

State Project No. 056-305
Bridge No. 01872
Replacement

**PUBLIC UPDATE
MEETING**

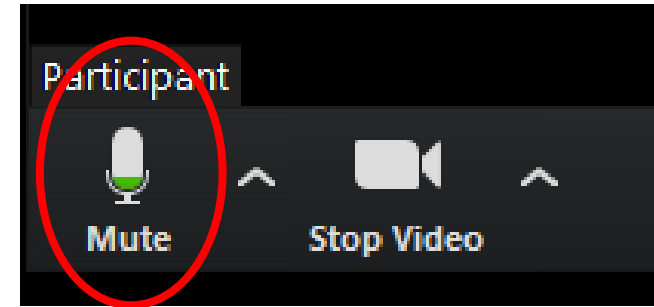
Wednesday, March 31st, 6:30 p.m.



**U.S. Route 1 over
Greenwich Creek
Town of Greenwich**

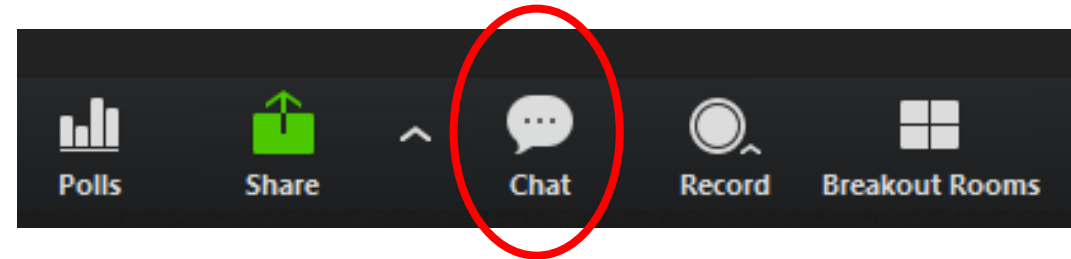
Meeting Format

- Please Mute Your Microphone
- Sign-In - Please Send a Chat with:
 - Name
 - Affiliation
 - Email Address
- Questions will be Addressed at the Conclusion
 - Send a Chat anytime During the Presentation
 - Open Mic Q&A at the Conclusion
- Meeting is being recorded

