

OLD SACRAMENTO
RIVERFRONT EMBARCADERO
AND K STREET BARGE
REPAIR PROJECT # PB15-030

APPENDIX

C

CVFPB LETTER

City of
SACRAMENTO
Department of Public Works

Mr. Len Marino
Chief Engineer
Central Valley Flood Protection Board

The City of Sacramento is preparing construction documents for a maintenance and repair project along the Old Sacramento riverfront boardwalk. Our assumptions are based upon the attached documents. We believe the proposed work can be accomplished as maintenance without a new CVFPB permit. Access will be made available for flood patrol and Stoplog installation, if necessary, during the flood season (Nov. 1 to April 15). Our proposed schedule of work is from late winter 2015/16 to summer 2016.

The City of Sacramento considers the proposed work/project as a minor alteration within an adopted plan of flood control and would not be injurious to the adopted plan of flood control. Therefore per CCR, Title 23, Article 3, Section 6 (e) the City of Sacramento requests your authorization of this project.

The City of Sacramento, Department of Public Works will comply with the following conditions that are applicable to the work:

- Only the work described shall be performed.
- The work on the levee section(s) shall conform to Title 23 standards.
- Project area shall be restored to at least the same conditions that existed prior to start of work. Soil cuttings, grout wastes, and debris resulting from drilling activities will be removed from the site.
- The City of Sacramento, Department of Public Works will be responsible for any and all damages to the levee, floodway and adjacent properties resulting from this project.
- The City of Sacramento, Department of Public Works will notify the Department of Water Resource's Flood Project Inspection Section at (916) 574-2353, at least 5 days prior to start of work.
- The City of Sacramento, Department of Public Works will notify the Local Maintaining Agency at least 5 days prior to start of work.
- The City of Sacramento, Department of Public understand this authorization does not relieve The City of Sacramento, Department of Public of the responsibility to obtain authorization from all concerned Federal, State and local agencies or to satisfy any California Environmental Quality Act (CEQA) requirements.

Sincerely,

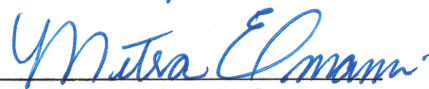


Kirk Thompson, Architect
City of Sacramento, Department of Public Works

Date: 8/18/15

Attachment 1, Drawing A1.12 (3-24x36)

Approved by:



Len Marino, P.E., Chief Engineer
Central Valley Flood Protection Board

Date: 8/20/15

For

Attachment 1

Construction Activities for the Embarcadero Material Replacement Project

This is a repair and replacement project to address existing deficiencies in the existing surface of the Old Sacramento Boardwalk. The Old Sacramento Boardwalk area was approved through two Reclamation Board permits (13589 BD and 13605 GM). The original bike path, north of the embarcadero, was approved through permit 12907. As stated in the permits, the required flood elevation building standard is 34.5' msl. The proposed project will maintain this elevation where appropriate and existing. The footprint of the embarcadero does not change with this project. Figure 1, Figure 2, and Figure 3 provide an aerial view of the project with key features identified. Figure 4 shows the latest architectural drawings of the project.

Remove and Replace Existing Wood Decking

The existing wood boards were installed in the mid-1980s and are experiencing extensive wear and degradation. Numerous tripping hazards are present along the Embarcadero (Figure 5). The wood boards are on top of a concrete slab-on-grade over aggregate base and bolted in place. Supporting the boards are fully threaded rods, commonly referred to as all threads and wedge anchors. The bolts were wet set in the concrete slab and if any repair to boards was performed, expansion anchors were used. The installation of the existing wood boards is covered in Reclamation Board Permit #13589 BD.

The repair work involves removing the wood boards with a backhoe. The remaining bolts will be snapped off at the concrete and left in place. Any damaged concrete will be repaired. The concrete slab will remain to provide the structure for installation of the new paving material replacing the existing wood boards. The new paving material will consist of stamped wood grain stained concrete placed over the existing concrete slab-on-grade.

Currently there are four shade structures along the cantilevered sections of the embarcadero. The support posts for these structures are bolted to the existing wood decking (Figure 6). The wooden decking on these sections will be replaced with new wood and the shade structures will again be bolted to the deck.

