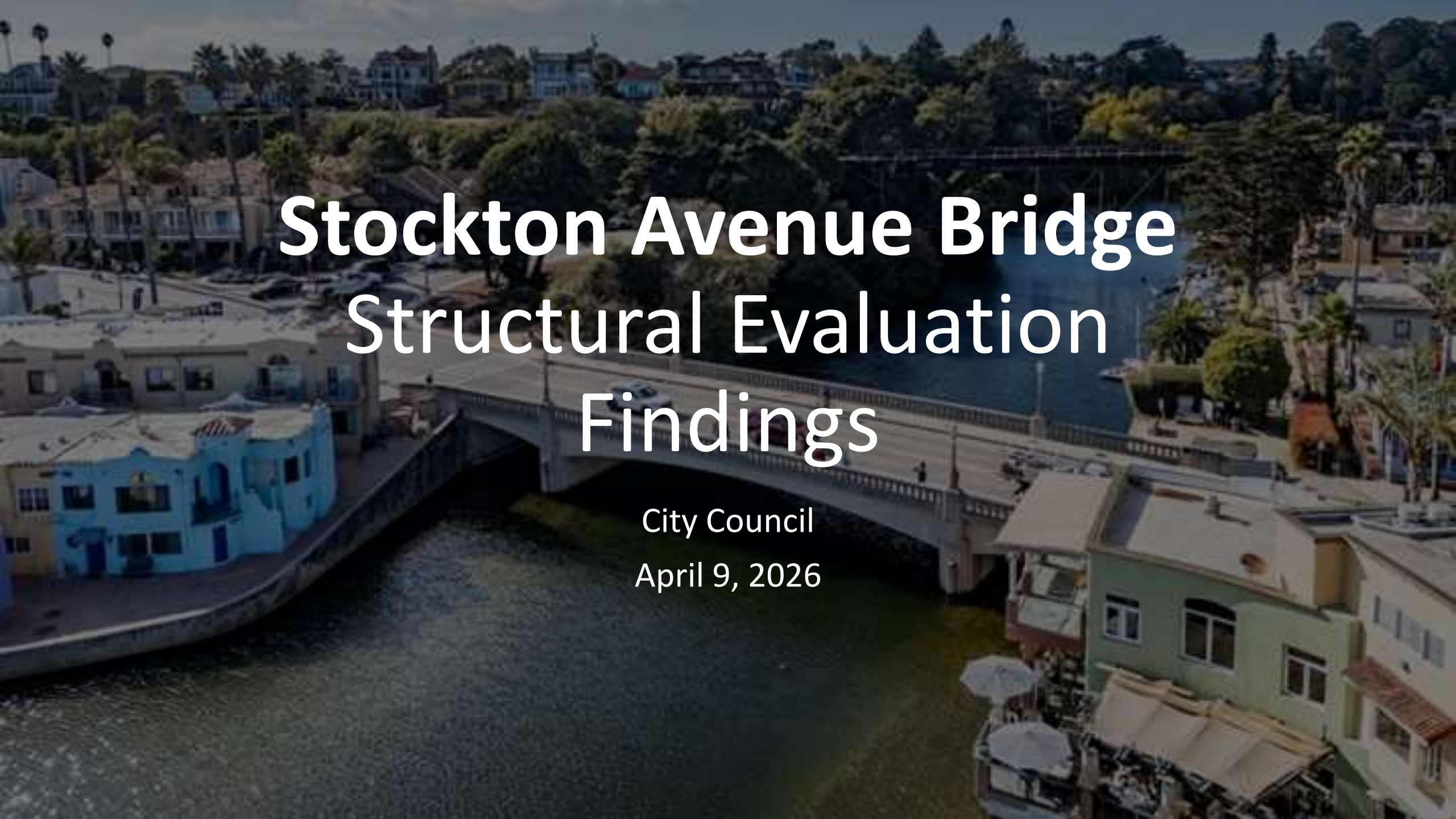


Stockton Avenue Bridge Structural Evaluation Findings

City Council

April 9, 2026

Stockton Bridge Evaluation

Background

FY 22/23 City budget included $350k to evaluate debris diversion

Jan 2023 – Storm impacts / debris concerns

Jan 2024 – Feasibility study initiated

Nov 2024 – Council: prioritize replacement

Mar 2025 – Council: structural evaluation requested

Apr 2026 – Evaluation complete

Stockton Bridge Evaluation

Key Takeaways

Bridge is approximately 93 years old

- Evaluation confirms deterioration is widespread, not isolated

- Repair would require major reconstruction and is not a viable long-term solution