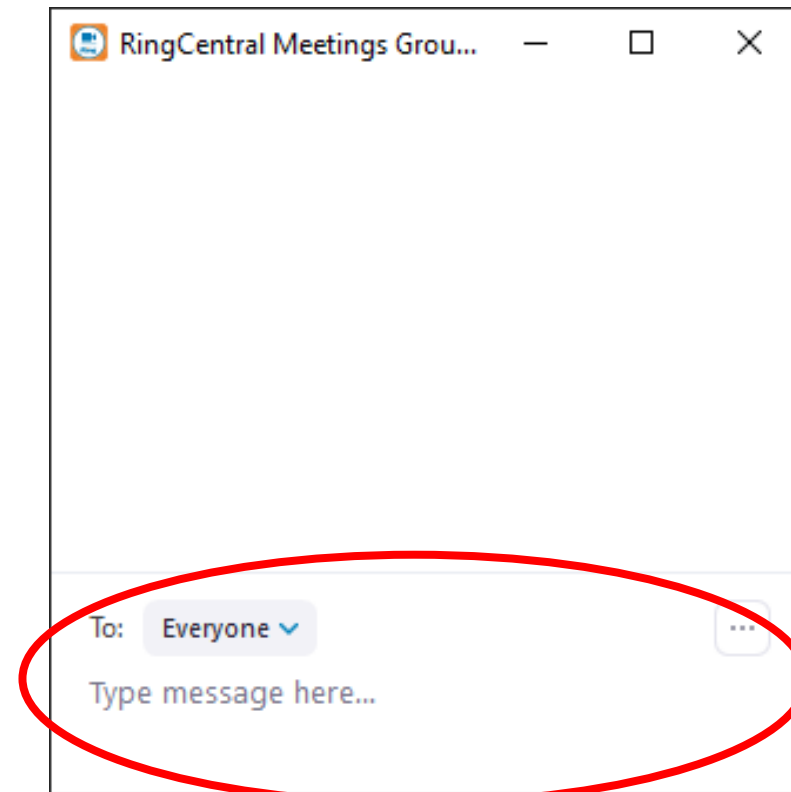


Meeting Format – RingCentral Chat

- Select Chat in Menu Bar



- Enter Text in Chat and Press Enter to Send



Project Team Introduction



BARTHOLOMEW SWEENEY

CTDOT Division of Bridges /
Division Chief of Bridges



LOUIS BACHO

CTDOT CE Bridge /
Supervising Engineer



SUSAN MORNEAULT

CTDOT CE Bridge
Project Engineer



MATT GEANOPOULOS

CTDOT Rights-of-Way /
ROW Coordinator



JENNIFER USHER

BL Companies /
Senior Project Manager



DAVID CICIA

BL Companies /
Principal Engineer



THOMAS BECKMAN

BL Companies /
Senior Engineer



JULIE GEORGES

A. DiCesare Associates/
Engineer-in-Charge

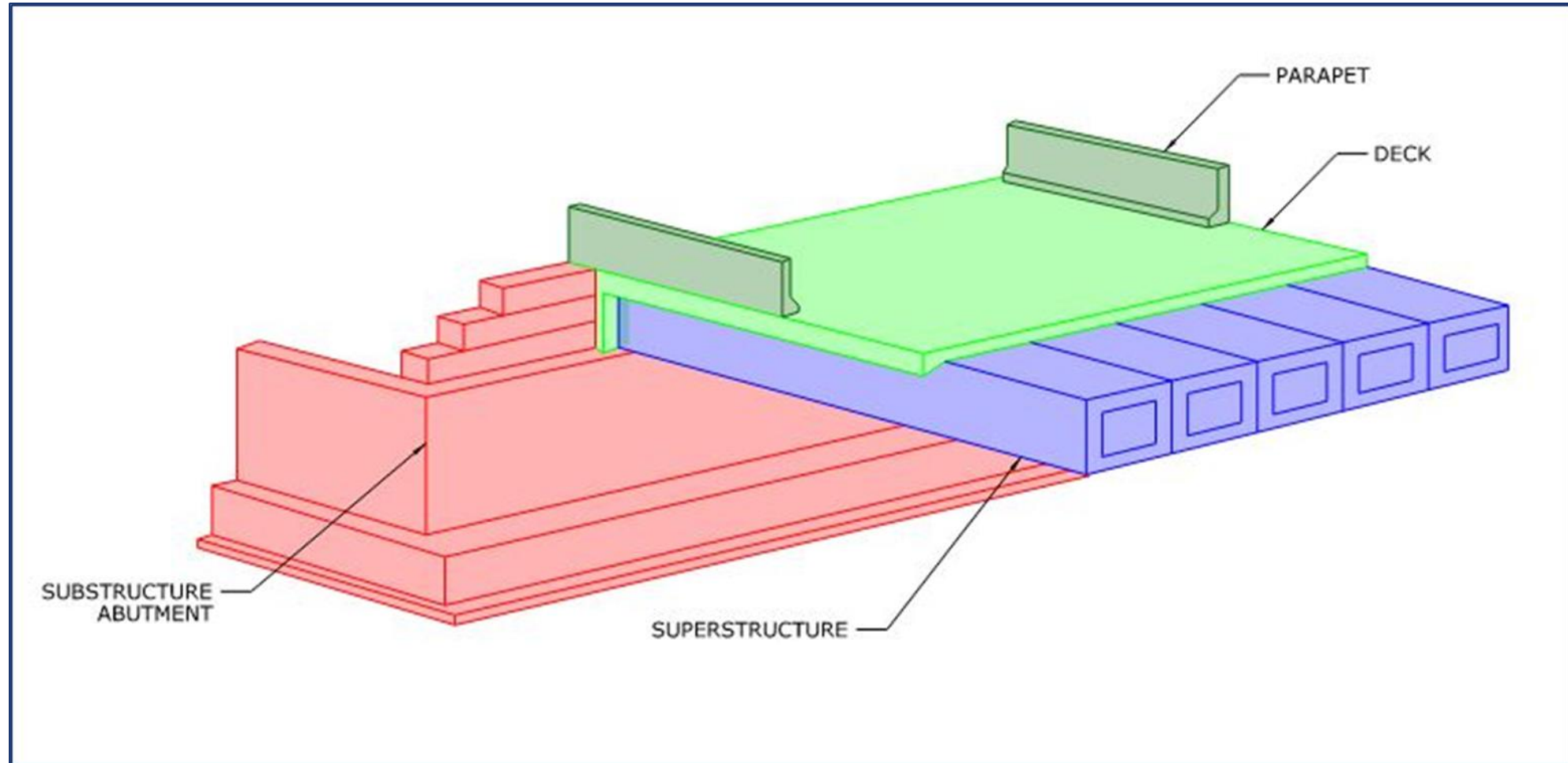


Previous Meetings and Today's Objective

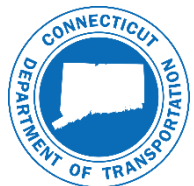
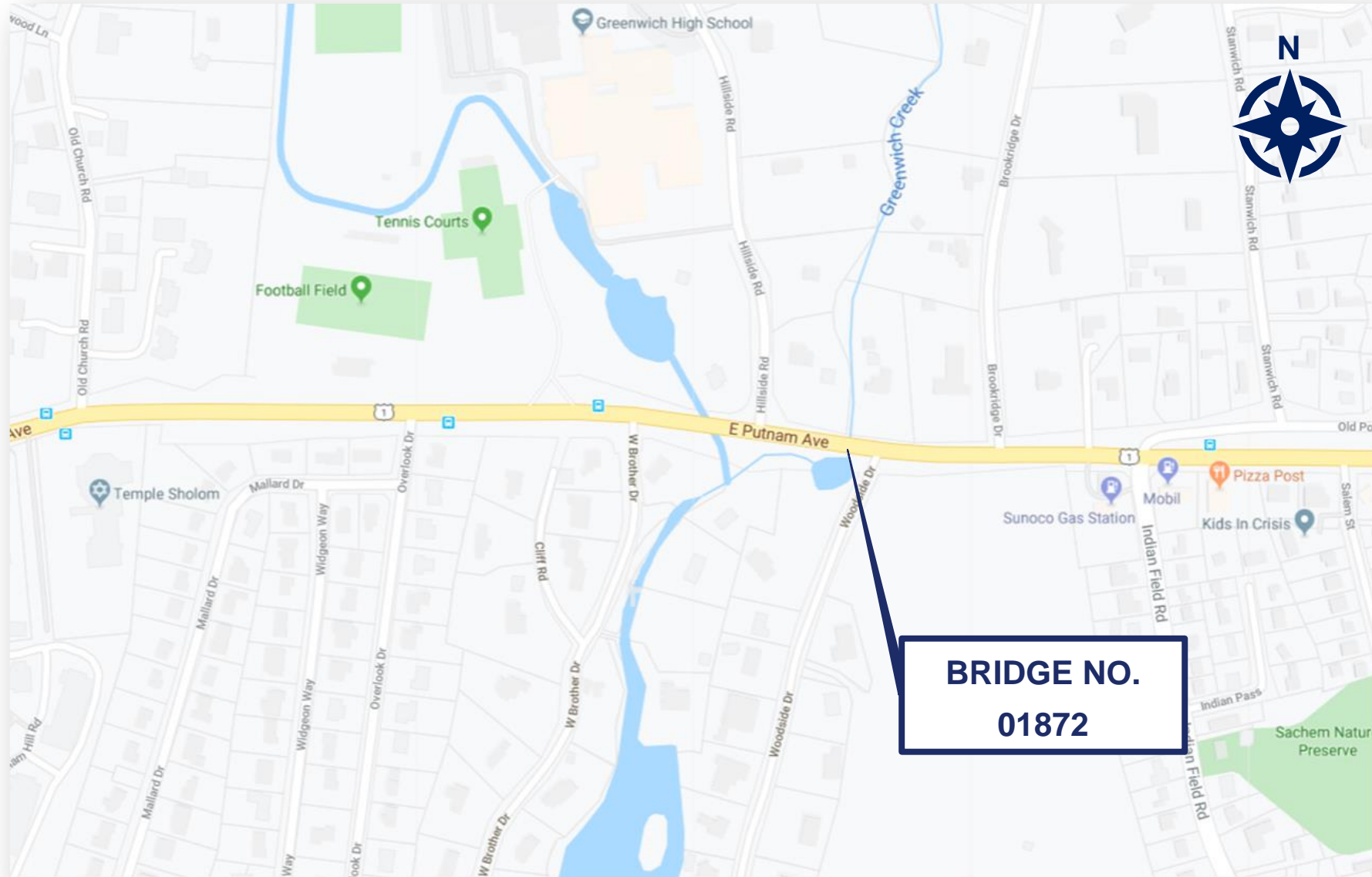
- Meetings with Residents
 - Homeowners Field Meeting (5/7/2013)
 - Homeowners Meeting (5/16/2017)
 - Virtual Call (9/24/2020)
- Meetings with the Town
 - At the Department (9/30/2013)
 - At the Town Hall (9/10/2014)
 - At the Town Hall with Residents (2/20/2015)
 - Virtual Call (6/22/2020)
- Meetings with CT DEEP
 - At the Department (4/2/2018)
- Today's Objective
 - Provide a Status Update to Local Residents regarding the Project's Design, Local Impacts and Global Improvements, Including Public Interest and Public Safety



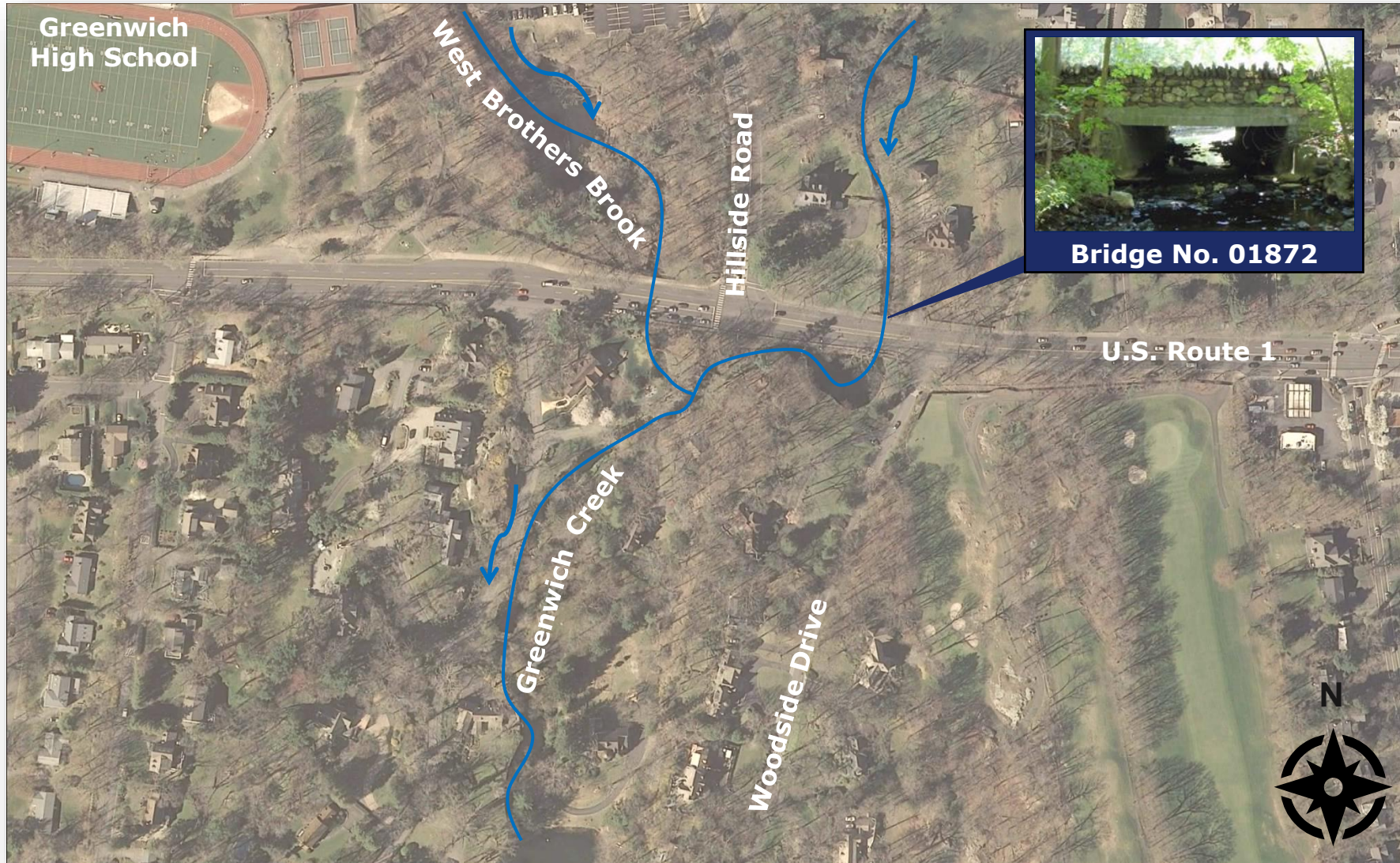
Components of a Typical Bridge



Project Location

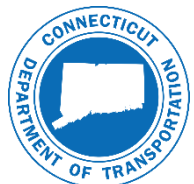


Aerial



Bridge No. 01872

U.S. Route 1



Existing Structure



STRUCTURE DESCRIPTION

- Single Span Concrete Slab Built in 1926
- 13.5 ft Clear Span
- 70 sq ft Waterway Opening
- Based on Analysis, the Existing Roadway Overtops just prior to the 25-year Storm Event, Flooding Occurred in 2007.