Replace Existing Wood Fascia on Floodwall

The Sacramento River floodwall is a vertical concrete wall along the Embarcadero (Figure 7). The top elevation of the wall is 34.5' msl. The face and top of the concrete wall has a wood fascia board to match the wood boards along the walking surface of the Embarcadero. There are existing openings in the floodwall, such as the entrance to the Delta King, where flood control is provided using stoplogs that slip into steel rails and cover the opening and stored in non-flood periods adjacent to the opening (Figure 7). The top of the stoplogs are at the elevation of the top of the concrete floodwall. The wood fascia board over the concrete floodwall is reflected in Reclamation Board Permit #13589 BD. There are areas on the perimeter of the precast concrete decks where the floodwall is constructed of a wood timber.

The repair will include removal of the existing wood fascia boards on both sides and top of the existing flood wall, and replacement with new wood on the easterly (land) side, and new wood on the top of the floodwall to match the existing height. The westerly (river) side of the wall will remain exposed concrete. The bolts will be cut or ground to be flush with the face of wall and existing blemishes patched to match the adjacent concrete surface. Low-profile ground-illuminating lights will be placed in the wood veneer on the easterly (land) side of the floodwall (Figure 4). The lights will be fed from new conduit which will be run behind the new wood, where there are currently existing conduits for other feeds.

On the elevated sections of the embarcadero and around the buildings, the floodwall is comprised of a timber beam bolted to the concrete slab under the embarcadero (Figure 8).

Repair Existing Barge and Dock/Stairs

The Delta King is moored to a dock that is mounted on the hull of a barge. On top of the barge is also an elevator, gangway, and stairs that provide a mostly accessible (ADA compliant) path of travel from street level to the Delta King (Figure 9). The barge, as with the associated elements, rises and falls with the elevation of the river. These are not overtopped in a flood event. The use of the Barge is covered in Reclamation Board Permit #13589 BD.

The barge is in need of interior repairs to address leakage, rust, and proper closure to the elements. These repairs will be conducted on the interior of the barge and will not involve any alterations that will modify the obstruction to flow resulting from the current barge.

Stairs and decking are part of the barge structure (Figure 10). The existing steel framed stairs that extend from the upper landing to the barge level will be modified to conform to current code requirements for stairs as part of the project. Replacement includes modifying the rise/run ratio and closing the vertical gap between the stairs (Figure 10). The existing riser height exceeds code maximum, the risers are open, and openings in the railings exceed code maximum. The existing wood treads will be reused, and new detailing will match the existing conditions.

Repair Existing Barge Elevator (Hoistway)

The elevator is contained in a steel and wood framed hoistway enclosure originally designed to reflect the architecture found within the Old Sacramento Historic District (Figure 11). The horizontal footprint is 8'-0" by 10'-0" and top of roof is 35'-0" feet above the barge deck. Repairs to the elevator will occur inside the hoistway and will not alter the horizontal or vertical footprint of the facility. There will also be repairs to some of the exterior siding and roof of the enclosure to address areas of rot or other wood decay. The repairs will replace in-kind and will not alter the footprint.

A new intermediate elevator stop and landing will be added midway between the barge level and upper level that connects to the gangway from the Embarcadero. The elevator enclosure will be modified to add the required opening. The landing at the new elevator stop will be connected directly to the Delta King by a new gangway. The new landing and walkway will match the existing architectural design style.

Lighting

Light fixture types relating to the Historic District's period of significance will be placed 20-25 feet to the easterly (land) side of the floodwall. Post holes will be augured about 4' below existing grade for placement of the light pole foundations. The landward side of the floodwall was previously filled to about the base of the floodwall. Assuming a typical levee prism with a 2:1 side slope, at 15 feet, the levee prism would be about 7.5 feet below grade. The proposed boring for the lamp pole foundations should be located above this elevation.

Lighting will also be placed on the posts that are part of the shade structures on the elevated cantilevered sections of the embarcadero. Only the posts on the east sides of the shade structures will be used for lighting on the embarcadero.

Joe's Crab Shack Improvements

The existing Joe's Crab Shack is located south of the California Pacific Steamers Building on the Embarcadero. The existing wood boards will be removed and the concrete exposed (Figure 12). The existing wood ramps will be removed and the grade will be raised in this area to FF 34.60'. This will be

accomplished by placing AB on the existing concrete slab and placing a new capping slab on top of the compacted AB.

