Public Information Meeting

Project 69-78

Replacement of Bridge No. 02498

Higganum Road (CT Route 81)

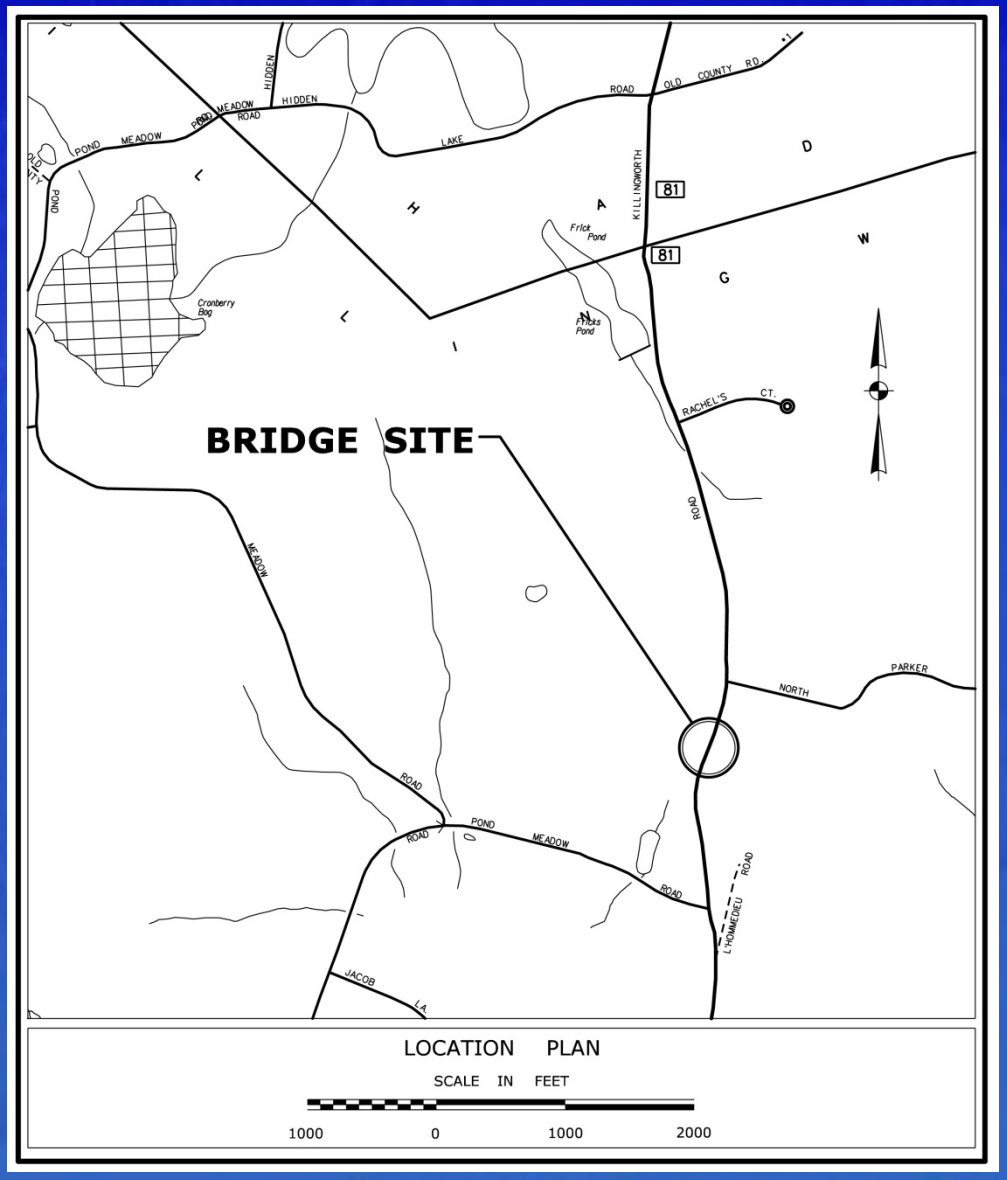
over

District Brook

Killingworth, Connecticut

Connecticut Department of Transportation

Project Location



Connecticut Department of Transportation

ConnDOT Role

Bureau of Engineering and Construction

- Responsible for engineering design, construction, and inspection of transportation projects

Contacts: Mr. Scott A. Hill, PE
(Manager of Bridges & Facilities)

Mr. David Cutler, PE
(Project Manager)

Ms. Michelle Lynch, PE
(Project Engineer)

Lenard Engineering, Inc.
Consultant Engineers

ConnDOT has retained Lenard Engineering, Inc. (LEI) to provide the design of this bridge project.

