Islais Creek Bridge Rehabilitation Project
Federal Aid Project No. BHLO-5934(168)

Capital Planning Committee Project Update
October 3, 2022

Thomas Roitman, Project Manager, San Francisco Public Works

AGENDA

- History and Rationale for Change to Fixed-Span Bridge
- Resilience Charrette – Purpose, Process, and Outcome
- “Preferred” Bridge Option
- Trade-offs with Proposed Design
- Benefits with Proposed Design
- Project Status and Timeline Update
- Outreach
- Questions

HISTORY OF EXISTING BRIDGE

1920s Strauss Single-Leaf Bascule Bridge

1940s Nishkian Double-Leaf Bascule Bridge

HISTORY OF EXISTING BRIDGE


Copra Crane, late 1990s; *photo by Chris Carlsson*

Industrial Use – Cargill Inc. - Copra Importation and Processing 1947 - 1974

HISTORY OF BRIDGE REHABILITATION PROJECT

Deteriorated girders and deck – Structural deficiencies noted in Caltrans Bridge Inspection – Impetus for bridge rehabilitation in 2013

RATIONALE FOR CHANGE TO FIXED-SPAN BRIDGE

- **Accelerated Impacts from Sea-Level Rise Projections**
- **Stakeholder Engagement With Other Departments and Resilience Charrette**
- **High Construction Cost of Drawbridge and HBP Eligibility / City Funding Constraints**
- **Re-examination of Case Need for the City's Stakeholders and Users**

