

Project Status Update Meeting

June 12, 2018

- **U.S. Route 1 (E. Main Street & Boston Post Road) over Noroton River**
 - **Replacement of Bridge No. 00315**
State Project No. 135-307



CT DOT & Consultant Engineers

CT DOT

Division of Bridges



BL Companies

Consultant Liaison Engineer

Nick Giardina, P.E.



Anchor Engineering Services

Design Consultant - Bridge No. 00315

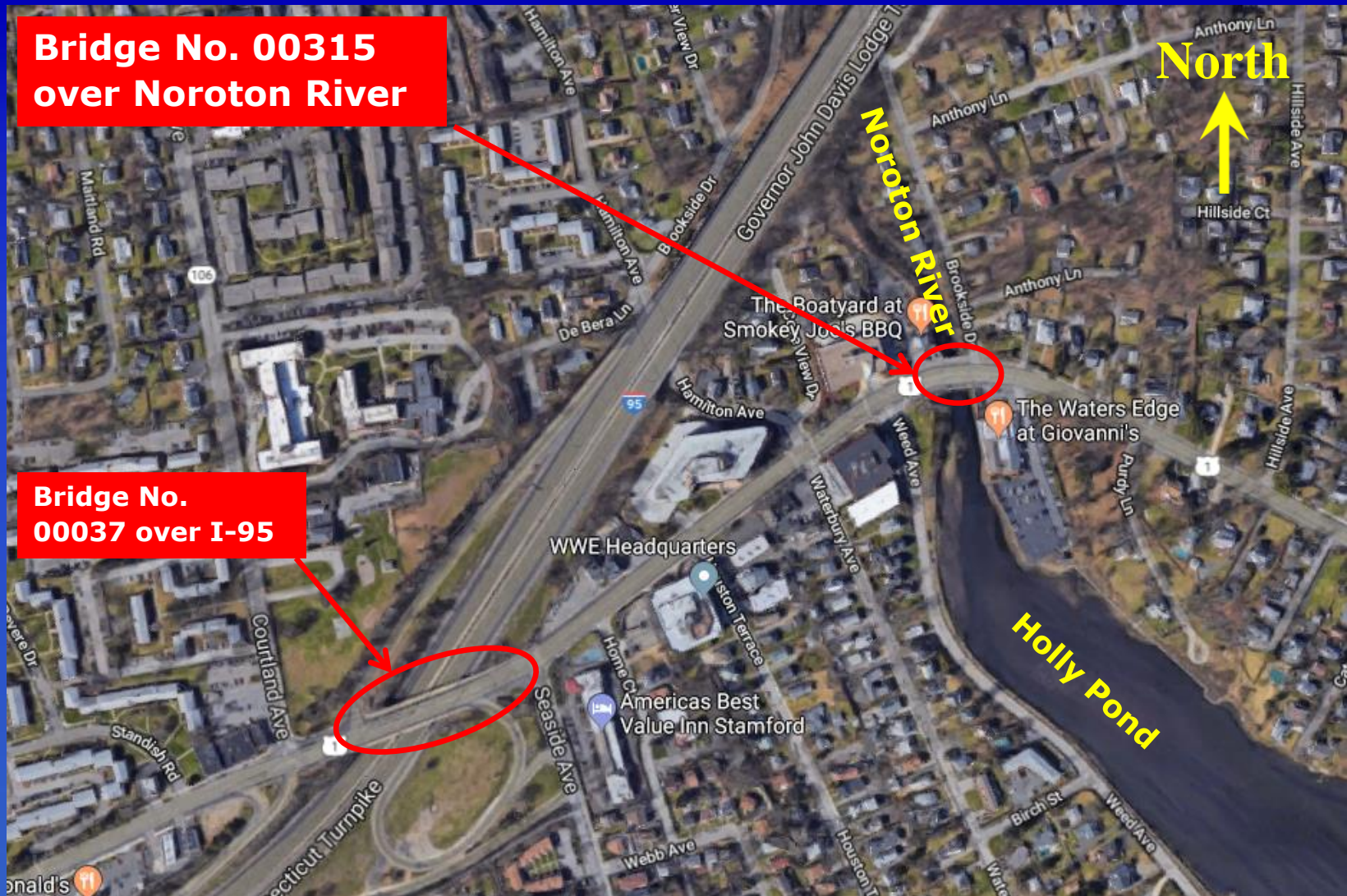
State Project No. 0135-307

Mark Zessin, P.E.



Connecticut Department of Transportation





Aerial View of Bridge 00315

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Existing Bridge Description

Bridge No. 00315

- **Built in 1913, rehabilitated in 1956**

- **Structure Dimensions**

Bridge Length = 50-feet

Two Spans

Curb-to-Curb Width = 70-feet

Superstructure composed of concrete deck units, concrete encased steel beams & reinforced concrete "T" beams, and closed spandrel arches

- **Bridge carries two lanes of traffic in each direction with a painted median**

- **Estimated Average Daily Traffic (ADT) on U.S. Route 1 at this site ~ 10,600 vehicles (2013)**



Reasons for Project

Bridge No. 00315

Structure is recommended for replacement under the State Bridge Program.

