

# **Public Information Meeting**

**Project 102-348**

**Rehabilitation of Bridge No. 00059**

**I-95 “Yankee Doodle Bridge”**

**over**

**Norwalk River and Hendricks Ave.**

**Norwalk, Connecticut**





# **ConnDOT Role**

## **Bureau of Engineering and Construction**

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

**Contacts: Timothy Fields, PE  
(Principal Engineer)**

**David Cutler, PE  
(Project Manager)**

**Jose Catalan, PE  
(Project Engineer)**



# **STV Incorporated** **Consultant Engineers**

**ConnDOT has retained the firm of STV Incorporated (STV) to provide the design of this bridge project.**

**Contacts: Mr. Richard Ezyk, P.E.**  
**(Project Engineer)**

**Mr. James Sherwonit, P.E.**  
**(Project Manager)**



# Reasons for Project

**Structure recommended for superstructure and substructure rehabilitation under the List 23 Bridge Program.**

**Reasons include:**

- **Structurally Deficient Superstructure**
- **“Poor” Condition Rating**
- **Extend Service Life**

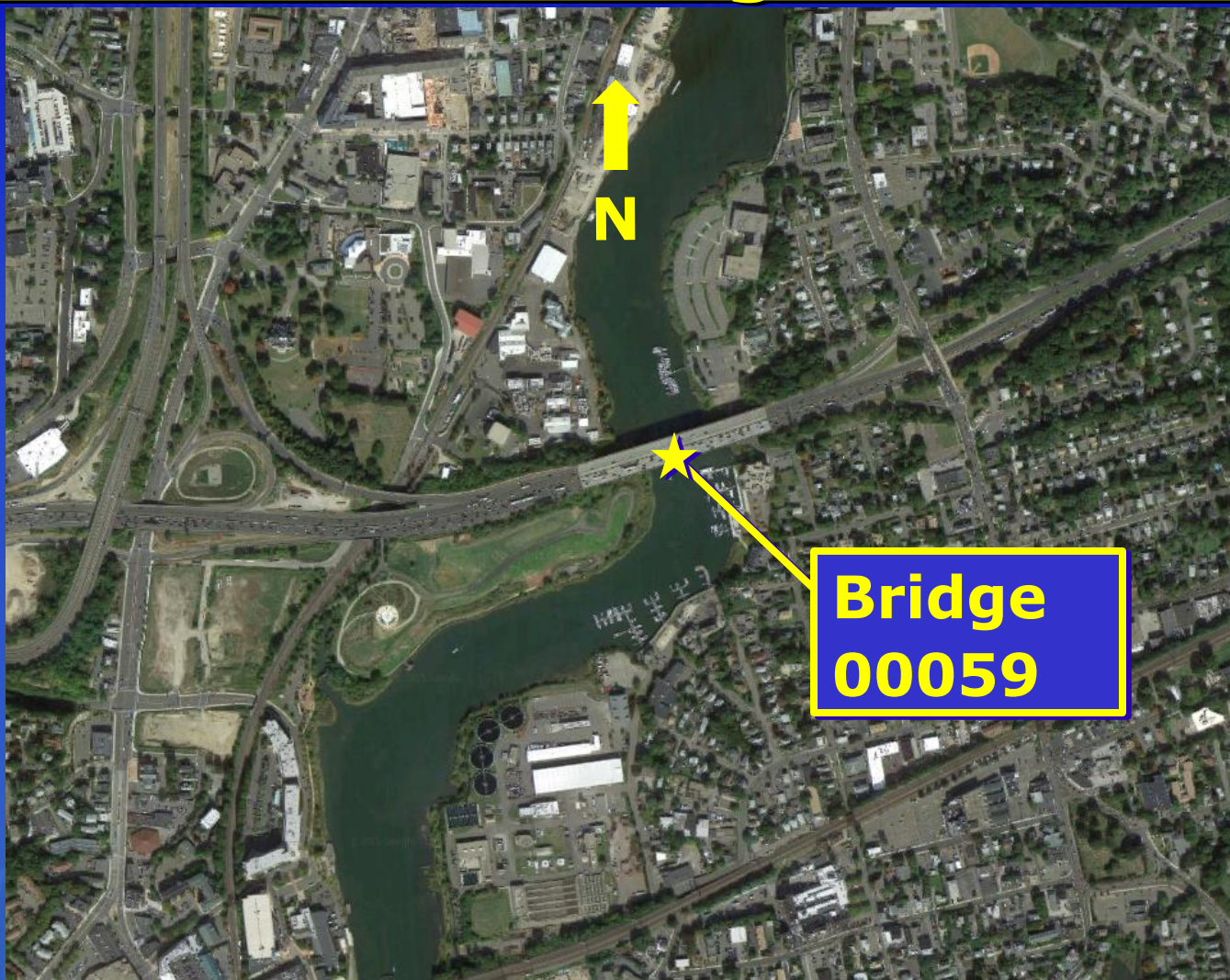


# **Project Goals**

- **Provide a safe structure for the traveling public**
- **Rehabilitation of the Yankee Doodle Bridge**
- **Minimize disturbance to traveling public**
- **Complete construction in a timely manner**
- **Effectively use funds**



# Aerial View of Bridge No. 00059





# Bridge Elevation

Connecticut Department of Transportation







# Hendricks Avenue

Connecticut Department of Transportation





# Typical Topside

Connecticut Department of Transportation





# Looking West over Bridge

Connecticut Department of Transportation





# Looking East over Bridge

Connecticut Department of Transportation



# Existing Bridge Description

- **Seven span structure built in 1958**
- **Structure Dimensions**
  - **Total Length = 911 ft, 7 spans**
  - **Overall Width = 121 ft 8 in**
  - **Roadway width = 108 ft**
- **Straight horizontal alignment**
- **520 ft long crest vertical curve over Norwalk River**
- **Carries four lanes of traffic in each direction**
  - **Estimated Average Daily Traffic (ADT) ~ 149,400 vehicles (2011)**
- **100 Ft. Wide Navigation Channel under bridge**

