetation is prohibited.

6. **Site Preparation Activities:** Mowing of vegetation may be required to prepare staging areas, unpaved access routes, and overland travel routes. Gravel may be installed along access roads and temporary work areas to create an all-weather working surface, and reduce fire risk.

[1] Additional clearance or the use of frame-mounted welding blankets will be required if sparks could travel beyond 50 feet due to wind or any other factor.

7. **Fire Extinguisher requirements for helicopter refueling**: Aircraft refuelers must be equipped with at least two fire extinguishers having a minimum rating of 20-B:C (U.F.C. Standard No. 10-1). A fire extinguisher must be readily accessible from either side of the vehicle. Portable fire extinguishers at aircraft motor vehicle fuel dispensing stations shall be located such that pumps and dispensers are not more than 75 feet from one such extinguisher.

4.0 RED FLAG WARNINGS WORK LIMITATIONS AND ADJECTIVE RATING ZONES

Red Flag Warning Days. When a Red Flag Warning is issued by the National Weather Service for all or part of the project area, PG&E will cease all non-emergency project activities in any affected areas that involve a high potential for starting fires as outlined in Attachment 1 unless specifically authorized by the CPUC in writing. These activities include welding, grinding, grading in rocky terrain, or reconductoring over energized power lines.

Red Flag Warnings and fire watches are available to the public through an interactive map posted at: http://www.fire.ca.gov/communications/communications_firesafety_redflagwarning

Daily Fire Adjective Index (FAI) Ratings. Through arrangements with the California Department of Forestry and Fire Protection (CAL FIRE) and USFS, PG&E staff has access to daily notification of FAI for any adjective rating zone within PG&E's service territory by requesting it on the PG&E Intranet at: http://wwwt2/Weather/EO/FireIndex/default.asp. FAI ratings are determined based on forecast fuel moisture, humidity, wind speed, and air temperature. These ratings are Low, Moderate, High, Very High, and Extreme and are defined as follows:

- Low – Very little or no fire danger.
- Moderate – Moderate fire danger.
- High – When fire danger is so high that care must be taken using fire-starting equipment. Local conditions may limit the use of machinery and equipment to certain hours of the day.
- Very High – Fire danger is critical. The use of equipment and open flames are limited to specific areas and times.
- Extreme – Fire danger is so critical that the use of equipment and open flames are not allowed at any time.

T*he Project is located in Fire Index Area 180*. The rating notification received by PG&E is the prediction of the most severe rating expected for that area. This information is received by the Transmission Operations Center and posted on the PG&E Intranet. PG&E staff will request daily notification of zone ratings be sent to their email account on the PG&E fire index site. In addition, the FC and fire patrol personnel will receive an automatic fire index notification email update

from the PG&E meteorology department. These emails will be forwarded to a distribution list at the request of CPUC for any project-related personnel to remain aware of fire conditions.

The rating is posted by 2100 hours (9:00 p.m.) each day and becomes effective at 0800 hours (8:00 a.m.) the following day. The notification email is sent at approximately 0600 hours of the day it is effective. Effective hours of fire adjective ratings, unless canceled or extended by local authorities, are as follows:

- Very High and Extreme: 0800 until 2 hours after local sunset time, daily.
- All other ratings (Low, Moderate, and High) do not have specific times noted.

It shall be the responsibility of any person in charge of personnel working in a Fire Adjective Rating Zone to keep abreast of changing local meteorological (weather) conditions. The person in charge shall also be aware of the possibility of increased fire danger during the time work is in progress.

A PG&E meteorologist will attend weekly construction meetings to provide a Fire Adjective Rating outlook for the coming work week.

Documentation and Reporting. PG&E shall document Red Flag Warnings and Fire Adjective Index Ratings for each construction workday in the Weekly Compliance Reports, as described in the project Mitigation Monitoring, Compliance, and Reporting Plan. The format of the documentation in the report will include a simple table roughly as follows:

Period Workday	Red Flag Warning	Fire Adjective Index Rating	Notes
10/1/2021	Yes	Extreme	Fire safety and work restrictions were discussed during the morning tailboard; no high-risk activities occurred per the CFPP
10/2/2021	No	Medium	Standard measures of the CFPP were implemented as required

5.0 TRAINING REQUIREMENTS FOR PG&E & CONTRACT PERSONNEL

Prior to the start of construction activities, all Project construction personnel *(PG&E & Contractors)* will receive training on Fire Prevention and Safety. The fire training will be provided by a qualified fire professional. Training will include:

- Fire prevention
- Fire detection & reporting
- Extinguishment tools and methods
- Fire response and suppression

Additionally, prior to start of construction, all project personnel will receive a presentation on the contents of the Fire Plan. Construction personnel will receive refresher training, should they be

away from the Project for more than 1-month, and no less frequent than every 12-months after Project initiation.

Worker fire trainings shall be tracked as part of the monthly training log submitted to CPUC.

6.0 TAILBOARDS, INSPECTIONS, REVIEW, & COMPLIANCE

Construction supervisors will be responsible for reviewing the contents of the Fire Plan with construction personnel throughout the duration of the project. Daily safety meetings and JSA shall address applicable fire related AMMs anytime of year when in designated fire season or when fire ignition is a concern from onsite conditions. In addition, JSA's shall discuss emergency evacuation protocols (meeting points, routes, etc.), latitude/longitude of project, and assign responsibility to a groundman or foreman (not operating equipment) for communications to fire agencies.

PG&E Work Supervisor reserves the right to have contractor conduct fire readiness drills at the job site at any time. A third-party inspector may be utilized for inspections and drills. PG&E may suspend operations for non-compliance at any time and deficiencies shall be corrected immediately at the vendor's expense. Inspection checklist is attached for reference (Attachment 3).

Violations of the requirements of this Fire Plan will be addressed immediately. Appropriate consequences for repeated or negligent actions in respect to this Fire Plan will be forwarded to the appropriate management for action.

7.0 COMMUNICATIONS PLAN

The ability to communicate with all Project personnel working within the project right of way and to contact emergency first responders is critical for fire and personnel safety. Cell phone, satellite phone, and/or radios are all acceptable. Crew supervisors shall conduct a communications check when they arrive at their work location for the day, to ensure phones and/or radios are functioning properly. All personnel must know emergency communication procedures while on the project. **If a fire is started, regardless if contractor extinguishes it, contractor MUST call 911 immediately and the PG&E work supervisor to report the fire and wait for fire agency personnel to clear the scene and officially list the fire as extinguished.**

Any type of rescue or fire will require a 911 call to the Fire Department **regardless of size or complexity** first and then notifications to the employer may be made, the goal is quick activation of the emergency system without delay. Failure to comply with this section will result in possible citations, Notice of Violations and termination of contract and most importantly puts the contractor AND PG&E at great risk and liability.