Reasons include:

- **Scour Critical**
 - Exposed footings
 - Risk of undermining foundations
- **Structure Condition**
 - South parapet exhibits impact damage
 - Areas of deteriorated concrete with cracks and spalls
 - Corroded reinforcing steel and steel beams





Looking East
Bridge No. 00315

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Looking West
Bridge No. 00315

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Looking North
Bridge No. 00315

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Looking South
Bridge No. 00315

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Substructure Deterioration

Bridge No. 00315

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Substructure Deterioration

Bridge No. 00315

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Impact Damage ***Bridge No. 00315***

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Exposed Footings
Bridge No. 00315

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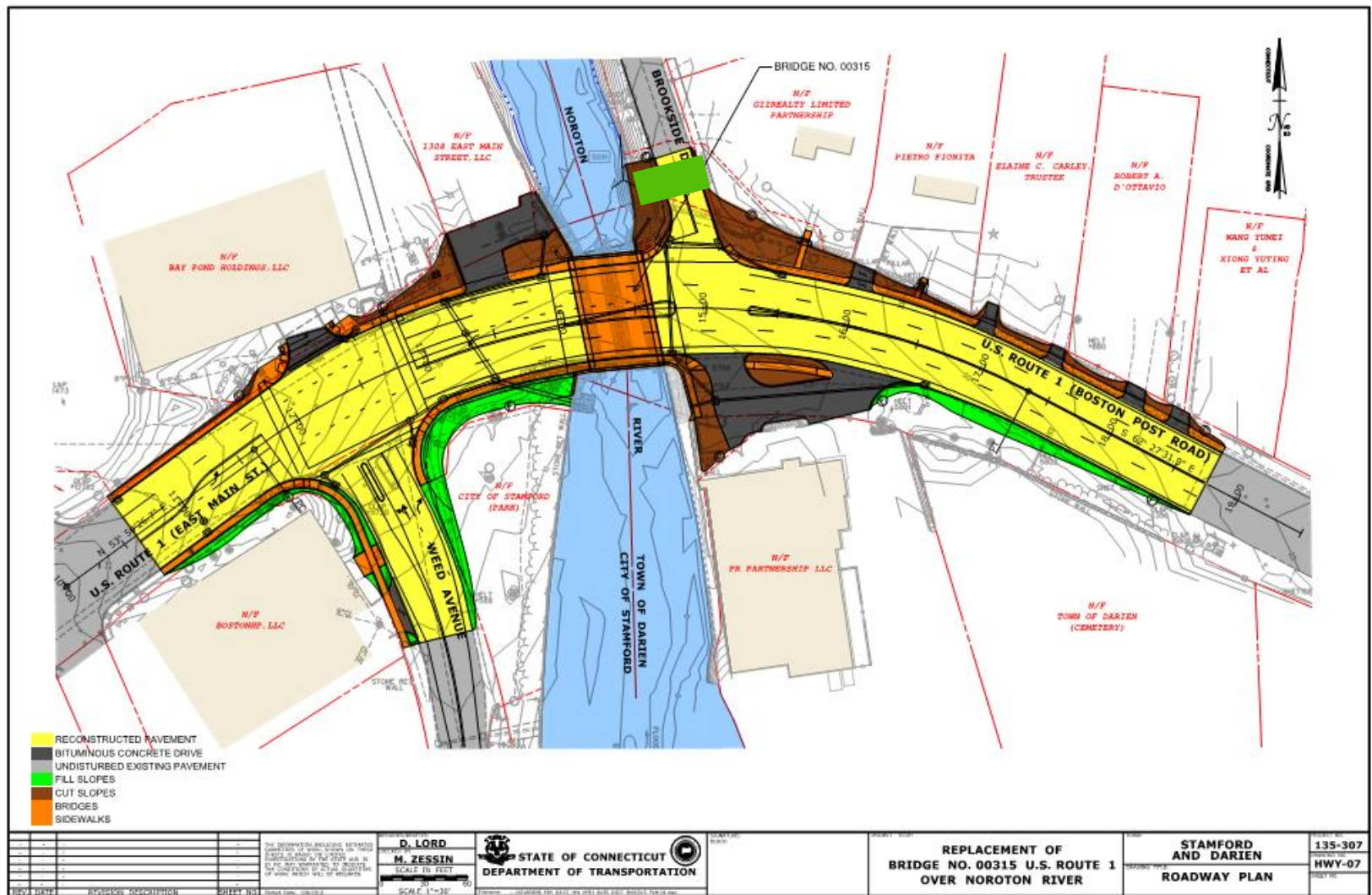


Proposed Construction

Bridge No. 00315

- **New single-span New England Extreme Tee (NEXT) prestressed concrete multi-girder structure with a concrete deck**
- **Cast in place concrete abutments supported on piles**
- **2.5-foot profile raise of U.S. Route 1 to meet minimum hydraulic opening requirements**
- **Three lanes of traffic to be maintained during construction**
 - **Temporary bridge to the north**



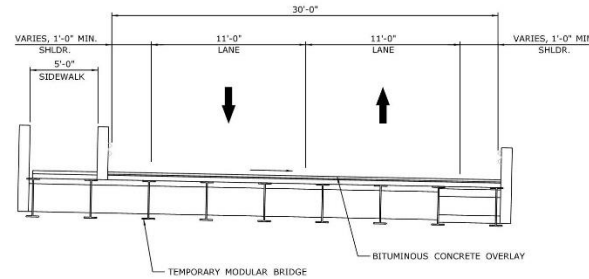


Proposed Roadway Plan

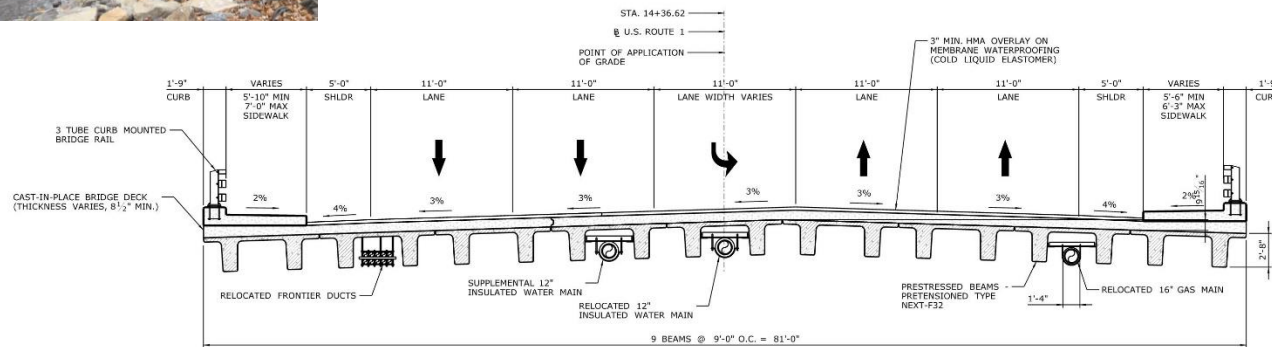
Bridge No. 00315

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**TEMPORARY BRIDGE
TYPICAL SECTION**
SCALE: 1/4" = 1'-0"



