Public Informational Meeting – February 15, 2024

Weirs Boulevard over Langley Brook
Laconia, NH
NHDOT Bridge # 135/128

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Presentation Outline

- Introduction
- Presentation Goals
- Public Outreach (Prior Meeting)
- Purpose and Need
- Project Phases
- Project Alternatives
- Schedule
- Feedback/Comments

Introduction

- Project Team
  - City of Laconia (Owner)
  - NHDOT & FHWA (Funding Agencies)
  - Hoyle, Tanner & Associates, Inc. (Consultant)
- Hoyle Tanner Team
  - Josif Bicja, PE – Project Manager
  - Katelyn Welch, PE – Project Engineer

Presentation Goals

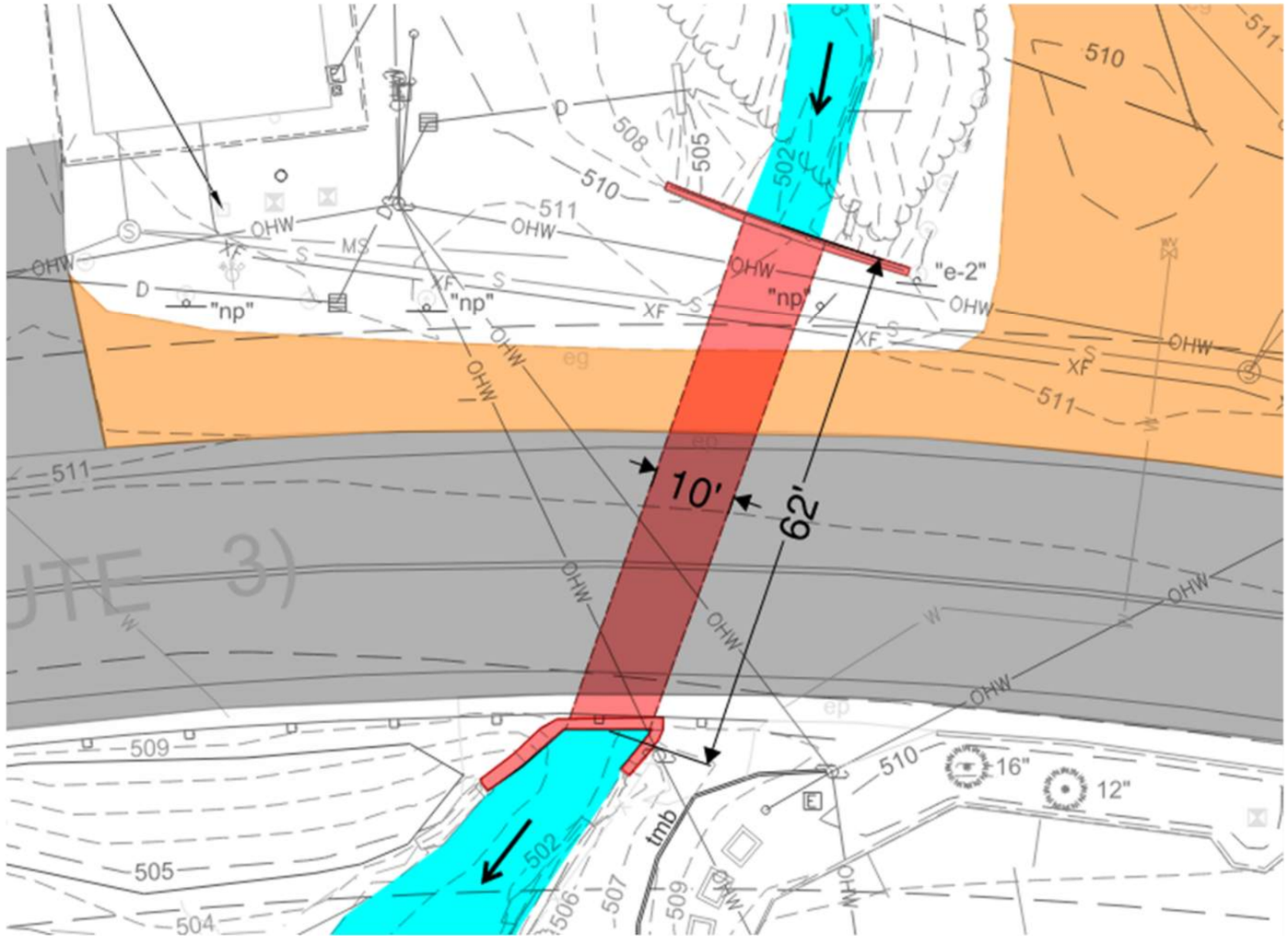
- Make Public Aware of Project Early in Design Process
- Share Project Development Process/Alternatives
- Listen to Concerns
- Gather Public Input
- Answer Your Questions

