ATTACHMENT A

Stockton Avenue Bridge Emergency Repair Project

Project Description

August 2, 2023

BACKGROUND

The Stockton Avenue Bridge (bridge) over Soquel Creek is located in Capitola, California (Figure 1). The bridge extends from Cliff Avenue to the southwest and the Esplanade to the east[1]. Soquel Creek Park is located to the northwest and Capitola State Beach and Capitola Wharf to the south. A vicinity map is provided on Sheet G-001 of the enclosed repair design plans provided as Attachment B.

The bridge was originally constructed in 1934 and is approximately 6,000 square feet, spanning 135 feet long and 45 feet wide. The structure is a 3 span, continuous parabolic RC (7 cell) box girder with cantilevered end spans on RC pier walls and RC diaphragm ends with non-monolithic wingwalls, all founded on RC pile caps and timber piles. The side spans are 25 feet, and the center span is 85 feet.

The City of Capitola maintains the water levels within Soquel Creek in accordance with their Soquel Creek Lagoon Management Plan (Certification (WDID) No. 34417WQ01). The water levels within the lagoon are managed for public safety, water quality, fish habitat and public access. Summer lagoon conditions begin with the creation of a sand bar which is generally formed in late May and is kept in place until the first large storm event, typically observed in late Fall (Figure 1).

[1] Note that the County of Santa Cruz has not assigned an APN to the bridge, likely due to its location.

Figure 1: Project Location and Vicinity Map

PURPOSE

The bridge is in need of emergency repair and the City of Capitola is proposing to repair the damage as documented in the U.S. Department of Transportation Federal Highway Administration – California Division – Title 23 Damage Assessment Form dated June 8, 2023.

The repair is approved for emergency funding by the City of Capitola, Caltrans District 5, and the Federal Highway Administration as of June 8, 2023.

PROPOSED EMERGENCY REPAIR ACTIVITIES

Repair activities would include:

- Patching 7 spall locations
- Replacing walkway slab concrete and adjacent retaining wall

Spall repairs on the east face of the east pier involve cleaning exposed rebar and removing unsound concrete. Three different spalls measuring 3'x2.5', 2'x2', and 1'x1' will be cleaned and patched (Figure 2).

Similarly, on the west face of the west pier, a total of four spalls require similar cleaning and patching. Two of the four spalls in this location measure 3'x2.5', a third measures 5'x2.5', and the fourth measures 3'x2' (Figure 3). There is no damage observed to the west abutment face or the inside face of the east pier.

The walkway slab underneath the bridge is 10 inches thick and 12 feet 6 inches to the north narrowing to 7 feet to the south. This slab has cracked and the concrete will be removed and replaced. The adjacent retaining wall is cracked and has a large amount of debris (Figures 4 & 5).

There is currently a tree trunk wedged between the east abutment and adjacent pier that crews have been unable to remove and which may be able to be dislodged during repair activities.

Figure 2: East Pier Wall During Very Low Tide with Spalled Areas Circled in Red

Figure 3: West Pier Wall in Post Storm Condition with Spalled Areas Circled in Red

Figure 4 & 5: Retaining Wall During Very Low Tide Showing Debris Accumulation

Figure 6: Close-up of Exposed Rebar Under Spall on East Pier Wall

CONSTRUCTION APPROACH

The proposed project approach would be either to use snooper trucks on the bridge to repair the spalls and walkway slab concrete and retaining wall or to conduct work from the channel when waters have sufficiently receded. Cranes may be staged on the bridge to cut up previous larger debris and may be used to repair the bridge. Staging would occur on the bridge as well as on an unpaved access area on the northeast side of the bridge. Repair equipment and materials would be transported by truck. The westbound lane may be briefly closed during portions of the repair due to the risk of construction hazards when equipment is on the bridge, however, lane closure would likely not be required if repairs are conducted from the dry channel. The work will be completed as soon as all permits are in hand and the City has made the site accessible for repair activities. Construction activities would occur during daylight hours and are anticipated to last a maximum of three weeks.

BEST MANAGEMENT PRACTICES

Best management practices (BMPs) will be utilized during repair activities to avoid or minimize any water quality impacts that could result to Soquel Creek. BMPs will address construction debris storage, floating debris, and repair equipment operations. Implementation of BMPs would reduce water quality impacts to below a level of

significance. Erosion control BMPs designed to prevent spillage and/or runoff of repair related materials and to contain sediment or contaminants associated with the repair activities shall be implemented prior to the onset of such activity. These BMPs shall include but are not limited to:

- Protection of storm drain inlets with sandbags or berms.
- Covering of all stockpiles.
- Storage, application and disposal of petroleum and other repair materials will be managed and controlled.
- BMPs will include a preconstruction meeting to review procedural and BMP guidelines.
- During construction, heavy equipment shall be operated in accordance with standard BMPs. All equipment shall be properly maintained such that no leaks of oil, fuel, or residues will take place. Provisions shall be in place to remediate any accidental spills.
- Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials.
- All food-related trash shall be disposed of in closed containers and removed from the Project Area each day during the construction period.
- All work shall take place during daylight hours.
- Construction work or equipment operations below the mean high-water line shall be minimized to the absolute extent feasible, and, where possible, limited to times when tidal waters have receded from the authorized work areas.

OTHER REQUIRED APPROVALS

The repairs are anticipated to be deemed exempt per CEQA under Guidelines Section 15269(d) emergency projects. Work will commence when all required approvals are in place. Emergency permits are requested from the United States Army Corps of Engineers (USACE) and California Coastal Commission (CCC). The Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) will not require permits but must be notified of emergency activities.