

# **Public Information Meeting**

**Project 96-193**

**Rehabilitation of Bridge No. 00507**

**SR 816 (Glen Road) over**

**Housatonic River**

**Newtown/Southbury, Connecticut**

Connecticut Department of Transportation





# **CTDOT Role and Mission**

## **Bureau of Engineering and Construction**

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

**Contact: Mr. David Cutler, PE**



# **Stantec Consulting Services Inc.** **Consultant Engineers**

**CTDOT has retained the firm of Stantec Consulting Services Inc. to provide the design of this bridge project.**

**Contact: Mr. John F. Eberle, P.E.**





# Reasons for Project

**Structure recommended for rehabilitation under the List 19 Bridge Program.**

**Reasons include:**

- **Structurally Deficient Superstructure**
- **“Poor” Rating**

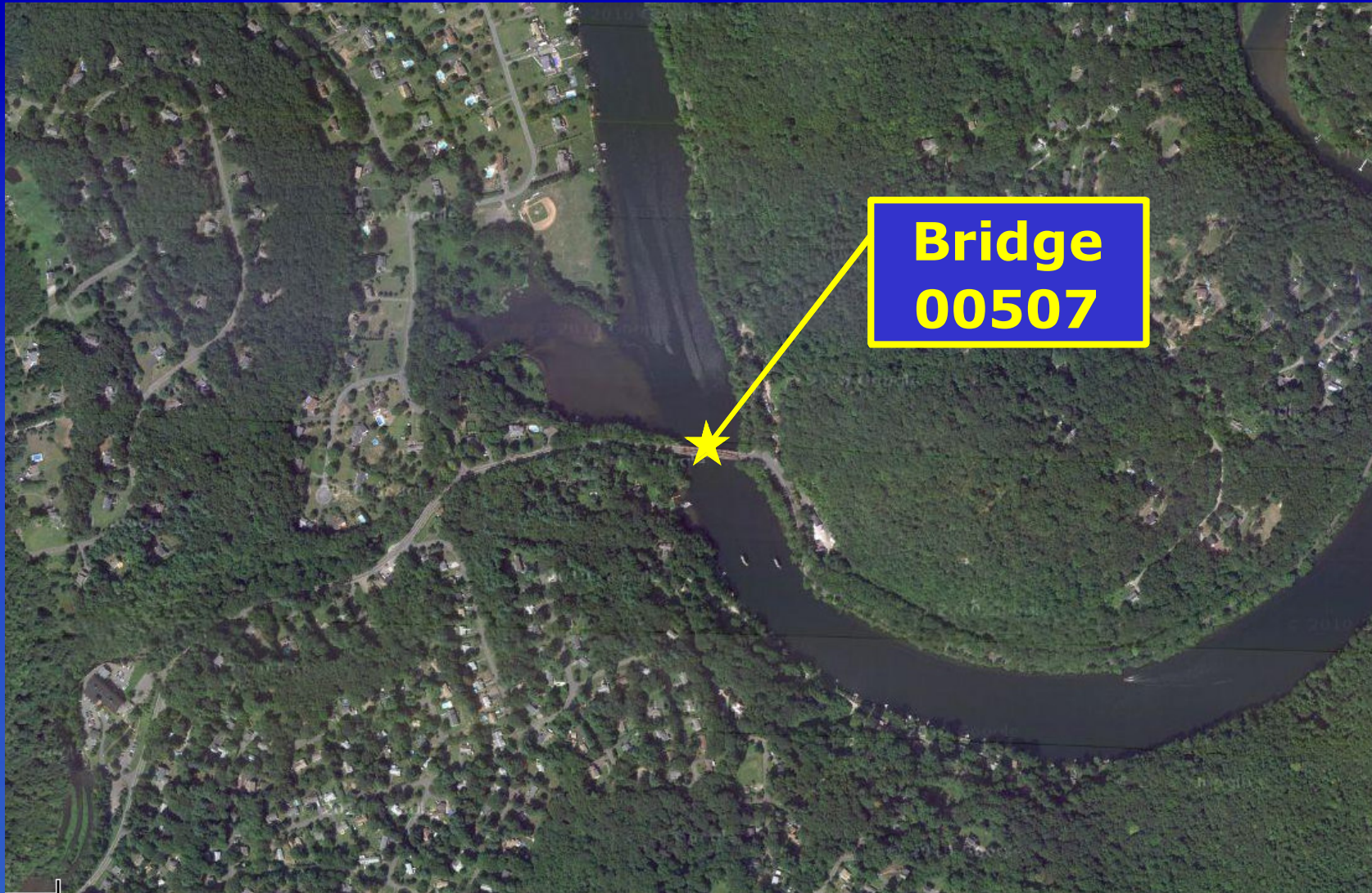


# Project Goals

- **Rehabilitation of Bridge No. 00507**
- **Minimize disturbance and improve safety for the traveling public**
- **Complete construction in a timely manner**
- **Effectively use funds**
- **Consider historic nature of existing bridge**







# Aerial View of Bridge No. 00507

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# Aerial View of Bridge No. 00507

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## Looking West thru Bridge

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## View from West Approach

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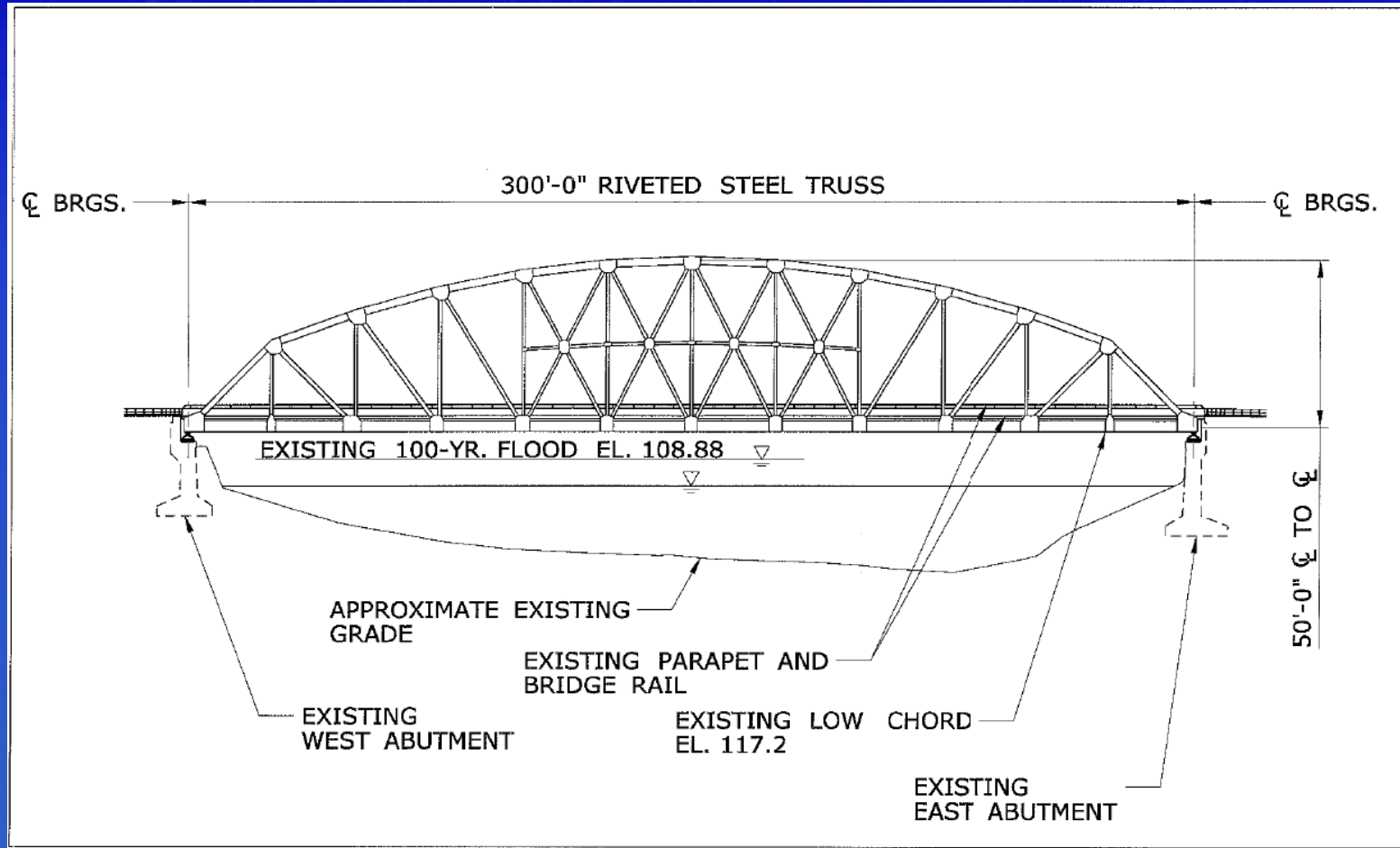


