

# Public Information Presentation

**Hartford – March/April 2019**

**Interstate 84 Transition Ramp 825 over  
U.S. Route 44EB & Columbus Boulevard**

**Rehabilitation of Bridge No. 01686B  
State Project No. 063-654**



**Bridge No. 01686B**



# CTDOT & Consultant Engineers

## **CTDOT**

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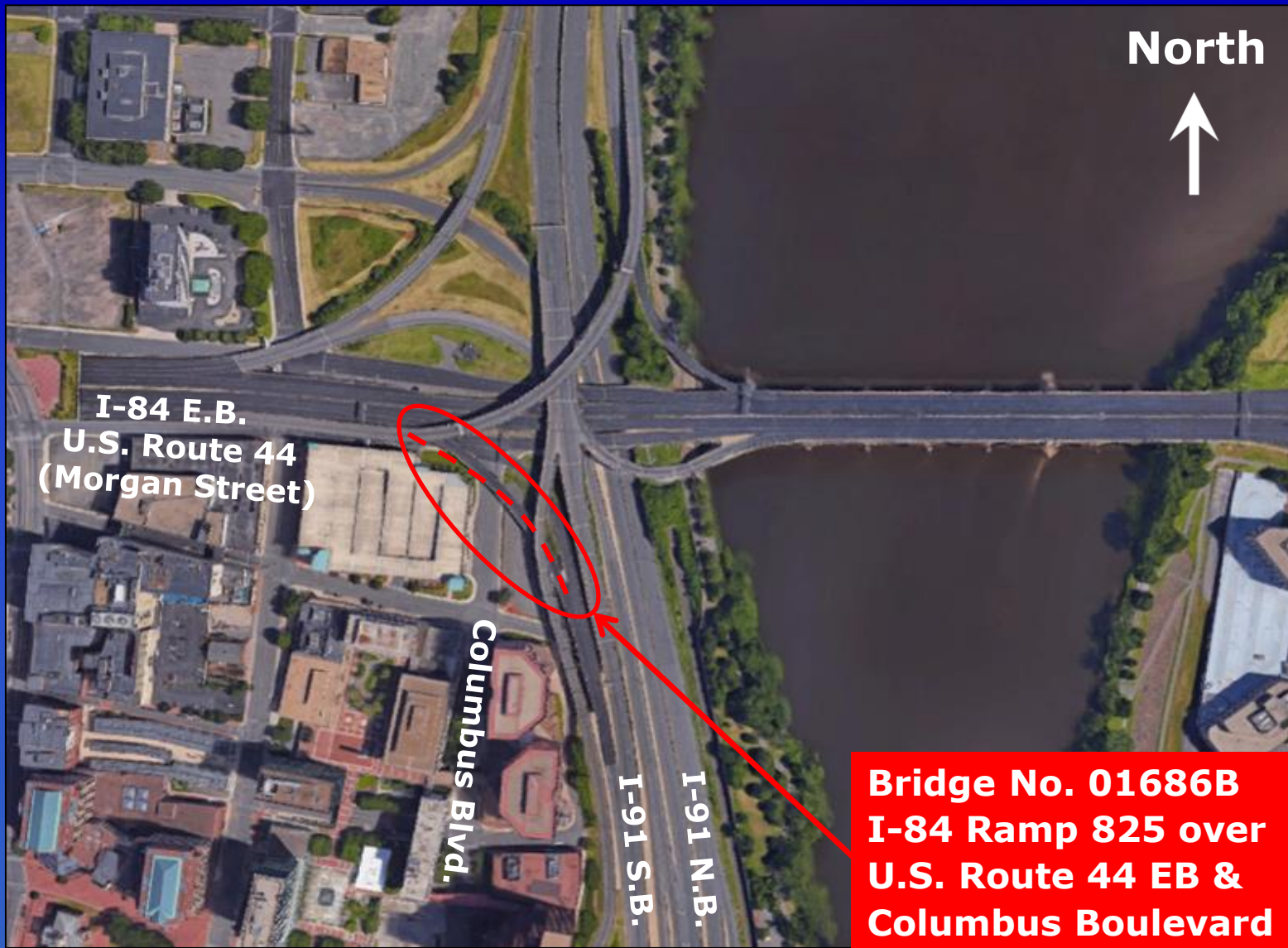
## **Parsons Transportation Group**

*Design Consultant*

*State Project No. 063-654*

**Gary Hall, P.E.**





North  
↑

I-84 E.B.  
U.S. Route 44  
(Morgan Street)

Columbus Blvd.

I-91 S.B.  
I-91 N.B.