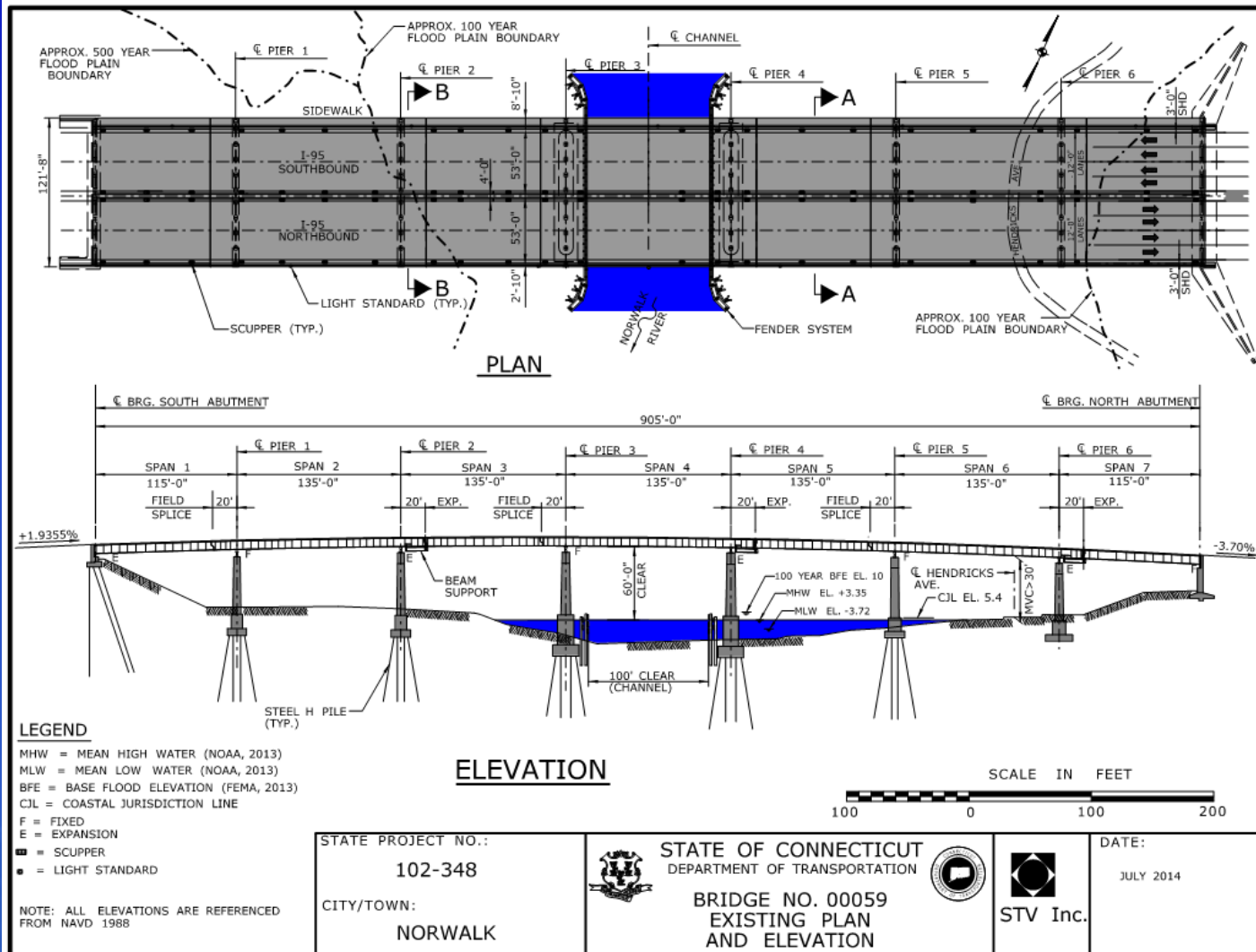


# Existing Bridge Description

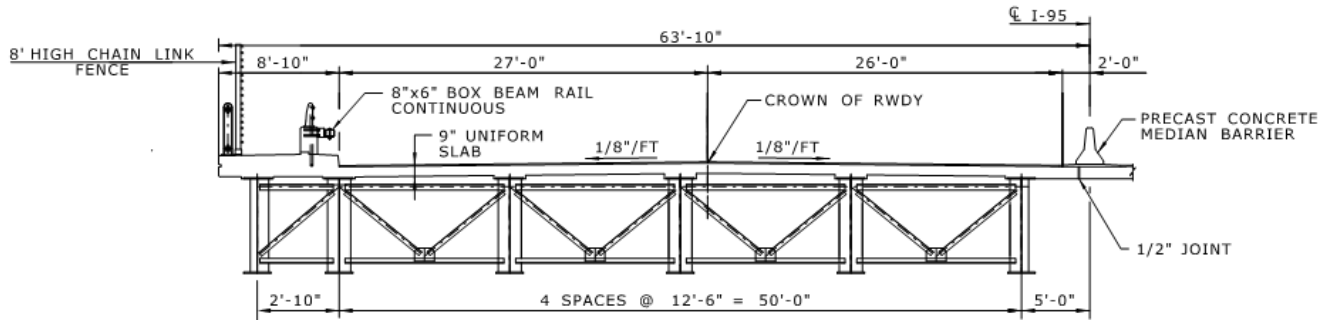
- **Superstructure consists of:**
  - Built-up welded steel plate girder superstructure
- **Substructure consists of:**
  - Cast-in-place concrete abutments and piers