- Replacement is the appropriate path forward

Stockton Bridge Evaluation

Fiscal Impact

$850,000 Total Funding

- $500,000 DWR Grant
- $350,000 General Fund FY22/23

$350,000 spent to date

- Feasibility and Structural Evaluation

Remaining funds

- Intended for design, environmental, and planning
- Not intended for major structural repair

Stockton Bridge Evaluation

Summary and Next Steps

Status

- Bridge remains in service today
- Condition will continue to decline

Next step: advance replacement planning

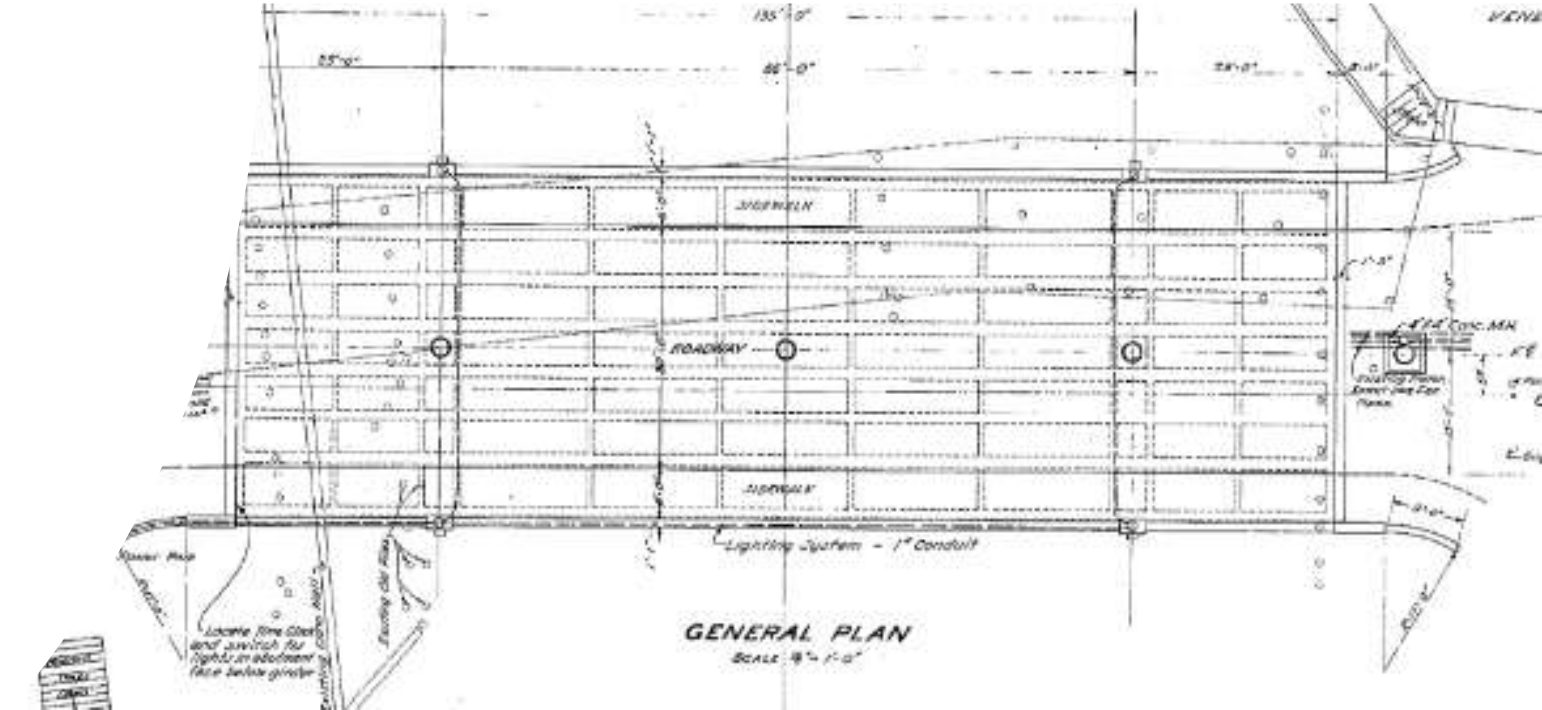
- Preliminary Design options
- Environmental review and permitting
- Historic resource considerations

