



Hanapepe Bridge Rehabilitation Community Meeting



County of Kaua'i
Department of Public Works, Engineering Division
Federal-Aid Project No. BR-0545(1)
Wednesday, December 2, 2020
CONSOR Engineers, LLC



Welcome!

Michael Moule, Chief of Engineering, DPW
County of Kauaʻi

Ikaika Kincaid, Meeting Facilitator
CONSOR Engineers, LLC

Go To Webinar – House Keeping

- Audience members will be muted until the end of the presentation.
- Questions can be asked in the “questions” chat box during the presentation for online users.
- Phone callers are asked to note questions, comments, and concerns and wait until the end when audience members are unmuted.
- Phone callers will need to use the following numbers:
 - Dial In Number is 415-655-0052
 - Access code is 662-249-615
 - Pin 80377

Presentation Agenda

- Introduction
- Purpose of this Meeting
- Objective of this Project
- Brief History of Hanapepe Bridge
- Project Site and Location
 - Laydown and Staging Area
 - River Access Area
- Proposed Repair Project Scope of Work
 - Repairs
 - New Structural Improvements
 - Elevated Walkway
- Best Management Practices
- Project funding source and Construction Costs
- Project Schedule
- Questions and Comments

Introduction

- County Department of Public Works Project (DPW)
- Federally-funded project using Federal Highway Administration (FHWA) funds.
- Design and Permitting Consultants: CONSOR Engineers, LLC (CONSOR) and Subconsultant WSP USA, are working with the County of Kauaʻi to provide design services for the rehabilitation of the Bridge.

Purpose of this Meeting

- Inform the community about the work proposed by this project.
- Clarify the history of prior work at Hanapepe Bridge.
- Solicit comments and answer questions.

National Historic Preservation Act (NHPA)

Section 106 Consultation Process

- Federally funded projects must conduct NHPA Section 106 Consultation with those knowledgeable about historic properties in the area to identify and assess potential effects.
- If historic properties are present, FHWA and DPW will determine how historic properties may be affected by the project.
- If there may be an “adverse effect” on a historic property, FHWA and DPW will work with Consulting Parties to avoid/minimize/mitigate the adverse effect.

Anyone with information on potential historic properties in the area, or formally requesting 106 Consulting Party status, is requested to contact DPW by **December 18, 2020**.