8.0 REFERENCES

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Attachment 1

CONSTRUCTION FIRE PREVENTION PLAN
HUMBOLDT BAY – HUMBOLDT #1 60 KV RECONDUCTORING PROJECT

Daily Procedures and Restrictions by Fire Adjective Index (FAI) and Red Flag Warnings.
***Each FAI Rating is inclusive of all preceding (lower) Ratings**

Activity or Equipment	Definition or examples	Operating Level Conditions (FAI Ratings & Red Flag Warnings)			
		Normal (Low, Medium, High)	Very High	Extreme	Red Flag Warning
A designated foot patrol must be assigned at all levels and jobs unless otherwise noted.					
Vehicles, Roads & Pads					
Privately owned vehicles (POV)	A privately own vehicle used as transportation to a yard and parking in a POV area.	No tools required when parked in designated area free of flammable materials (If the vehicle is brought out to sites it must have the same tools as other project vehicles).			No vehicular off-road travel except when all vegetation is removed to bare mineral soil or in case of emergency.
Project vehicles	Company owned vehicles, Crew trucks, including Monitoring and Survey activities	1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. Never park on top of vegetation.			No vehicular off-road travel except when all vegetation is removed to bare mineral soil or in case of emergency.
Heavy Equipment (rubber tires or tracks)	Chippers, bulldozers, skid steers, graders, dump trucks, augers with rubber tires or rubber tracks.	1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. Never park on top of vegetation. Never park on top of vegetation.			No vehicular off-road travel except when all vegetation is removed to bare mineral soil or in case of emergency.
Road and pad construction, grading, and maintenance	Grader, bulldozer, & other steel blade/tracked equipment.	Immediately following the cessation of operations, a documented walking foot patrol is required over all	Immediately following the cessation of operations, a documented walking	May operate until 4:00 pm (1600) if a walking foot patrol is conducted **once every**	All ground-based metal tracked equipment

Activity or Equipment	Definition or examples	Operating Level Conditions (FAI Ratings & Red Flag Warnings)			
		Normal (Low, Medium, High)	**Very High**	**Extreme**	**Red Flag Warning**
		the areas operated/cleared that day. A tank truck or water trailer with a minimum of 300 gallons, or approved compressed air foam system (CAFS) substitute with 200 feet of 1" hose shall be within **500 feet** of the active operations for mechanical masticating, mowing or hot saw operations. 1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. Never park on top of vegetation.	foot patrol for **one hour** over all the areas operated/cleared that day. A tank truck, water trailer with a minimum of 300 gallons, or approved compressed air foam system (CAFS) substitute with 200 feet of 1" hose shall be **within 200 feet** of the active operations.	**hour.** A tank truck, water trailer with a minimum of 300 gallons, or approved compressed air foam system (CAFS) substitute with 200 feet of 1" hose shall be **within 200 feet** hour on all areas operated/cleared that day	operations are strictly **prohibited.** No vehicular off-road travel except when all vegetation is removed to bare mineral soil or in case of emergency.
Vegetation Management using mechanized equipment	Mowing equipment including chainsaws, hot saws, and weed-eaters	Immediately following the cessation of operations, a documented walking foot patrol is required over all of the areas operated/cleared that day. A tank truck or water trailer with a minimum of 300 gallons, or approved	Immediately following the cessation of operations, a documented walking foot patrol **for one hour** over all of the areas operated/cleared that day.	May operate until 4:00 pm (1600) as long as a walking foot patrol is conducted once every hour. A tank truck, water trailer with a minimum of 300 gallons, or approved compressed	All Hot Saws, chainsaws, and mowing operations are strictly **prohibited.** No vehicular off-road travel except when all vegetation

Activity or Equipment	Definition or examples	Operating Level Conditions (FAI Ratings & Red Flag Warnings)			
		Normal (Low, Medium, High)	**Very High**	**Extreme**	**Red Flag Warning**
		compressed air foam system (CAFS) substitute with 200 feet of 1" hose shall be **within 500 feet** of the active operations for mechanical masticating, mowing or hot saw operations. 1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. Never park on top of vegetation.	A tank truck, water trailer with a minimum of 300 gallons, or approved compressed air foam system (CAFS) substitute with 200 feet of 1" hose shall be **within 200 feet** of the active operations.	air foam system (CAFS) substitute with 200 feet of 1" hose shall be **within 200 feet** on all areas operated/cleared that day	is removed to bare mineral soil or in case of emergency.
Pole Removal/Replacement (direct bury)	Hand tools, augers, jack hammers, compressors, etc.	1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. and no combustible material underneath; approved spark arrestors on exhaust.			
Conductor removal/installation	Line stringing, pulling and tensioning	At pulling and tensioning locations, 1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. and no combustible material underneath; approved spark arrestors on exhaust.			
Elevated risk conductor removal/installation	Line stringing, pulling and tensioning over energized lines	At pulling and tensioning locations, 1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. and no combustible material underneath; approved spark arrestors on exhaust. Adequate guard structures must be installed over all energized lines or the lines must be taken out of service during overhead stringing.			Prohibited
Hotwork: Welding, cutting and/or grinding of metal or	Welder, grinder, saw; gas, air or	Only allowed when completed in an enclosed building or within an area cleared of all flammable material for a 50' radius.			Prohibited

Activity or Equipment	Definition or examples	Operating Level Conditions (FAI Ratings & Red Flag Warnings)			
		Normal (Low, Medium, High)	Very High	Extreme	Red Flag Warning
other spark producing activities.	electric powered.	1 serviceable round point shovel, and a backpack fire pump and/or 16 oz. personal fire extinguisher on each person operating a portable power tool. After immediate use the portable power tools shall be placed in an area/location free of combustible vegetation.			
Working on or in proximity to energized equipment and facilities, including removal and replacement and new installations *See above for conductor removal/installation over energized lines	Conductor, transformers, switches, etc.	1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. and no combustible material underneath; approved spark arrestors on exhaust.	Implement Normal requirements 150 gallons (minimum) of water with pump, hose, & nozzle. Water tender, water buffalo or other water tank.		
Internal combustion engines, equipment and machinery - off paved roads	Generators, Compressors, and any piece of equipment with a combustion engine.	1 round point shovel, 1 axe, 1 fire extinguisher (e.g. Dry Chemical, Class ABC, UL Rating 4A:80B:C, Capacity 5 lb.), one backpack fire pump or 2.5-gallon pressurized water extinguisher. and no combustible material underneath; approved spark arrestors on exhaust.	Implement Normal requirements and 150 gallons (minimum) of water with pump, hose, & nozzle. Water tender, water buffalo or other water tank.		
Helicopter operations including picking and setting equipment/ poles/ towers in high risk wildland areas		Aircraft refuelers must be equipped with at least two fire extinguishers having a minimum rating of 20-B:C. A fire extinguisher must be readily accessible from either side of the vehicle. Portable fire extinguishers at aircraft motor vehicle fuel dispensing stations shall be located such that			

Activity or Equipment	Definition or examples	Operating Level Conditions (FAI Ratings & Red Flag Warnings)			
		Normal (Low, Medium, High)	Very High	Extreme	Red Flag Warning
		pumps and dispensers are not more than 75 feet from one such extinguisher.			
Smoking	Cigarettes & Cigars.	Permitted in areas measuring a minimum of 20 feet in diameter, void of all vegetative fuels (roads, landings, manually cleared areas on the ground; in cab of vehicles or equipment.			
Spark Arresters: All internal combustion engines shall have approved spark arresters; 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; Turbocharged engines are exempt.					
Delivery Vehicles: Defined as vehicles that will drop off equipment or material and leave (e.g. water tankers, postal trucks); these vehicles do not need to be equipped with fire tools, but drivers need to follow all fire plan procedures while accessing the site.					