**Bridge No. 01686B  
I-84 Ramp 825 over  
U.S. Route 44 EB &  
Columbus Boulevard**

**Aerial View of Bridge No. 01686B**

Connecticut Department of Transportation



# Existing Bridge Description

*Bridge No. 01686B*

## Existing Bridge

- **Eight-span steel multi-girder superstructure with a reinforced concrete deck and a bituminous concrete wearing surface.**
- **Supported by eight reinforced concrete piers of various types.**

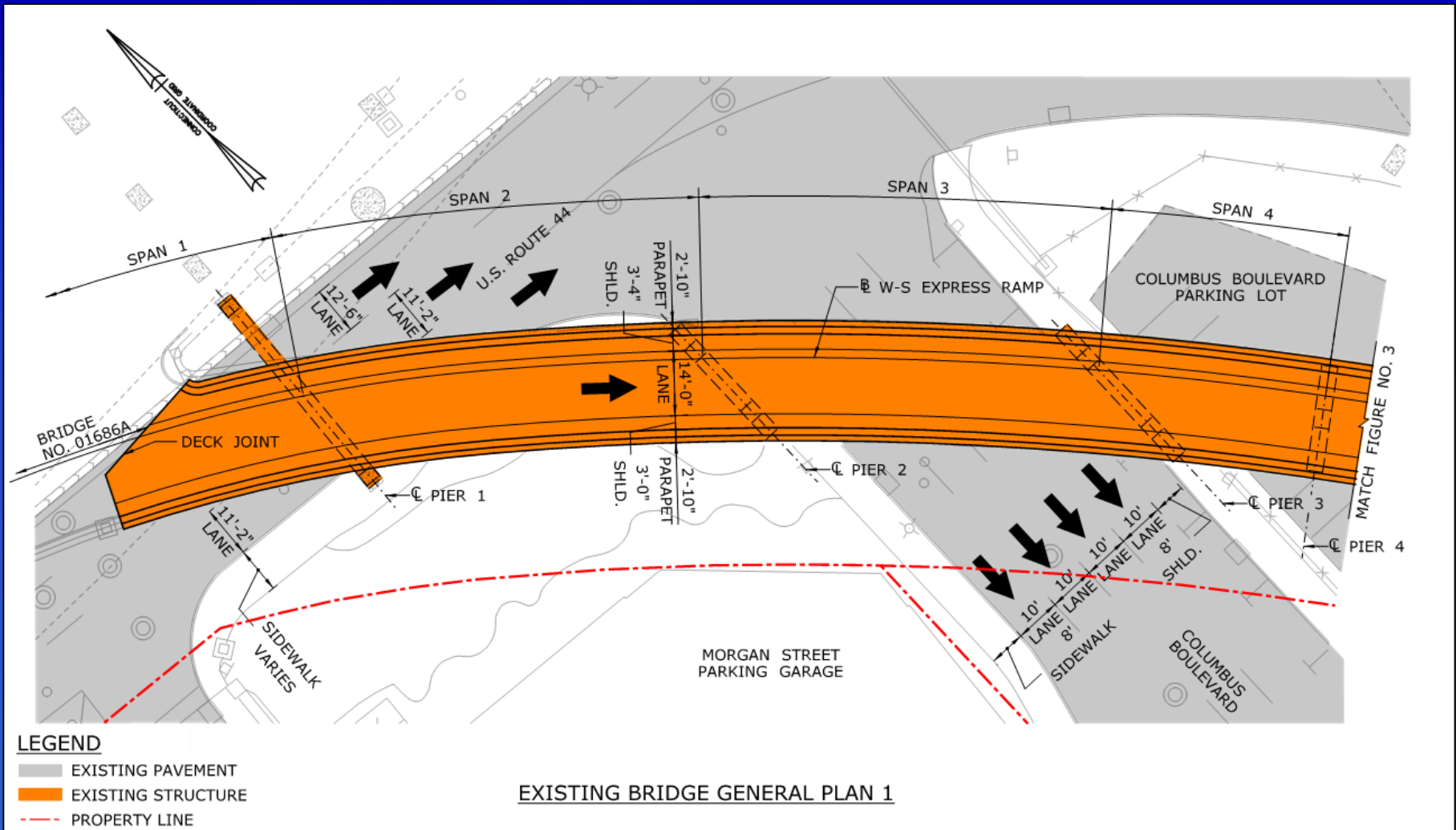


# **Existing Bridge Description**

## *Bridge No. 01686B*

- **Bridge No. 01686B was built in 1961.**
- **Bridge supports the I-84 eastbound transition ramp to I-91 southbound (TR 825) over U.S. Route 44 eastbound (Morgan Street south) and Columbus Boulevard.**
- **Existing bridge is approximately 524 feet long with a curb-to-curb width of 20 feet.**
- **TR 825 Ramp is a single lane, urban, interstate highway connector with a posted speed limit of 25 mph.**
- **Estimated Average Daily Traffic (ADT) on I-84 TR 825 is approximately 10,800 vehicles (2013 Traffic Log).**