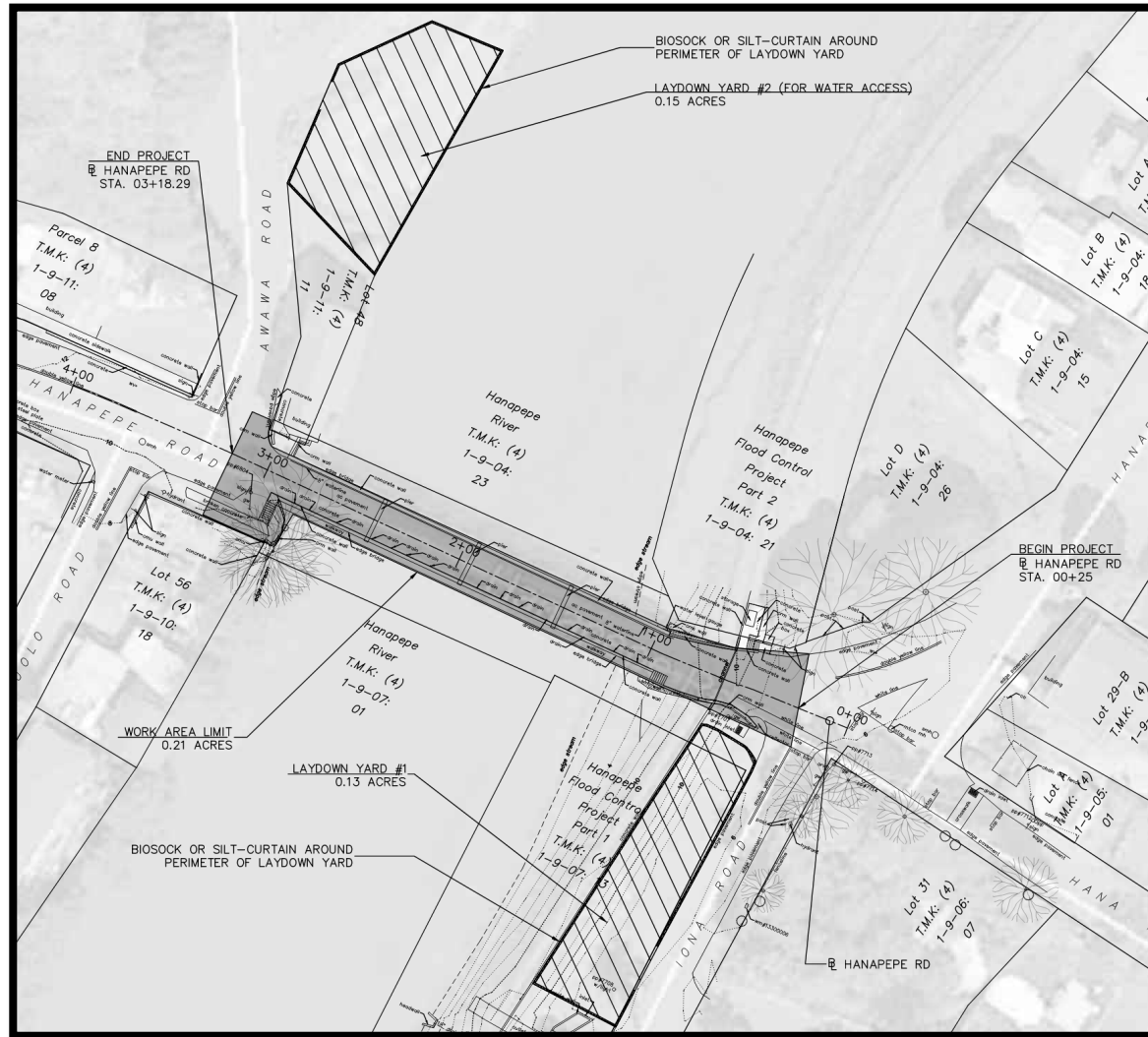
Brief History

- Bridge Originally Built in 1911.
- Pedestrian Walkway was added in 1927.
 - Additional support brackets and the bottom horizontal railing were added later.
- Rehab attempt in 2010s.
- DOW's waterline installation and proposed raised sidewalk.
- US Army Corps of Engineers (USACE)
Hanapepe River Flood Control Project (levee).