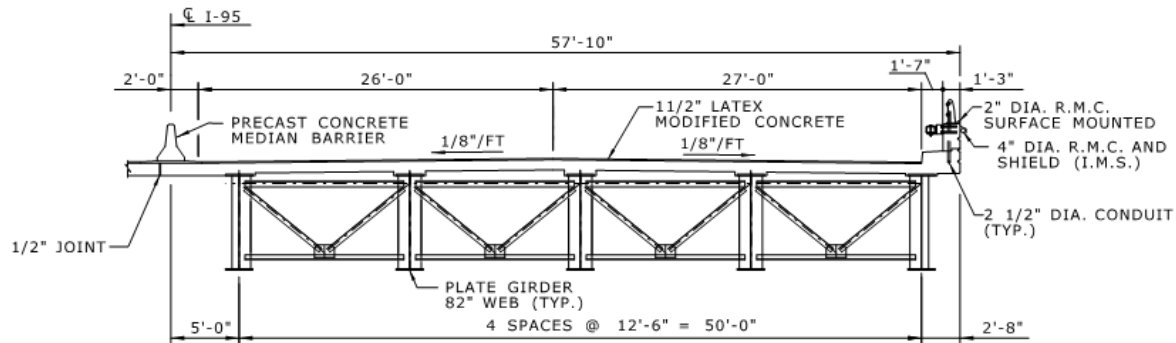
# Existing Bridge



# Existing Bridge



**SOUTHBOUND ROADWAY**



**NORTHBOUND ROADWAY**

SCALE IN FEET



STATE PROJECT NO.:  
102-348  
CITY/TOWN:  
NORWALK



STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BRIDGE NO. 00059  
EXISTING SECTION A-A



DATE:  
JULY 2014





# **Proposed Rehabilitation**

- **Repair structural steel deficiencies**
- **Clean and paint structural steel**
- **Replace channel fender system**
- **Replace navigation lighting**
- **Repair box beam approach guide rail**
- **Repair deck expansion joints**
- **Repair underside of deck concrete**
- **Repair substructure concrete**
- **Stabilize West Abutment embankment**



# **Proposed Rehabilitation**

- **Upgrade parapet and median barrier**
  - **Maintain existing sidewalk**
- **Diamond grind concrete wearing surface**
- **Clean bridge deck scuppers and replace defective connecting drains**