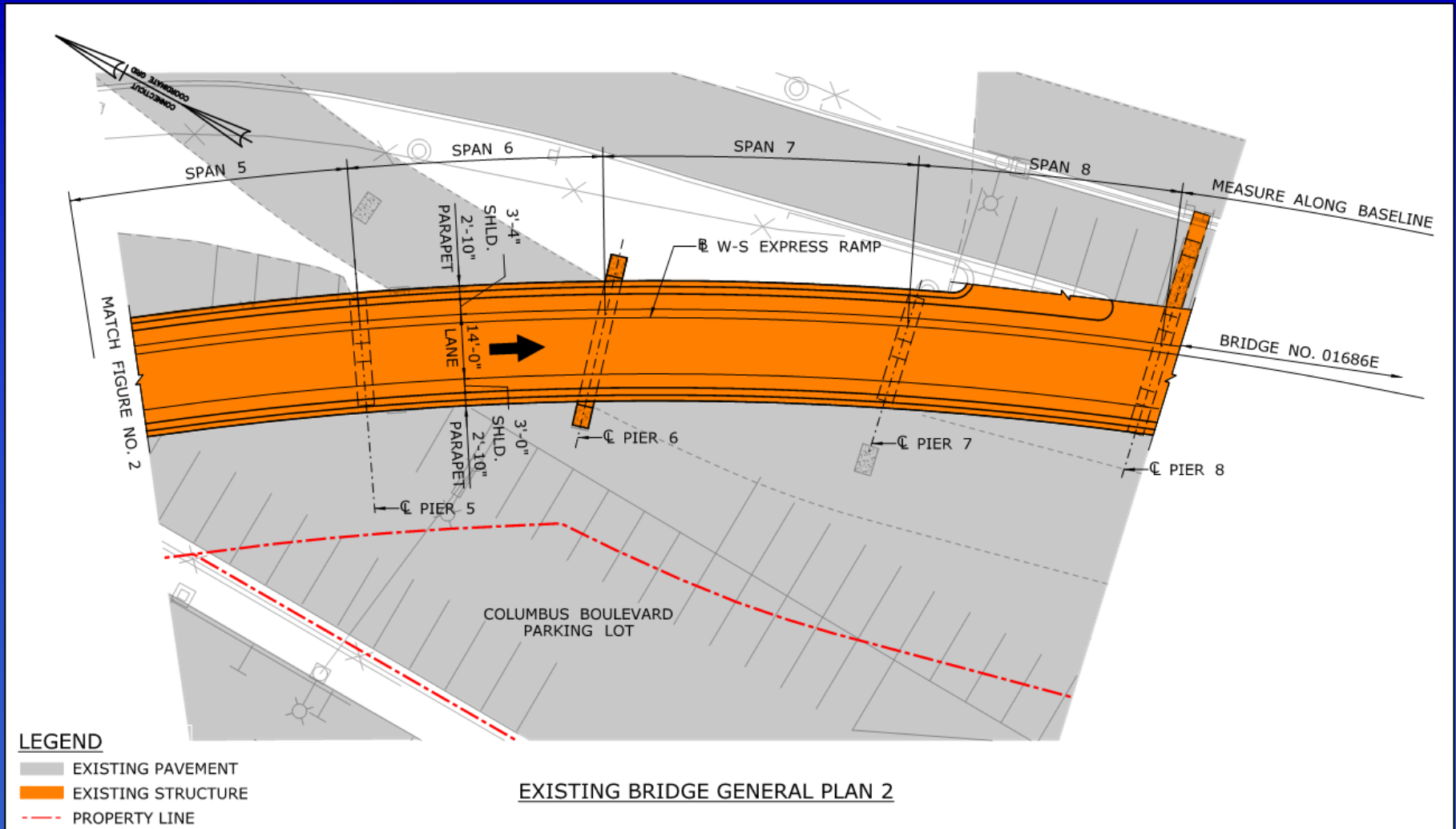




# Existing Bridge General Plan 1 *Bridge No. 01686B*

Connecticut Department of Transportation

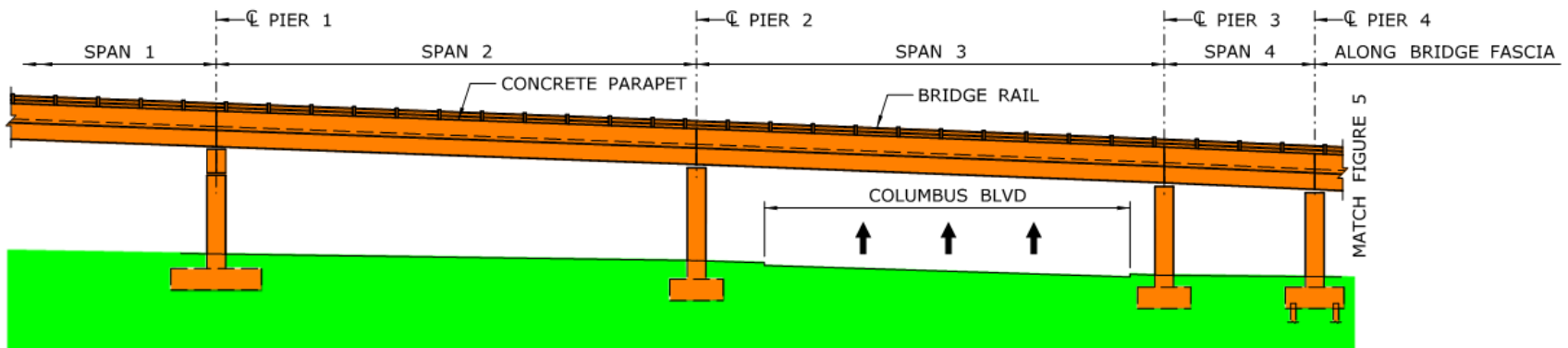




# Existing Bridge General Plan 2 *Bridge No. 01686B*

Connecticut Department of Transportation





**LEGEND**

- EXISTING STRUCTURE