Contacts: Mr. James R. Bancroft, P.E.
(General Manager)

Mr. Paul Magyar, P.E.
(Project Manager)

Reasons for Project

Structure recommended for full replacement with pre-cast concrete box culvert under the List 19S Bridge Program for the following reasons:

- **Structurally Deficient superstructure (rating = 3 on scale of 1–9)**
- **Structurally Deficient substructure (rating = 4 on scale of 1–9)**
- **Obsolete deck geometry**
- **The existing 8.5-foot opening is hydraulically inadequate**

Project Goals

- Improve safety at this crossing
- Replace Bridge No. 02498 with structurally and hydraulically code-compliant new structure
- Minimize disturbance to traveling public
- Complete construction in a timely manner
- Effectively use funds

Aerial View of Bridge No. 02498

Connecticut Department of Transportation

Upstream Elevation

Looking West

Connecticut Department of Transportation

Downstream Elevation

Looking East

Connecticut Department of Transportation

Underside of Deck

Connecticut Department of Transportation

Road Alignment

Looking North

Connecticut Department of Transportation

Road Alignment

Looking South

Connecticut Department of Transportation

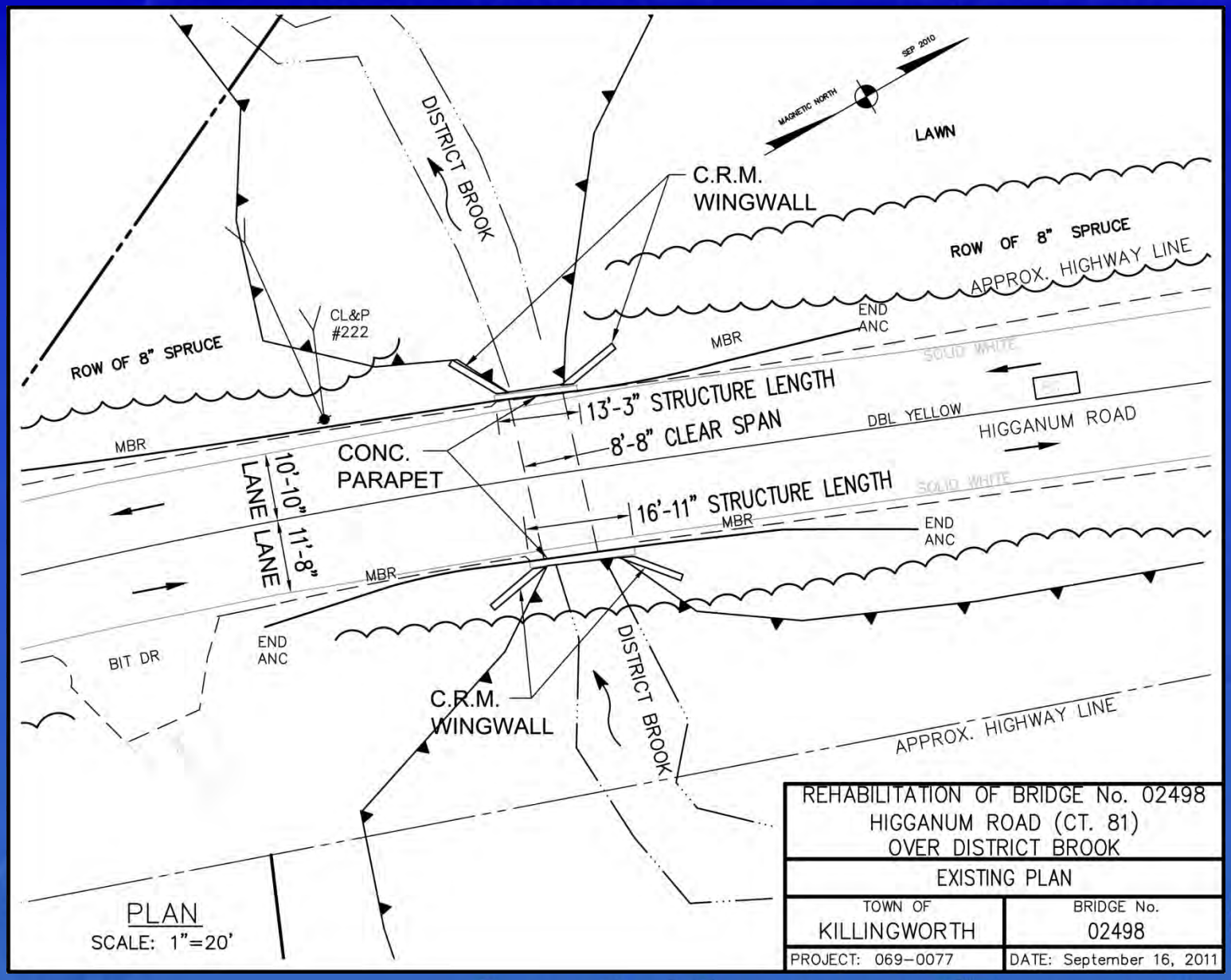
Existing Bridge Description

- Single span structure built in 1922
- Structure Dimensions
  - Total Length = 13 ft, single span
  - Overall Width = 30.0 ft
  - Roadway width = 24.0 ft
- Curved horizontal alignment
- Minimal sag vertical curve over watercourse
- Carries one lane of traffic in each direction
  - Estimated Average Daily Traffic (ADT) ~ 6,600 vehicles (2007)

Existing Bridge Description

- **Superstructure consists of:**
  - **Cast-in-place concrete slab deck with metal beam rail**
- **Substructure consists of:**
  - **Mortared masonry abutments and wingwalls**