# Structural Steel Deficiencies



04/13/2014



# Poor Paint Condition



05/17/2014



# Deteriorated Fender System

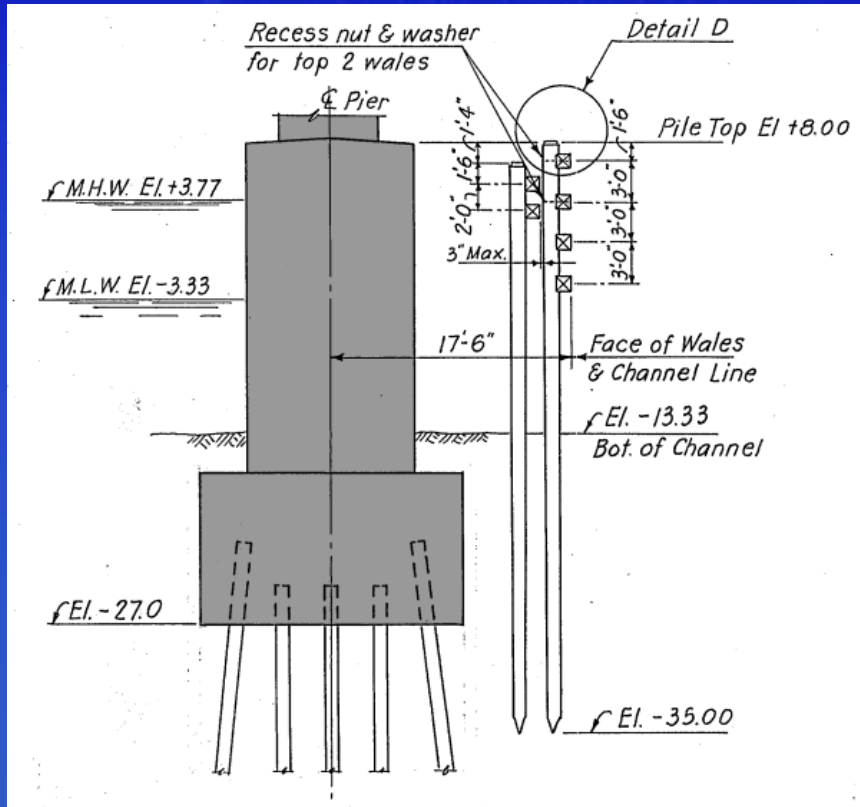


04/04/2014

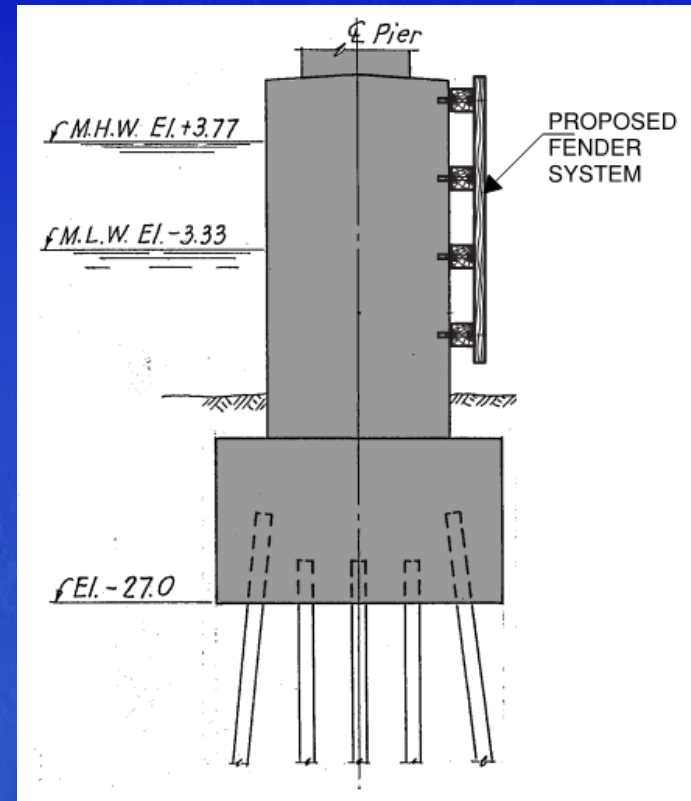
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# Fender System Replacement



Existing



Proposed

# Non-functioning Navigation Lights



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# Worn Guide Rails





# Expansion Joint Defects



# Underside of Deck Deterioration



05/18/2014



# Substructure Concrete Deterioration



# Embankment Erosion



04/12/2014



# Damaged Parapet



05/17/2014

# Damaged Median Barrier



05/11/2014



# Excessive Road Noise



# Clogged Scupper



05/17/2014