# Existing Bridge Description

- **Single span structure built c. 1936**
- **Rehabilitated in 1986**
- **Structure Dimensions**
  - Total Length = 300 ft single span
  - Overall Width = 36 ft
  - Roadway width = 29 ft
- **Located immediately west of horizontal curve (R=200 ft)**
- **Located in slight crest vertical curve**
- **Carries one lane of traffic in each direction**
  - Estimated Average Daily Traffic (ADT) ~ 3,000 vehicles (2009)

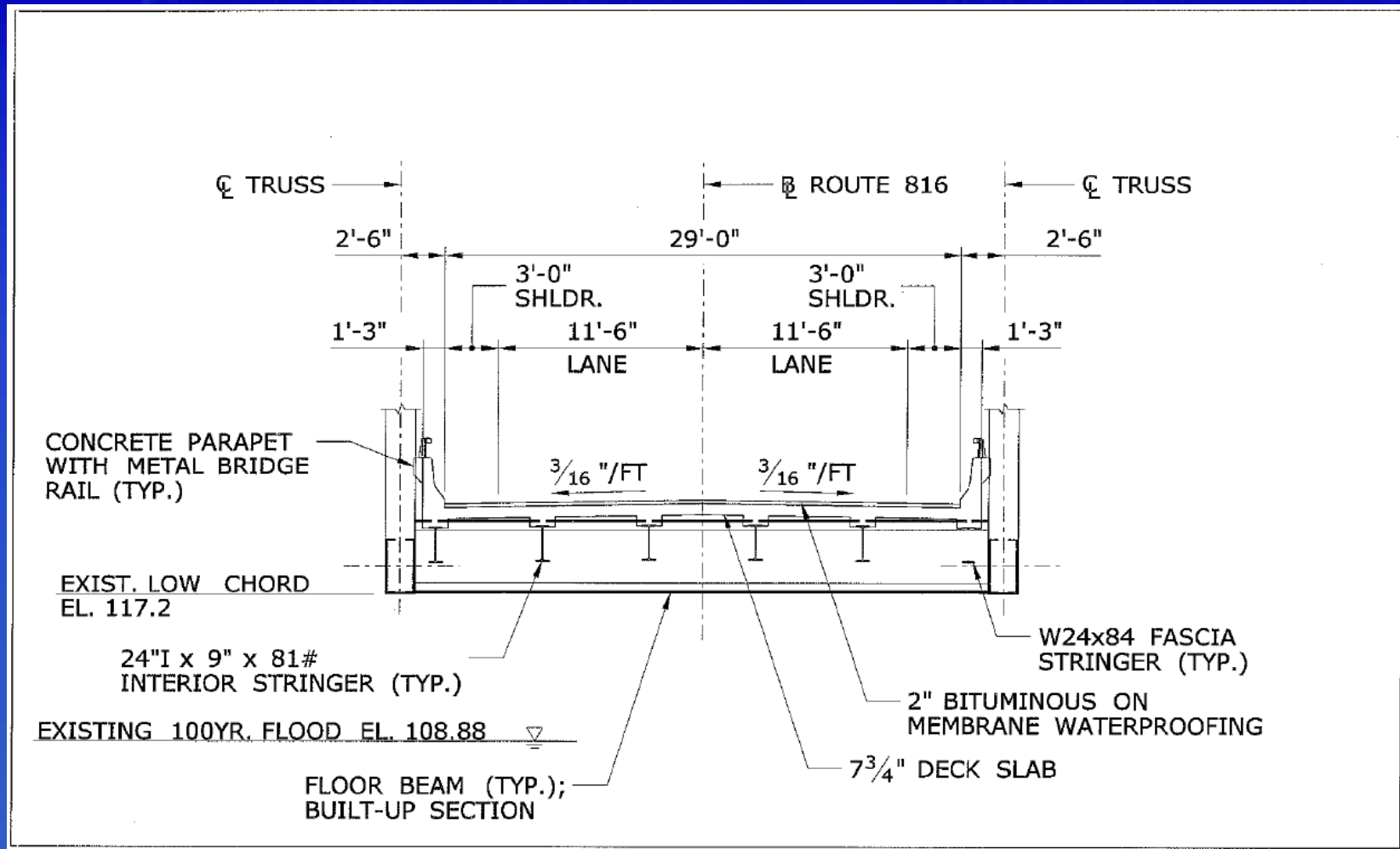


# Existing Bridge Description





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# Existing Bridge Description

- **Superstructure consists of:**
  - **Steel truss with concrete deck supported by floorbeam and stringer floor system**
- **Substructure consists of:**
  - **Concrete abutments**
- **Bridge is listed on CT Historic Bridge Inventory, and is eligible for National Register of Historic Places**