INLET ELEVATION

Existing Structure



STRUCTURE DESCRIPTION

- 69 ft Out-to-Out Width (Including Timber Pedestrian Bridge)
- 49 ft Curb-to-Curb Roadway Width
- Two travel lanes in both the northbound and southbound direction
- ADT = 20,200 (2017 CTDOT Traffic Log)

OUTLET ELEVATION

Existing Structure – Roadway Approaches



LOOKING EAST



LOOKING WEST



Project Purpose & Need

Address Safety Concerns & Structural Deterioration

- Replace a Bridge that's in Serious Condition and Too Small to Pass Major Storms
- Public Interest to Improve the Bridge for Residents and Safety of the Traveling Public
- Prevent or Minimize the Chance of Water overtopping the Roadway
- Better Performance of the Town's Emergency Route
- Maintain access to Greenwich High School
- Maximize Flow Conveyance while Minimizing any Offsetting Inundation Increase



EXPOSED REINFORCEMENT



**DETERIORATED CONCRETE
ENCASED BEAM**

Roadway Overtopping – March 2007



***Significant Impact
Full Day Closure of U.S. Route 1***

Replacement of Bridge No. 01872 // State Project No. 056-305

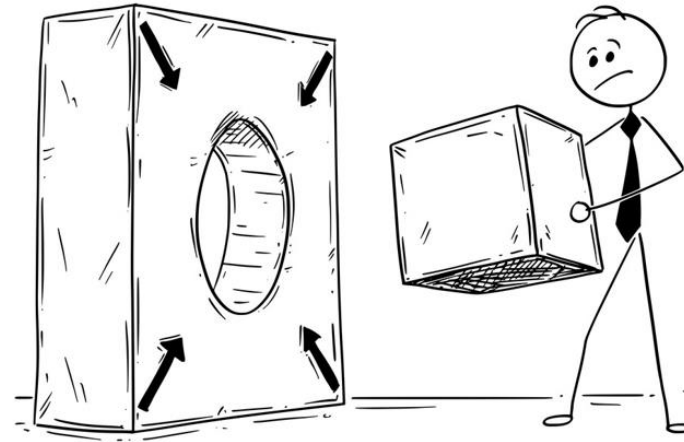


Aerial – Hydraulic Details



Proposed Bridge Replacement – Hydraulic Constraints

- Upstream of U.S. Route 1
 - FEMA Floodplain
 - FEMA Floodway
 - Property Impacts
- U.S. Route 1
 - Drainage Manual Criteria
 - Emergency Route
- Downstream of U.S. Route 1
 - West Brother Drive
 - Existing Dike
 - Two Residential Driveways
 - Two Other Adjacent Properties



Proposed Bridge Replacement – Hydraulic Design

- Objective of the Hydraulic Design is to Balance the Benefits and Encumbrances
- Benefits
 - Public Interest and Safety to Improve Deficient Bridge
 - Minimize Flooding Potential of Emergency Route
 - Maintain Access to Greenwich High School
 - Maximize Flow Conveyance with Minimum Inundation Increase
 - Improve Roadway Drainage
- Encumbrances
 - Inundation Increases on Downstream Properties during Less Frequent/High-Intensity Storm Events
 - Temporary Traffic Impacts
 - Roadway Remains in FEMA Floodplain



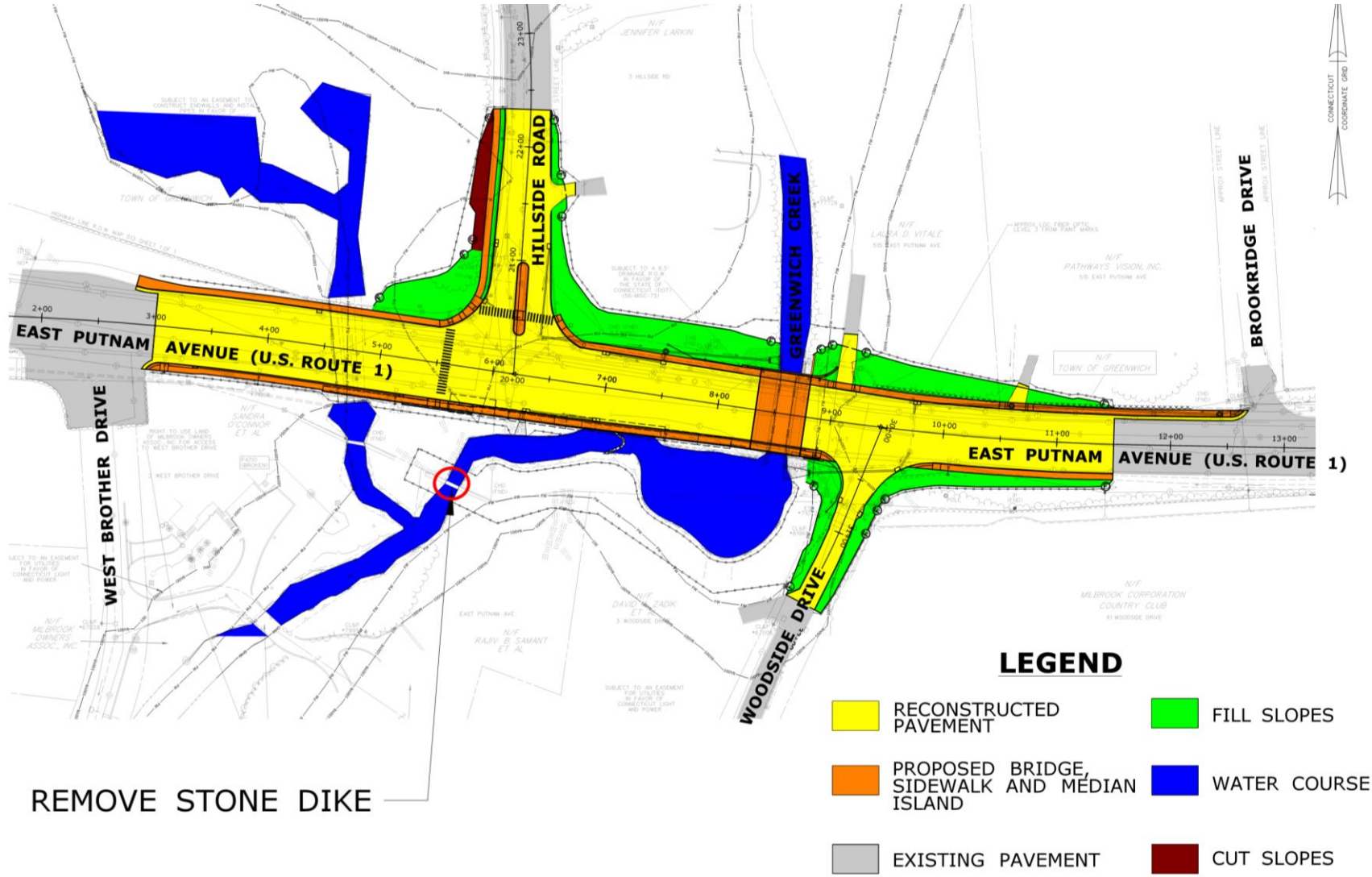
Proposed Bridge Replacement – Stone Arch Dike