# Leaking Drainage Pipes



05/04/2014

Connecticut Department of Transportation



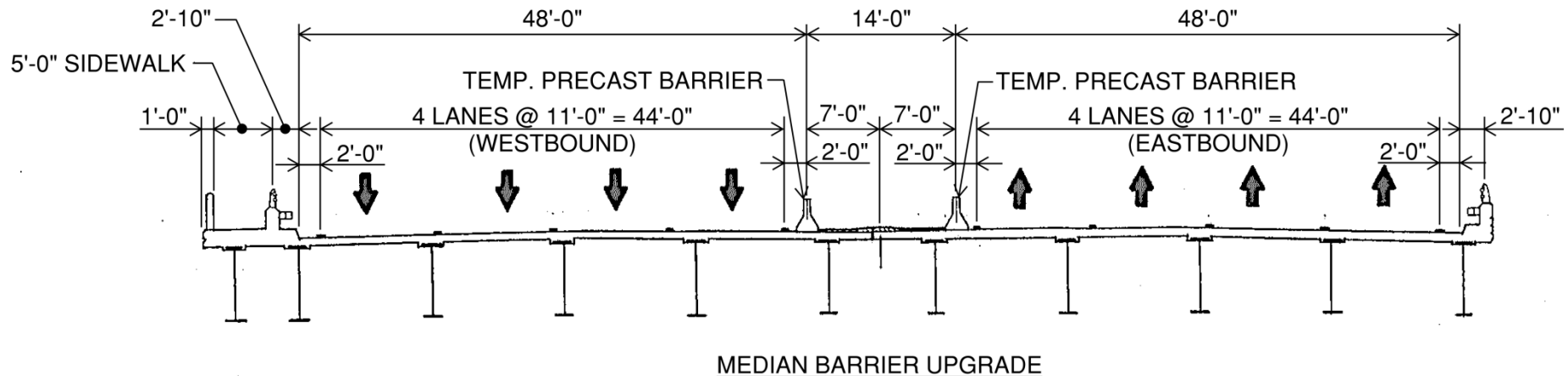
# **Construction Impacts**

- **Limited top of deck work**
  - **Off-peak lane and shoulder closure**
  - **Temporary lane width reductions**
- **Fender and navigation light replacement and all work over the Norwalk River navigable channel**
  - **Requires coordination with U.S. Coast Guard**
  - **No channel closures anticipated**
- **All other work can occur without interrupting I-95 and Norwalk River Traffic**
- **Work will not impact Hendricks Avenue**
- **Structure will be encapsulated during painting**
  - **No danger of debris falling**