Existing Bridge



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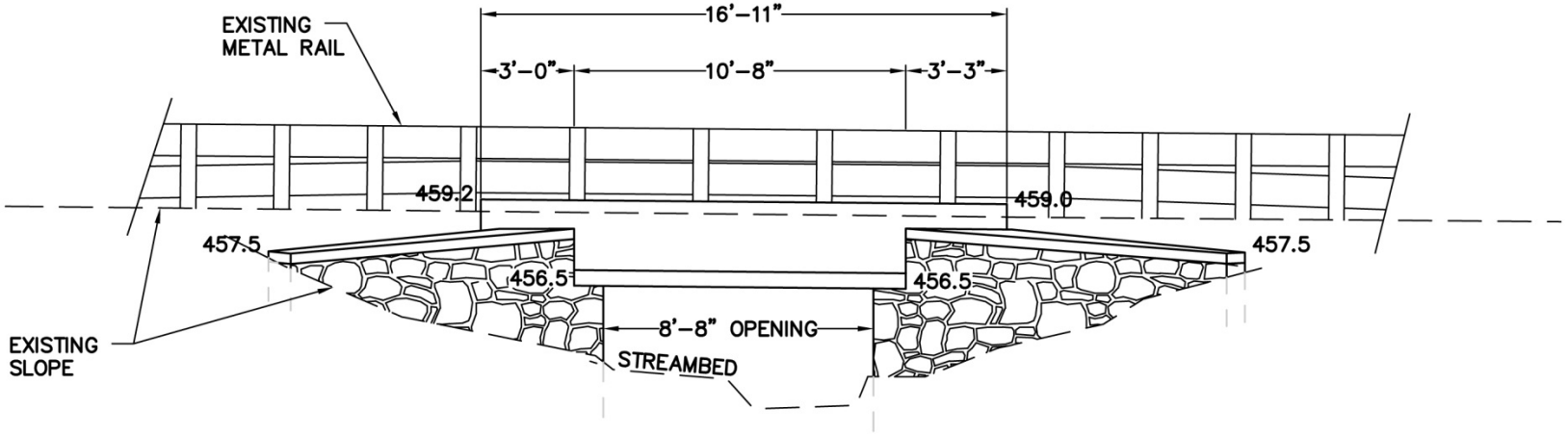
Existing Bridge



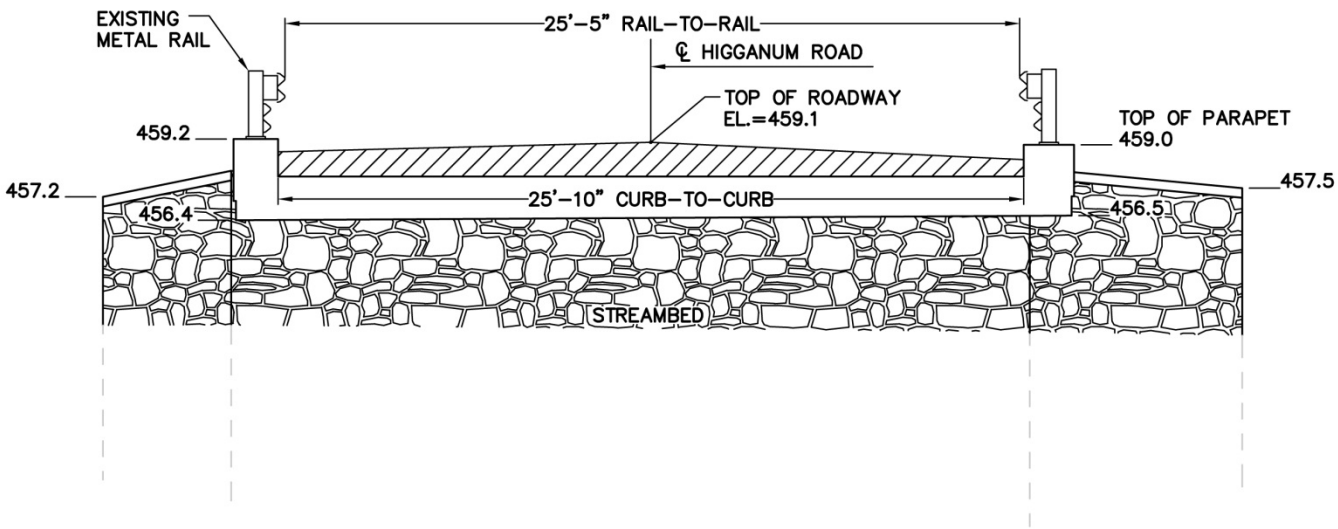
UPSTREAM ELEVATION LOOKING WEST

SCALE: 3/16" = 1'–0"

NGVD 1929
VERTICAL DATUM

REHABILITATION OF BRIDGE No. 02498 HIGGANUM ROAD (CT. 81) OVER DISTRICT BROOK	
EXISTING ELEVATION	
TOWN OF KILLINGWORTH	BRIDGE No. 02498
PROJECT: 069–0077	DATE: September 16, 2011

Existing Bridge



SECTION LOOKING NORTH
SCALE: 3/16" = 1'-0"