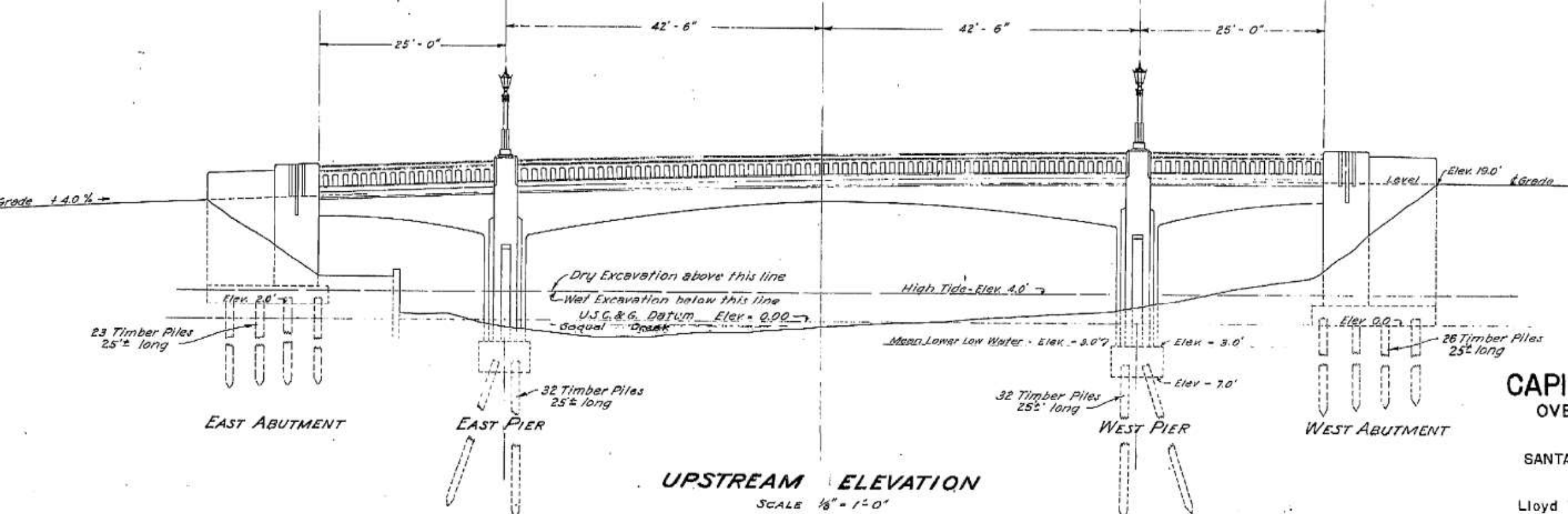
BIGGS CARDOSA

Stockton Avenue Bridge at Soquel Creek

(Br. No. 36C0110)

Structural Condition Evaluation





GENERAL DESCRIPTION

- 1933 Era Cast-in-Place Concrete Arch
- 85-foot center span with two center piers on Timber

HYDRAULIC BACKGROUND

- 2023 Storms Caused Erosion at Abutments and Corrosion Repairs were implemented.
- CSWST2 determined bridge to be “Scour Critical” and developed several hydraulic mitigations in 2024
- Due to hydraulic mitigation complexity, the last alternative proposed to replace bridge entirely.

BRIDGE CONDITION CONSIDERATIONS

Prior to recommending overall replacement, a general condition investigation of underside of bridge deck was warranted to consider:

- Review of several existing bridge inspection reports that discussed transverse deck cracking
- Hydraulic vulnerabilities
- Age of structure
- Proximity to ocean

EXISTING SIDEWALK CONDITIONS

July 2025 Site visit
(manhole access only)

- Corroding reinforcement and spalling was observed in beneath the sidewalk. Underside of the bridge deck at roadway manholes not visible due to formwork.
- Chain-drag evaluation of the deck located several areas that indicated delaminations of the concrete
- Additional deck openings were recommended




EXISTING ROADWAY DECK CONDITIONS

March 2026 Site Visit

- Openings for bridge cell access provided for viewing of almost 20% deck slab formwork removal
- Significant spalling and corrosion consistent with existing roadway surface cracking. The type and frequency of this corrosion damage was not isolated.