# Existing Bridge Description



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# Existing Bridge Condition





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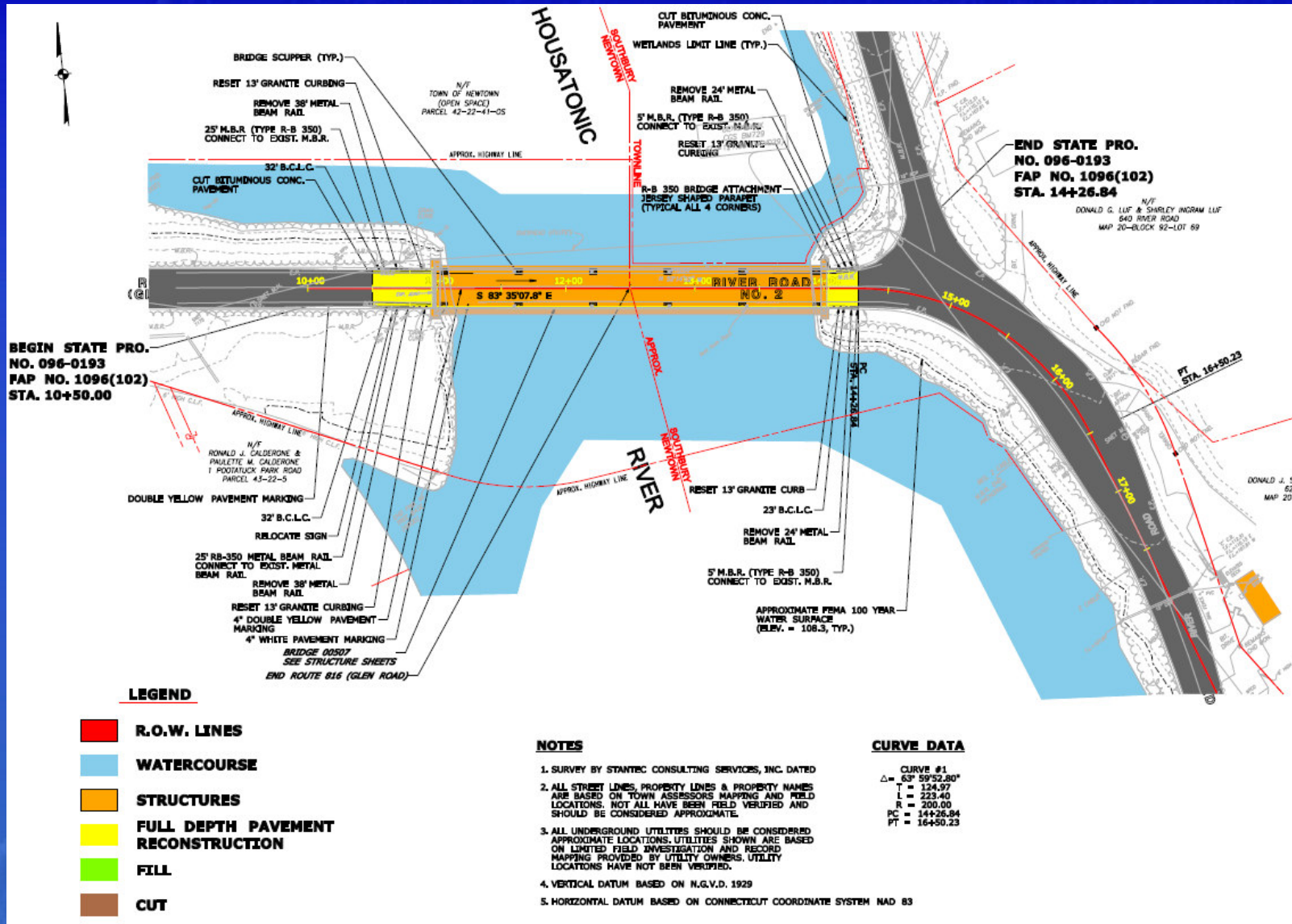
# Proposed Construction

- **Strengthen truss members**