- EXISTING GROUND BELOW GRADE

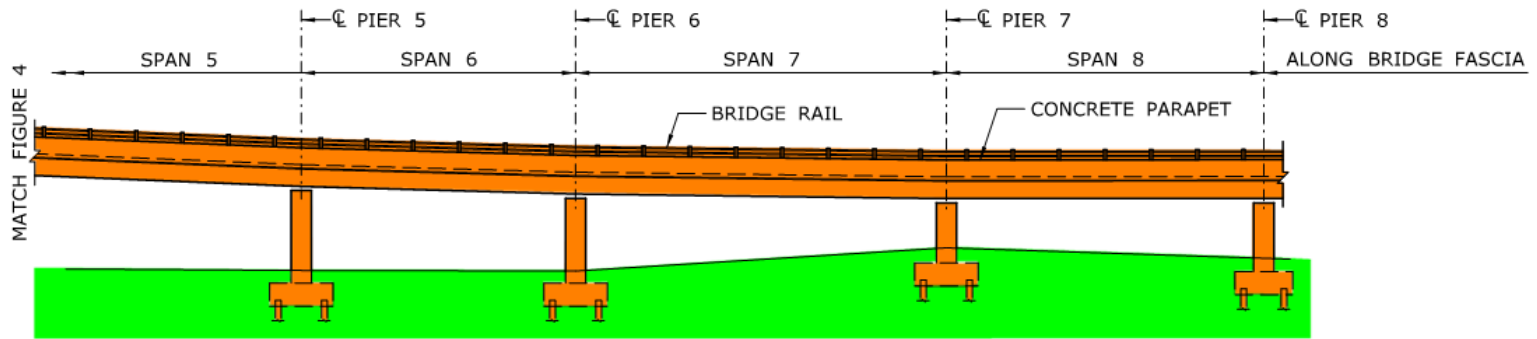
EXISTING BRIDGE ELEVATION 1

# Existing Bridge Elevation 1 *Bridge No. 01686B*

Connecticut Department of Transportation







**LEGEND**

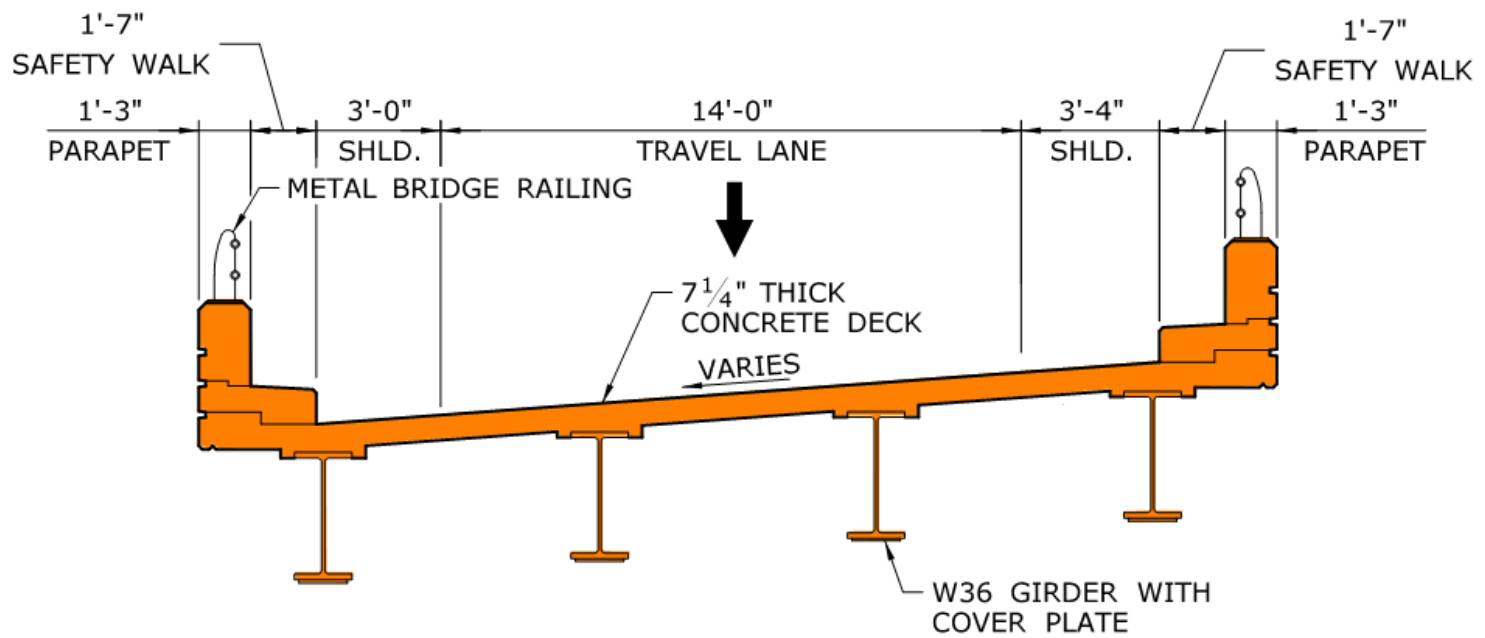
- EXISTING STRUCTURE
- EXISTING GROUND BELOW GRADE

EXISTING BRIDGE ELEVATION 2