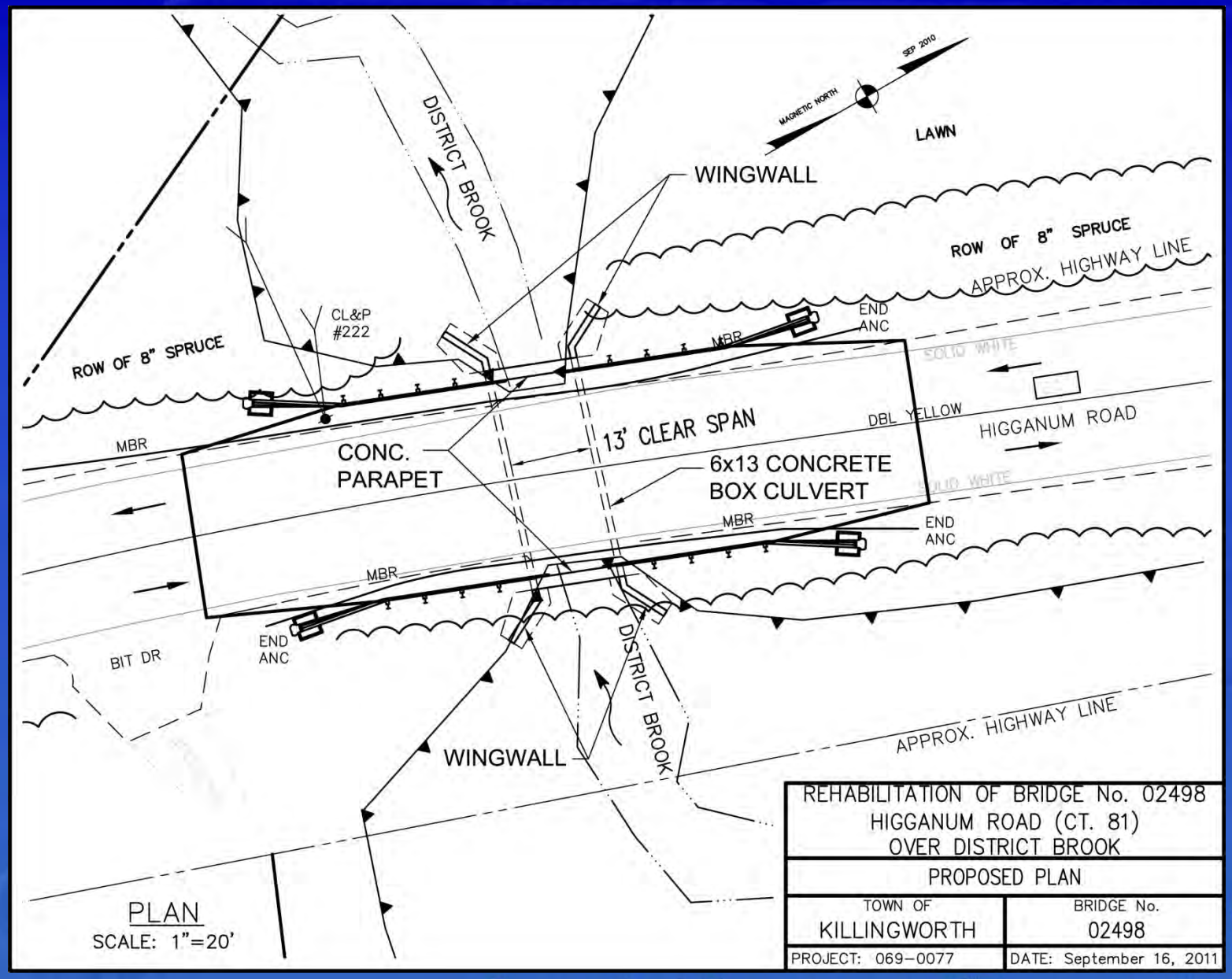
NGVD 1929
VERTICAL DATUM

REHABILITATION OF BRIDGE No. 02498 HIGGANUM ROAD (CT. 81) OVER DISTRICT BROOK	
EXISTING SECTION	
TOWN OF KILLINGWORTH	BRIDGE No. 02498
PROJECT: 069-0077	DATE: September 16, 2011