- **Repair/replace deficient floor members**
- **Rehabilitate concrete deck and overlay**
- **Blast clean and paint superstructure**





# Proposed Construction



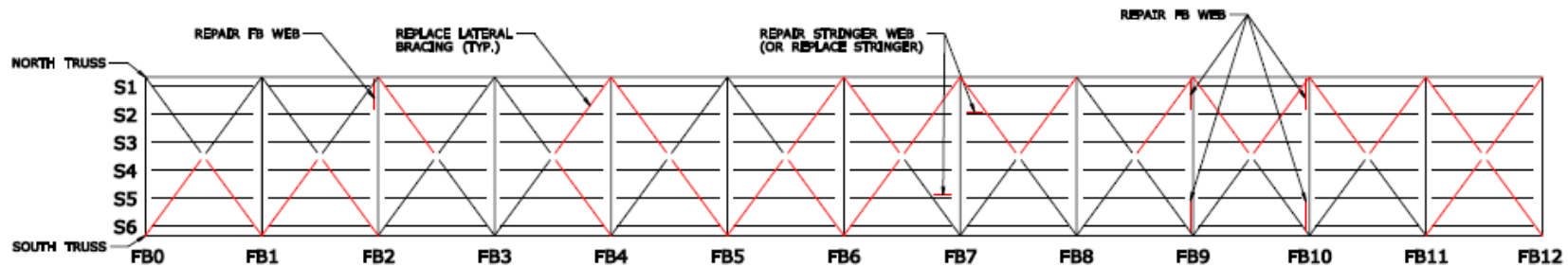
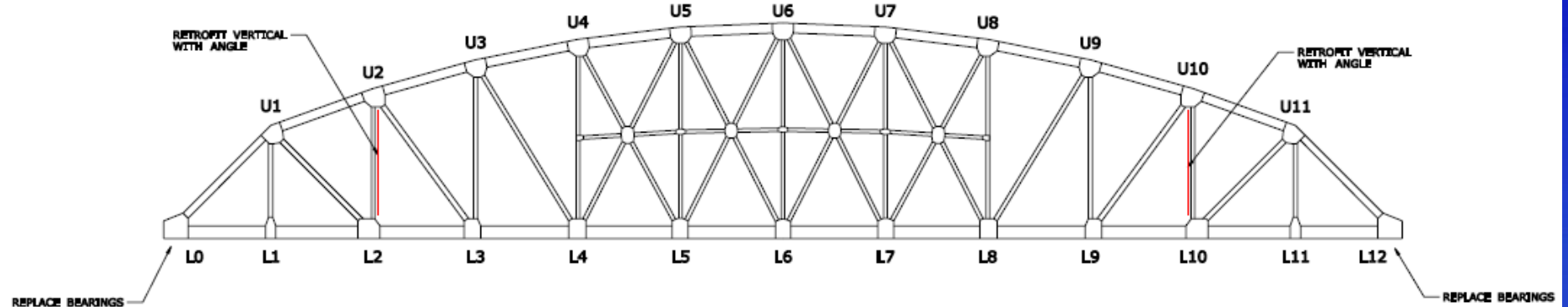
# Proposed Construction