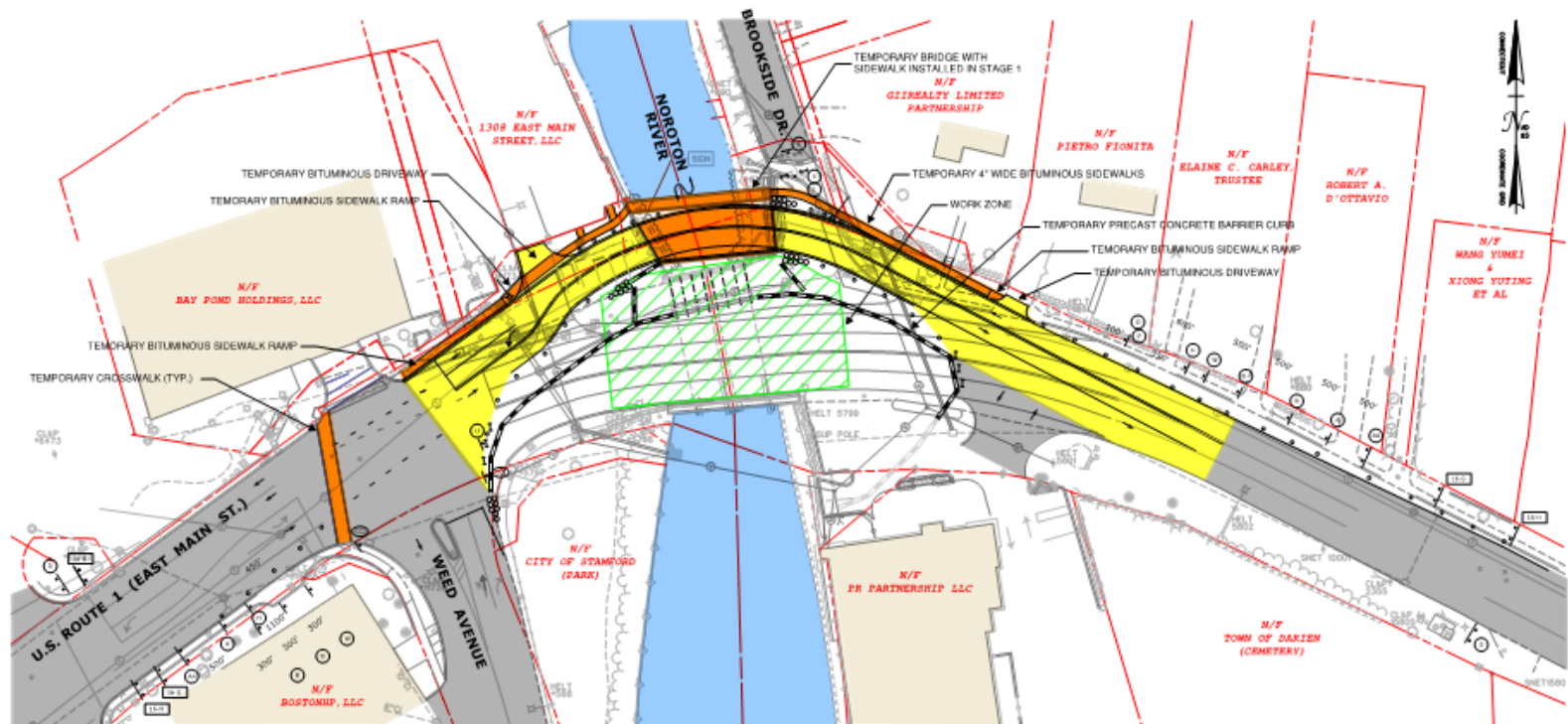
TYPICAL SECTION
SCALE: 1/4" = 1'-0"

REVISION DATE REVISION DESCRIPTION SHEET NO.	THE INFORMATION INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATION BY THE S&P AND IS NOT A GUARANTEE TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	DESIGNED BY K. FLETCHER CHECKED BY M. ZESSIN SCALE AS NOTED STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE REPLACEMENT OF BRIDGE NO. 00315 U.S. ROUTE 1 OVER NOROTON RIVER	DRAWN BY STAMFORD AND DARIEN TYPICAL BRIDGE SECTIONS PROJECT NO. 135-307 DRAWING NO. S-03 SHEET NO. 05.03
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Proposed Bridge Plan **Bridge No. 00315**

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STAGE 2

- RECONSTRUCTED PAVEMENT
- BITUMINOUS CONCRETE DRIVE
- UNDISTURBED EXISTING PAVEMENT
- FILL SLOPES
- CUT SLOPES
- BRIDGES
- SIDEWALKS