Attachment 2

PG&E Fire Patrol Log

Project: ____________________ **Contractor:** ____________________ **Inspector/Patrol Person:** ____________________

Date	FS Weather Station or Index Area	PAL or PG&E Risk Rating	Red Flag (Y/N)		9:00 AM Patrol	10:00 AM Patrol	11:00 AM Patrol	12:00 PM Patrol	1:00 PM Patrol	2:00 PM Patrol	3:00 PM Patrol	4:00 PM Patrol	5:00 PM Patrol	6:00 PM Patrol	7:00 PM Patrol	8:00 PM Patrol
8/4/2015	ELD/335	C/High	N	***EXAMPLE***					MTW			MTW	MTW			

Attachment 3

PGE Land Operations

Contractor Fire Protection Checklist

Contractor: _____ **Project:** _____ **Inspection Date:** _____

Topic:	Y/N/n/a	Comment:
JSA and Communications		
1) Completed and signed Job Site Analysis		
2) Working communications onsite (i.e. cell phone, radio, satellite phone)		
4. Required Fire Tools		
4.1) Sufficient amount of fire tools available for each employee to fight fire (i.e. Backpack Fire Pump, Shovel, Axes, McLeod)		
4.2) Serviceable chainsaw available		
4.3) Each Vehicle Contains:		
One axe, one shovel, one fire extinguisher		
Backpack Fire Pump or 2.5 g water ext		
4.4) Portable power tools have shovel and a backpack fire pump and/or 16 oz. personal fire extinguisher		
4.5) Heavy Equipment Power Tools		
Each has one shovel & one 10 lb. fire ext.		
Applicable communication in place		
Additional suppression support if required by PG&E		
4.6) Masticators/Hot Saws		
Depending on Time of year, equipped with Trim ax system or PG&E agreed upon in lieu measures		
Applicable communication in place		
Ground person assigned, if required		
5) Maintenance of Fire Tools/Equipment		
All equipment in good working order		
Crew members trained on equipment		
6) Fire Hazard		
Fire Hazard rating is documented and shared with crew members		
6.4) Foot Patrols		
Fire tools such as backpack fire pump, shovel/McLeod, and communications in place with patrol person		
Fire patrol log is onsite and available		
7) Ingress/Egress		
Roadways left open and functional to allow for evacuation and fire emergency response		
10) Variance Process		
Variance in place and copy available on site		

PG&E reserves the right to stop the operation for non-compliance at any time

Contractor: _____ Date: _____ PG&E Rep _____

Spill Prevention and Response Plan

PG&E HUMBOLDT BAY – HUMBOLDT #1 60 kV RECONDUCTORING PROJECT
Humboldt County

(CDP 9-20-0092**)**
Final Initial Study/ Mitigated Negative Declaration

Prepared for

California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105

Prepared by

Pacific Gas and Electric Company
2730 Gateway Oaks
Sacramento, CA 95833

Contact: Tom Naiman, EFS
Office Phone: 916-247-2728

Date: July 2021

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FIGURES

TABLES

APPENDICES

SECTION 1.0 INTRODUCTION

On March 12, 2021, the California Coastal Commission issued Coastal Development Permit 9-20-0092 for the Humboldt Bay-Humboldt #1 60 kV Reconductoring Project. Special condition 3 specifies the requirement for development of a Spill Prevention and Response Plan as follows:

> *PRIOR TO THE COMMENCEMENT OF PROJECT ACTIVITIES, the Permittee shall submit a project-specific Spill Prevention and Response Plan to the Executive Director for review and approval. The Plan shall identify the worst-case spill scenario and demonstrate that adequate spill response equipment will be available. The Plan shall also include a detailed description of all preventative measures the Permittee will implement to avoid spills and clearly identify responsibilities of Permittee personnel and any contractors employed, and shall list and identify the location of oil spill response equipment and appropriate protocols and response times for deployment. Vehicles and heavy equipment left at laydown area during non-work hours shall have drip pans or other means of collecting dripped fuel, lubricants or other hazardous materials, which shall be collected and disposed of off-site. Contracts with off-site spill response companies shall be in-place and shall provide additional containment and clean-up resources as needed.*

The proposed Project will replace existing conductor and structures along 7.8 miles of the Humboldt Bay-Humboldt (HB-H) #1 line and 0.6-mile of the Humboldt Bay-Eureka (HB-E) line between Humboldt Bay Substation and Humboldt Substation in Eureka, California.

Along the first 0.6-mile of the proposed Project, approximately 14 existing wood poles will be removed and approximately seven wood poles will be shortened. Along this portion of the Project, the HB-H #1 and HB-E lines will be supported by two new tubular steel poles (TSPs) and four new lattice steel towers (LSTs). The HB-E line will be co-located with the HB-H #1 line on the new LSTs. After the initial 0.6-mile, both the HB-E and HB-H#1 lines turn to travel northeast. This location marks the location of the last LST along the Project alignment as well as the conclusion of modifications made to the HB-E line. The remainder of work along the Project alignment is reconductoring and pole replacements and removal along the HB-H #1 line.

Modifications made to the remainder of the HB-H #1 line include the replacement of existing conductor, the replacement of 90 existing wood poles and eight light duty steel (LDS) poles with approximately 57 wood poles, 41 LDS poles, and one wood interset pole. The Project will replace seven existing wood stub poles with new ones, replace an existing manual switch on a wood pole with a SCADA switch on a new engineered direct embedded steel pole, and reframe or replace insulators on ten existing poles.

SECTION 2.0 PROJECT DESCRIPTION

The Project is located in unincorporated Humboldt County and the City of Eureka (see Figure 1). The Project begins at Humboldt Bay Substation located south of Eureka and west of Spruce Point in an industrial area west of Highway 101. From Humboldt Bay Substation, the Project will travel northeast through unincorporated Humboldt County, then back through Humboldt County, terminating at Humboldt Substation located east of Eureka near Myrtle Avenue. The following is a summary of construction activities:

HB-H #1 Line Reconductoring

- Replace 7.8 miles of bare single-circuit 60 kV conductors and insulators with a larger-diameter aluminum, specular conductor;
- Replace 90 existing wood poles with approximately 52 wood poles and 38 light duty steel (LDS) poles, one TSP, and four lattice steel towers (LSTs);
- Replace eight LDS poles with five wood poles and three LDS poles; and
- Remove six wood poles and shorten four additional wood poles; and
- Reframe or replace insulators on approximately 10 existing poles.