Proposed Construction

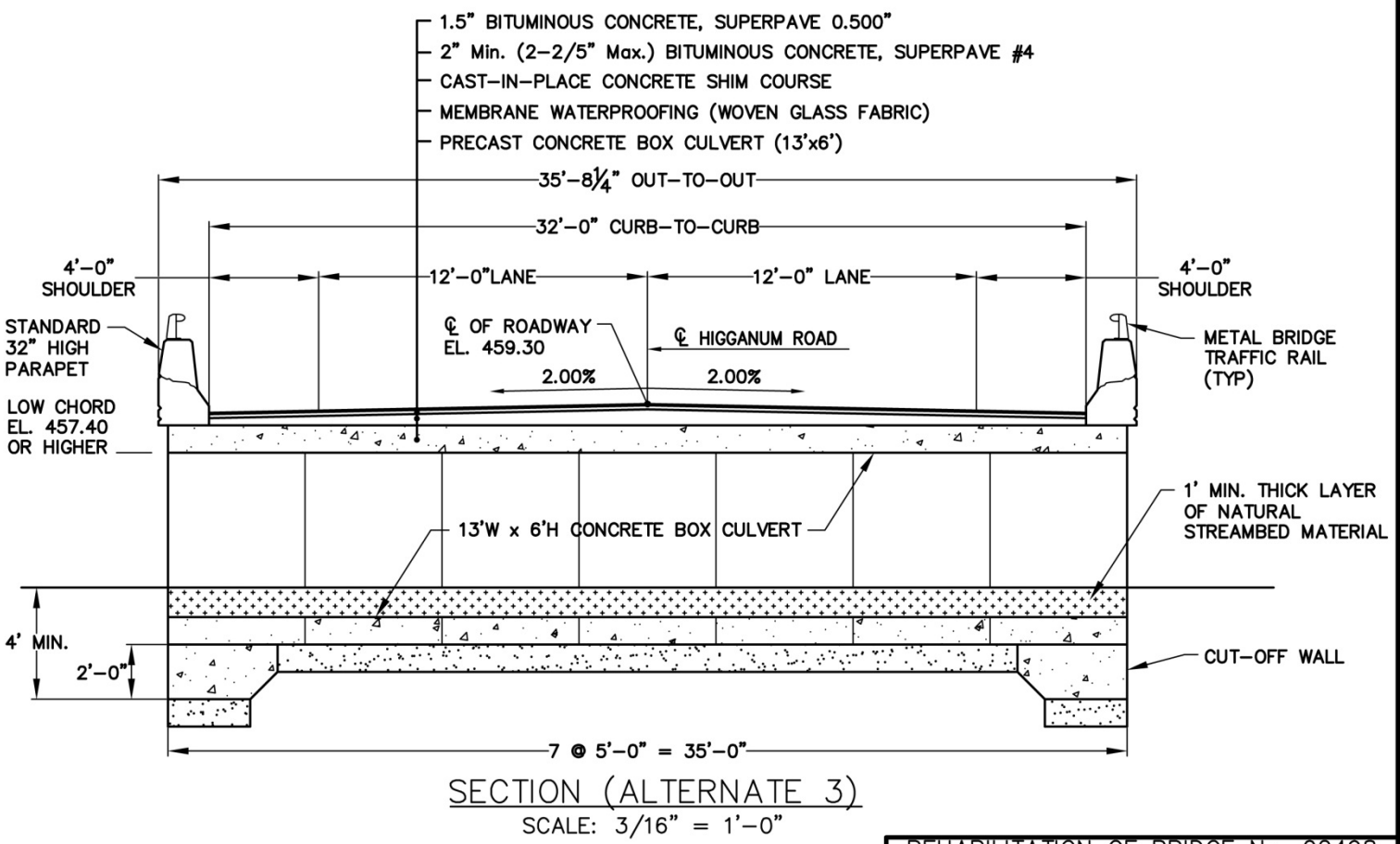
- Replace existing bridge with pre-cast concrete box culvert
- Replace existing stone masonry wingwalls with cast-in-place concrete wingwalls
- Widen road, maintain existing alignment
- Improve safety of approach roadways (improved railing system)
- Staged construction — alternating traffic will be maintained on one lane during the entire length of the construction

Proposed Construction



Connecticut Department of Transportation

Proposed Construction



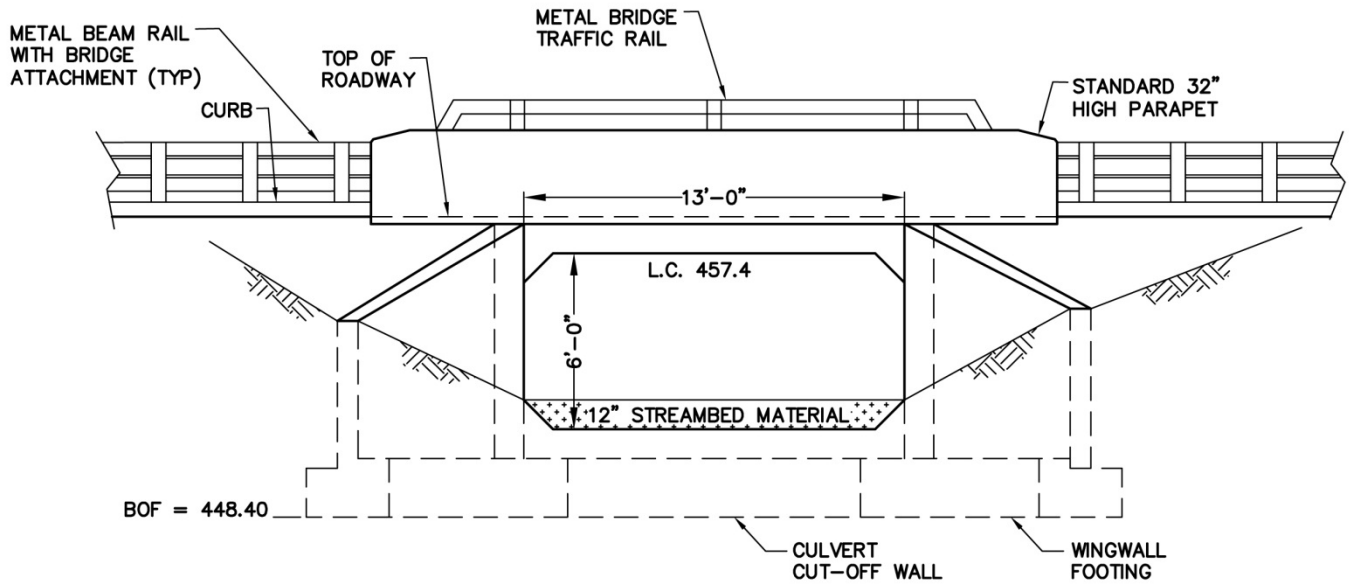
SECTION (ALTERNATE 3)