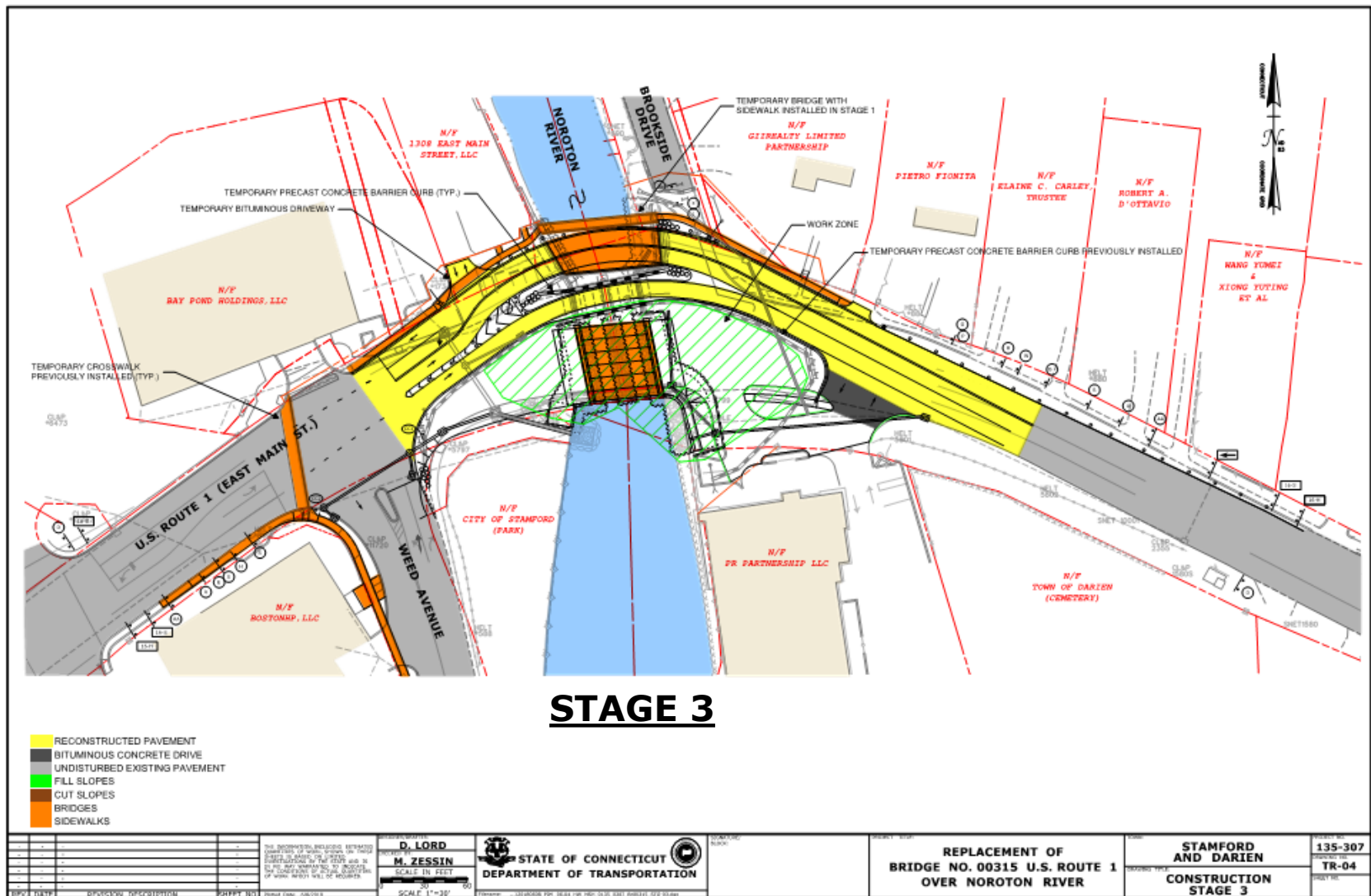
DESIGNED BY D. LORD M. ZESSIN SCALE IN FEET 1"=30'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT NO. REPLACEMENT OF BRIDGE NO. 00315 U.S. ROUTE 1 OVER NOROTON RIVER	PROJECT NAME STAMFORD AND DARIEN CONSTRUCTION STAGE 2	PROJECT NO. 135-307 PROJECT NAME TR-03
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Construction Stages

Bridge No. 00315

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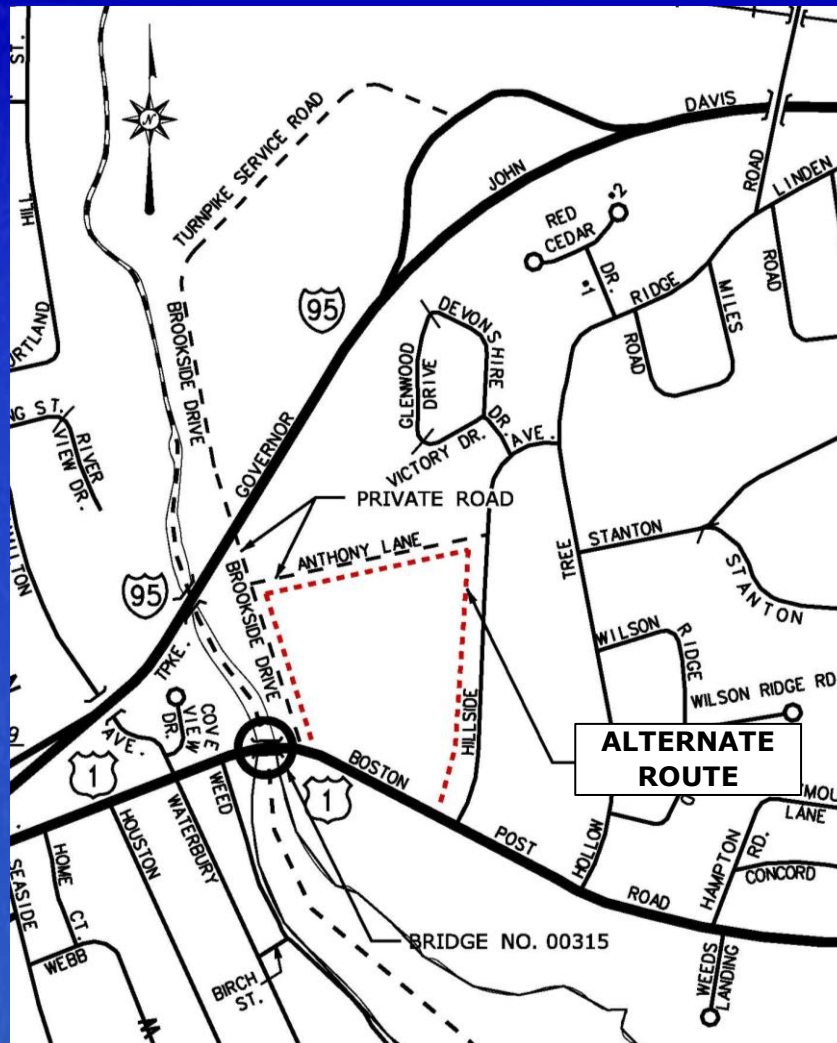