HB-E Line Reconductoring

- Relocate 0.6-mile of HB-E line to a new TSP with Humboldt Bay-Humboldt #2 60 kV Power Line, co-locate the HB-E line with the HB-H #1 line on its four new LSTs, and replace the existing conductor; and
- Remove seven wood poles and shorten three additional wood poles.

HB-H #2 Line Relocation

- Remove a single wood pole and move the line onto the new TSP on the HB-E line.

SECTION 3.0 MAXIMUM POSSIBLE SPILLS

The fuel capacities of vehicles and equipment used for project activities are summarized in Table 1. Based on this information, the maximum possible spill that could occur at HB-H #1, HB-H #2, and HB-E line locations would be approximately 150 gallons if the fuel tank of a vacuum truck used for the project leaked. However, in this unlikely event, the leak would be identified and stopped immediately.

SECTION 4.0 CLEANUP EQUIPMENT AND SUPPLIES

Spill kits will be present in all crew trucks and equipment and will be within reach during activities with potential to release fuel, such as vehicle and equipment fueling and maintenance. All fueling and equipment maintenance vehicles are required to have spill kits on board. Typical contents of a spill kit are presented in Table 2.

In addition to the spill kits in the crew trucks, spill response materials will be staged at multiple staging areas/landing zones. The spill response material will be placed on a flatbed truck or pickup truck for ease of mobilization to the spill location. Spill response material will include "All Absorbent" (typically gray) pads and booms to absorb and retain oils and water and "Oil Only" (typically white) booms and pads to absorb only oil along with dry absorbent (kitty litter), gloves, and disposal bags. Spill response materials to be staged at the Segments are presented in Table 3.

SECTION 5.0 WETLANDS

Project area work will occur at or near wetlands, see Appendix A for project work locations and mapped wetlands and surface waters.

SECTION 6.0 FUEL SPILL PREVENTION AND CONTROL

This section describes the measures that PG&E will implement to prevent spills of fuel from vehicles and to respond to spills should they occur. Best Management Practices to prevent, control and respond to a fuel spill will be implemented according to the requirements presented herein. These requirements will be updated in the field as conditions change.

All hazardous materials and hazardous wastes will be handled, stored, and disposed of in accordance with all applicable regulations, by personnel qualified to handle hazardous materials. The hazardous substance control and emergency response procedures include, but are not limited to, the following:

- Proper disposal of potentially contaminated soils.
- Establishing site-specific buffers for construction vehicles and equipment located near sensitive resources.
- Emergency response and reporting procedures to address hazardous material spills.
- Stopping work at that location and contacting the County Fire Department Hazardous Materials Unit immediately if visual contamination or chemical odors are detected. Work will be resumed at this location after any necessary consultation and approval by the Hazardous Materials Unit.

The following best management practices will be implemented to prevent and control fuel

spills from vehicles and equipment at all work locations:

- Vehicle or equipment cleaning is not permitted onsite other than tire washes to remove accumulated soil.
- Use offsite fueling stations as much as possible. Where onsite fueling occurs, use designated areas at least 100 feet away from wetlands and other water bodies unless otherwise approved by a qualified biologist. Use drip pans and spill rags when fueling, and discourage "topping-off" of fuel tanks.
- Check vehicles and equipment regularly for leaking oils and fuels. If leaks are observed, place a drip pan under the leak and remove the vehicle from the project site immediately.
- Vehicles and equipment are not to be maintained onsite, except for emergency repairs.
- Clean leaks immediately, if safe to do so, and properly dispose of leaked material or contaminated soil.
- Equipment and materials for cleanup of spills shall be available onsite at all times. If cleanup supplies are maintained only in vehicles, vehicles must be onsite at all times.
- All spill response will be conducted under the direction of the PG&E Environmental Field Specialist (EFS). The Construction Superintendent will be the lead Spill Response field coordinator. The EFS will train the Construction Superintendent on the Spill Prevention Control and Response Plan. The EFS or their designees will provide general environmental awareness training including general fuel spill prevention, control and response to all crew members.
- If a spill occurs, immediately notify the EFS. After hours, or if the local EFS is unavailable, call the following 800 number: **800-874-4043.**
- If rain is forecast, cover spills and contaminated materials prior to the onset of rain.
- Remove spilled material with absorbents. Do not wash spilled material with water.
- Store and dispose of cleanup materials, contaminated materials, and recovered spilled material in accordance with federal, state, and local requirements.
- Keep areas where materials and wastes are stored clean and well organized to facilitate inspection for leaks and spills.
- Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.

Equipment with integral fuel tanks:

- Where the bottom of the equipment cannot be inspected for leaks (i.e., placed directly

on the ground or paved surface), store equipment on a continuous containment surface (e.g., visqueen) with a continuous perimeter berm (e.g., edges of plastic wrapped over fiber roll which extends around the equipment). This requirement applies whether the equipment is in storage or in use.

- Where equipment is elevated off the ground such that the bottom of the equipment may be inspected for leaks (e.g., wheeled generators, air compressors, light stands), use drip pans under the fuel connection while fueling. Inspect the equipment on a daily basis for leaks.
- All portable (including wheeled) equipment that is planned to be stored (i.e., not used) for 7 days or more will be kept on a continuous containment surface with a continuous perimeter berm. Elevated equipment may be inspected on a daily basis for leaks.

SECTION 7.0 FUEL SPILL INITIAL RESPONSE AND NOTIFICATION

The following response and notification procedures will be completed by the contractor under the direction of the Construction Superintendent and in coordination with the EFS in the event of a fuel spill.

A. First Project Personnel at the Scene

The responsibilities of the first project personnel at the scene of an oil spill or associated emergency are as follows:

1. Observe from a safe distance
2. Identify hazards
3. Restrict access to the spill area
4. Call for assistance. Provide the Environmental Field Specialist and Onsite Incident Commander with the following information:
    a. Your name and telephone number
    b. Any injuries
    c. Location and type of spill
    d. Source and cause of spill, if known
    e. Fire or explosion risk
    f. Actions taken to stop/contain the release
    g. Notify fire department if needed
5. **If safe to enter the area**, attend to any injured. Administer first aid if you have been trained and certified. Call an ambulance or paramedic.

6. **If safe to do so**, stop the source of the discharge. Note: This may involve:
    - Shutting off equipment or pumps;
    - Plugging a hole in operating equipment or a tank;
    - Closing a valve; and/or
    - Righting an overturned container or piece of operating equipment.

    Simultaneously pursue containment of the discharge with the following containment techniques:
    - For relatively small spills, apply absorbent to the surface of the spill enough to absorb all the liquid.
    - For larger spills, construct earthen dikes or ditches around the spill to prevent the discharge from flowing off-site or into waterways.
    - Prevent discharge into storm drains by sealing off with plastic and/or earthen dikes.
7. Remain at the scene to prevent other people or vehicles from entering the emergency area until relieved by the Onsite Incident Commander, the EFS or their designee.