SCALE: 3/16" = 1'–0"

NGVD 1929
VERTICAL DATUM

REHABILITATION OF BRIDGE No. 02498 HIGGANUM ROAD (CT. 81) OVER DISTRICT BROOK	
PROPOSED SECTION (ALTERNATE 3)	
TOWN OF KILLINGWORTH	BRIDGE No. 02498
PROJECT: 069–0077	DATE: September 16, 2011

Proposed Construction



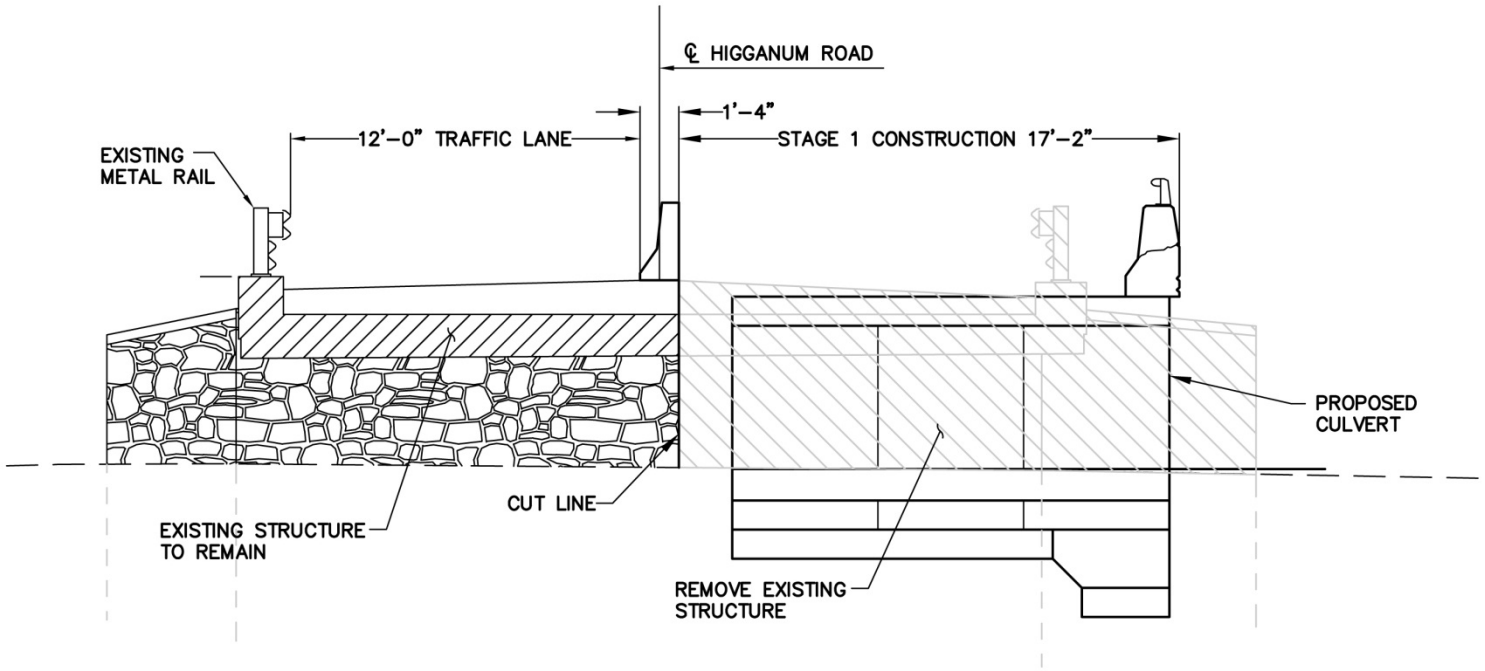
PROPOSED UPSTREAM ELEVATION LOOKING WEST

SCALE: 3/16" = 1'-0"

NGVD 1929
VERTICAL DATUM

REHABILITATION OF BRIDGE No. 02498 HIGGANUM ROAD (CT. 81) OVER DISTRICT BROOK	
PROPOSED ELEVATION	
TOWN OF KILLINGWORTH	BRIDGE No. 02498
PROJECT: 069-0077	DATE: September 16, 2011