Construction Stages *Bridge No. 00315*

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Brookside Drive

Bridge No. 00315

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Allowable Working Periods

Bridge No. 00315

Contractor will be permitted to work during the following periods:

- Monday through Thursday, 6:00am – 10:00pm**
- Fridays, 6:00am – 6:00pm**
- Night Work will be permitted for limited activities from Sunday through Thursday, 10:00pm – 6:00am**

No work will be permitted Friday from 6:00pm through Monday 6:00am, except those periods indicated for night work (Sunday nights)



Project Costs & Schedule

Bridge No. 00315

Estimated CN Cost: \$8 Million - \$9 Million

The project is anticipated to be funded using Federal (80%) and State (20%) capital

Construction is anticipated to begin in the fall of 2018.

**Anticipated construction time = 35 months
(Construction Completion Date October 1, 2021)**

The schedule is predicated upon the availability of funding, the issuance of the requested environmental permits and the resolution of all property impacts.



THANK YOU...

FOR YOUR TIME AND ATTENTION

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Contact Information

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Anticipated Environmental Permits

Bridge No. 00315

The proposed construction will impact approximately 5,000 square feet of inland wetlands.

The following environmental permits will be required:

- **CT DEEP – Inland Wetlands Watercourse Permit**
- **CT DEEP – Flood Management Certification**
- **CT DEEP – Structures, Dredging and Fill Permit**
- **ACOE General Permit (Pre-Construction Notification)**
- **CT DEEP – Stormwater Discharge Permi**