# Existing Bridge Elevation 2 *Bridge No. 01686B*

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**LEGEND**

 EXISTING STRUCTURE

**EXISTING BRIDGE SECTION**

**Existing Bridge Section**  
***Bridge No. 01686B***

Connecticut Department of Transportation





**BRIDGE NO. 01686B**

**SPAN 1**

## North Elevation (Span 1)

*Bridge No. 01686B*

Connecticut Department of Transportation





**BRIDGE NO. 01686B**

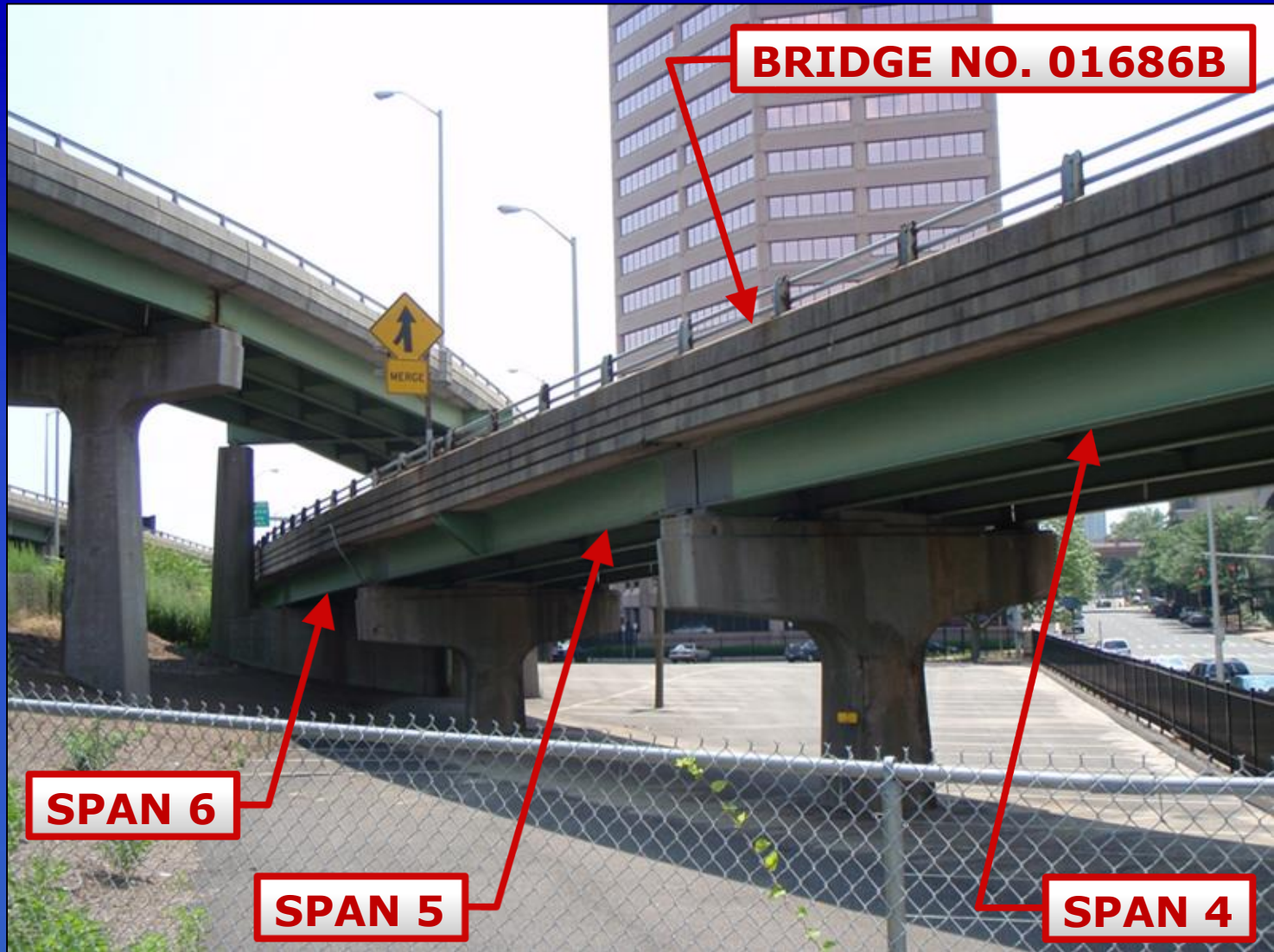
**SPAN 3**

**SPAN 2**

**North Elevation (Spans 2 - 3)**  
***Bridge No. 01686B***

Connecticut Department of Transportation





**BRIDGE NO. 01686B**

**SPAN 6**

**SPAN 5**

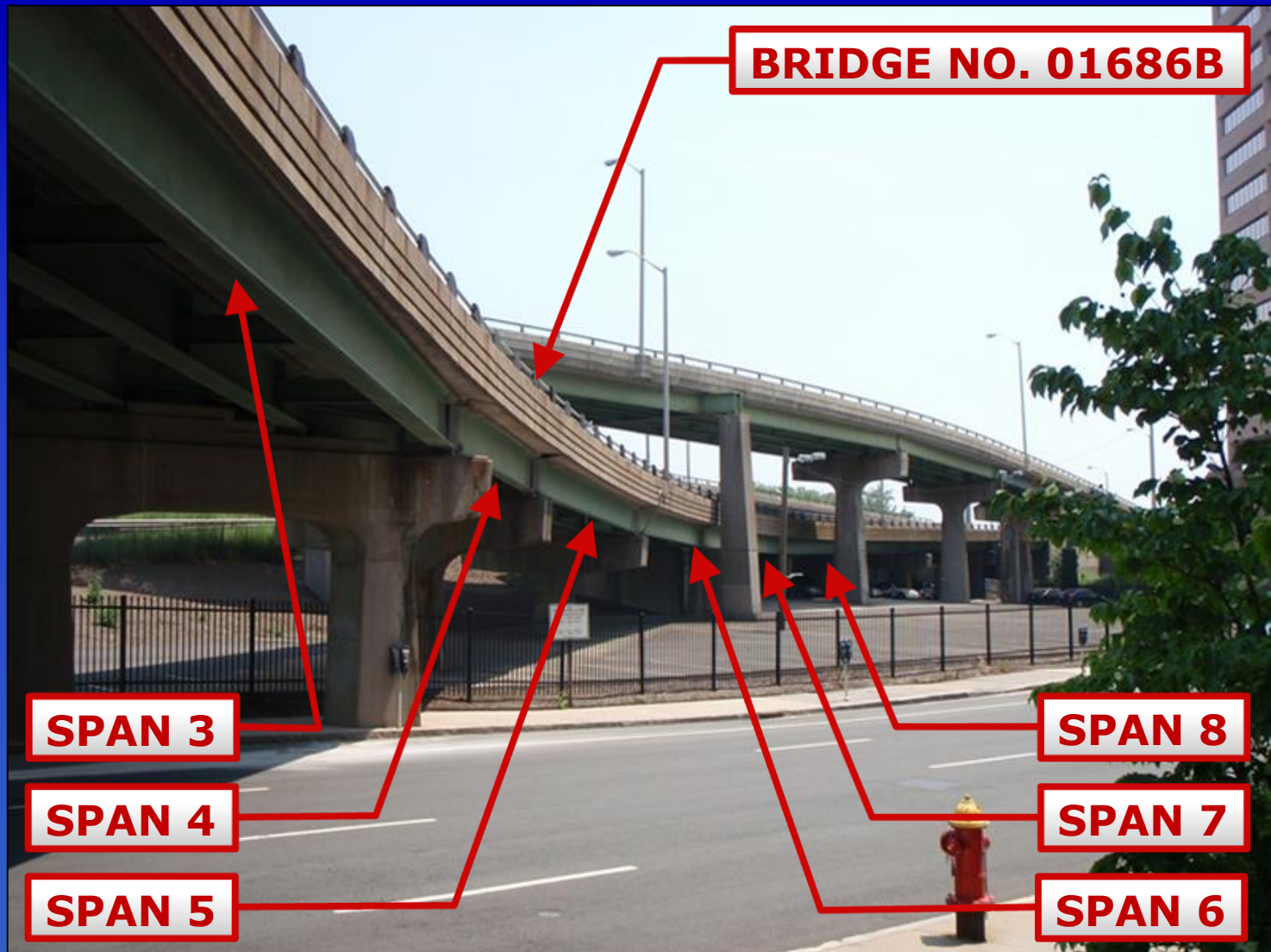
