Project: Electric Tugboat Charging Station and Shore Power Infrastructure Project
Location: Tenth Avenue Marine Terminal, adjacent to Crosby Pier
Parcel No.: 020-023, 020-039, 202-036
Project No.: 2022-056
Applicant: Crowley Marine Services
Date Approved: July 12, 2022

PROJECT DESCRIPTION

The proposed project would involve installation, by Crowley Marine Services (Applicant), of an electric tugboat charging station and shore power infrastructure adjacent to Crosby Pier at the Tenth Avenue Marine Terminal (TAMT) in the city of San Diego, California (see Figure 1). Work to specifically complete the proposed project would involve:

- 50 x 50-foot concrete pad in the south-west corner of the dirt lot
- Battery cabinets with capacity of 500 KW and 3,200 KWh placed on top of the concrete pad
- 60 x 60-foot, 14-foot-high canopy shading the battery cabinets (with overhang) and 40 KW solar system installed on top of canopy
- Upgrades to the existing transformer and switch gear
- Security fencing around the concrete pad and solar canopy
- Fire suppression system
- New electrical conduits and cables

Figure 1

Existing Utility Service

The project will consist of upgrading the existing Crosby Pier utility service transformer from 750 KVA to 1500 KVA.

The existing transformer currently feeds existing dock loads for Crosby pier tenants and building
structures adjacent to the existing parking lot. The current assumption is that the existing underground utility conduit and wire are sufficient to support the larger transformer, so no excavation will be required. The utility scope will include removing the existing transformer from its pad and installing the new transformer in its place. Any interruption of service to affected customers should be less than 8 hours.

**Existing Substation Revisions**

New utility approved meter and main breaker equipment will be installed in the existing Crosby pier substation to support the new Crowley charging station. The existing substation elevated slab will be extended to the east approximately 5 feet to accommodate the new meter and main breaker equipment. Existing fencing and stairs will be altered for placement of the new equipment.

Incoming service feeders from the new transformer will be installed approximately 5 feet to the new equipment. This will be hand dug in the existing planter area next to the transformer pad.

**Secondary Feeders to the New Energy Storage Yard**

Conduits and conductors from the new main breaker equipment (detailed above) will be installed above ground along the lower half of the existing block wall that borders the Caesar Chavez Park. These conduits and conductors will be run east, along the wall to the new 60 x 60-foot Energy Storage System (ESS) detailed below. This will eliminate any excavation or disruption of onsite soils and asphalt.

**Energy Storage System (ESS) Yard**

The new conduits will feed power to AC-DC charging equipment installed under a 60 x 60-foot, 14-foot-high canopy in the ESS yard located in the large parking lot (across Waters Street) east of the Crosby Pier operations area. The area under the canopy (where the equipment is installed) will be elevated approximately 24 inches to accommodate the local designated flood plain. This canopy will be an open-air structure designed to protect the shore power charging equipment from direct sunlight and rain.

The equipment under the canopy will consist of ten AC/DC converter cubicles and isolation transformers, with a footprint of approximately 200 square feet. Additionally, two 20 x 8 feet storage containers will be installed, housing batteries used in the vessel charging process. The design and installation practices for the structural foundation of the raised pad and electrical equipment will be in accordance with an independent third-party Geotechnical Study dated June 9, 2022, prepared by Ninyo and Moore. Structural design will be reviewed and stamped by EPS engineering services.

Conduit and conductors feeding this equipment will be installed in the 24-inch elevated foundation so that no excavation of the native parking lot soil will be required.

The roof structure of the canopy will also support a photo voltaic solar array to supply supplemental energy for the e-wolf electric tug charging system.

**DC Charging Feeders from the ESS Yard to the Pier**

Conduit and cable infrastructure between the ESS yard and Crosby Pier will be installed above grade along the lower half of the existing block wall that borders the Caesar Chavez Park. This will eliminate any excavation or disruption of onsite soils and asphalt. Once the conduit run along the block wall extends on to the shoreline sea wall, the conduit will turn and run north (above tide line) under the pier headwall to the north side of Crosby pier.

It will then extend down the pier on the north side supported by existing galvanized steel pipe racks mounted to the side of the pier (approximately 400 feet) to the vessel service point. This work will safely be accomplished from the main deck of the pier. There will be no raft or boat work involved in the installation of any conduit, wire or equipment related to this project.

**Cable Management System**

The raceway and charging conductors will be transitioned from the pier to the e-wolf vessel via a custom cable management system. The design and operation of the Cable management system will not require structural upgrades to the pier. Upon design completion of the cable management system, EPS engineering will provide
drawings and anchor details required to secure the system to the existing pier deck. This motorized jib will extend over the edge of the pier and lower the cable onto the vessel. It will be manually connected to the vessel electrical system using a single 1000 KW DC rated plug and receptacle assembly. Sufficient cable will be distributed and stored on the vessel deck to compensated for wind and tide movement.

Charging voltage and durations will be automatically controlled by the vessel’s automation systems, coordinating available shore charging energy and vessel requirements.

Charging rates and energy usage will be coordinated to minimized peak demand consumption.

Project Schedule

System design and engineering will be completed early second quarter of 2022. The site infrastructure installation would take place July 2022 through December 2022. Major equipment is scheduled for arrival no later than January 2023. Canopy construction and equipment installation will follow. Equipment installation with system testing and commissioning is anticipated for the first quarter of 2023. The crew size will average three workers with peak work force likely onsite September 2022 and October 2022 with possible eight to ten man crew.