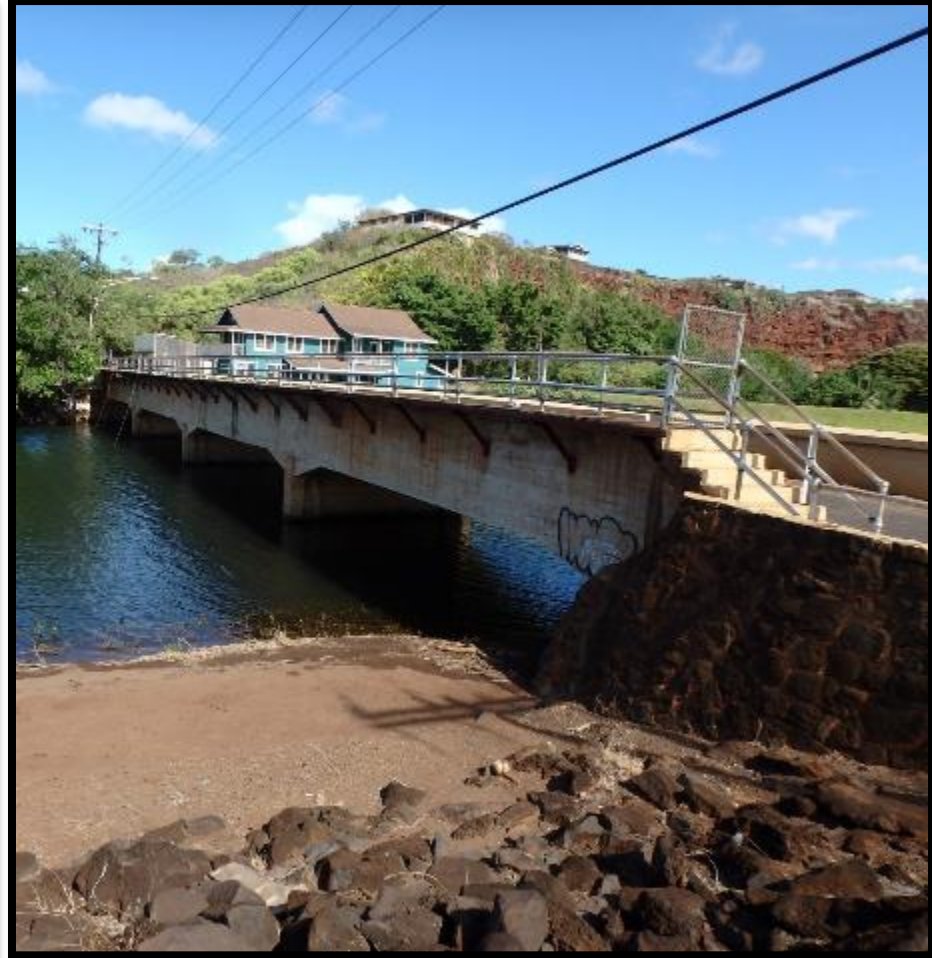
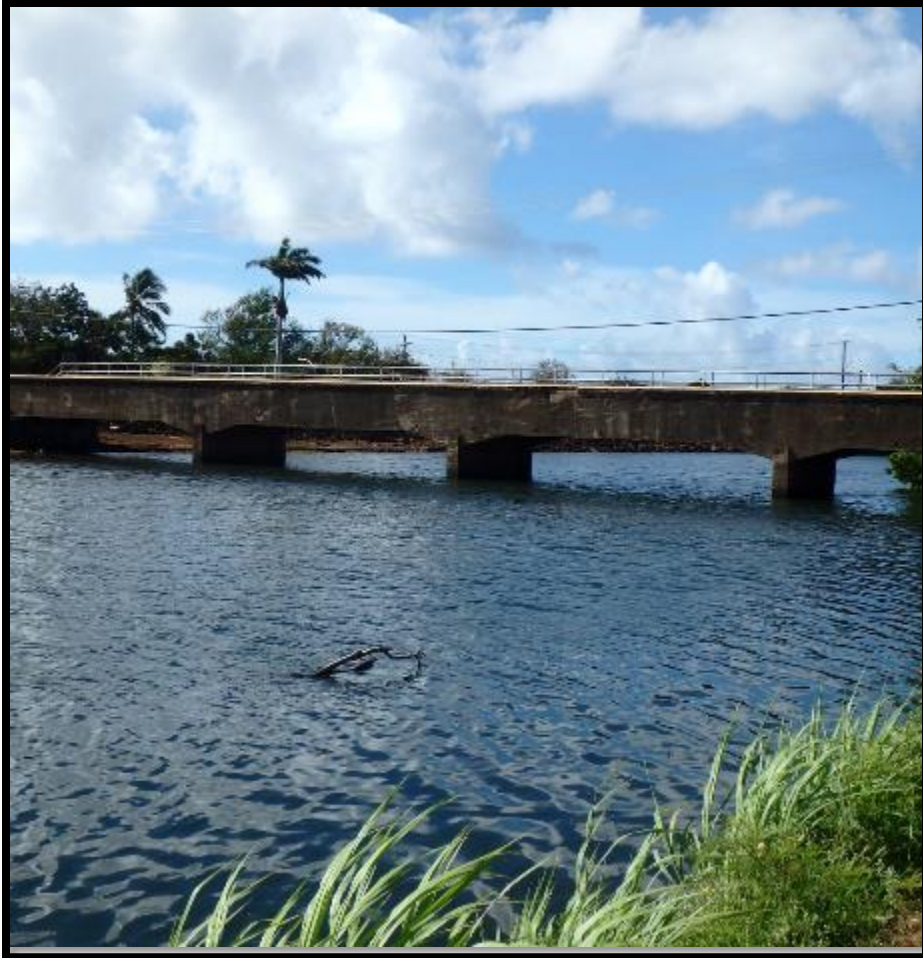
Objective of the Project

- Repair Hanapepe Bridge
 - Spalls, delamination, general deterioration
- Repair Elevated Walkway
 - Closed due to extreme deterioration making it unsafe
- Restore Load Capacity (~20-tons)
 - Currently at 10-ton load limit