Public Outreach – Sept. 13 Meeting

- Local Concerns Meeting on September 13, 2023
  - Access to all Residential Areas During Construction
    - Access to nearby residences will be maintained at all times
  - Bike Lanes
    - Not part of this project
  - Require 24/7 Construction Activities
    - No weekend or night work will be allowed, unless an emergency
  - Erosion Control Measures During Construction
    - Contractor will be required to install and maintain

Public Outreach – Sept. 13 Meeting

- New Bridge Width
  - New bridge will match existing bridge width



Public Outreach – Sept. 13 Meeting

- Emergency Vehicles Impact
  - Access on each approach will be maintained. Detour route plans will be provided to Fire, Police & Ambulance.
- Need for Temporary and Permanent Easements
  - May be required. Will be coordinated during preliminary design. Individual meetings with affected abutters.
- Remove Silt Downstream of Bridge
  - Not part of this project
  - Goal of this project is to address bridge's deteriorated condition

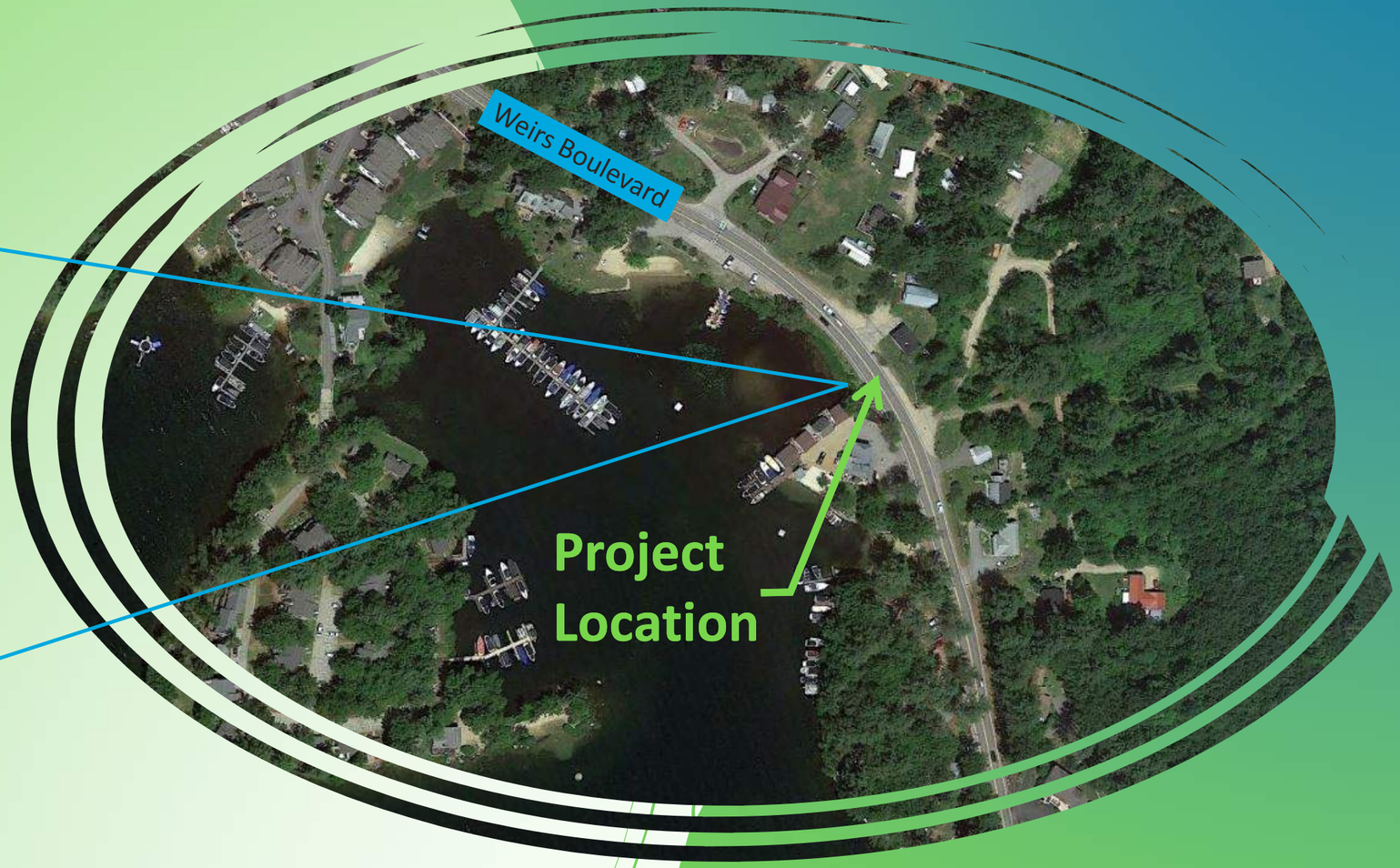
Purpose and Need

- Purpose
  - Provide structurally cost-effective, safe bridge, which accommodates design floods, provides adequate load carrying capacity and rail system to improve roadside safety.
- Need
  - Provide access for residents and emergency response vehicles.
  - Improve the roadway safety, load carrying capacity, and hydraulic capacity.

Project Phases

- Preliminary Engineering
  - **Engineering Study**
  - Preliminary Design
  - Permitting/ROW
  - Final Design
  - Bid Phase
- Construction
  - Construction
  - Construction Engineering

Project Alternatives



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Project Alternatives – Existing Conditions

- Original Structure Built circa 1898, Widened in 1933, and Rehabilitated in early 1980s
- 26’ Wide Travelway, 62’ Wide Structure, 10’ Span
- Superstructure
  - Partial Jack Arch (original)
  - Partial Concrete Slab (widening)
- Exposed Curb Reinforcing, Section Loss in the Jack Arch

Project Alternatives – Existing Conditions

- Substructure
  - Partial Stone Masonry (original)
  - Partial Concrete (widening)
- Cracks, Rust Staining, and Efflorescence of the Abutments
- Large Wingwall Spalls
- 10,202 Vehicles/Day (2021)