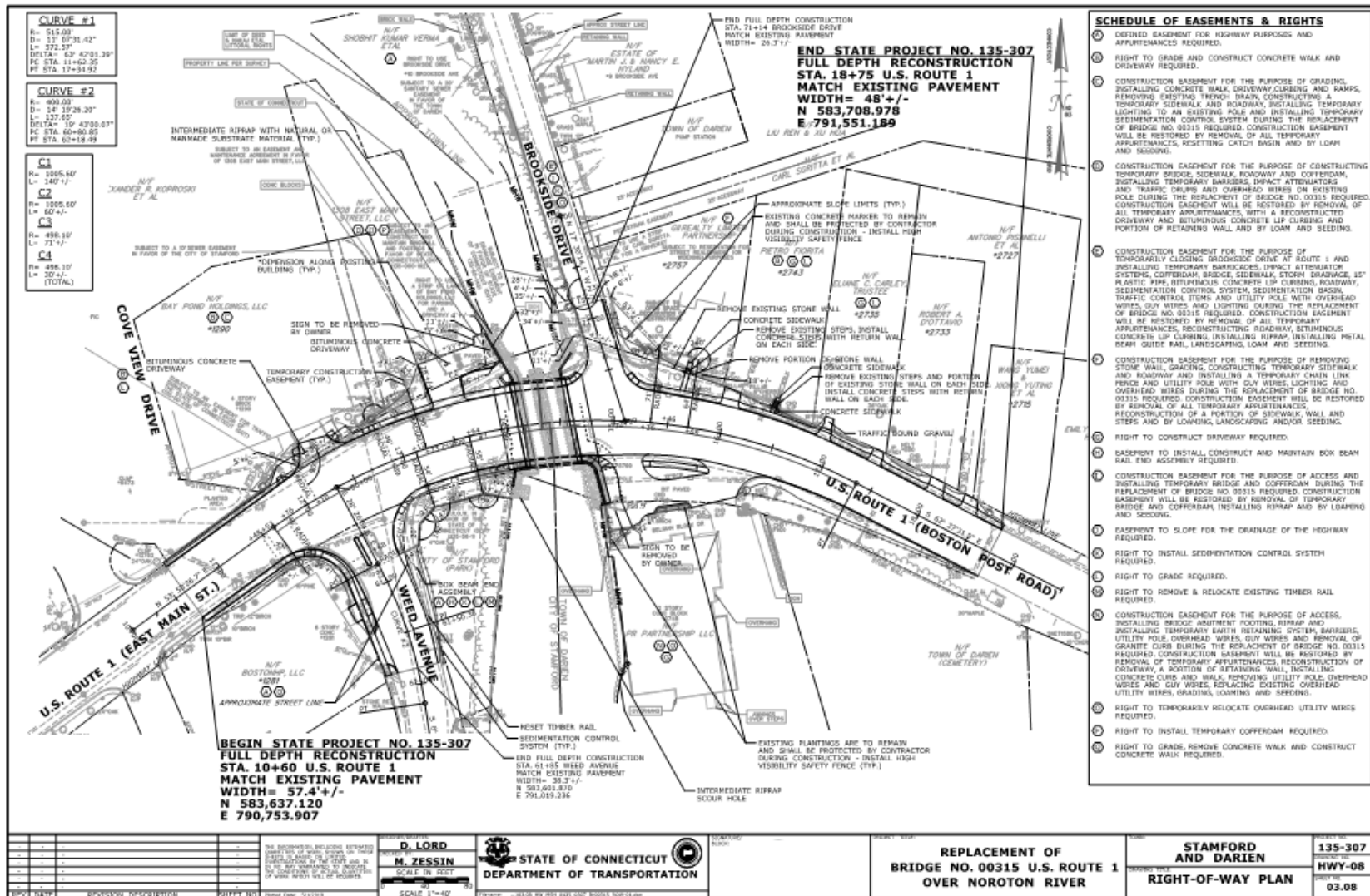


Rights-of-Way

Bridge No. 00315

- **Based upon the State boundary map, the width of the U.S. Route 1 Right-of-Way in the vicinity of the bridge is approximately 130-feet.**
- **Anticipated impacts to private property include:**
 - **Three (3) defined easements for highway purposes**
 - **One (1) easement to slope for the drainage of the highway**
 - **One (1) easement to install, construct and maintain box beam rail end assembly**
 - **Five (5) temporary construction easements**
 - **Three (3) right to construct driveways**
 - **Two (2) right to reconstruct sidewalks**
 - **Two (2) right to grade and construct concrete walk and driveways**
 - **One (1) right to remove stone steps and portion of stone wall and replace with concrete steps and wall**
 - **Four (4) right to grades**
 - **Three (3) right to temporarily relocate overhead utility wires**
 - **One (1) right to install temporary cofferdam**
 - **Two (2) right to install sedimentation control systems**
 - **One (1) right to remove and relocate existing timber rail**





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Public Utilities

Bridge No. 00315

Overhead utilities at the bridge site:

- **Frontier Communications and Eversource Energy utility poles (with illumination)**

Underground utilities at the bridge site:

- **Telecommunication ducts, 12" water main and 16" gas main. No impact to sanitary sewer.**

Anticipated utility impacts:

- **Support in place and shift Frontier conduits**
- **Install temporary water main along temporary bridge and install two new water mains on new bridge**
- **Backfeed existing gas main and install new main**
- **Temporary street lighting to be provided during construction**





Gas Main - South Side
Bridge No. 00315

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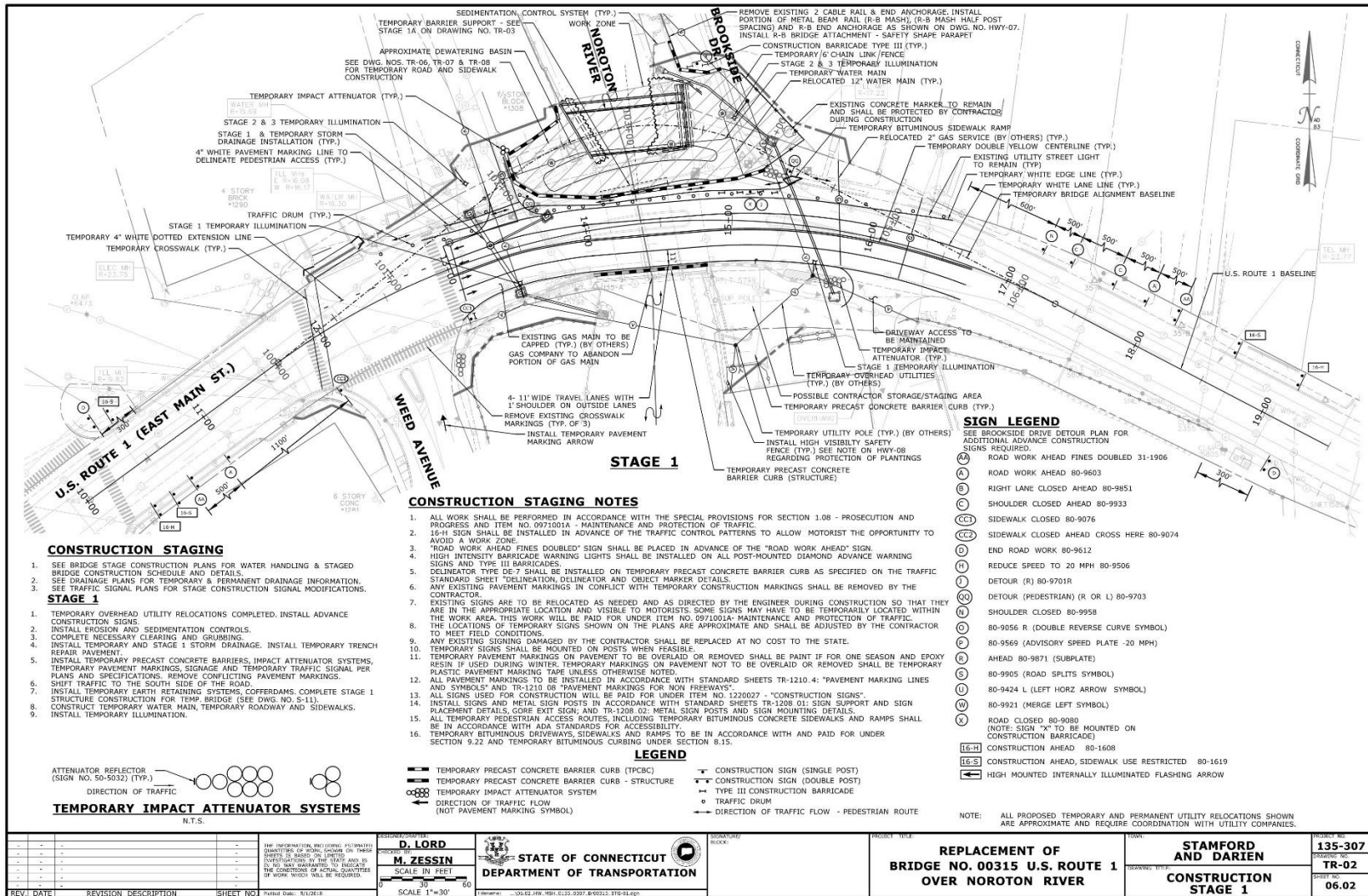