Miscellaneous Project Modifications

As part of the repair and replace project there will be several other improvements. These include:

- Adding stairs to the elevated cantilevered sections
- Improving ADA access Ramps on east side of embarcadero
- Replacing existing railings
- Cutting and capping the driven piles
- Overlay wood on cantilevered sections that are not on a concrete base

List of Flood Permits for the Original Boardwalk Improvements

Flood Board Permits for Old Sacramento		
Permit Activity	Number	Notes
Bike Path	12907	
Cut Floodwall	13605 GM	
Barge, Handicap Ramp	13589 BD	34.5 elevation mentioned
Rio City Café Dock	15528	

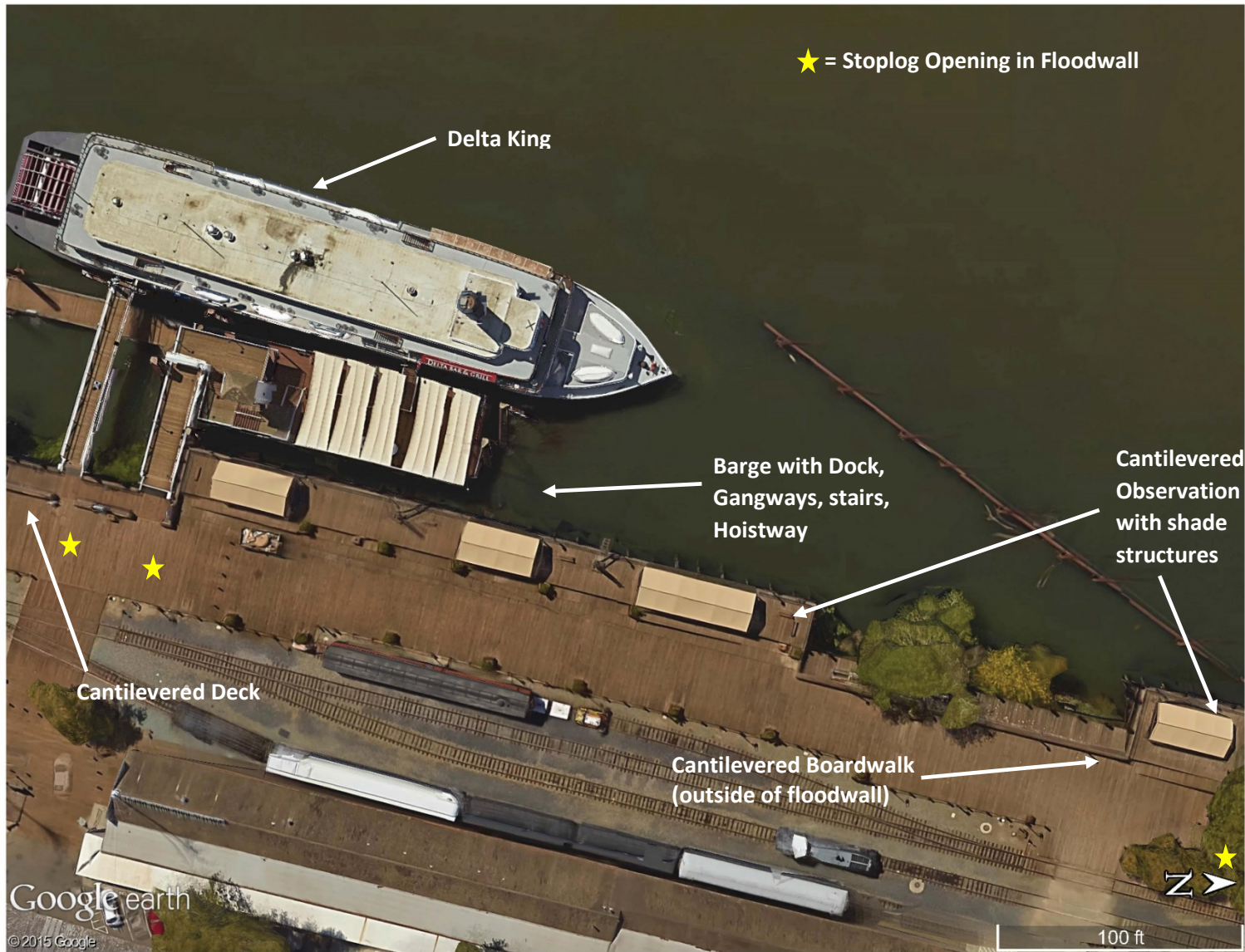


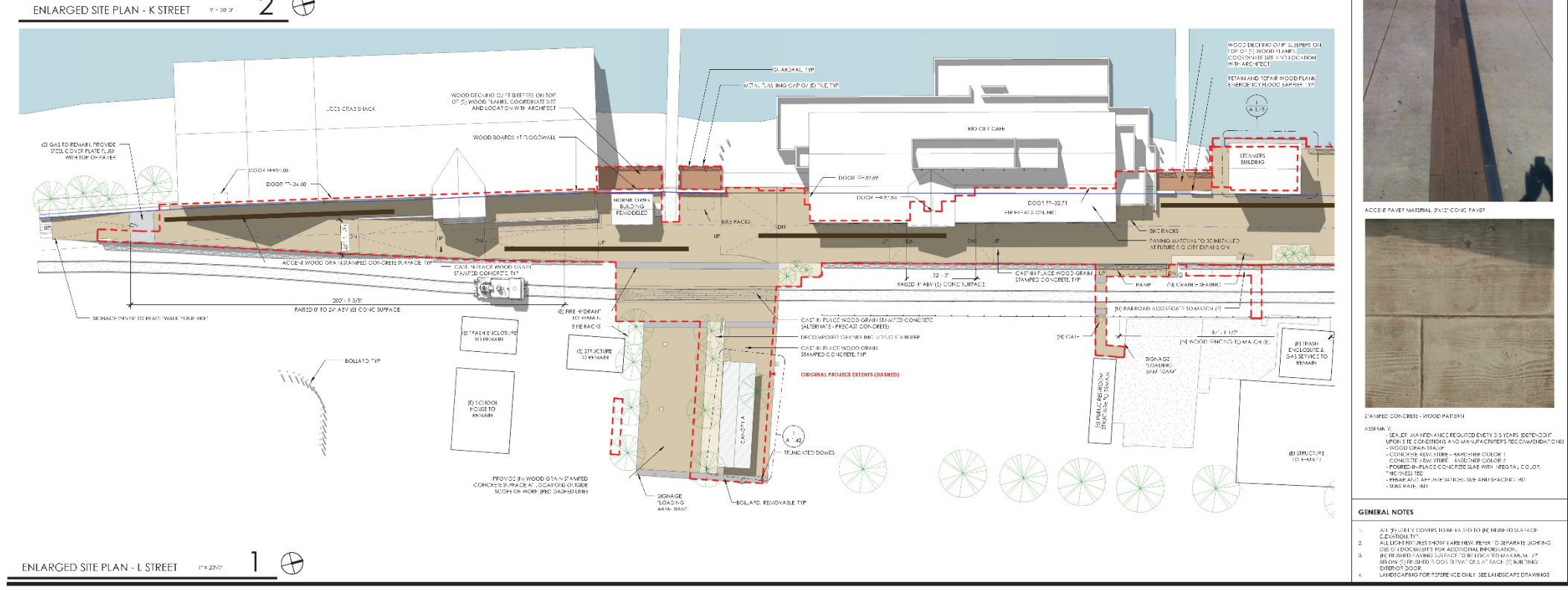
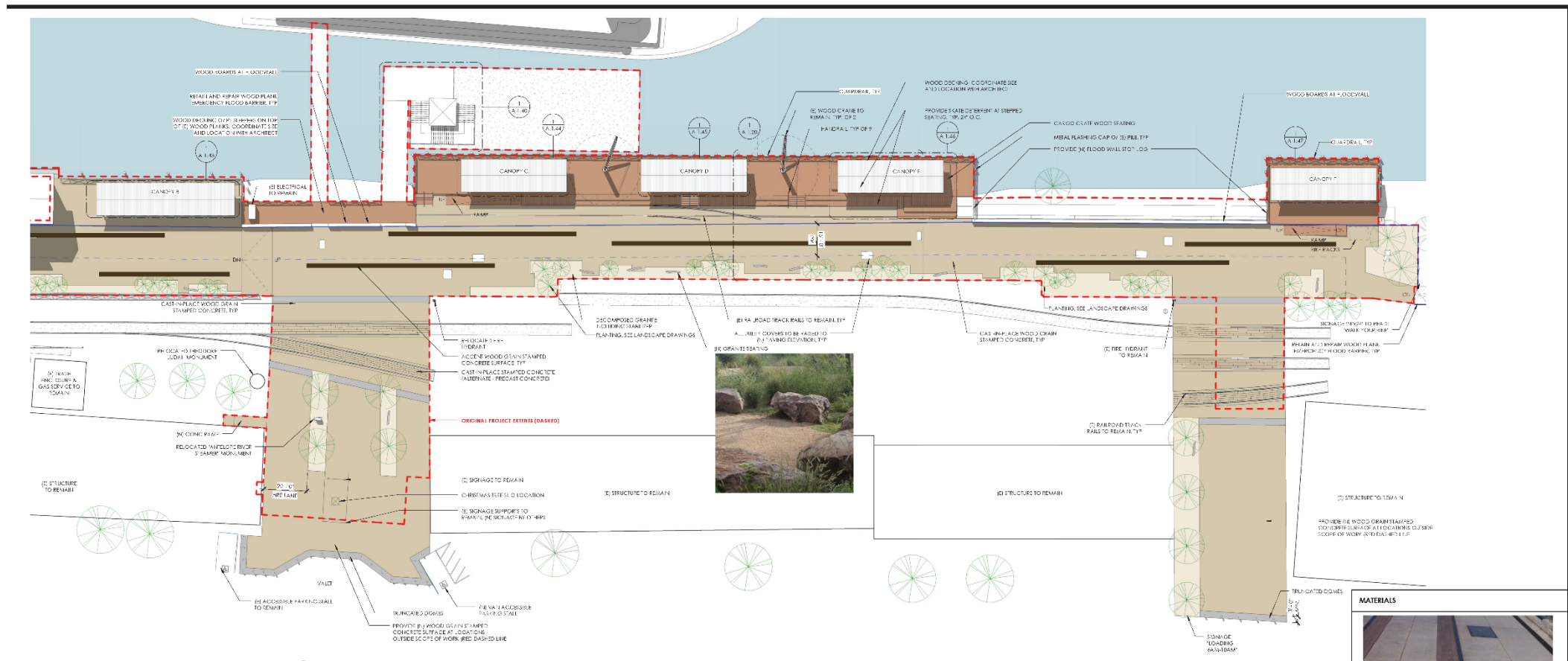
Figure 1. Upstream (north) Section of Project.