Site Details



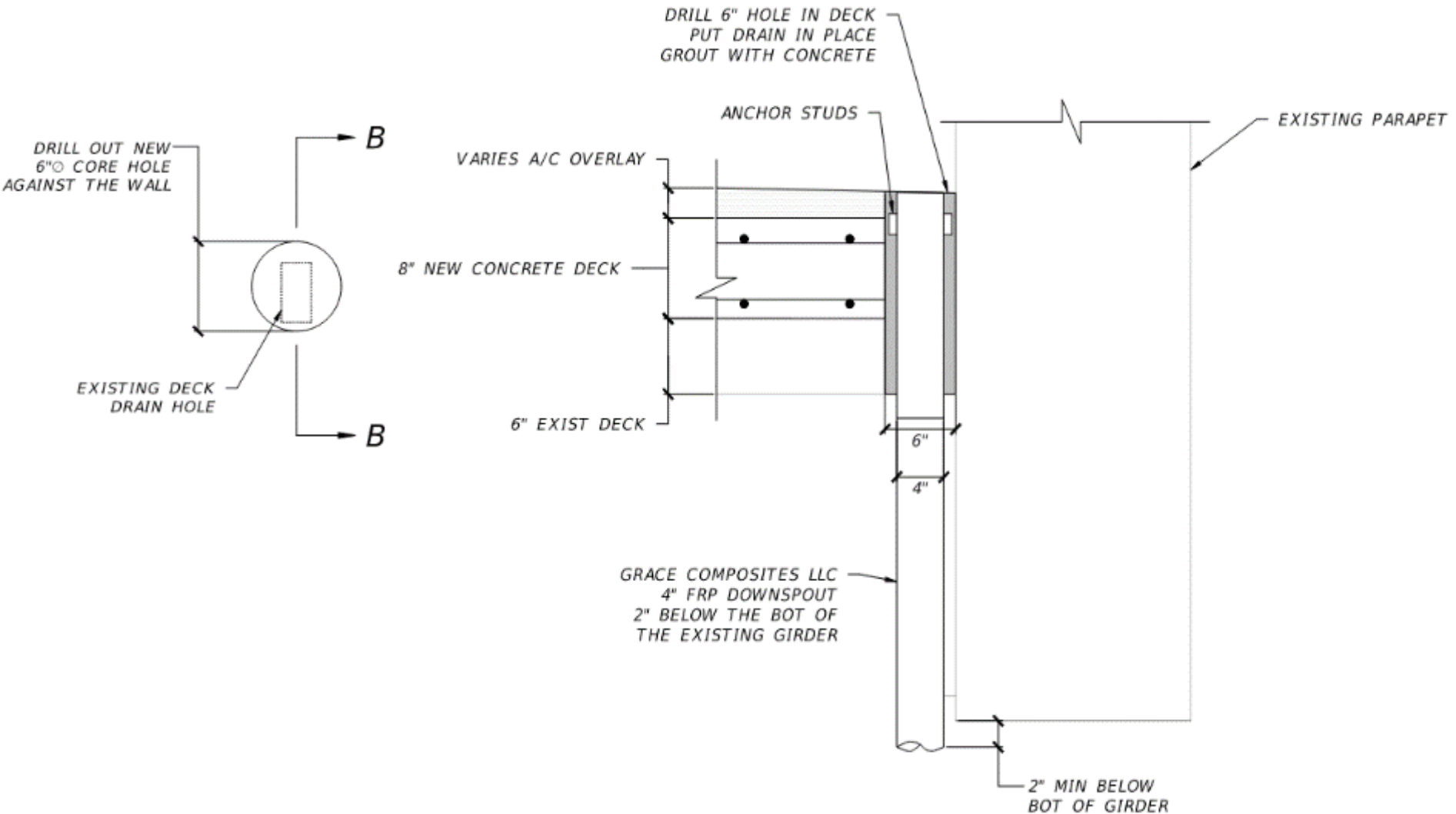
Hanapepe Bridge



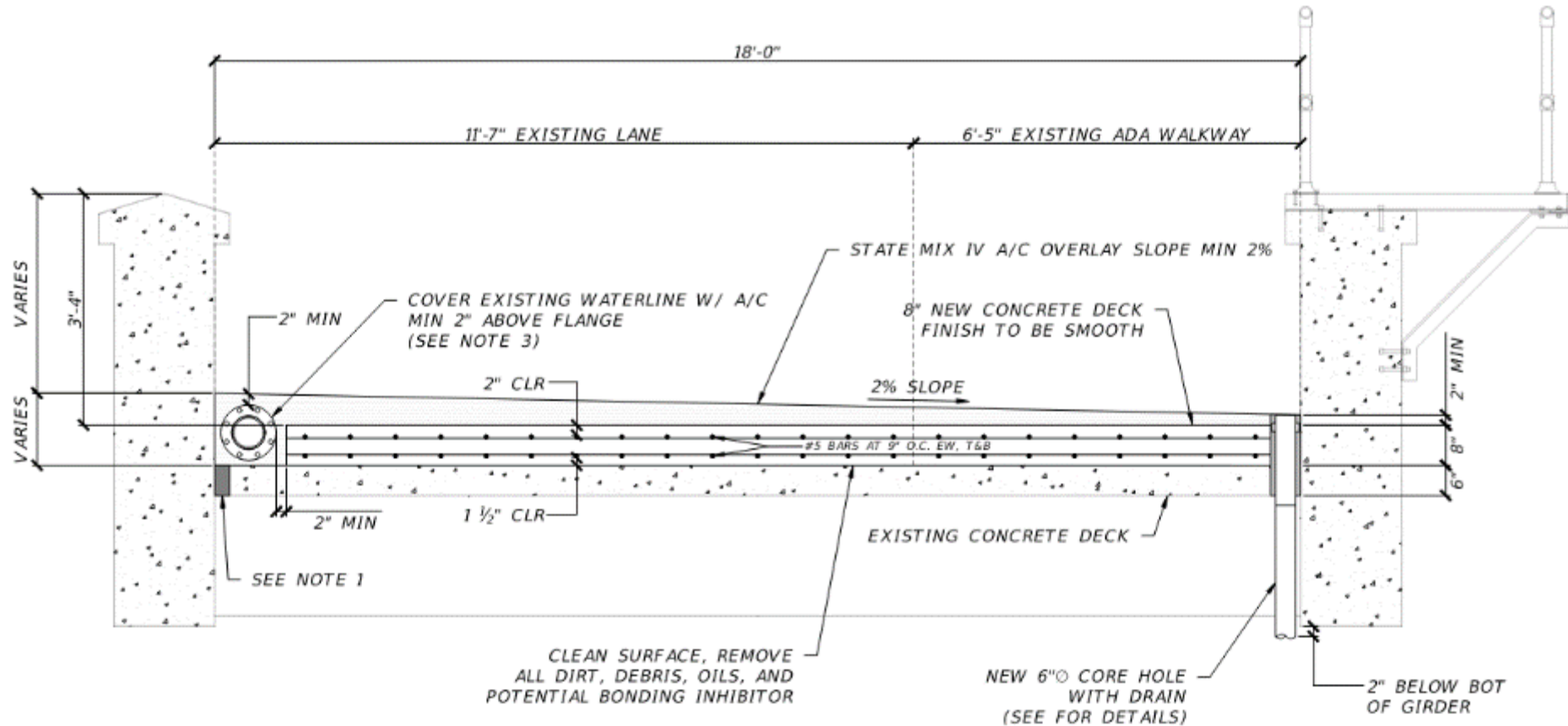
Proposed Scope of Work

- Repair of defects; spall and crack repair with color matching.
 - Inside of the parapets will be painted to match current color.
- Install drainpipes to keep water away from the structure.
- New Structural Improvements.
 - Remove existing AC roadway and fill material.
 - Replace with reinforced concrete with an AC overlay.
- Restore the original function of the elevated walkway.
 - Installation of precast deck planks.
 - Install new railings that meet current safety standards and resemble the original design.
- Restore ADA compliant sidewalk on the roadway surface on the Makai side.
- Temporary construction laydown areas will not require grading or earthwork. Work at bridge approaches will not exceed 6 inches from existing pavement surface