Proposed Construction



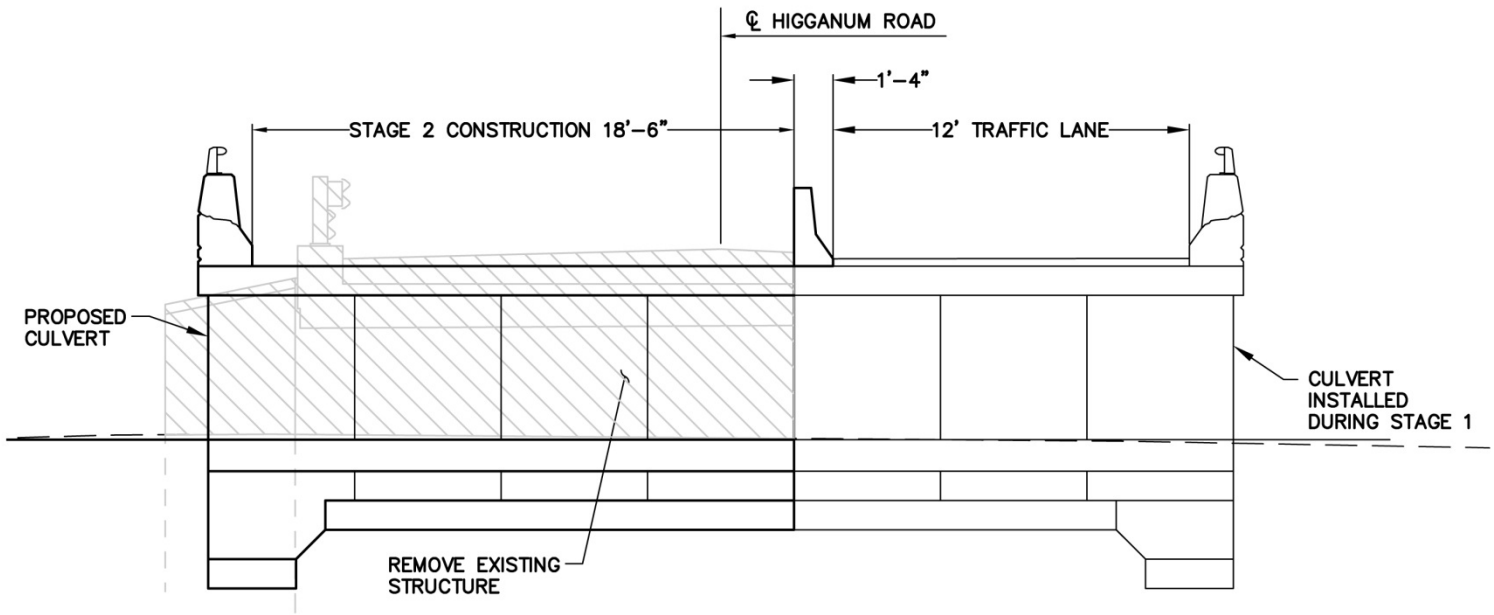
STAGE 1 REMOVAL AND CONSTRUCTION (ALTERNATE 3)

SCALE: 3/16" = 1'-0"

NGVD 1929
VERTICAL DATUM

REHABILITATION OF BRIDGE No. 02498 HIGGANUM ROAD (CT. 81) OVER DISTRICT BROOK	
STAGE 1 (ALTERNATE 3)	
TOWN OF KILLINGWORTH	BRIDGE No. 02498
PROJECT: 069-0077	DATE: September 16, 2011

Proposed Construction



STAGE 2 REMOVAL AND CONSTRUCTION (ALTERNATE 3)

SCALE: 3/16" = 1'-0"

NGVD 1929
VERTICAL DATUM

REHABILITATION OF BRIDGE No. 02498 HIGGANUM ROAD (CT. 81) OVER DISTRICT BROOK	
STAGE 2 (ALTERNATE 3)	
TOWN OF KILLINGWORTH	BRIDGE No. 02498
PROJECT: 069-0077	DATE: September 16, 2011

Environmental Considerations

- Wetland areas are known to exist within project limits
- No known contaminated and/or hazardous materials expected within project limits
- Best management practices will be utilized to handle sedimentation control during construction and to protect wildlife in the stream channel

Public Utilities

Utilities at the bridge site consist of overhead wire utilities along the westerly side of the road:

- **Comcast of Connecticut, LLC**
- **AT&T Connecticut**
- **Northeast Utilities Service Co.**

CTDOT conducted a utility coordination meeting with the appropriate utility companies.