Figure 2. K Street Section of Project.



Figure 3. Downstream (south) Section of Project.



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 www.cityofsacramento.org

UNGER
 CONSTRUCTION CO.

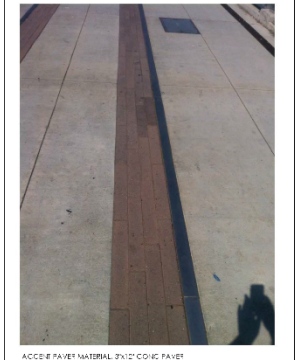
910 E. Street
 Sacramento, California 95814
 Office: (916) 352-5500
 www.ungersconstruction.com

HRGA
 ARCHITECTURE

The HR Group Architects
 227 K Street, Suite 200
 Sacramento, CA 95811
 Office: (916) 492-4800
 www.hrgrouparchitects.com

Owner: _____
 City/Division: _____
 This drawing is not valid for use for construction until it is signed by the architect and the owner.

MATERIALS



ASSUMPTIONS:
 1. SEALER APPLIED WHEN REQUIRED EVERY 5-6 YEARS DEPENDING ON SITE CONDITIONS AND MANUFACTURER'S RECOMMENDATIONS
 2. WOOD GRANT STAIN
 3. CONCRETE FINISHES: BROOM-FINISH COLOR 1
 4. FORMED-IN-PLACE CONCRETE SLAB WITH: BEGAL CO. LTD.
 5. FINISHES: SEE
 6. FINISHES: SEE
 7. FINISHES: SEE

GENERAL NOTES

1. ALL JOINTS AND COVERS TO BE FINISHED TO BE HIGH-TOUCH FACED ELEVATION, E.T.
2. ALL LETTERS MUST SHOW LABEL NUMBER TO SEPARATE WORKING SETS OF DOCUMENTS FOR ADDITIONAL INFORMATION.
3. ALL DIMENSIONS ARE UNLESS OTHERWISE NOTED TO THE CONTRARY.
4. LANDSCAPING FOR FUTURE USE ONLY. SEE LANDSCAPE DRAWINGS.

SCHEMATIC DESIGN
CITY OF SACRAMENTO
OLD SACRAMENTO RIVERFRONT EMBARCADERO AND K STREET BARGE PROJECT
 Enter address here

NOT FOR CONSTRUCTION

ISSUE/REVISION _____ DATE _____

ENLARGED SITE PLAN - L TO J STREET

Project Number: _____
 Project Name: _____

Drawn By: _____
 Author: _____
 Checked By: _____
 Date: **A 1.12**

Figure 4. Architectural Drawings of the Project.