Proposed Scope of Work



Proposed Scope of Work



Bridge Defects



Conceptual – North Elevation



Conceptual – North Fascia



Conceptual – South Elevation



Conceptual – South Side, East Bank



Conceptual – Pier Wall 1



Conceptual – Pier Wall 2



Conceptual – East Approach



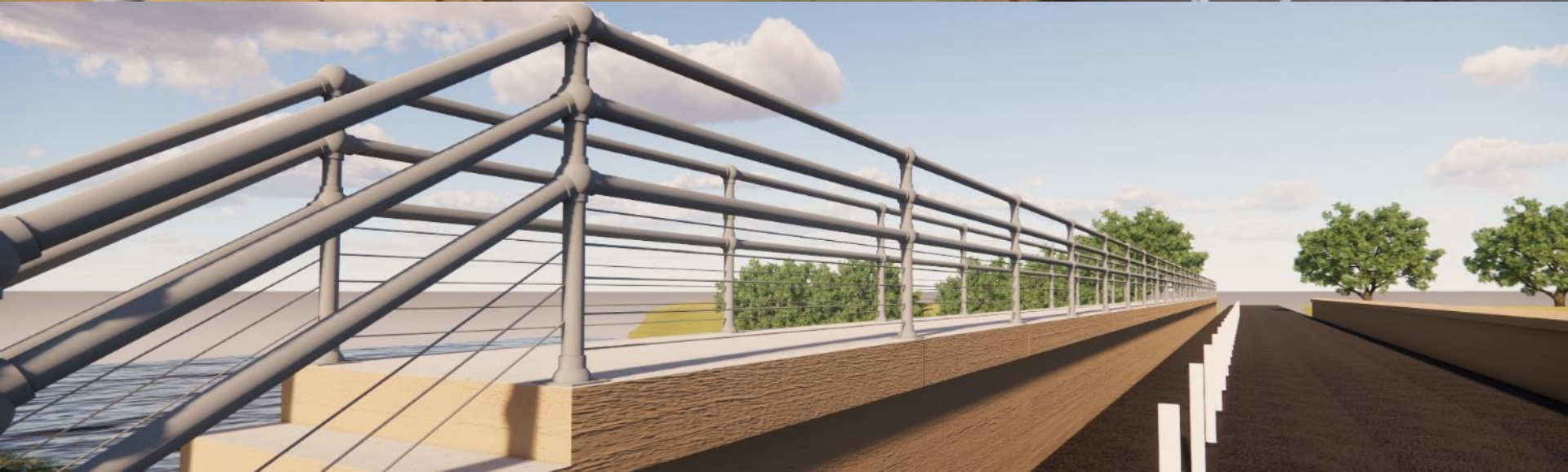
Conceptual – West Approach



Conceptual – North Parapet



Conceptual – Elevated Walkway



Conceptual – Walkway West Stairs



Conceptual – Walkway West Side



Conceptual – Elevated Walkway Brackets



Elevated Walkway Pedestrian Railings

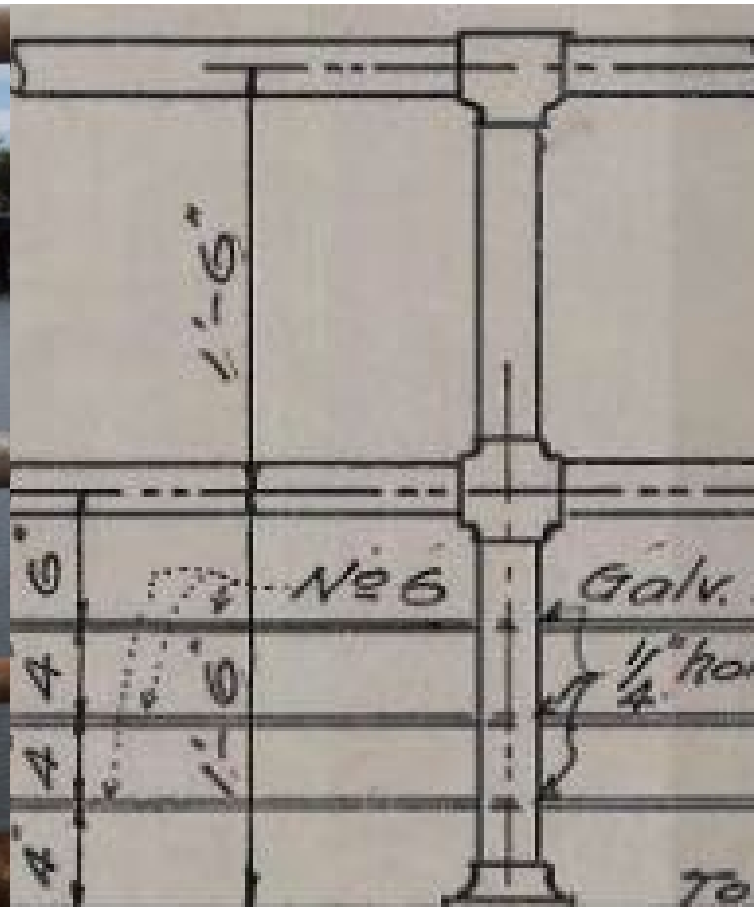
- International Building Code (IBC) Section 1013
 - “Guards shall be located along... stairs, platforms and landings which are located more than 30 inches (762 mm) above the floor or grade below.”
 - “Guards shall form a protective barrier not less than 42 inches (1067 mm) high...”
 - “Required guards... shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches (102 mm) or more in diameter below 27 inches, above 27 inches it is an 8 inch sphere”.