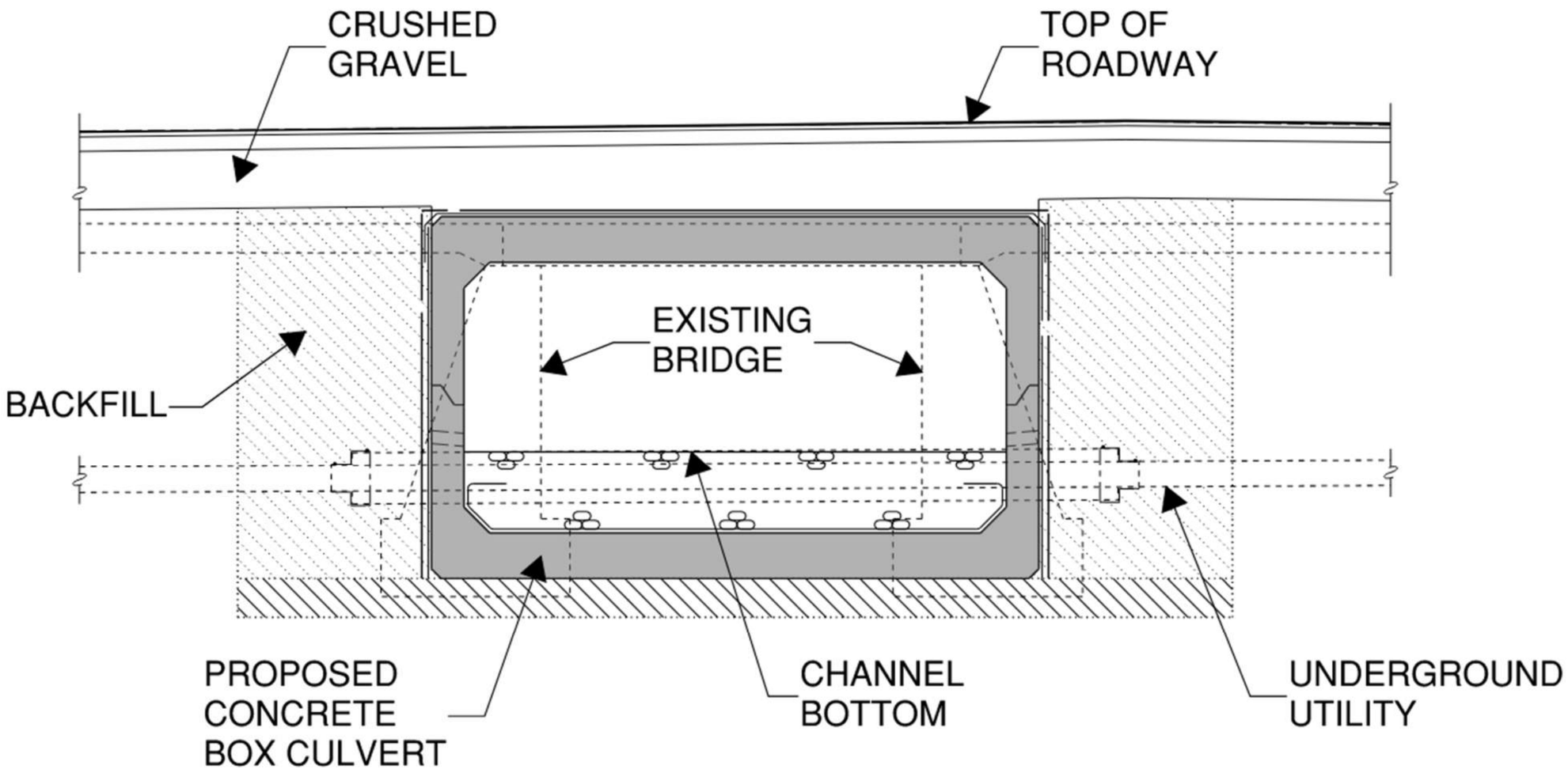
Project Alternatives – Existing Conditions

Project Alternatives – Existing Conditions

Project Alternatives

- Alternative No. 1 – “No Build”
- Alternative No. 2 – Rehabilitation
- Alternative No. 3 – Replacement
  - No. 3A – Precast Concrete Box Culvert
  - No. 3B – Precast Concrete Rigid Frame