B. Assessment and Notification

The EFS or their designee will complete the following assessment and notification procedures in coordination with the Onsite Incident Commander:

1. Identify if any injuries have occurred and that proper actions have been taken.
2. Assess the possible hazard to human health, property, or the environment.
    a. Stop processes or operations where necessary. Isolate affected containers or equipment.
    b. Isolate the spill from human or vehicular contact. (Use cones, stanchions, and tape; post signs.) Order all personnel not involved with the cleanup operation to leave the area.
    c. Obtain additional resources, material and equipment, if needed for cleanup.
    d. If the volume of the fuel spill is 42 gallons or more, if a fuel spill results in a sheen on the surface of water bodies or the emergency threatens human health outside the facility boundaries and local areas must be evacuated, notify the California Emergency Management Agency (Cal EMA) and the local emergency assistance organizations listed below:

State Agency:	
California Office of Emergency Service (Cal O E S)	(800) 852-7550
California Coastal Commission:	(415) 904-5200
Local Contacts:	
Humboldt County Division of Environmental Health	(707) 445-6215
Humboldt Bay Fire Department.	(707) 441-4000
Cal Fire Humboldt-Del Norte Unit	(707) 725-4413 or 911
Humboldt County Sheriff's Office	Business Hours: 707-268-2500
Office of Emergency Services	After Hours: 707-445-7251
Ambulance:	911

National Response Center:
In addition, if the oil spill results in a sheen on the water's surface or leaves sludge or emulsion beneath the surface, the National Response Center must be notified

National Response Center:	(800) 424-8802

An immediate verbal report of any release or threatened release which poses a present or potential danger to human health and safety, property or the environment including wetlands, surface waters and sensitive habitats must be reported to the Humboldt County Sheriff's office, the Commission and the Cal EMA;

The verbal notification should include the following information:

- Name and telephone number of person reporting release
- Name and address of the facility
- Time and type of incident
- Location of the release
- Hazardous material and estimate of the quantity
- Extent of injuries
- Potential hazards (if known)

References:

California Public Utilities Commission (CPUC). 2020. Pacific Gas & Electric Humboldt Bay – Humboldt #1 60 kV Reconductoring Project, Final Initial Study/Mitigated Negative Declaration. Pacific Gas & Electric Humboldt Bay- Humboldt #1 60 kV Reconductoring Project (CPUC A.19-02-004) Final IS/MND. Accessed: April 6, 2021.

Figure 1: Project Overview

FIGURE 1
Project Overview
Humboldt Bay-Humboldt #1 60 kV Reconductoring Project

Tables

Table 1: Estimate of Fuel Volumes of Vehicles and Equipment by Activity
Humboldt Bay-Humboldt #1 60kV Reconductoring Project

Activity	Backhoe	Excavator	Regular Crew Truck	Line Truck	5 Ton Dump Truck	12 Ton Crane	Vacuum Truck	Water Truck	49 HP Compressor	Generator	Hydroseed truck	Terex mower	Tractor	Semi truck/ trailer	Tremie pumps	Bucket truck	Cement truck	Dozer	Crew-cab, boom truck	Forklift	Helicopter
Survey			1																		
Access Roads	1	1	1					1				1		1				1			
Staging Areas			1					1				1		2						2	
Drainage Crossings	1		1																		
Auger Pole Holes			2	2																	
Material Haul and Pole Delivery				1										2							
Pole Installation/Removal			2	2			1									2					1
LDS Pole Delivery and Installation	1	1	2	2										1		2			3		
TSP and Tower Foundation and Installation	1	1	5		1	1	1		1	2				1	1		1		2	1	1
Conductor Removal and Installation			3	4												3					2
Right-of-way Restoration and Clean-up			1								1		1						1		
Sidewalk Restoration			1														1		1		

Typical Volumes

Backhoe	36 gallon fuel tank, hydraulic system including 24 gallon fuel tank
Excavator	75 gallon fuel tank, hydraulic system including 50 gallon fuel tank
Regular Crew Truck	47 gallon fuel tank, 3.4 gallon fuel capacity compressor, 5 gallon gasoline can

Line Truck	56 gallon fuel tank	Tractor	25 gallon fuel tank
Dump Truck	120 gallon fuel tank	Semi truck/trailer	125 gallon fuel tank
12 Ton Crane	60 gallon diesel tank	Tremie pumps	18 gallon fuel tank
Vacuum Truck	120 gallon fuel tank	Bucket truck	38 gallon fuel tank
Water Truck	150 gallon fuel tank	Cement truck	65 gallon truck
49 HP Compressor	20 gallon fuel tank	Dozer	30 gallon diesel tank
Generator	40 gallon diesel tank	Crew-cab truck, boom truck	26 gallon tank
Hydroseed truck	56 gallon fuel tank	Forklift	8 gallon fuel tank
Terex mower	25 gallon fuel tank	Helicopter	46 gallon fuel tank

Table 2: Spill Kit on Crew Truck
Humboldt Bay-Humboldt #1 60kV Reconductoring Project

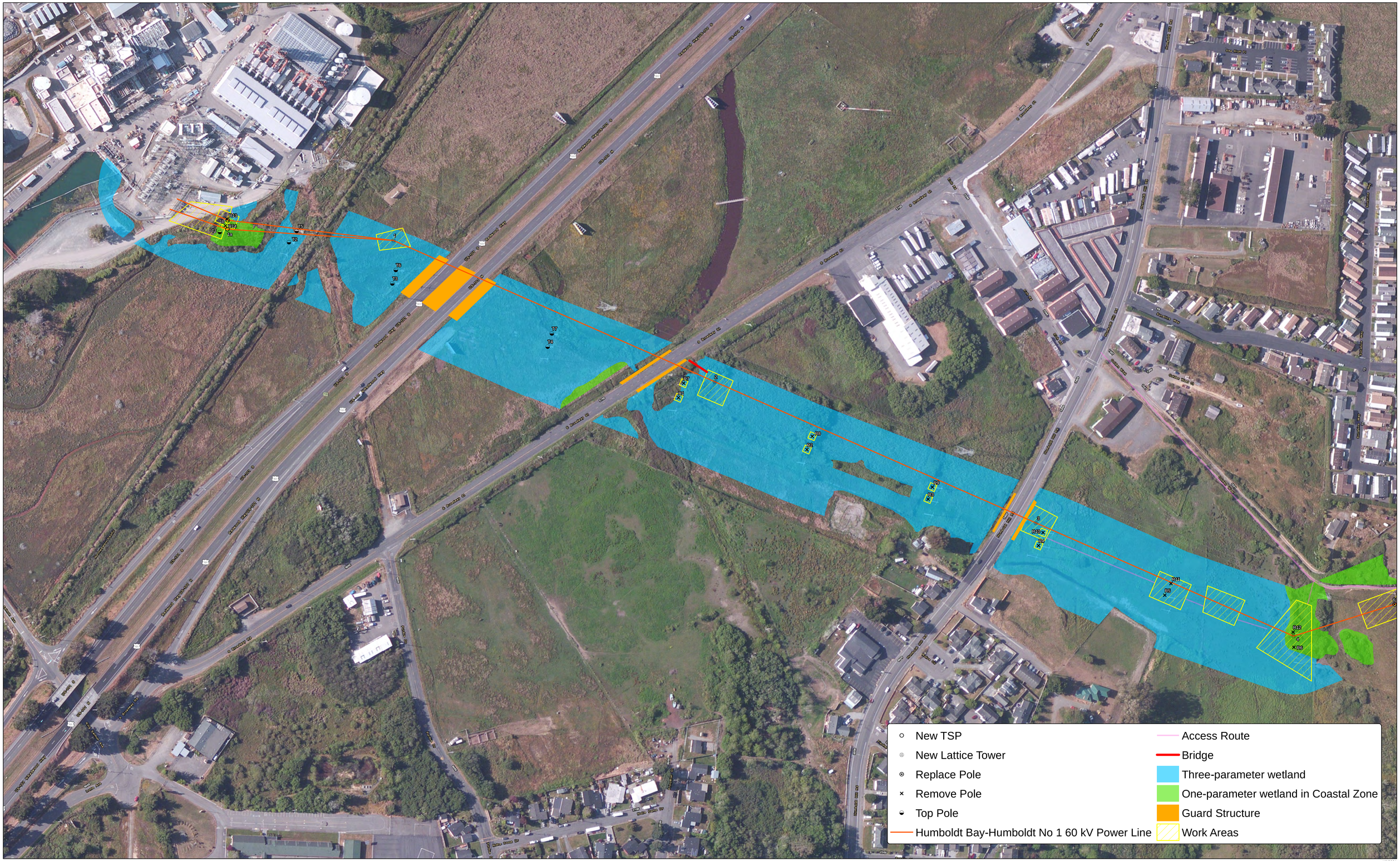
15 Absorbent pads 3 Absorbent Socks Goggles Nitrile Gloves Disposal Bag