King Tide – 1/10/2021

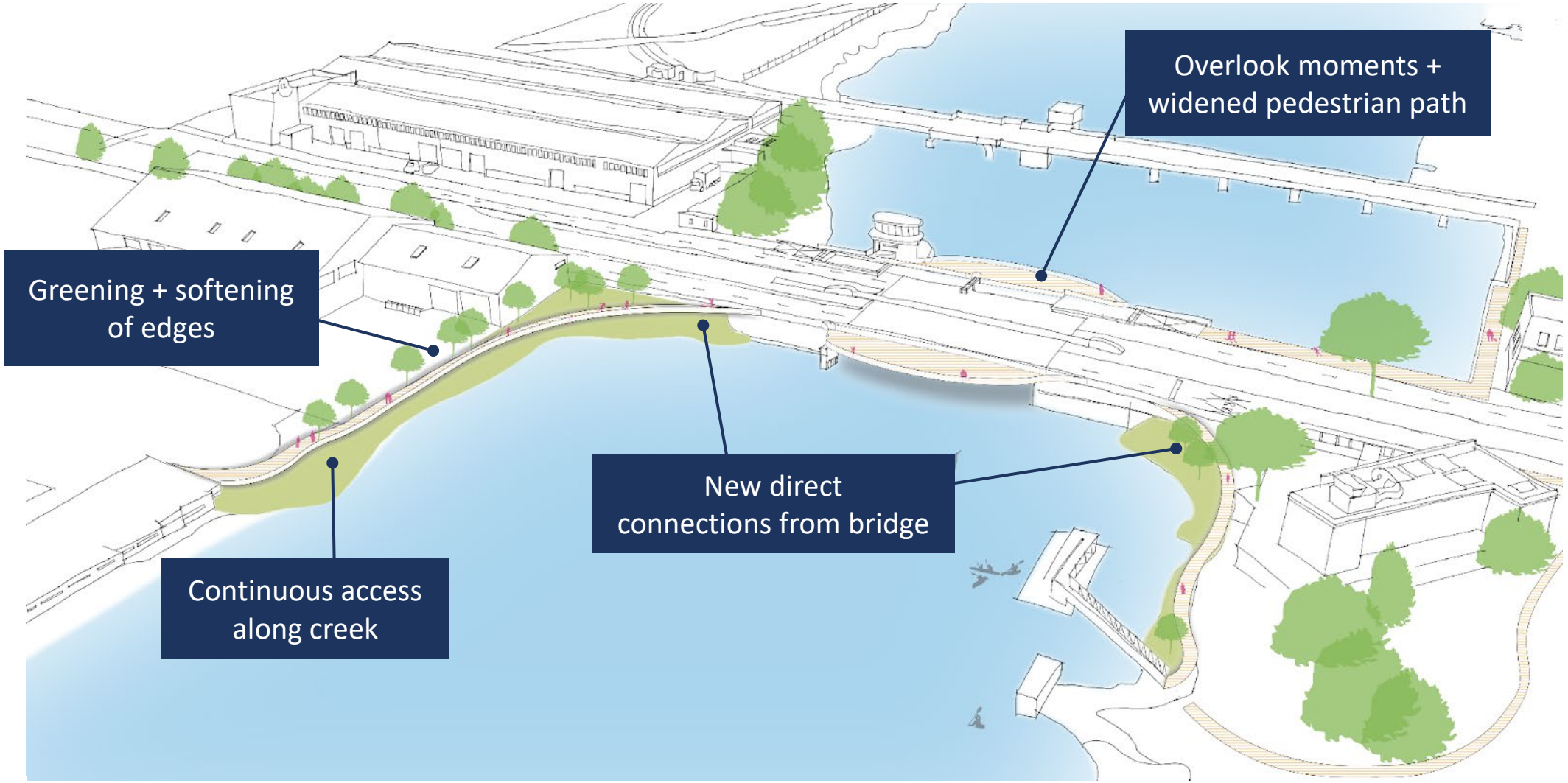
ISLAIS CREEK BRIDGE RESILIENCE CHARRETTE - PURPOSE

Holistic perspective to enable good decisions that will benefit the City now and for the future.