Walkway Railing

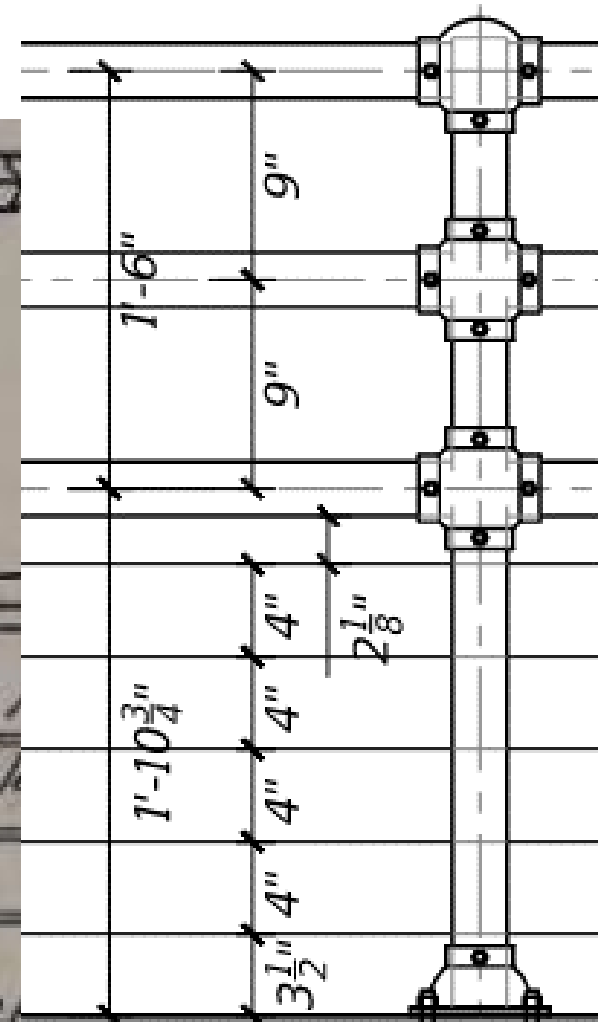
Existing



Original Design



Draft Design



Best Management Practices

- Scaffolding or falsework will be installed to catch construction debris from entering the river.
- Checklist and precautions to prevent impact to protected species and water quality.
- The US Army Corps of Engineers (USACE) levee will not be modified during this project
 - Coordination will be maintained with USACE in the event of a flood condition arises
 - Levee protection will not be compromised and will remain functional at all times

Construction Traffic Control Plan



Project Funding

- State Transportation Improvement Plan (STIP)
 - 80% Federal Highway Administration
 - 20% County Funds
- \$1.2 million Estimated Construction Cost

Estimated Project Schedule

- 2021 – Complete Planning, Permitting and Design
- 2022– Construction Start
 - Dependent on completion of State Hanapepe Bridge – Tentative August 2021
- 2023 – Construction Completion

Questions and Comments

- Contact or comments:
 - DPW Project Manager Donald Fujimoto
 - dfujimoto@Kauai.gov
 - (808) 241-4882
- Section 106 comments requested by –
December 18, 2020