- **Proposed structure will have high performance concrete overlay**
- **Full depth asphaltic pavement reconstruction will occur to the approach roadway approximately 30 feet to the east and approximately 45 ft to the west of the bridge**
- **Bridge railing and parapets will match existing**
- **Existing roadway geometry will match existing**





# Proposed Construction



**FRAMING PLAN**

## Major Steel Repairs

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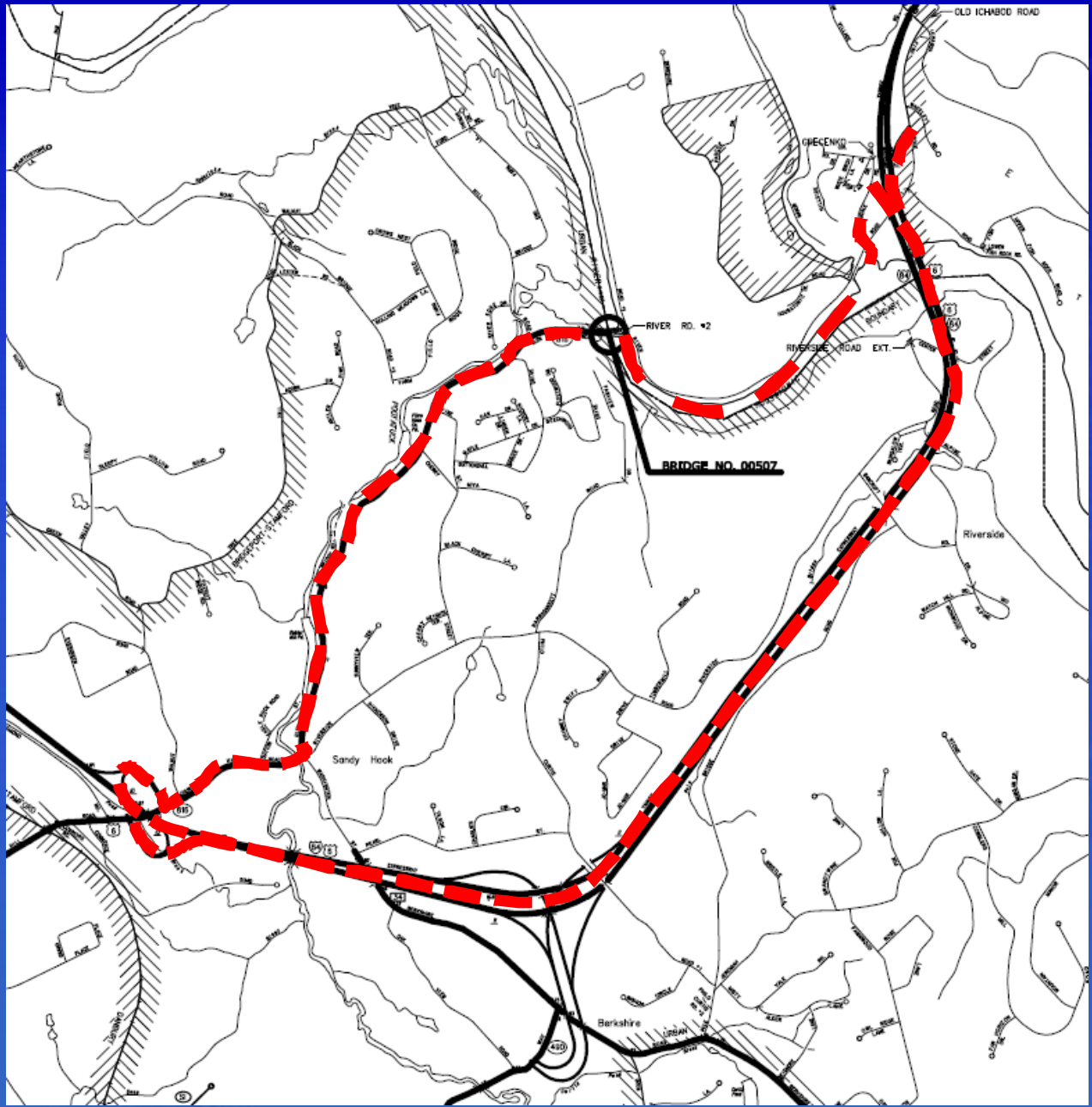