Overhead Utilities

Bridge No. 00315

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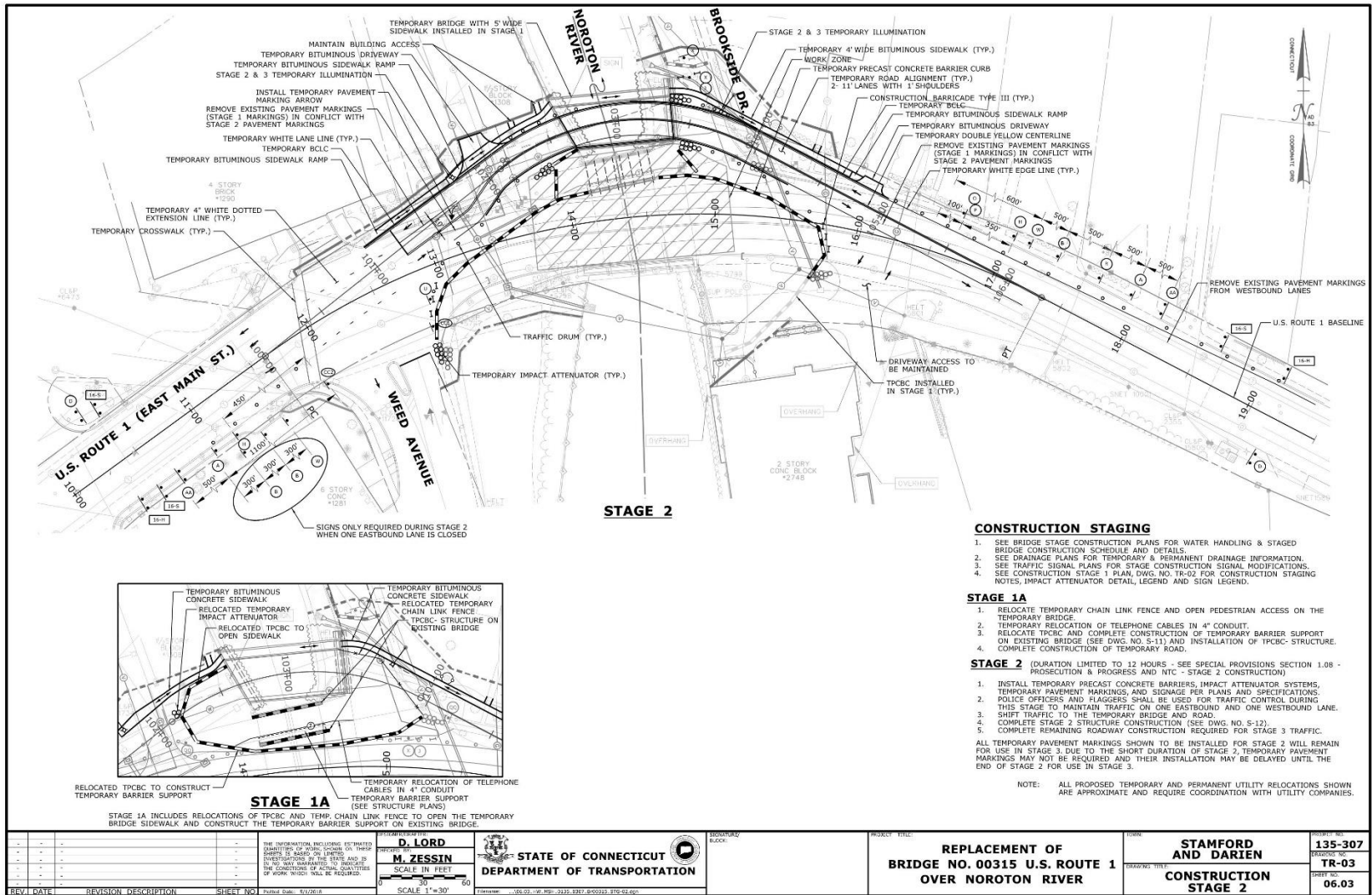


Construction Stages

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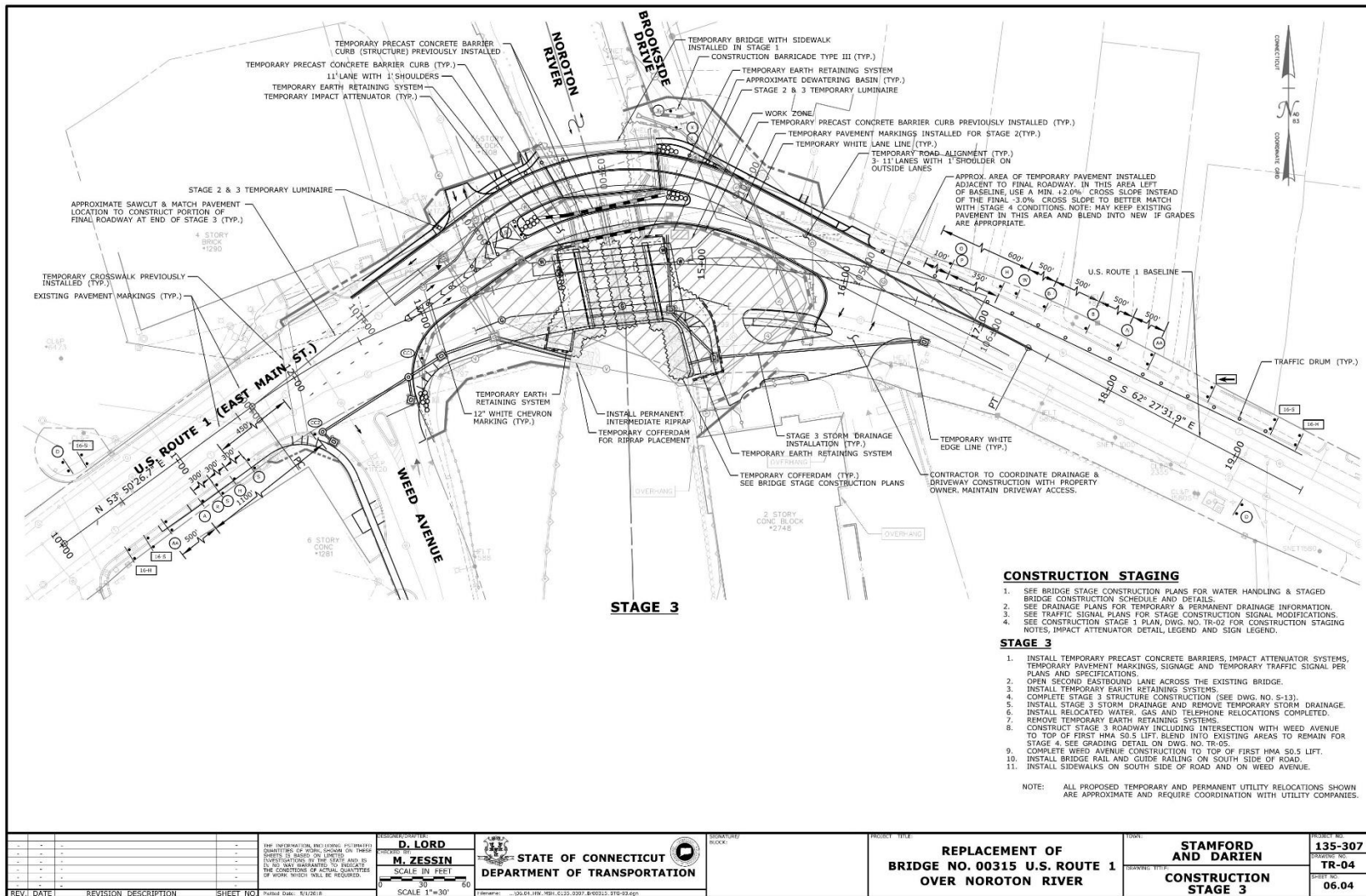