**SPAN 4**

**North Elevation (Spans 4 - 6)**

***Bridge No. 01686B***

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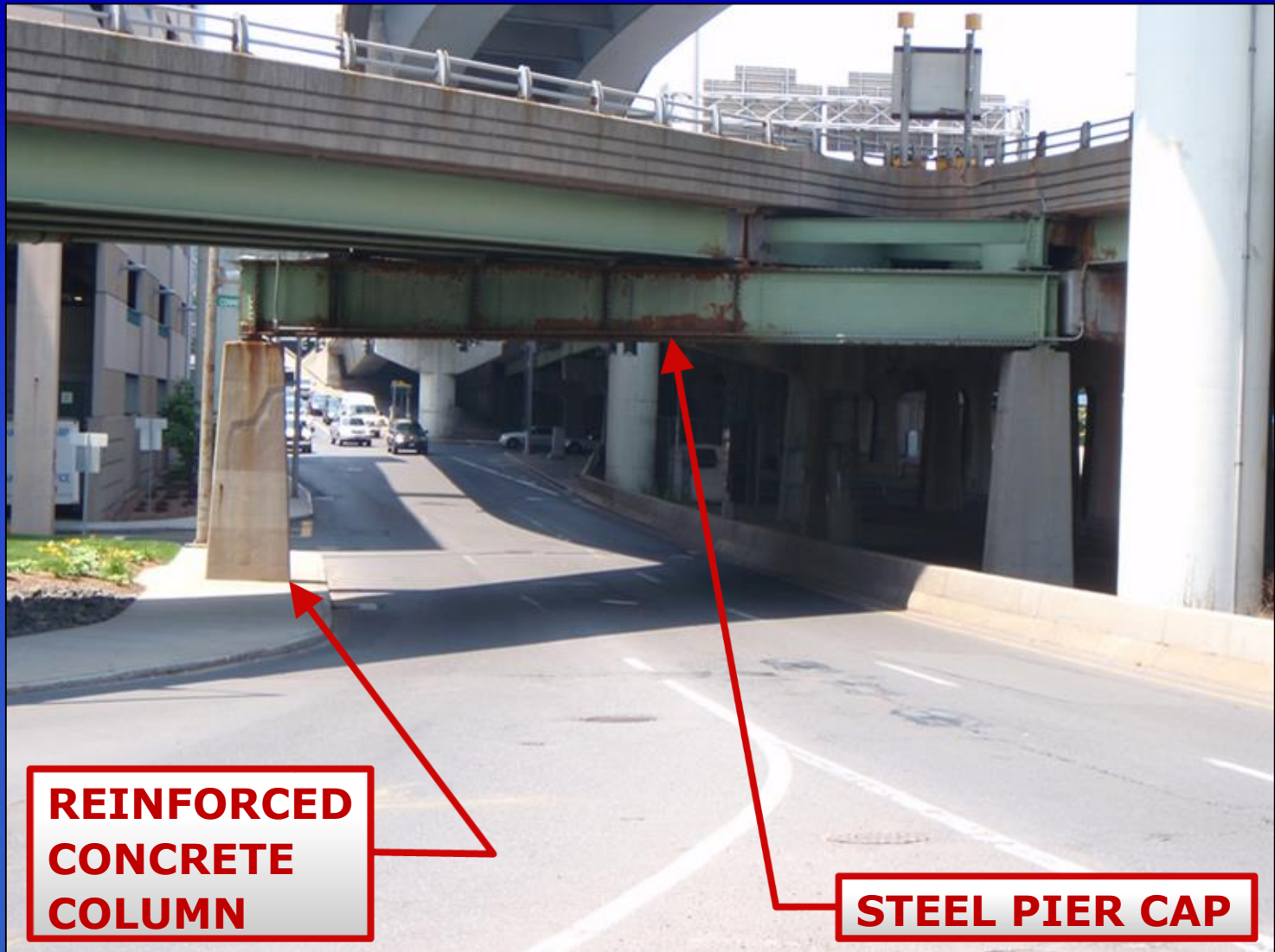


**South Elevation (Spans 3 - 8)**

*Bridge No. 01686B*

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**REINFORCED  
CONCRETE  
COLUMN**