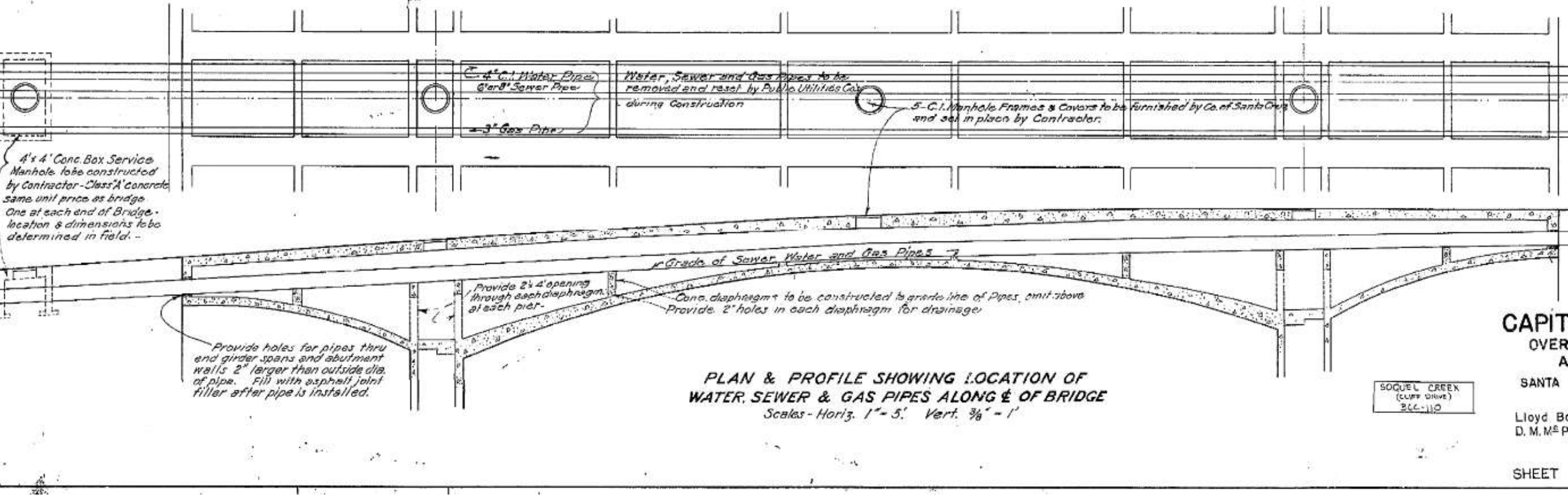



EXISTING ROADWAY DECK CONDITION

Additional Photos of Roadway Deck Soffit Spalls and Corrosion

EXISTING SIDEWALK DECK CONDITION

Additional Photos of Sidewalk Slab Soffit Spalls and Reinforcing Corrosion



CORROSION ISSUES

- Corrosion in key structural elements, especially bridge deck
- Concrete Spalling and Exposed reinforcement
- Ongoing maintenance needs

Still safe for use today, but condition will continue to decline over time

Bridge Replacement Need

- Stockton Bridge is a critical link for emergency response and community. Nearest alternative crossing of Creek is Highway 1.
- Bridge deck rating from recent Caltrans Inspection Report is currently “poor”. Caltrans review of new data will likely lower superstructure rating from “fair” to “poor”.
- Bridge is considered “Scour Critical” for hydraulics.
- Existing bridge is 93 years old, beyond its anticipated service life, and highly likely to be seismically deficient.

Bridge Replacement Process

- Environmental and permitting studies
  - Army Corps, Regional Water Quality, US and California Fish and Wildlife, Caltrans
- Multi-season construction period and maintaining 1-way signalized traffic and pedestrian access
- Caltrans review and coordination
- Historical structure issues
  - Listed on Historic Bridge Inventory
  - Approval through California Office of Historic Preservation
- Community involvement
- Utilities in existing bridge replaced or accommodated. Bridge carries sewer, water, electrical utilities. Some of these utilities are deteriorating and do not match historical record

Bridge Replacement Features

A replacement structure could be configured so new clear span structure would mimic existing historic character of the bridge, incorporating such features as:

- Arched bridge soffit
- Historic railing features
- Art Deco lighting and support pedestals
- Art Deco approach pedestals at abutments
- Alternative designs could be considered

Conclusions

- Remaining service life: 5 to 10 years, but this is a rough estimate due to inaccessible areas prone to similar deterioration to what was observed.
- Timing: Replacement planning should begin immediately as studies and approvals alone may take 2+ years.
- Replacement over Repair: Even a full deck replacement is not a cost-effective long-term solution as this would not address streamflow debris and seismic vulnerabilities
- Risk of Delaying replacement: Continued deterioration could lead to severe cracking, unsafe conditions, partial closure with potential for prolonged roadway shutdown if failure occurs.
- Monitoring needed: A significant increase in deck cracking will warn of an impending need to close the bridge – frequent inspections (every 3 months) are recommended.

Stockton Bridge Evaluation

Recommended Action

Receive presentation

Next step: advance replacement planning

- Preliminary Design
- Environmental review and permitting
- Historic resource considerations

Alternative

- Consider returning remaining funds