Construction Stages

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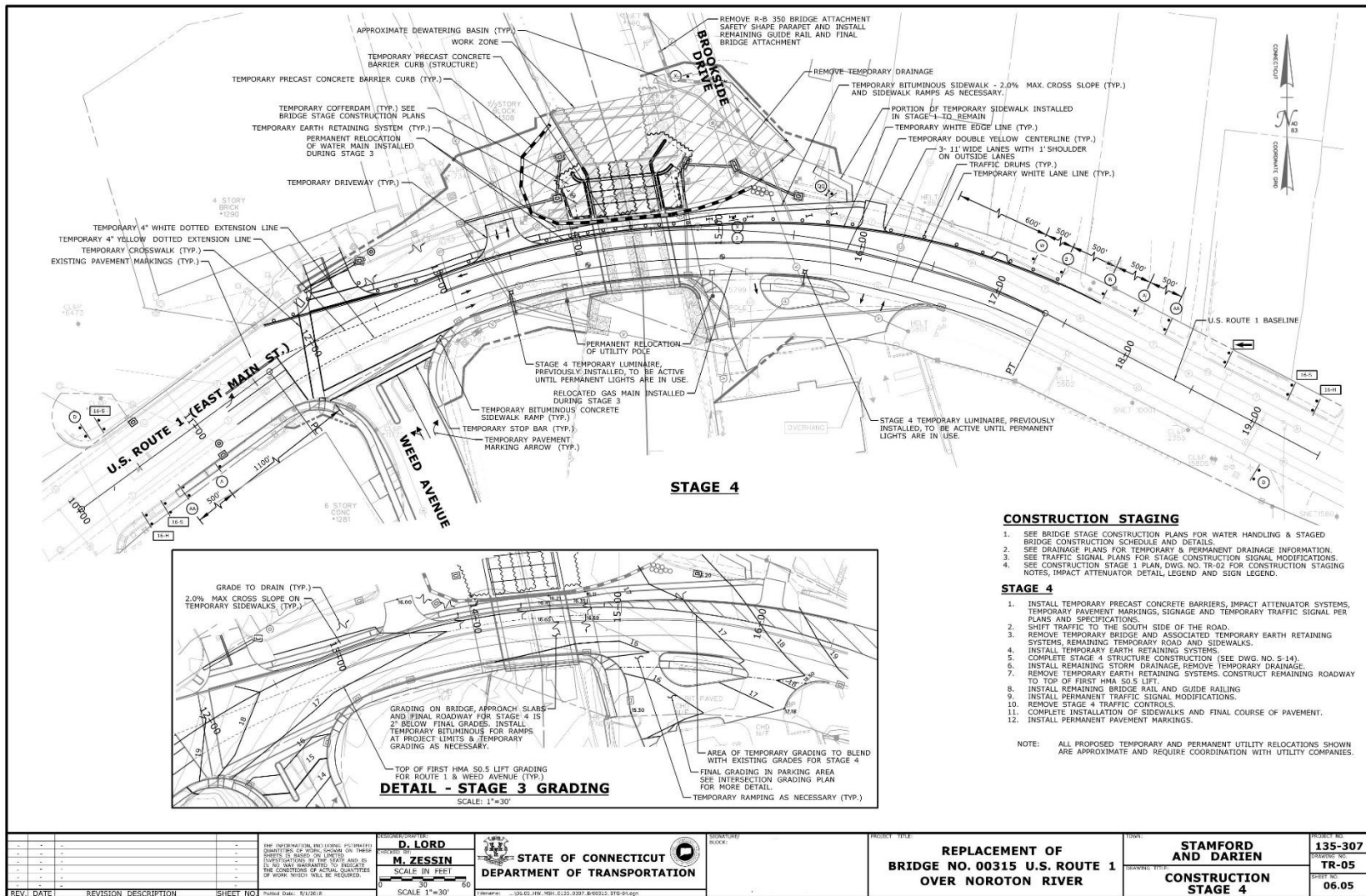


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