# Construction Staging

- **Bridge to be closed to traffic during structure repairs**
  - Reasonable detour route is available
  - Eliminating live loads on bridge allows for easier repair methods by contractor
  - Single stage construction will minimize the construction duration
  - Reduced construction duration will result in cost savings to the State
- **Alternating one-way traffic on bridge during blast cleaning and painting**







# Detour

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# **Environmental Considerations**

- **No direct impacts to watercourse or wetlands**
- **No threatened or endangered species identified**
- **No known contaminated and/or hazardous materials within project limits**
- **Painting operations to be fully contained to collect debris**
- **Best management practices will be utilized to handle sedimentation control during construction**





# Public Utilities

- **No subsurface utilities in the vicinity of the bridge**
- **Overhead utilities north of bridge:**
  - **Fiberoptics**
  - **Power Distribution**
- **Conduit bank attached to south face of bridge**
  - **SNET/CLP**
- **Utilities will be maintained in place or relocated as necessary during the proposed construction activities**



# Rights-of-Way

**No permanent impacts to private property are anticipated.**





## **Project Cost**

**The estimated construction cost for the entire project is approximately \$6,000,000 (2011).**

**This bridge replacement is anticipated to be undertaken using 80% Federal funds and 20% State funds.**



# **Project Schedule**

**The project is anticipated to be constructed starting in Spring 2014.**

**Project duration estimated to be two construction seasons:**

- One season for structure repairs**
- Portion of second season for painting**

**The schedule is preliminary and is predicated upon the availability of funding and obtaining all necessary permits.**





# Contact Information

- **CTDOT**

**Mr. David Cutler, PE**  
**2800 Berlin Turnpike, P.O. Box 317546**  
**Newington, CT 06131-7546**

- **Stantec Consulting Services Inc.**

**Mr. John F. Eberle, PE**  
**2321 Whitney Avenue**  
**Hamden, CT 06518**  
**203-281-1350**



# **THANK YOU...**

## **FOR YOUR TIME AND ATTENTION**

**Connecticut Department of Transportation  
and  
Stantec Consulting Services Inc.**

Connecticut Department of Transportation