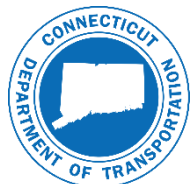
Replacement of Bridge No. 01872 // State Project No. 056-305



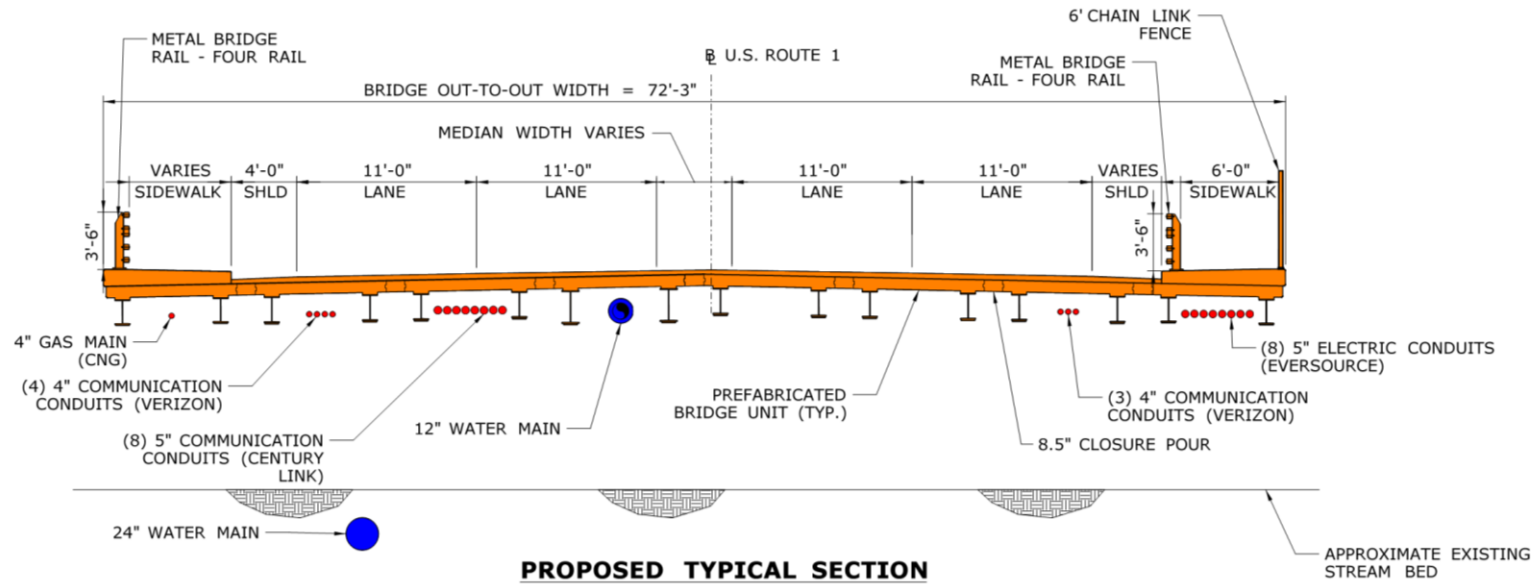
Proposed Bridge Replacement – Plan View



- New bridge - 38-foot span multi-girder steel superstructure on pile founded precast concrete abutment and wingwalls
- Approximately 850-feet of roadway reconstruction
- Profile of the road is being raised 3.5 ft. at the bridge and nearly 2 ft. at Hillside Road
- Stone dike to be removed

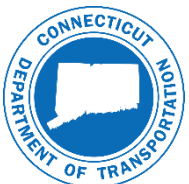
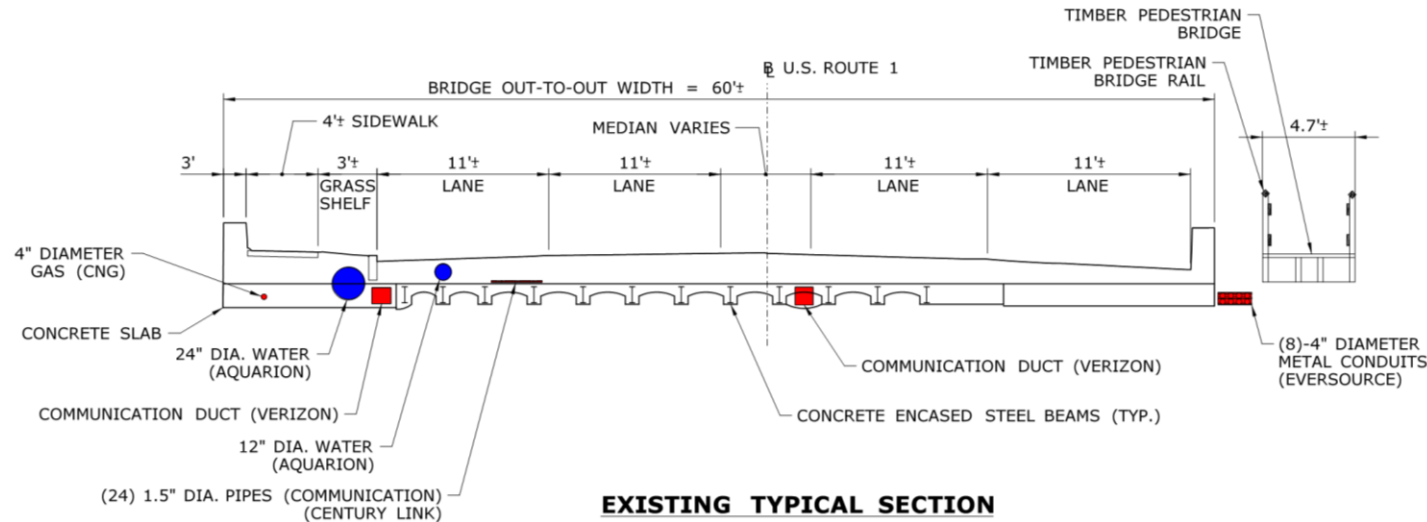


Proposed Bridge Replacement – Typical Sections

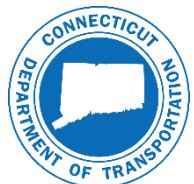
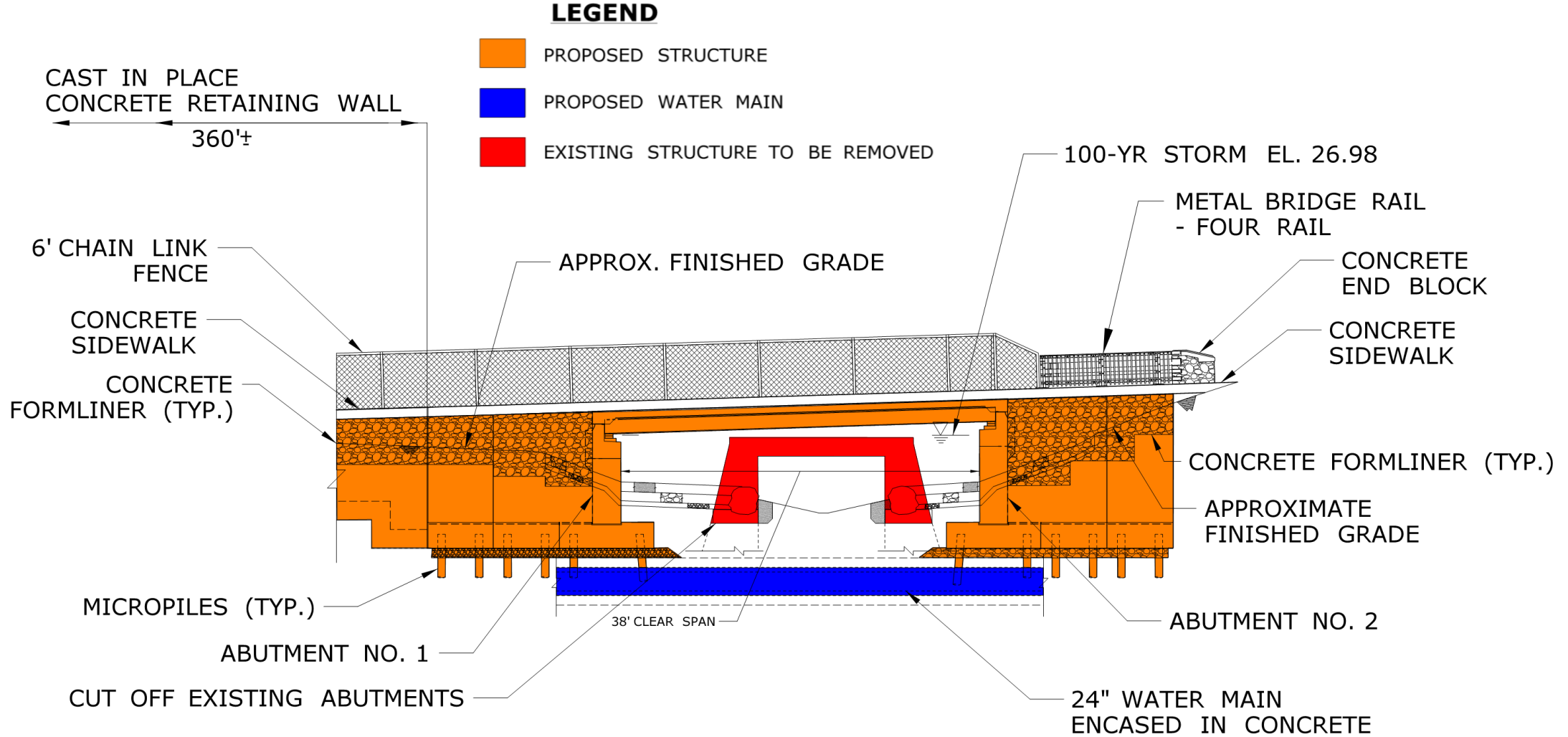