Non-essential vehicles will be parked in the large dirt lot east of the Crosby pier site. This area is outside the TAMT secured property. Onsite essential construction related company vehicles will be limited to maximum of two at any one time and will be coordinated so as not to impact existing tenant.

Due to its nature and limited scope, construction of the proposed project would generate a minor amount of vehicle trips and would require limited use of equipment. Therefore, impacts related to air quality, greenhouse gas emissions, and transportation and traffic are not anticipated to occur. Furthermore, the Applicant would be responsible for complying with all applicable federal, state, and local laws regarding construction demolition debris, hazards and hazardous materials, and stormwater.

The following categorical determinations are based on the project submittal and all project information known to the District as of the date of this determination.

### CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

**CATEGORICAL DETERMINATION**

Categorical Exemption(s): SG §15301, Class 1/Section 3.a: Existing Facilities and SG §15303, Class 3/Section 3.c: New Construction or Conversion of Small Structures

3.a. Existing Facilities (SG § 15301) (Class 1): Includes operation, repair, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing, including but not limited to:

(7) Existing facilities used to provide electric power, natural gas, sewerage, or other public utility service.

**AND/OR**

3.c. New Construction of Conversion of Small Structures (SG § 15303) (Class 3): Includes construction of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and conversion of existing small structures from one use to another with minor modifications to the exterior of the structure. Examples of this exemption include:

(2) Accessory (appurtenant) structures and mechanical equipment including, but not limited to, garages, sheds, railway spur tracks, pilings, temporary trailers, industrial equipment enclosures, fences, parking, on-site roadways, walkways and health and safety devices.

(3) Water, sewer, electrical, gas, telephone, and other utility structures or facilities.
The proposed project is determined to be Categorically Exempt pursuant to the CEQA Guidelines and the Section(s) of the District’s Guidelines for Compliance with CEQA as identified above because the project will install new: concrete pad with battery units covered by a canopy, fencing, electrical conduits and cable and fire suppression system; and, upgrade existing transformer and switch gear. The project consists of construction and location of new, small facilities/structures and involves no expansion of use beyond that previously existing and would not result in a significant cumulative impact due to the continuation of the existing use The District has determined none of the six exceptions to the use of a categorical exemption apply to this project (CEQA Guidelines Section 15300.2).

Pursuant to CEQA Guidelines Section 15062, a 35-day statute of limitations for this CEQA exemption shall apply from the date a Notice of Exemption is posted with the San Diego County Clerk, or a 180-day statute of limitations for this CEQA exemption shall apply if no Notice of Exemption is filed.

CALIFORNIA COASTAL ACT

PORT MASTER PLAN CONSISTENCY

Planning District(s): 4 - Tenth Avenue Marine Terminal (Precise Plan Figure 13)

Land Use Designation(s): Marine Related Industrial

The proposed project conforms to the certified Port Master Plan because it would involve electric tugboat charging station and shore power infrastructure consistent with the existing certified Land Use designation(s). The proposed project would not change the use of the site nor would it interrupt or expand the existing conforming uses of the site.

CATEGORICAL DETERMINATION

Categorical Exclusion(s): Section 8.a: Existing Facilities and Section 8.c: New Construction or Conversion of Small Structures

8.a. Existing Facilities: The operation, repair, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing, including but not limited to:

(2) Public and private utilities used to provide electric power, natural gas, sewer, or other utility services.

AND/OR

8.c. New Construction or Conversion of Small Structures: Construction and location of limited numbers of new, small facilities or structures and installation of small, new equipment and facilities, involving negligible or no change of existing use of the property, including but not limited to:

(2) Water main, sewer, electrical, gas, or other utility extensions of reasonable length to serve such construction.

(3) Accessory structures, including, but not limited to, on-premise signs, small parking lots, fences, walkways, swimming pools, miscellaneous work buildings, temporary trailers, small accessory piers, minor mooring facilities, buoys, floats, pilings, or similar structures; and seasonal or temporary use items such as lifeguard towers, mobile food units, portable restrooms, or similar structures.

The proposed project is determined to be Categorically Excluded pursuant to the Section(s) of the District’s Coastal Development Permit Regulations as identified above because it would involve negligible or no expansion of use beyond that previously existing and would involve negligible or no change of existing use of the property.

Pursuant to California Coastal Act Section 30717, there is a 10-working-day period to appeal this “Coastal Act Categorical Determination of Exclusion” to the California Coastal Commission.
CALIFORNIA PUBLIC TRUST DOCTRINE

The proposed project complies with Section 87.(a)(1) of the Port Act, which allows for the establishment, improvement, and conduct of a harbor, and for the construction, reconstruction, repair, maintenance, and operation of wharves, docks, piers, slips, quays, and all other works, buildings, facilities, utilities, structures, and appliances incidental, necessary, or convenient, for the promotion and accommodation of commerce and navigation. The Port Act was enacted by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, the proposed project is consistent with the Public Trust Doctrine.

JOE STUYVESANT
President/CEO

Determination by:
Megan Hamilton
Senior Planner
Development Services

Signature: ____________________________
Date: ________________________________

Deputy/Assistant General Counsel

Signature: ____________________________
Date: ________________________________