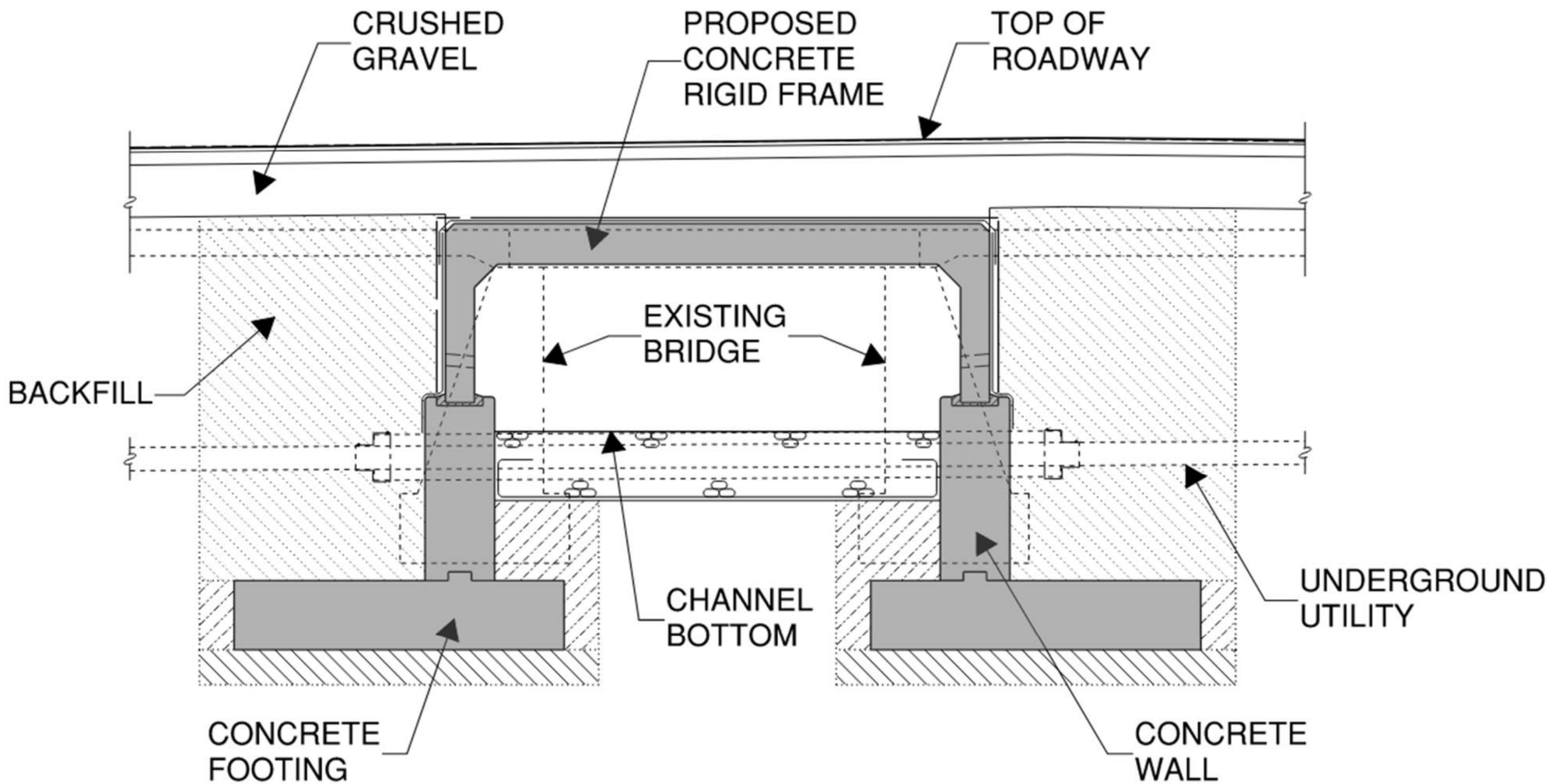
Project Alternatives – Box Culvert



Project Alternatives – Box Culvert

North Shore Road
Derry, NH

Project Alternatives – Rigid Frame



Project Alternatives – Rigid Frame

Cider Mill Road
Bedford, NH

Project Alternatives – Cost Estimates

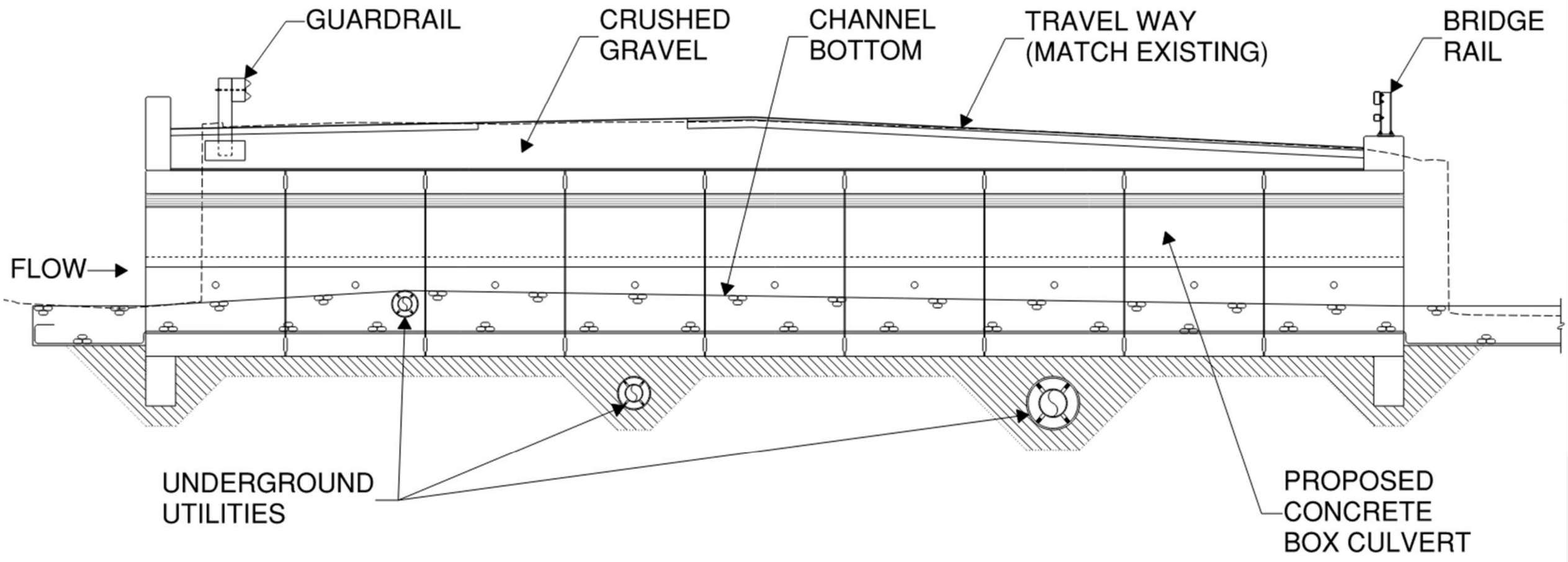
- Alternative No. 3 – Replacement
  - **$2.9 M** (No. 3A – Precast Concrete Box Culvert)
  - **$3.2 M** (No. 3B – Precast Concrete Rigid Frame)
- NHDOT Estimate = $2.9 M

Project Alternatives – Recommendation

- No. 3A – Precast Concrete Box Culvert
  - 14’ Clear Span
  - Two travel lanes and two shoulder that match existing widths
  - 63’ overall width
  - NHDOT T2 steel rail