LEGEND

- PROPOSED STRUCTURE
- WATER MAIN
- COMMUNICATION/GAS UTILITIES








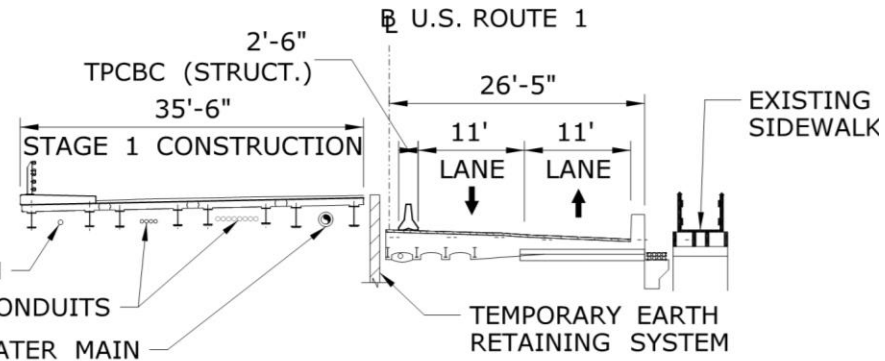
Proposed Bridge Replacement – Elevation



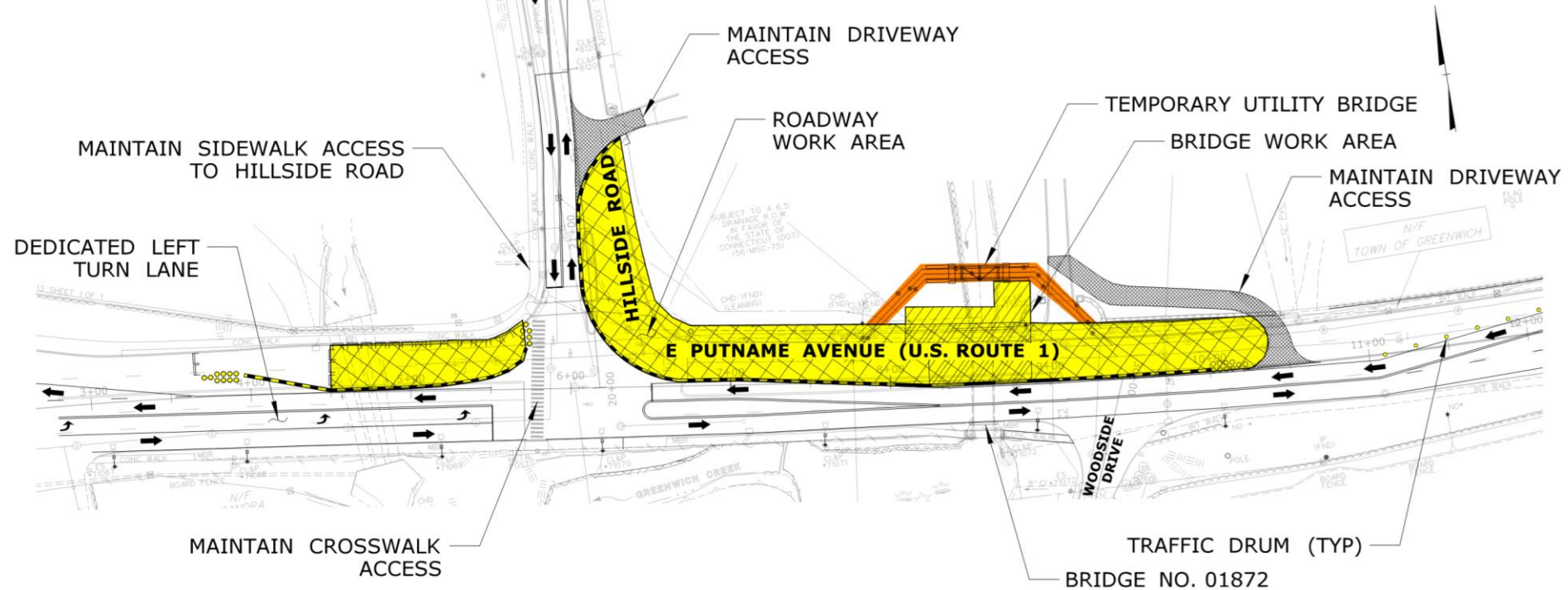
Proposed Bridge Replacement – Maintenance of Traffic Stage 1A

LEGEND

-  WORK AREA
-  TEMPORARY UTILITY BRIDGE
-  TRAFFIC DRUM
-  TEMPORARY PRECAST CONCRETE BARRIER CURB
-  TEMPORARY SAND BARRELS