* Every crew truck will have its own spill kit

Table 3: Spill Response Material
Humboldt Bay-Humboldt #1 60kV Reconductoring Project

ITEM	CAPABILITY	TYPE OR DESCRIPTION	QUANTITY
Containers	Disposal of Spilled Material	55-gallon drum	4
	Spill Cleanup	10 mil/50”x56” bags	10
Absorbents	Spill Cleanup	Oil absorbent compound	5 bags
	Spill Cleanup	Spill control pillows, or absorbent socks	2 bales
	Spill Cleanup	3M Sorbent type 100 or equivalent	1 bale
	Spill Cleanup	3M Sorbent type 156 or equivalent	1 bale
Cleanup Materials	Spill Cleanup	"All absorbent" pad	10
	Spill Cleanup	"All absorbent" boom	2
	Spill Cleanup	"Oil only" absorbent pad	10
	Spill Cleanup	"Oil only" absorbent boom	2
	Spill Cleanup	Dry absorbent (Kitty litter)	50 pounds
	Spill Cleanup	Rags	20
	Spill Cleanup	Street broom	2
	Spill Cleanup	Scrub brush	1
	Spill Cleanup	Mop	1
	Spill Cleanup	Plastic pail	2
	Spill Cleanup	Flat-bottomed shovels	2
	Spill Cleanup	Flat bottomed aluminum shovels	1
Personal Protective Equipment	Personal Protection	Gloves	6 pairs

Appendix A: Project Work Areas and Surface Waters



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Humboldt Bay-Humboldt 60kV Reconductoring Project

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Miles

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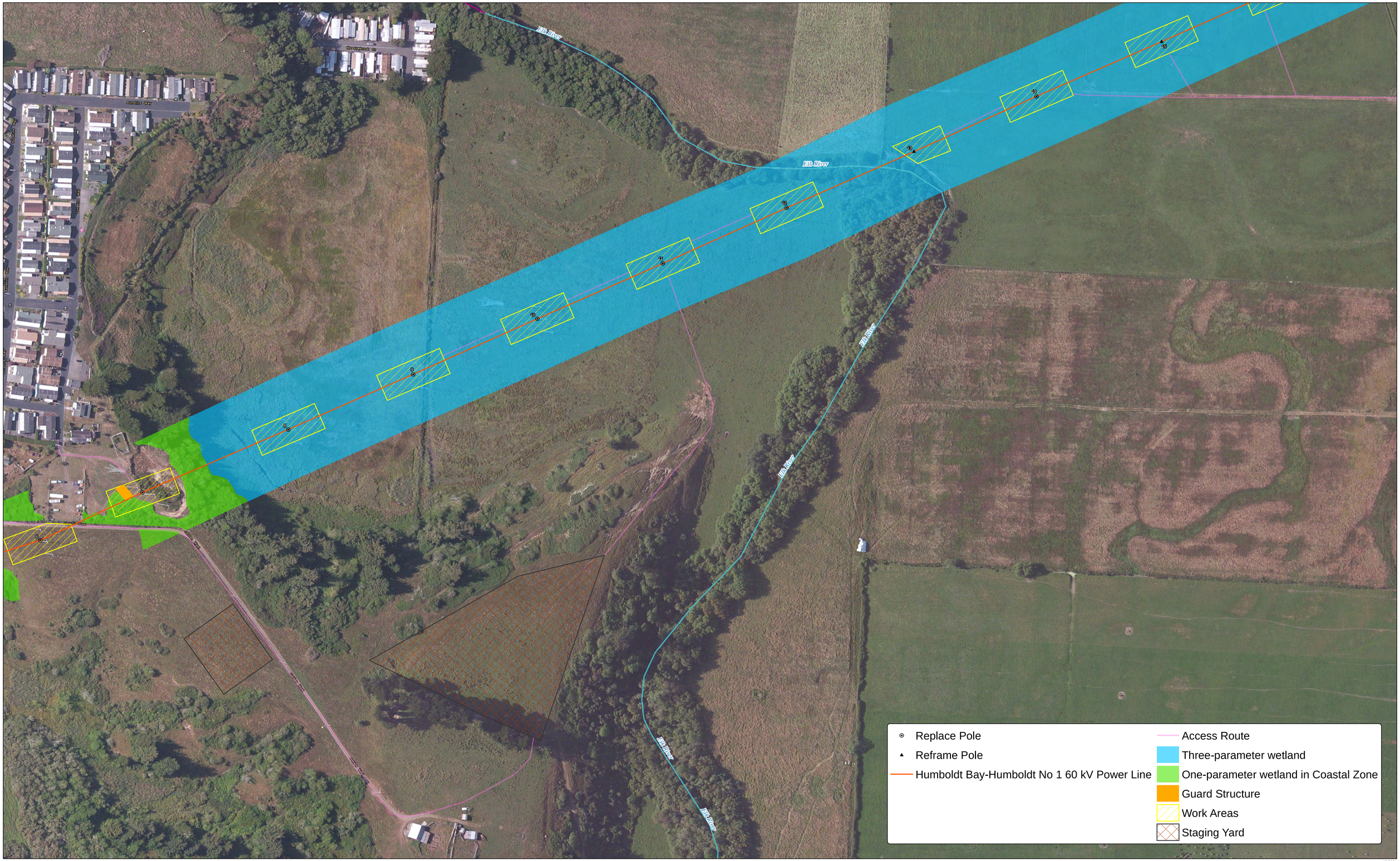
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Elk River
Elk River