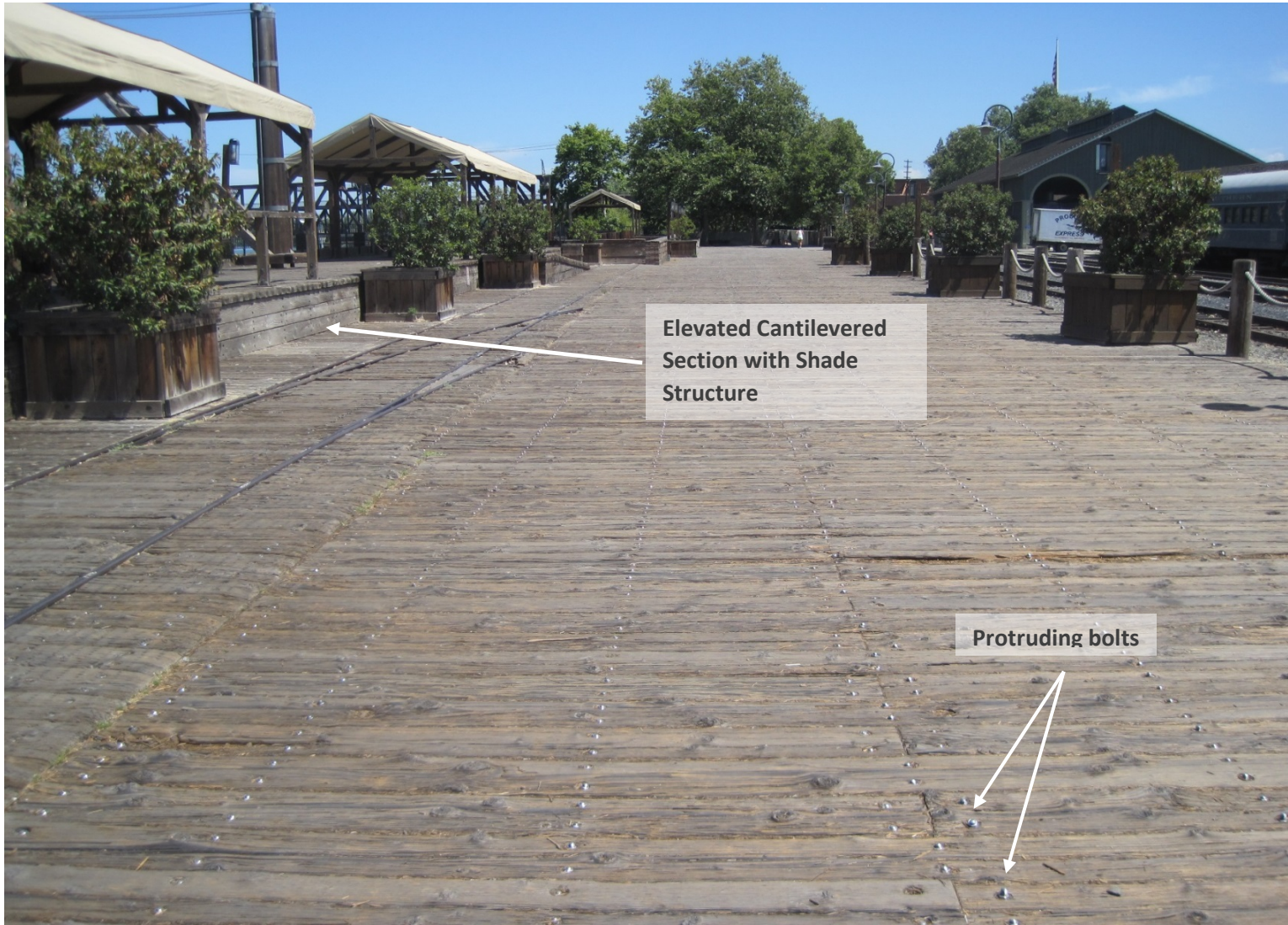


Figure 5. Existing Wood Deck on the Embarcadero with Protruding Bolts.



Figure 6. Shade Structure on the Embarcadero Showing Bolted Vertical Supports.



Figure 7. Existing Concrete Floodwall with Timber Fascia and Cap.



Figure 8. Timber Beam that Forms the Floodwall on the Elevated Embarcadero Sections.



Figure 9. View of the Gangway and the Barge Facilities adjacent to the Delta King.



Figure 10: Current Condition of the Stairs.



Figure 11. Hoistway Housing.



Figure 12. Joe's Crab Shack.