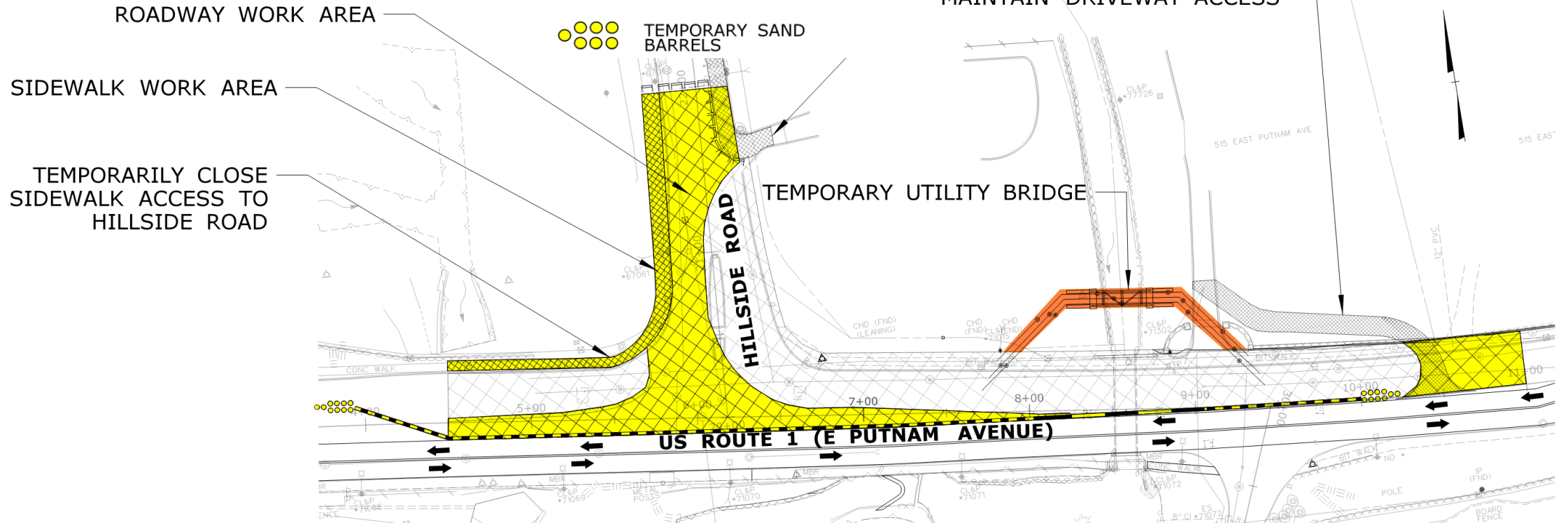
STAGE 1 TYPICAL SECTION



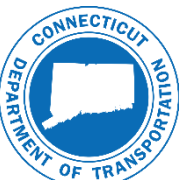
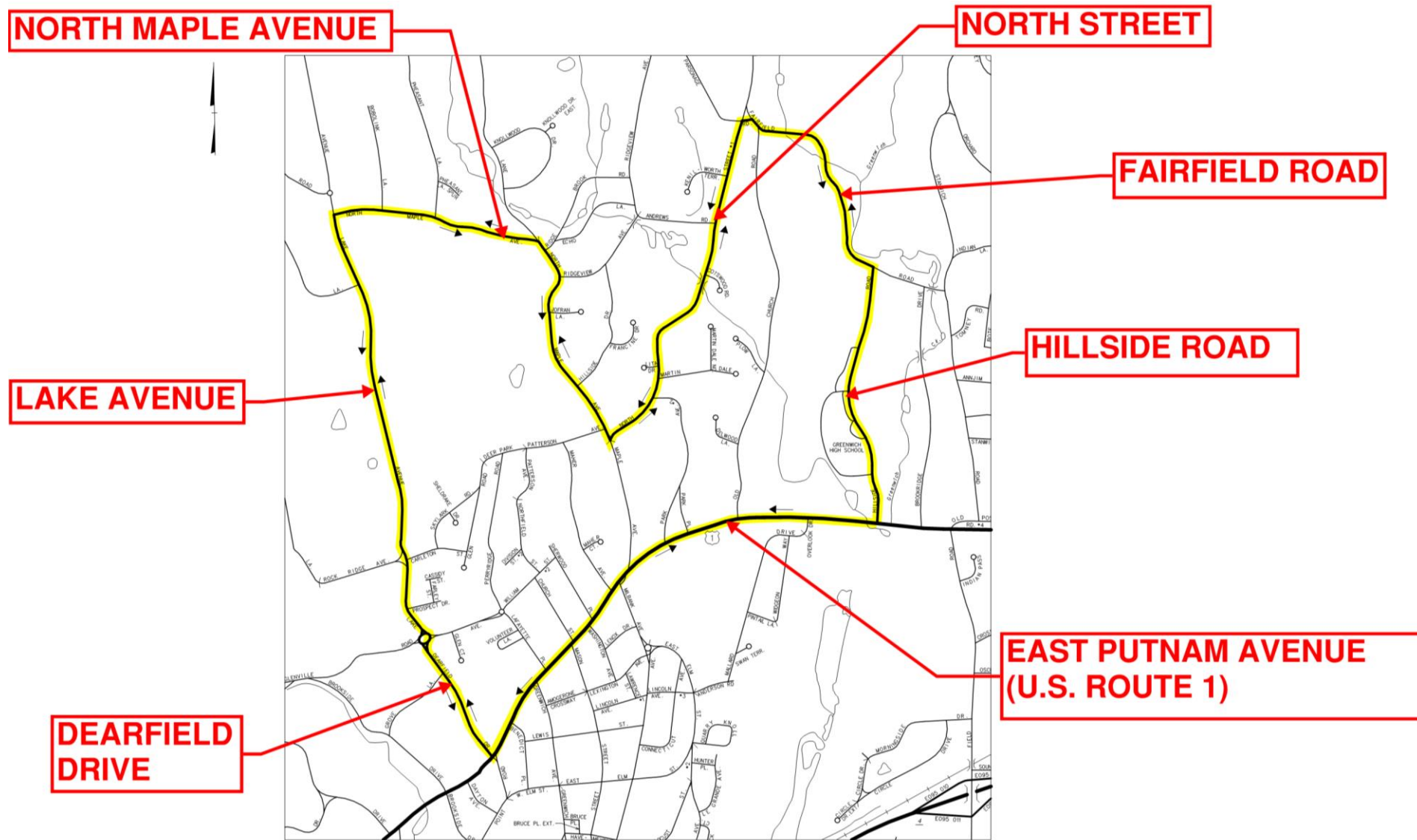
Proposed Bridge Replacement – Maintenance of Traffic Stage 1B

LEGEND

-  WORK AREA
-  TEMPORARY UTILITY BRIDGE
-  TEMPORARY PRECAST CONCRETE BARRIER CURB
-  TEMPORARY SAND BARRELS



Proposed Bridge Replacement – Hillside Road Detour



Proposed Bridge Replacement – Maintenance of Traffic Stage 2

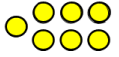
LEGEND



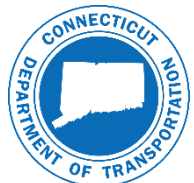
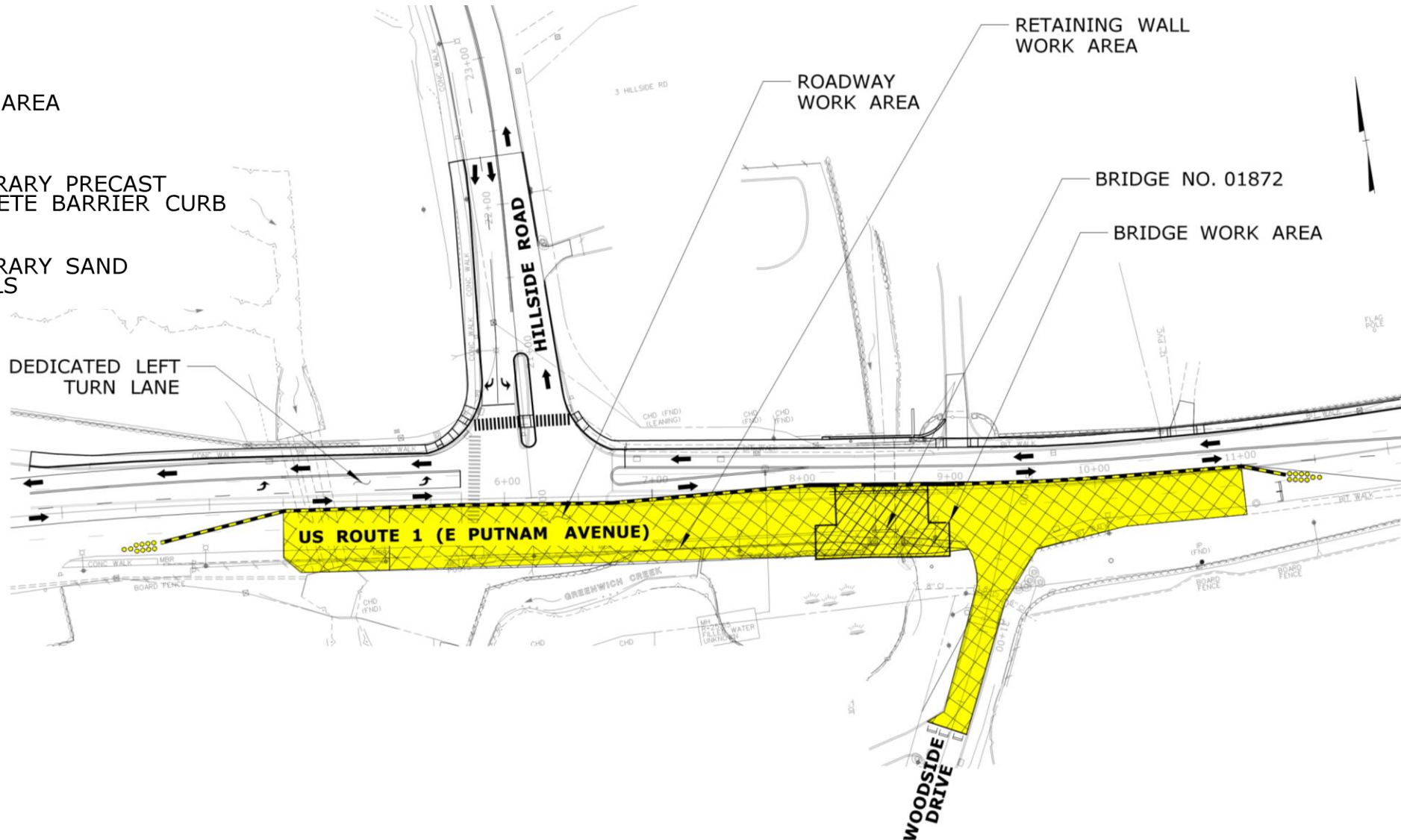
WORK AREA