Project Alternatives – Rendering

Project Alternatives – Bridge Section



Project Alternatives – Roadway Plan

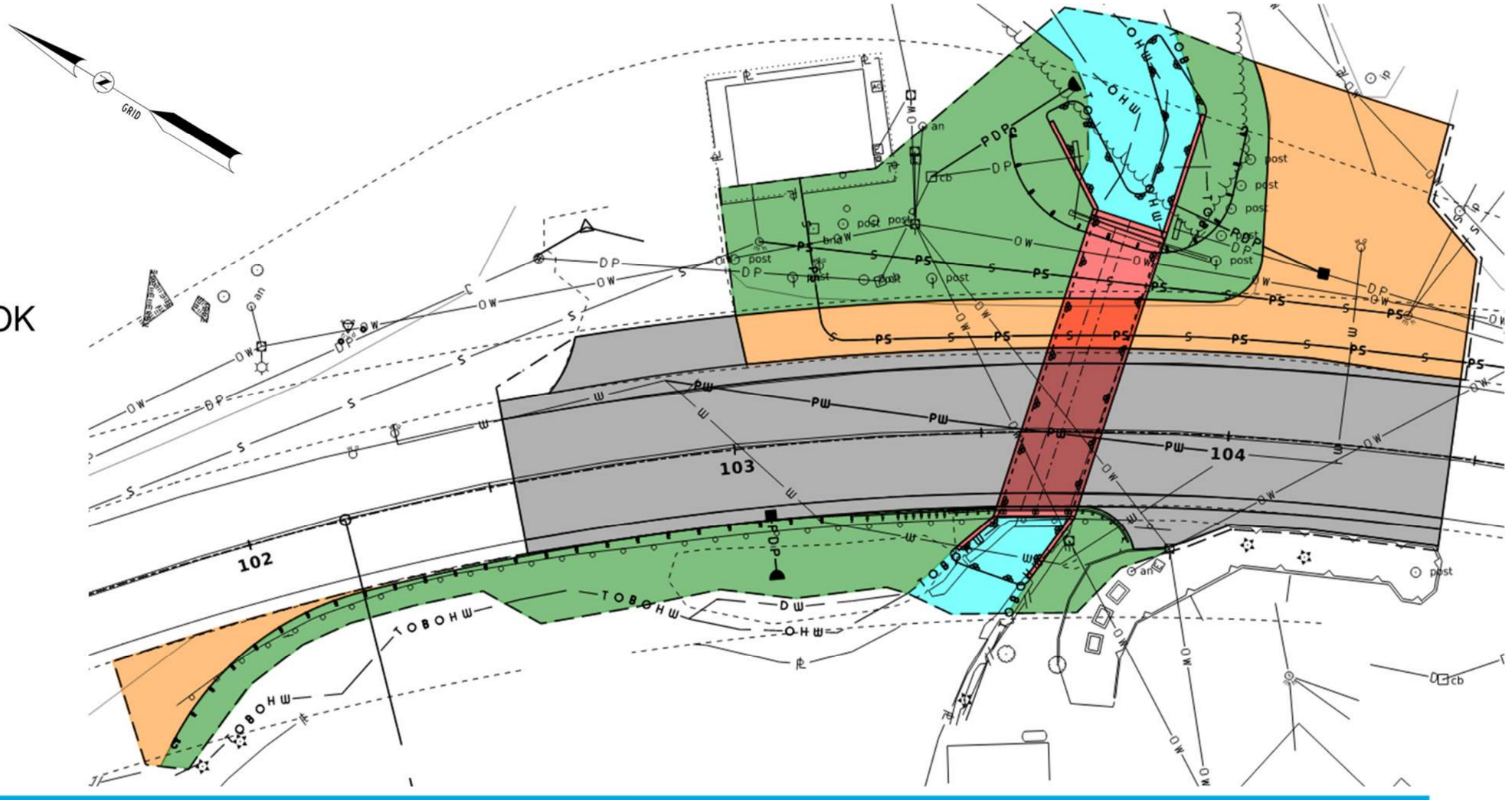
BRIDGE

PAVEMENT

GRAVEL

LANGLEY BROOK

LOAM & SEED



Project Alternatives – Detour Route

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Project Schedule

- Engineering Study
  - February 2024
- Preliminary Design/Permitting/ROW
  - March 2024 to April 2025
- Final Design
  - May 2025 to September 2025
- Bid Phase
  - November 2025
- Construction
  - Fall 2026

FEEDBACK/COMMENTS?

THANK YOU

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