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Humboldt Bay-Humboldt 60kV Reconductoring Project

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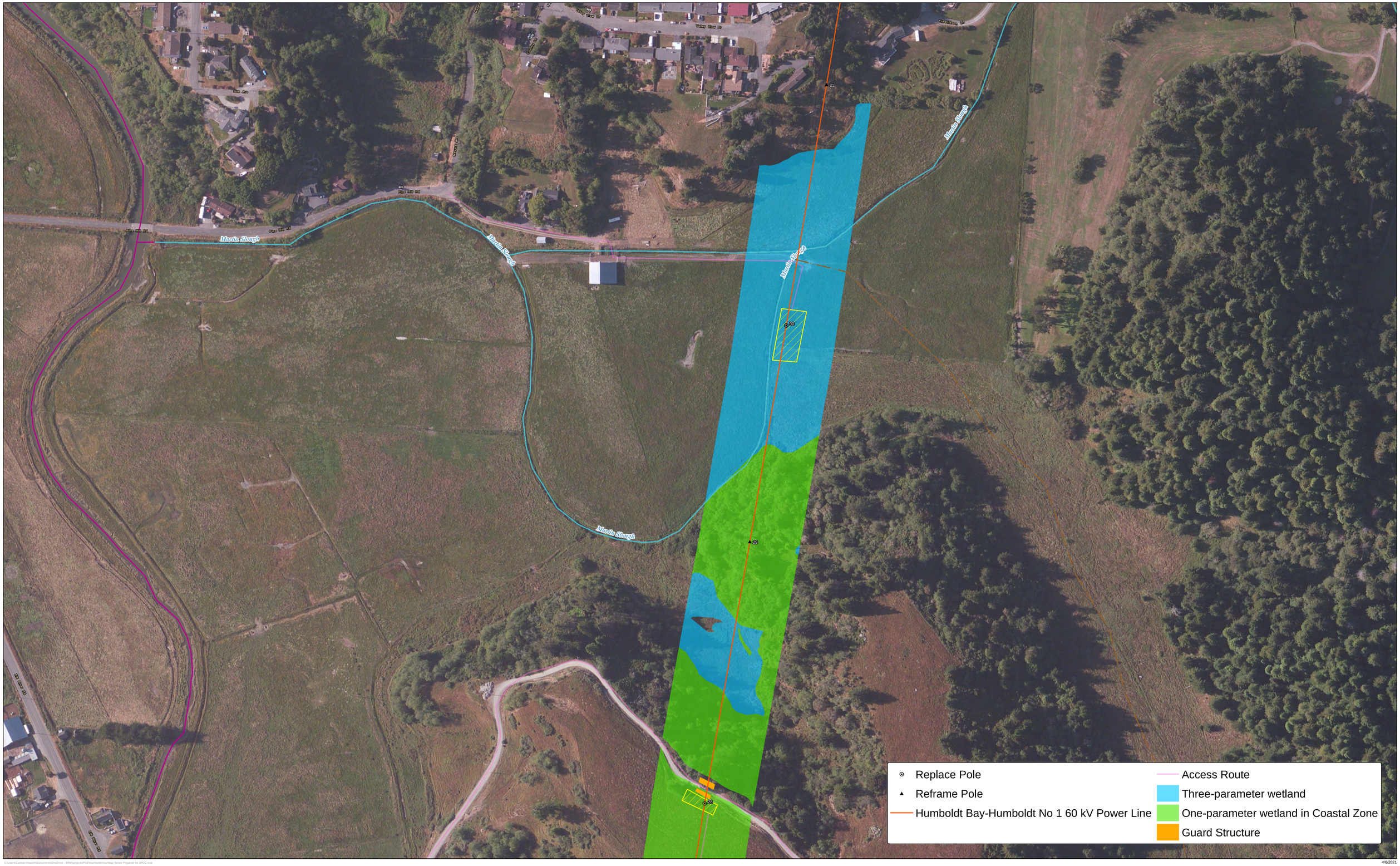
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Humboldt Bay-Humboldt 60kV Reconductoring Project

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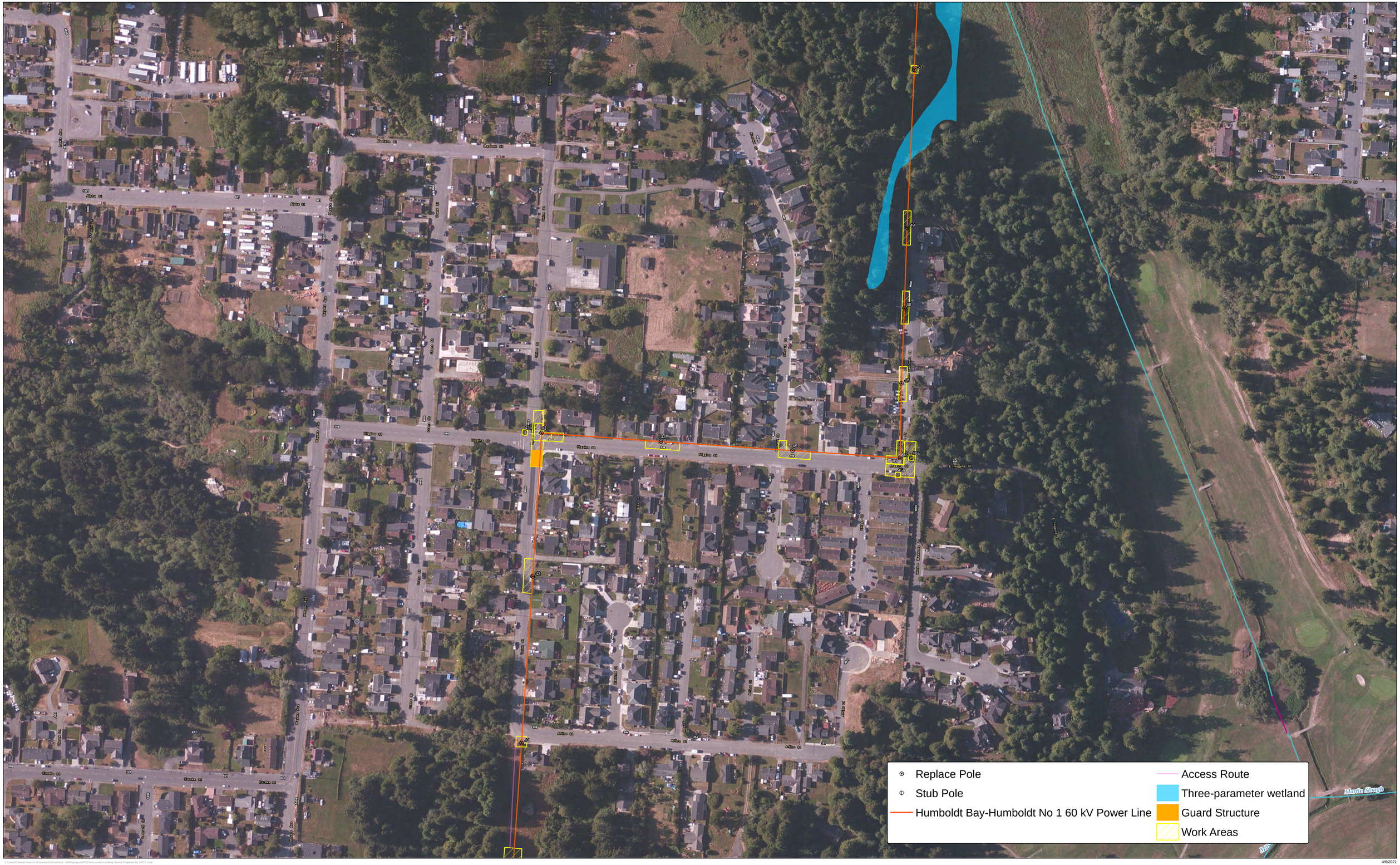