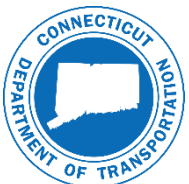
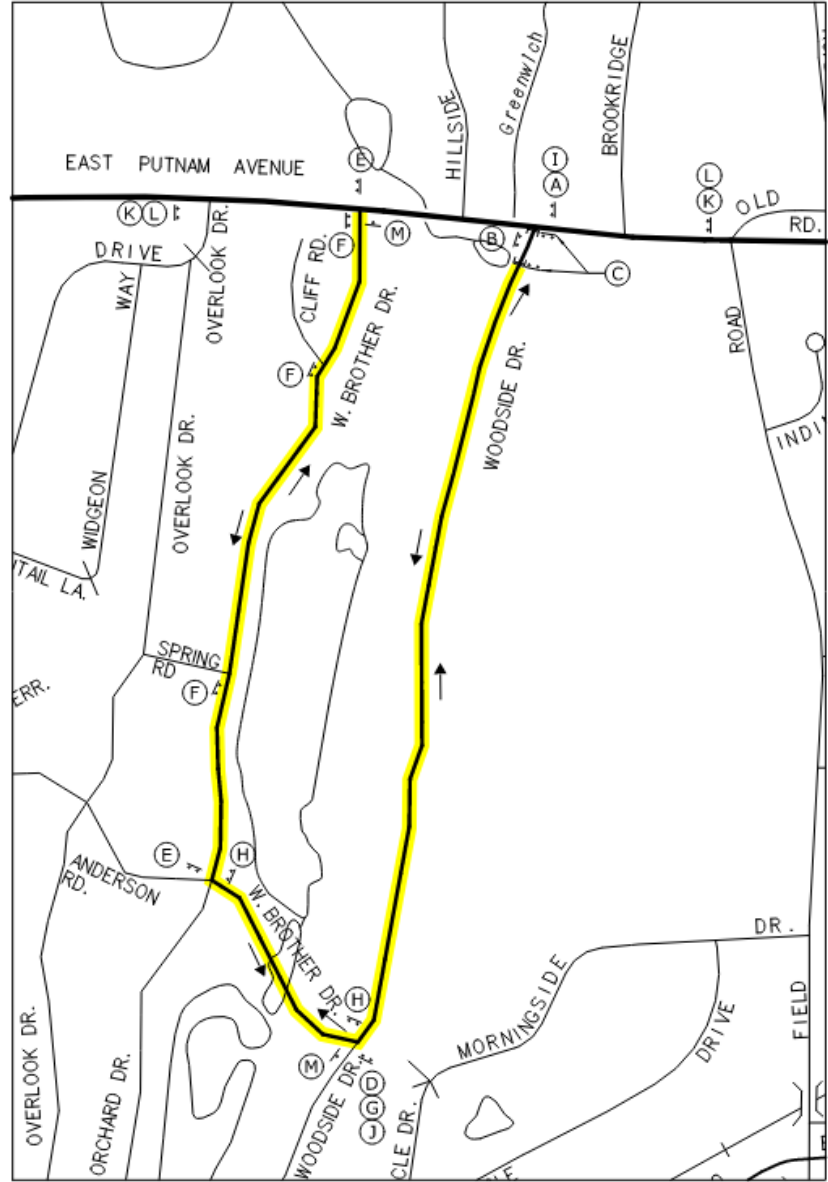
TEMPORARY PRECAST
CONCRETE BARRIER CURB



TEMPORARY SAND
BARRELS



Proposed Bridge Replacement – Woodside Drive Detour

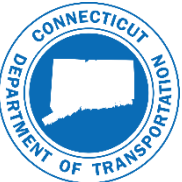


Proposed Bridge Replacement – Southern Sidewalk Existing Condition

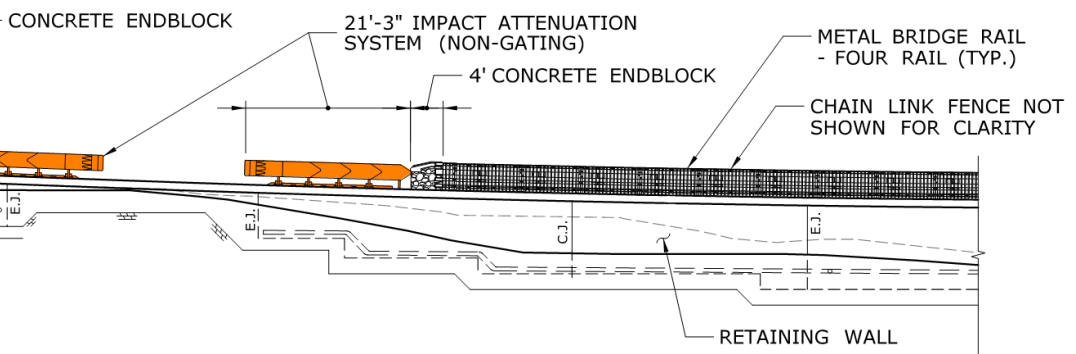
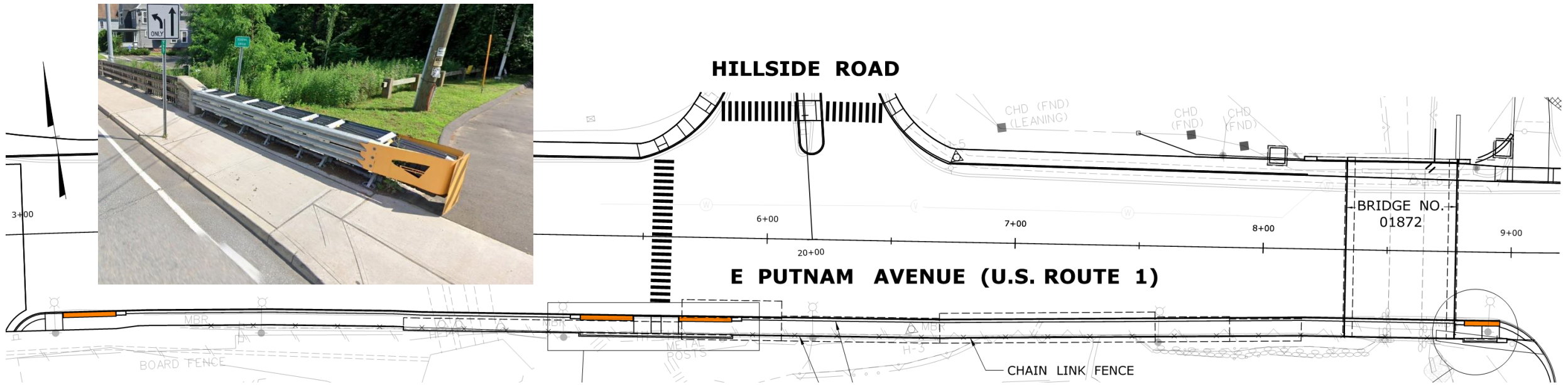
Southern sidewalk looking east



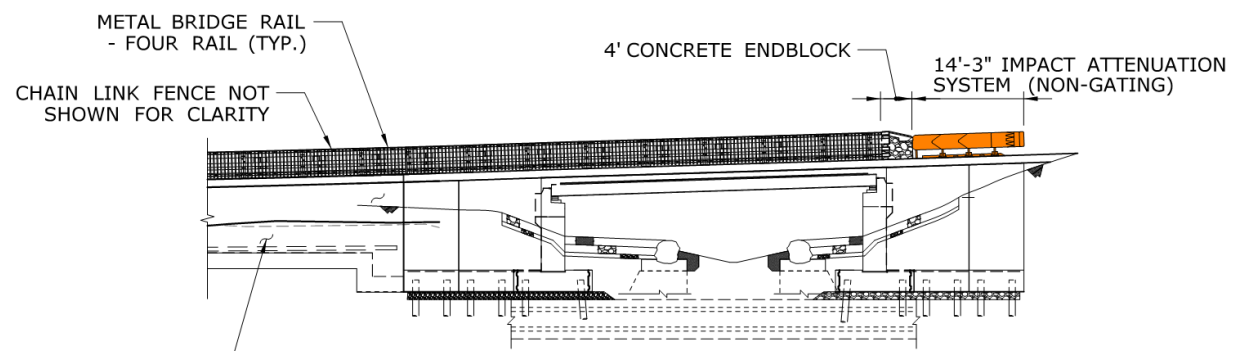
Southern sidewalk looking west



Proposed Bridge Replacement – Southern Sidewalk



ELEVATION



Proposed Bridge Replacement – Construction Complexities

- Utility Relocation
 - Temporary Utility Bridge for temporary utility relocation
 - Utilities to remain in place during construction
 - Utilities will then be permanently relocated
- In-Water Work
- Time of Year Restrictions