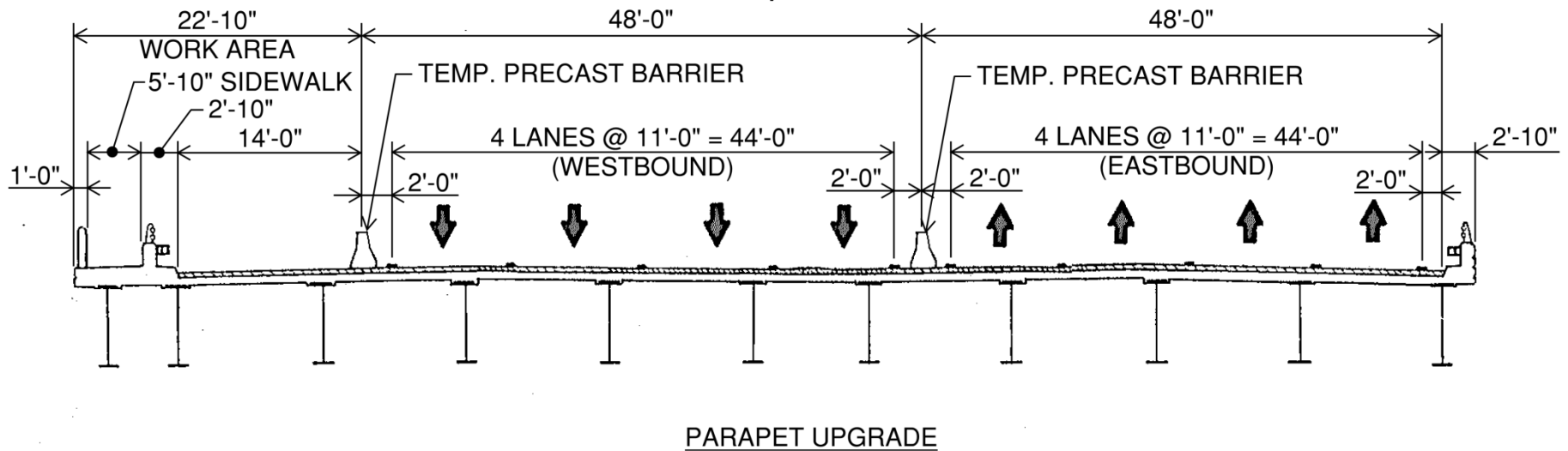
# Maintenance and Protection of Traffic

- **Median Barrier Upgrade**



# Maintenance and Protection of Traffic

- Parapet Upgrade



# **Environmental Considerations**

- **Partially located within a FEMA Special Flood Hazard Zone AE**
- **Located within a Natural Diversity Database area**
- **During field painting of structure surface preparation debris will be 100% contained, collected, removed and properly disposed.**
- **Best Management Practices will be utilized to handle sedimentation control during construction**