PORT OF SAN FRANCISCO

ISLAIS CREEK BRIDGE RESILIENCE CHARRETTE – SITE OVERVIEW

ISLAIS CREEK BRIDGE RESILIENCE CHARRETTE - PUBLIC REALM ENHANCEMENT OPPORTUNTIES



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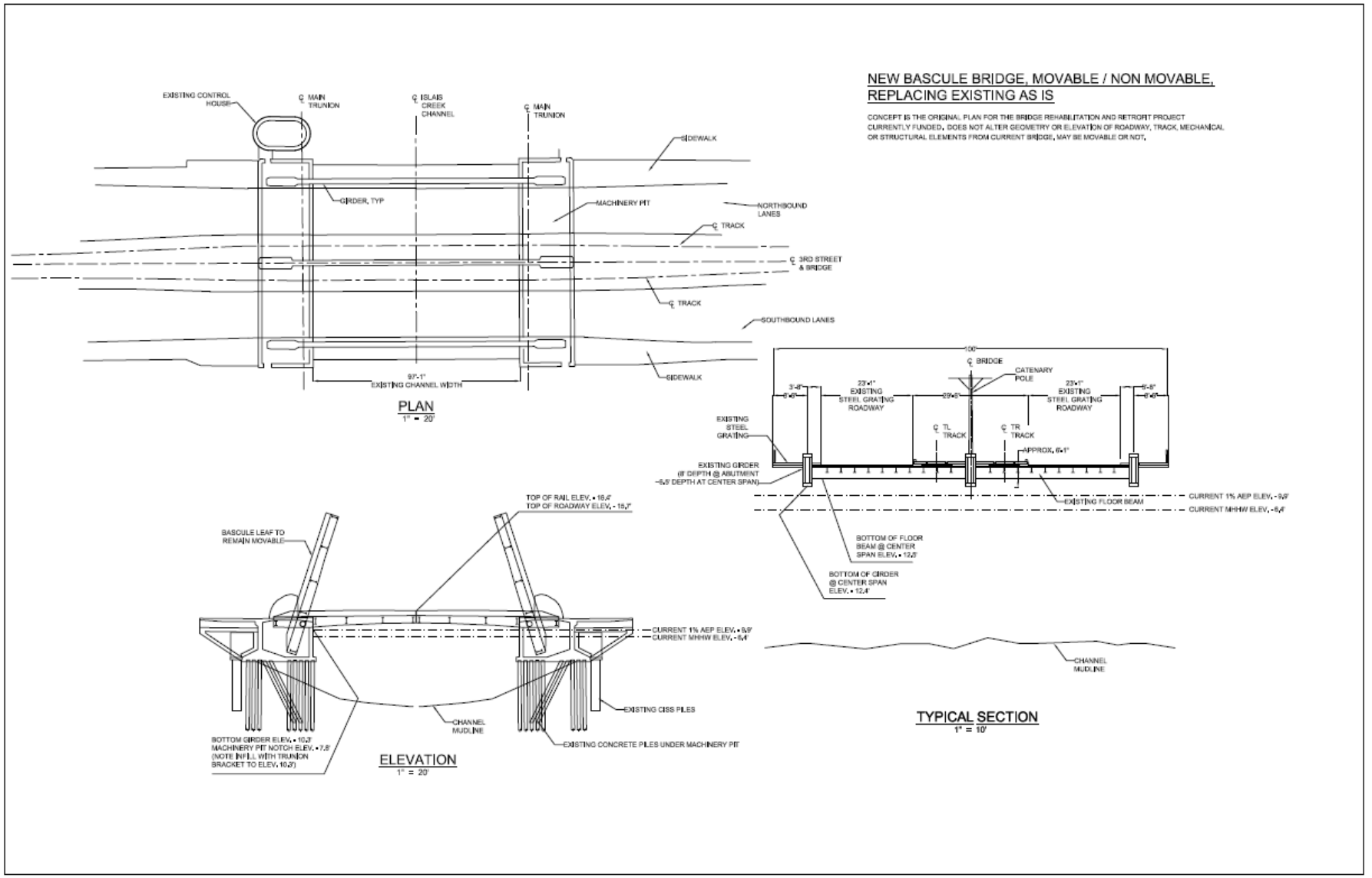
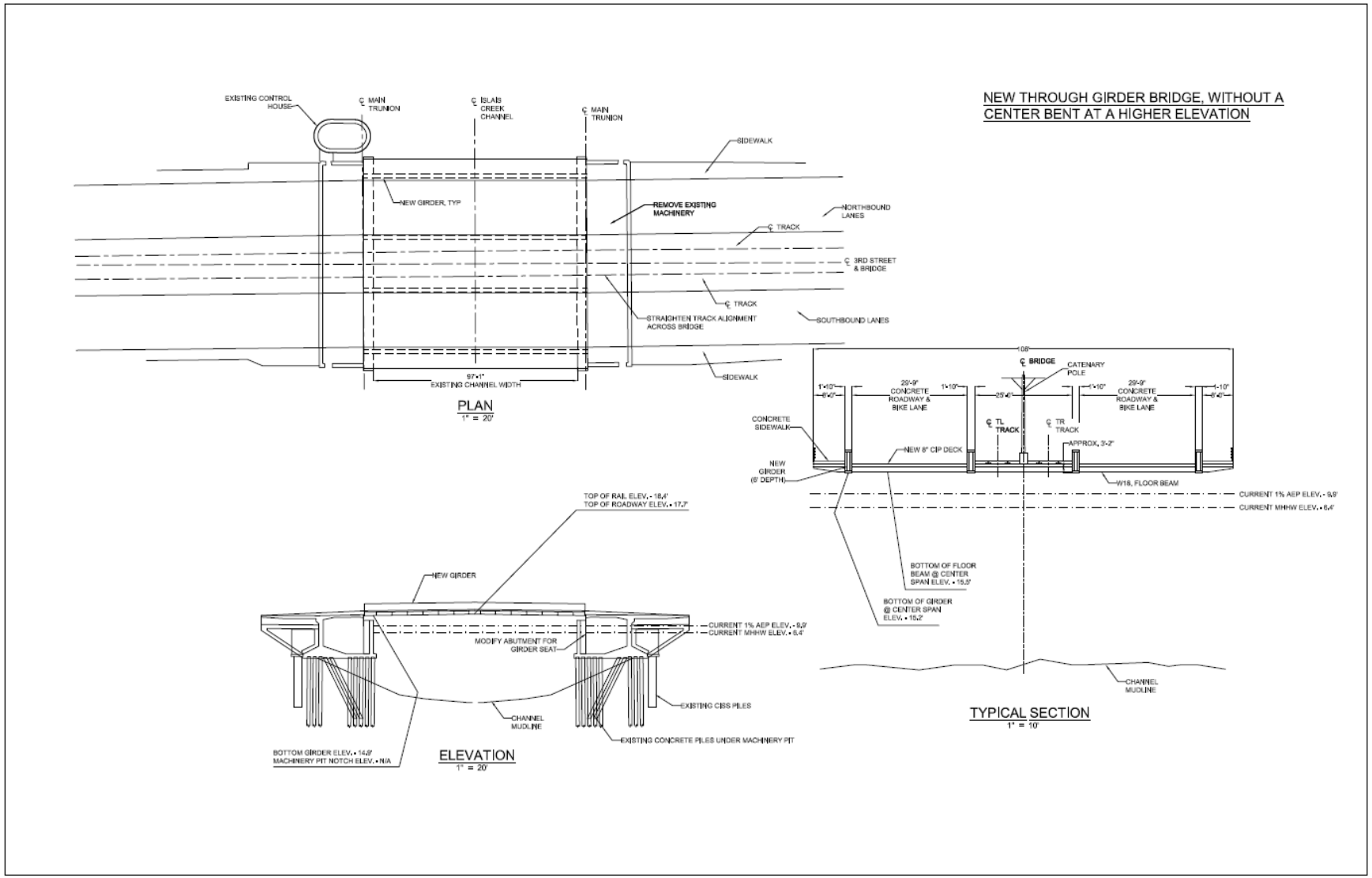
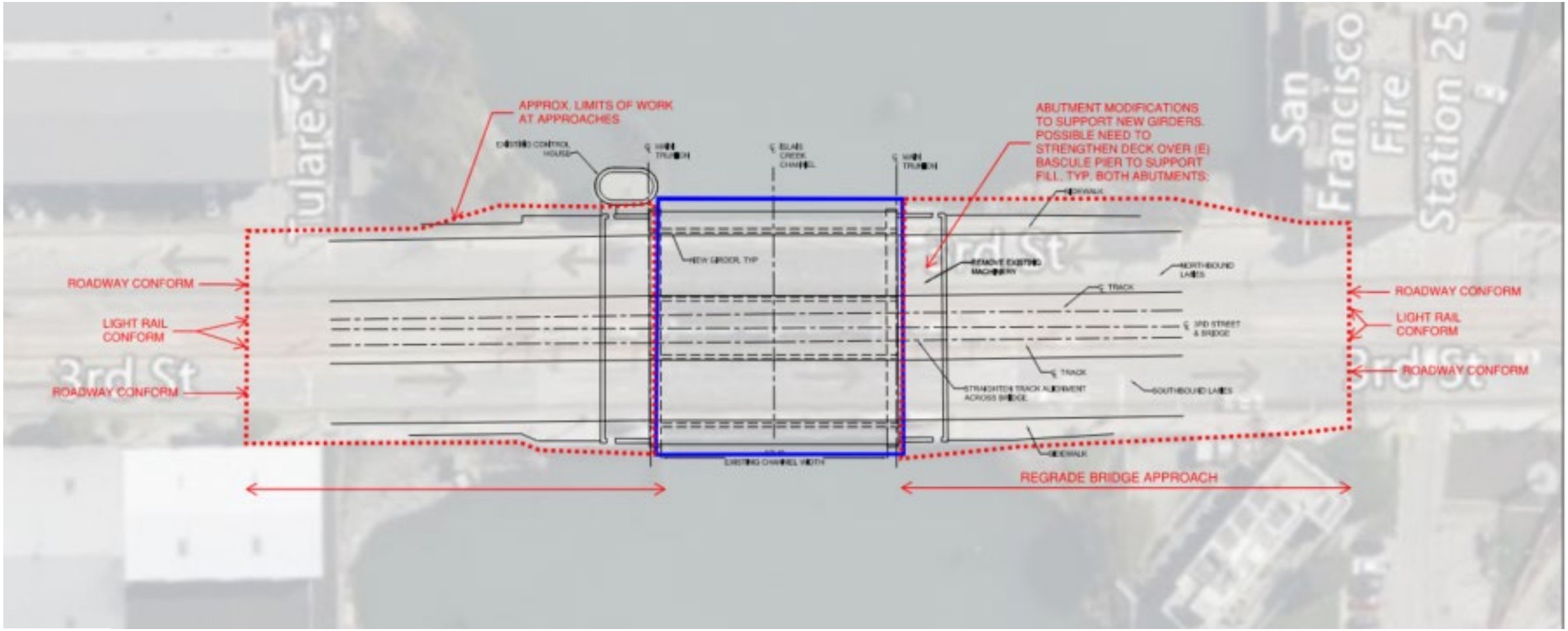
EXISTING BRIDGE DESIGN (Double Leaf Bascule Span Drawbridge at Existing Elevation)