Utilities

- Eversource Energy – Electric Distribution
- Altice USA
- Crown Castle Fiber Network
- Century Link
- Verizon New York
- Aquarion Water Company of Connecticut
- Connecticut Natural Gas



Permitting – Right-of-Way

- Anticipated Environmental Permits:
 - US ACOE Pre-Construction Notification
 - CT DEEP Individual Flood Management Certification with Exemption
 - CT DEEP Individual Inland Wetland & Watercourses
 - CT DEEP Water Quality Certification

- Anticipated ROW Impacts:
 - Eight (8) Construction Easements
 - Two (2) Drainage Right-of-Way
 - Three (3) Partial Property Takes
 - One (1) Total Property Take



Right-of-Way Relevant Law

State of Connecticut

- C.G.S. Sections 13a-73 & 13a-98e

Federal

- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.



Right-of-Way Acquisition Process

Letter of Intent to Acquire

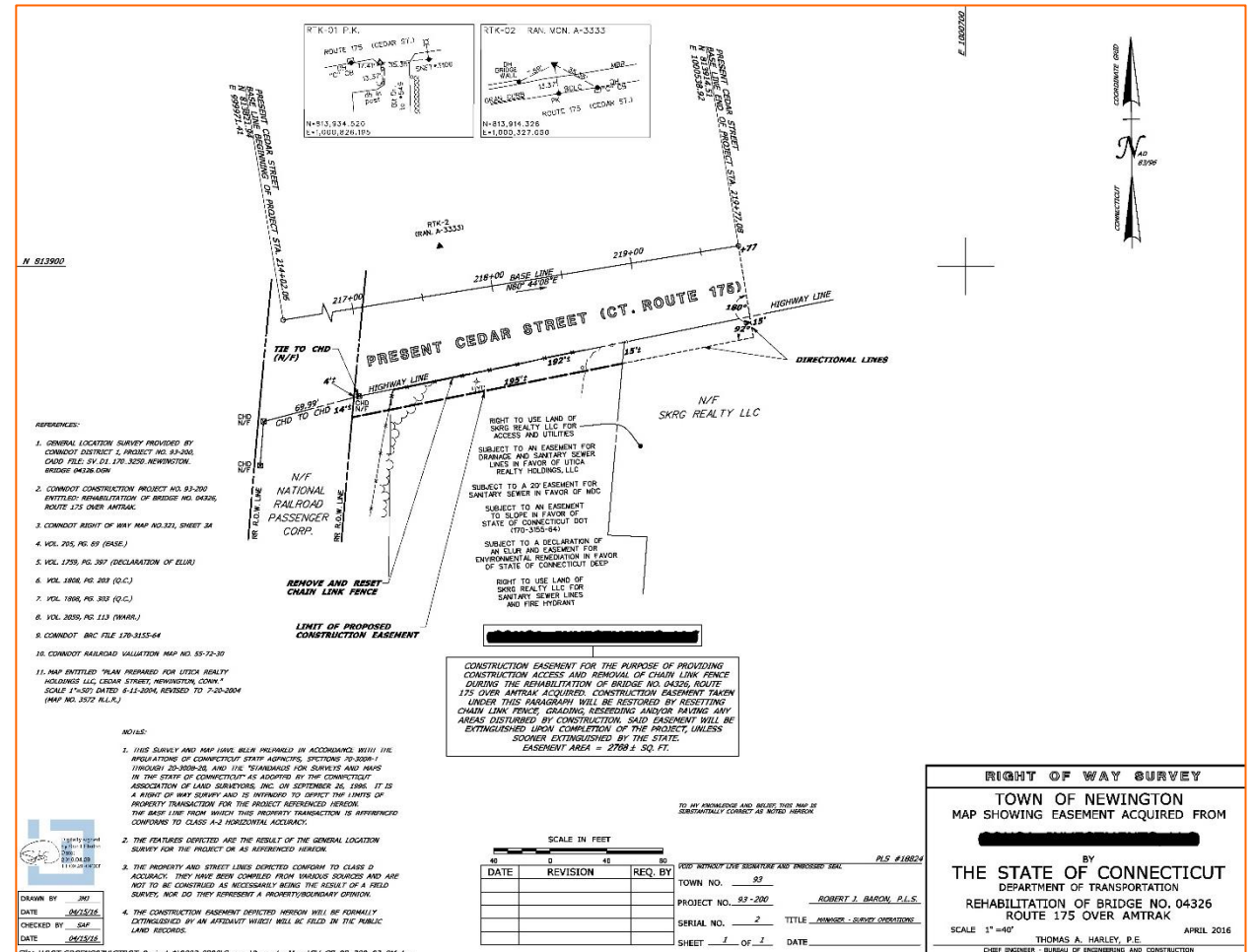
Valuation

Offer of Just Compensation

Negotiation

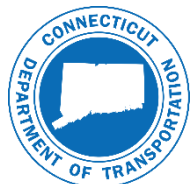
Acquisition

- Agreement
- Eminent Domain/Condemnation
- 6-month Appeal Period



Sample Property Map

Replacement of Bridge No. 01872 // State Project No. 056-305



Project Cost & Schedule

- Estimated Construction Cost: \$10,600,000*
- Funding: Federal (80%) & State (20%)
- Construction is Anticipated to Begin in Summer 2022
- Anticipated Construction Duration – 2 to 3 Construction Seasons

Schedule is Preliminary and is Predicated Upon the Availability of Funding

*Construction costs does not include rights-of-way or utility costs associated with this project

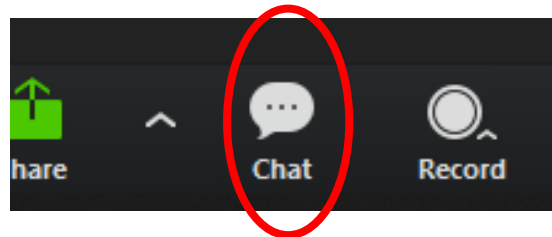
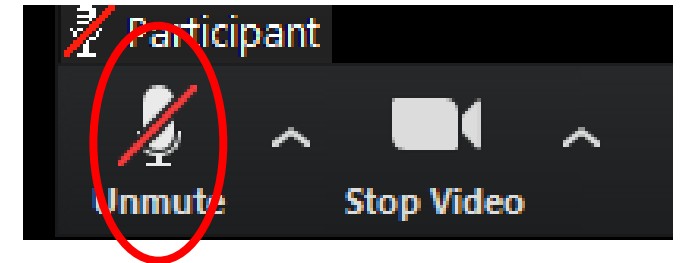
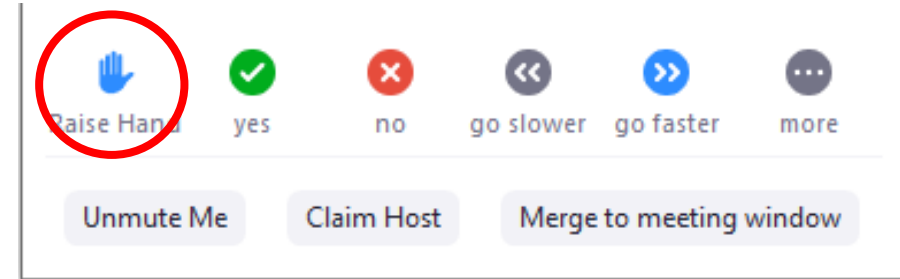


Question & Answer Session



Question & Answer Session – Providing Feedback

- Raise Your Hand to Speak
 - Participants will be called on to Speak
 - When Called on Select Unmute to Speak
- Offer a Comment/Question in the Chat



- Select Chat
- Enter Text in Chat
Press Enter to Send