# Public Utilities

**No known public utilities within project limits**



# Rights-of-Way

**No impacts to private property  
anticipated for the proposed work.**



# **Project Cost**

**The estimated construction cost for the entire project is approximately \$25,000,000.**

**This bridge rehabilitation is anticipated to be undertaken using 90% Federal funds and 10% State funds.**





# **Project Schedule**

**The project is anticipated to be constructed starting in Spring of 2017.**

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

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



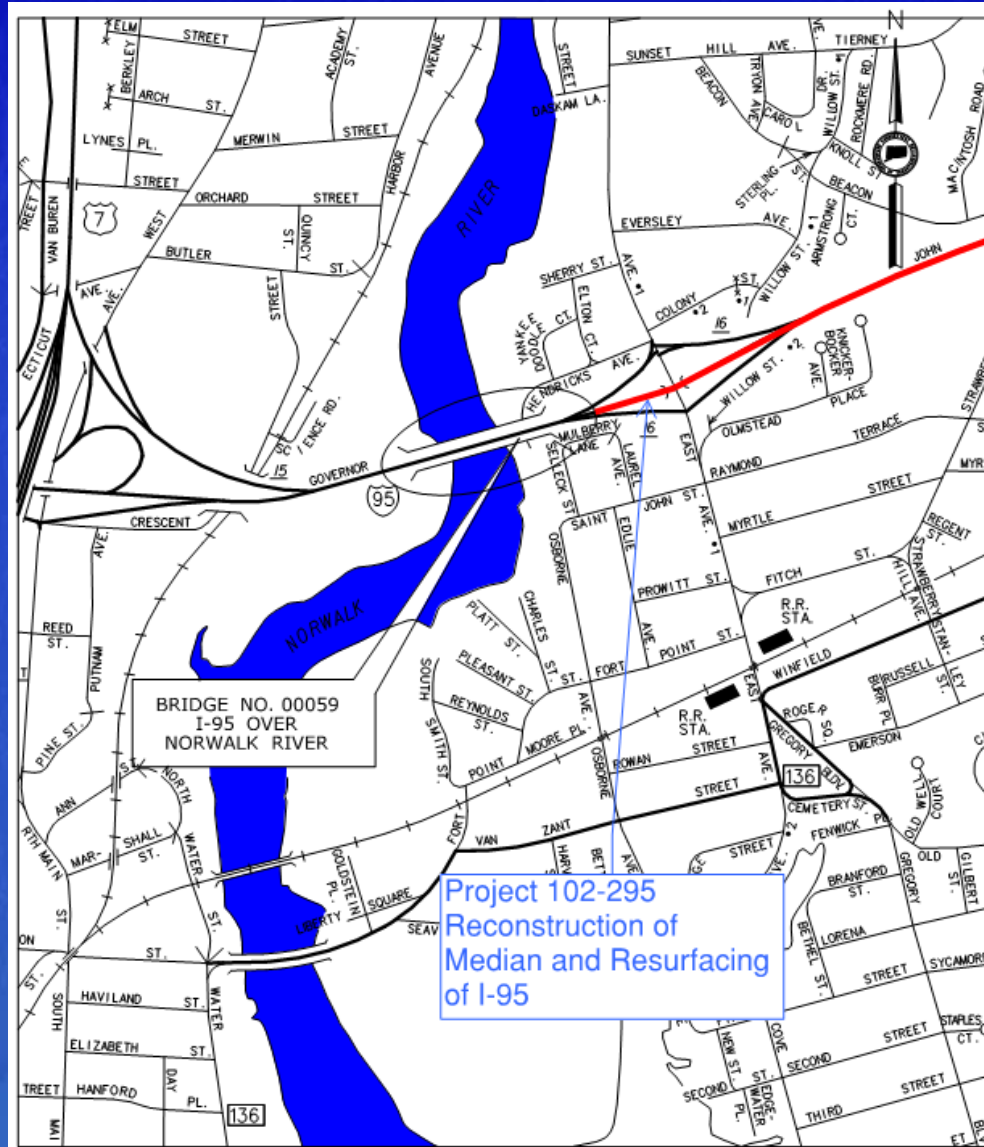
# **Coordination with Other Projects**

## **Other Planned Department Projects in Norwalk**

- **102-295 Reconstruction of Median and Resurfacing of I-95 east of the Yankee Doodle Bridge**
- **Project 102-348 may be combined with 102-295 in a single construction contract**



# Other Project Locations



# Contact Information

- **ConnDOT**

**Mr. David Cutler, PE**

**2800 Berlin Turnpike, P.O. Box 317546**

**Newington, Connecticut 06131-7546**

**860-594-3210**

- **STV Incorporated**

**Mr. Richard Ezyk, PE**

**185 Plains Road Suite 208E**

**Milford, CT 06461**

**203-375-0521**



# **THANK YOU...**

## **FOR YOUR TIME AND ATTENTION**

**Connecticut Department of Transportation  
and  
STV Incorporated**

Connecticut Department of Transportation