PROPOSED BRIDGE DESIGN (Fixed-Span Through Girder with Raised Approaches)



PROPOSED BRIDGE DESIGN – AREA OF CONSTRUCTION IMPACT



TRADE-OFFS WITH PROPOSED DESIGN

- **Design includes changing existing superstructure from a steel double leaf bascule span drawbridge to a concrete fixed-span bridge with a wider solid deck at a higher elevation. This results in an "adverse effect" on a historic resource.**
- **Fixed span results in reduction to maritime navigational clearance. There are no reductions to operational use of roadway, sidewalks, and light rail.**
- **Upfront effort is required to obtain stakeholder and regulatory agency buy-in. There is cost and time for additional environmental clearance and new design effort for proposed alternative. These initial costs and time are easily offset by construction cost savings, a better performing product, and a host of future benefits resulting from the change.**

BENEFITS WITH PROPOSED DESIGN

KEY DIRECT BENEFITS TO BRIDGE ASSET

- Lower construction costs, lower downtime for light rail during bridge span replacement, and less future disruption
- Elimination of maintenance costs associated with drawbridge operability and steel re-coating
- Improved seismic resiliency
- More operational reliability on primary arterial for transit and traffic, including more efficient T-Line crossing
- Meets the intent and purpose of the FHWA Highway Bridge Replacement & Rehabilitation Program (Federal Funding)

KEY INDIRECT REGIONAL AND COMMUNITY BENEFITS

- Improved resiliency against current, near-term, and long-terms sea-level rise impacts
- Benefits current and future upstream capital projects such as PUC Sewer Outfall Replacement
- Flexibility to incorporate design into other climate change adaptation measures planned on the region
- Better connectivity to adjacent open spaces for pedestrians, bicycles, and recreational access
- More reliable and uninterrupted link to the Bayview and south-east part of City and future developments

STATUS & TIMELINE UPDATE – October 2022

Design Status:

Fixed-span Bridge preliminary engineering design (15% APS Level) and environmental clearance is in progress. 35% TSR Design starting in October 2022. Internal and external agency outreach is ongoing.

Environmental Status:

NEPA: PES submitted September 2021 – NEPA technical reports started in March 2022

CEQA: PPA Submitted December 2021 – SF Planning/CEQA analysis started in May 2022

Bridge Clearance Navigation Change Request to US Coast Guard anticipated December 2022

Current Schedule:

Environmental Clearance/Preliminary Engineering: **18 months*** December 2021 – June 2023

Detailed Design and PS&E Preparation, ROW Certification: **12 months** July 2023 – June 2024

Advertisement, Bid & Award: **6 months** July 2024 – December 2024

Construction: **24 months** January 2025 – March 2027

ROM Cost:

Current Draw Bridge Design Construction Cost Estimate: **$110 Million**

Revised Fixed-Span Bridge Design Construction Potential Cost Savings: **$30-50 Million***

**pending formal validation of NEPA/CEQA schedule and professional cost estimate*

OUTREACH

- City Department Coordination and Periodic Updates
- Primary/Ancillary Stakeholders (9+ Letters of Support Received)
- State And Federal Agency Regulatory Implications

QUESTIONS