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Humboldt Bay-Humboldt 60kV Reconductoring Project

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Miles

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Project Information Preliminary and Subject to Change with Final Engineering

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Humboldt Bay-Humboldt 60kV Reconductoring Project

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Project Information Preliminary and Subject to Change with Final Engineering

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Murphy Slough
Murphy Slough
Murphy Slough
Murphy Slough
Madrone Ave
Madrone Ave
Madrone Ave
Madrone Ave
Hemlock St
Hemlock St
Vista Dr
Vista Dr
Vista Dr
Vista Dr
Fern Dr
Fern Dr
Fern Dr
Fern Dr
Fern Dr
Fern Dr
Cameron Rd
Cameron Rd
Cameron Rd
Cameron Rd
Broadway
Broadway
Broadway

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ERM

Map Series Prepared for SPCC

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Humboldt Bay-Humboldt 60kV Reconductoring Project

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Miles

1:1,400

Project Information Preliminary and Subject to Change with Final Engineering

N


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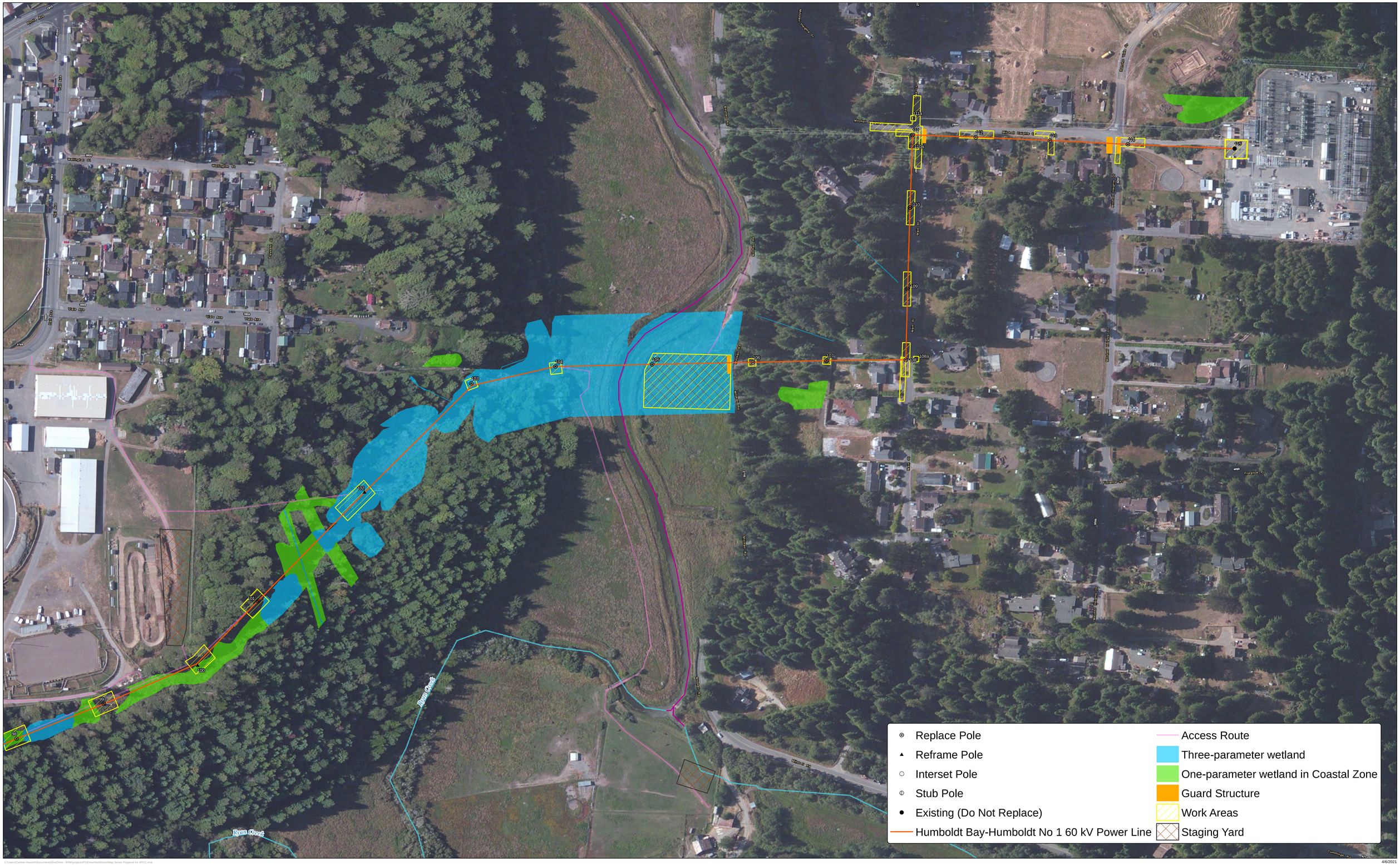
Wrinkle St
Wrinkle Ave
Wrinkle Ct
Wrinkle Way
Wrinkle Pl
Wrinkle Ln
Wrinkle Dr
Wrinkle Cir


Replace Pole
Reframe Pole
Interset Pole
Stub Pole
Existing (Do Not Replace)
Humboldt Bay-Humboldt No 1 60 kV Power Line
Access Route
Three-parameter wetland
One-parameter wetland in Coastal Zone
Guard Structure
Work Areas
Staging Yard
Ryan Creek
Ryan Creek
Ryan Creek
Wilson Rd
Wilson Rd
Wilson Rd
Mitchell Heights Dr
Mitchell Heights Dr
Mitchell Heights Dr
Florence Dr
Florence Dr
Florence Dr
Wilson Rd
Wilson Rd
Wilson Rd