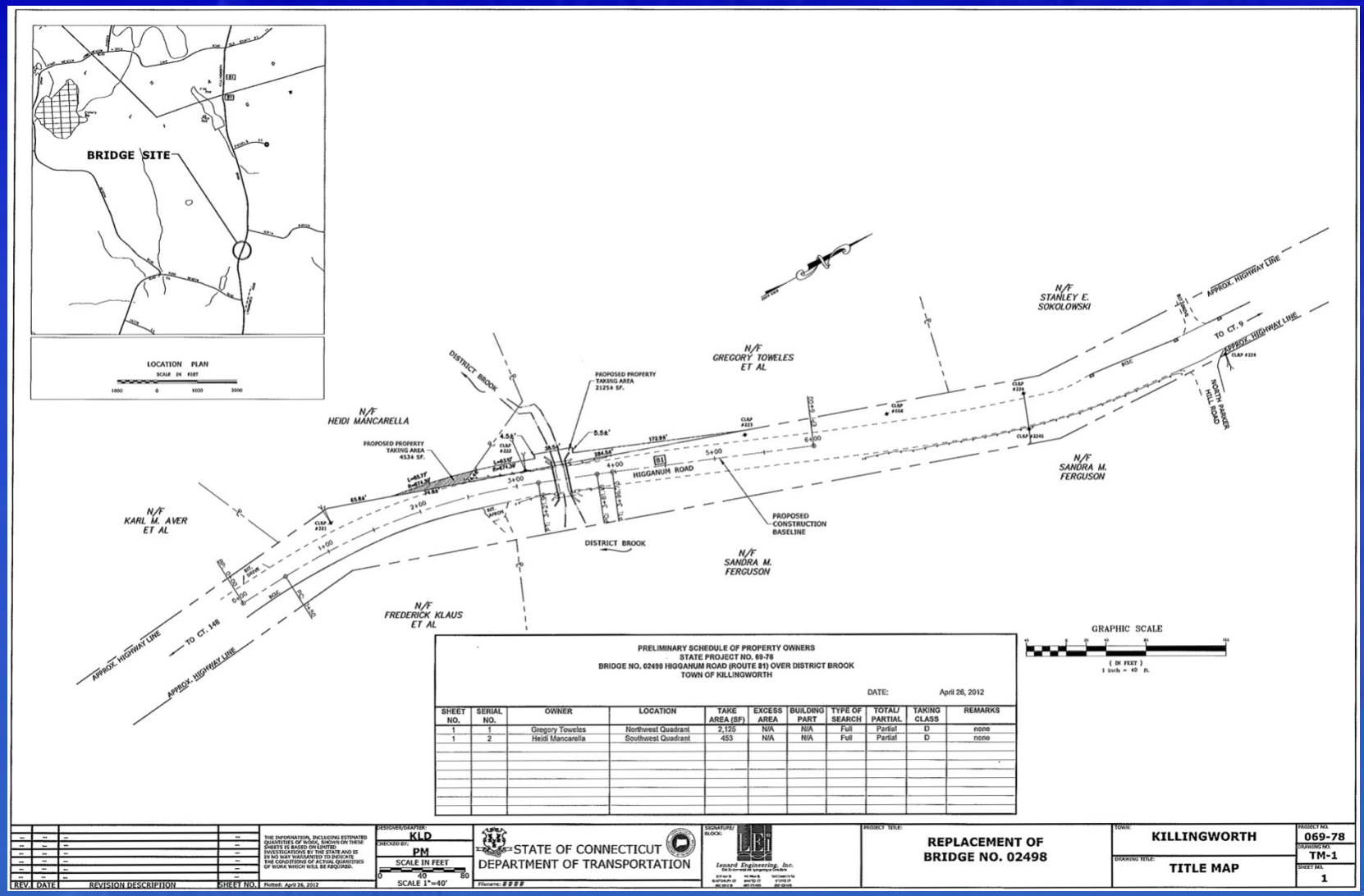
Utilities will be maintained in place or relocated as necessary during the proposed construction activities.

Rights-of-Way

Impacts to private properties consisting of permanent land takings are anticipated.

Contact: Mr. Derrick Ireland

Rights-of-Way



PRELIMINARY SCHEDULE OF PROPERTY OWNERS
STATE PROJECT NO. 69-78
BRIDGE NO. 02498 HIGGANUM ROAD (ROUTE 81) OVER DISTRICT BROOK
TOWN OF KILLINGWORTH

DATE: April 26, 2012

SHEET NO.	SERIAL NO.	OWNER	LOCATION	TAKE AREA (SF)	EXCESS AREA	BUILDING PART	TYPE OF SEARCH	TOTAL/ PARTIAL	TAKING CLASS	REMARKS
1	1	Gregory Toweles	Northwest Quadrant	2,125	N/A	N/A	Full	Partial	D	none
1	2	Heidi Mancarella	Southwest Quadrant	453	N/A	N/A	Full	Partial	D	none

REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted: April 26, 2012

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER: KLD
CHECKED BY: PM
SCALE IN FEET
0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

SIGNATURE/ BLOCK: Lenard Engineering, Inc.

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 02498

TOWN: KILLINGWORTH
DRAWING TITLE: TITLE MAP

PROJECT NO. 069-78
DRAWING NO. TM-1
SHEET NO. 1

Connecticut Department of Transportation

Project Cost

The estimated construction cost for the entire project is approximately $1,000,000.

Project Schedule

The project is anticipated to be constructed starting in Spring 2015.

Project duration estimated to be one construction season of approx. 8 months.

The schedule is preliminary and is predicated upon the availability of funding.

Contact Information

- **ConnDOT**

  Mr. David Cutler, PE

  2800 Berlin Turnpike, P.O. Box 317546

  Newington, Connecticut 06131-7546

- **Lenard Engineering, Inc.**

  Mr. Paul Magyar, PE

  2210 Main Street

  Glastonbury, CT 06033

  860-659-3100

THANK YOU…

FOR YOUR TIME AND ATTENTION

Connecticut Department of Transportation
and
Lenard Engineering, Inc.