**STEEL PIER CAP**

**Pier 1 (East Elevation)**  
***Bridge No. 01686B***

Connecticut Department of Transportation





**REINFORCED  
CONCRETE  
PIER CAP**

**Pier 2 (West Elevation)**  
***Bridge No. 01686B***

Connecticut Department of Transportation







## **Pier 3 (West Elevation)**

***Bridge No. 01686B***

Connecticut Department of Transportation





## **Pier 4 (East Elevation)**

***Bridge No. 01686B***

Connecticut Department of Transportation





## **Pier 5 (West Elevation)**

***Bridge No. 01686B***

Connecticut Department of Transportation





## **Pier 6 (West Elevation)**

*Bridge No. 01686B*

Connecticut Department of Transportation





## Pier 7 (West Elevation)

*Bridge No. 01686B*

Connecticut Department of Transportation



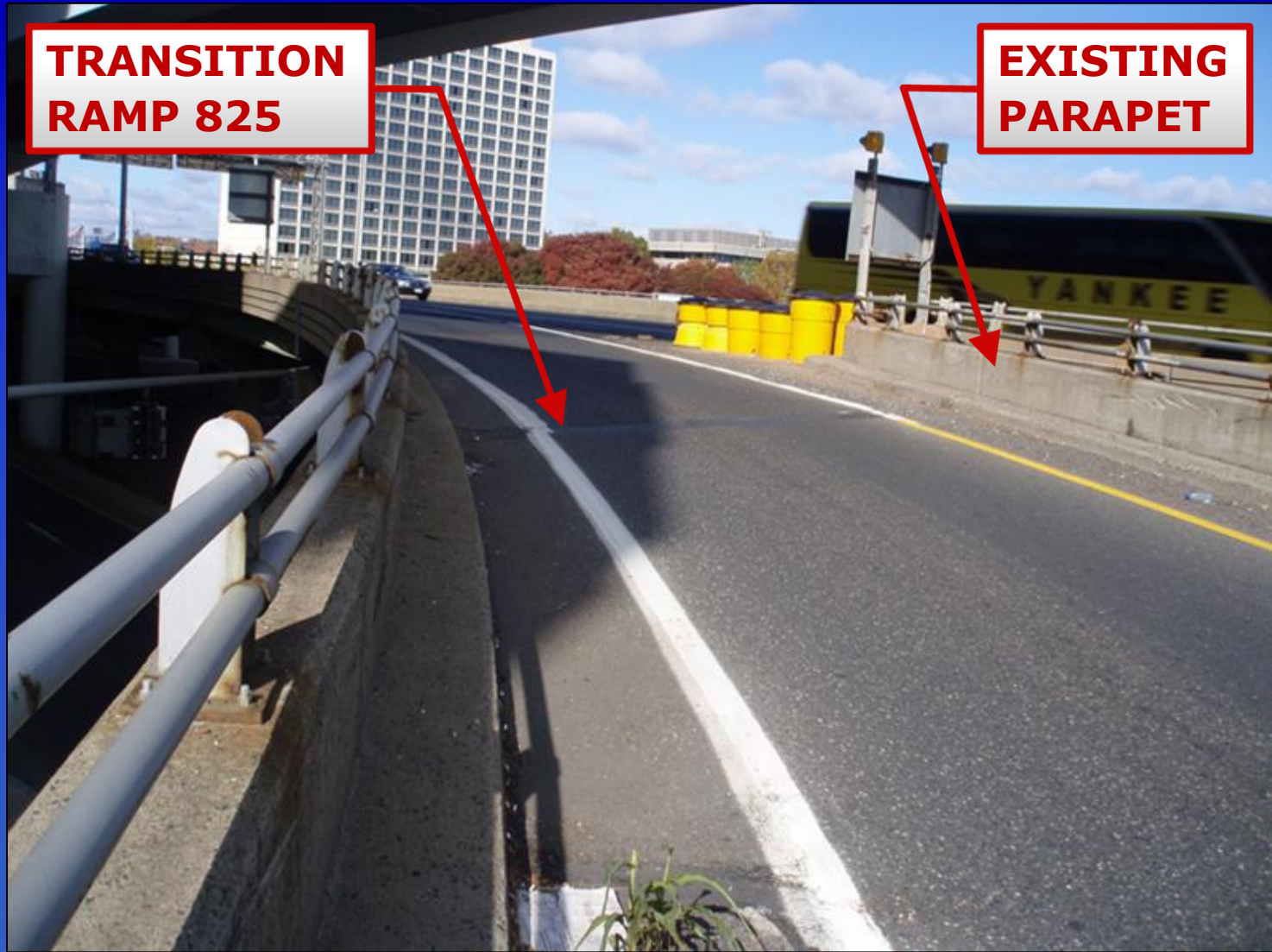


## **Pier 8 (East Elevation)**

***Bridge No. 01686B***

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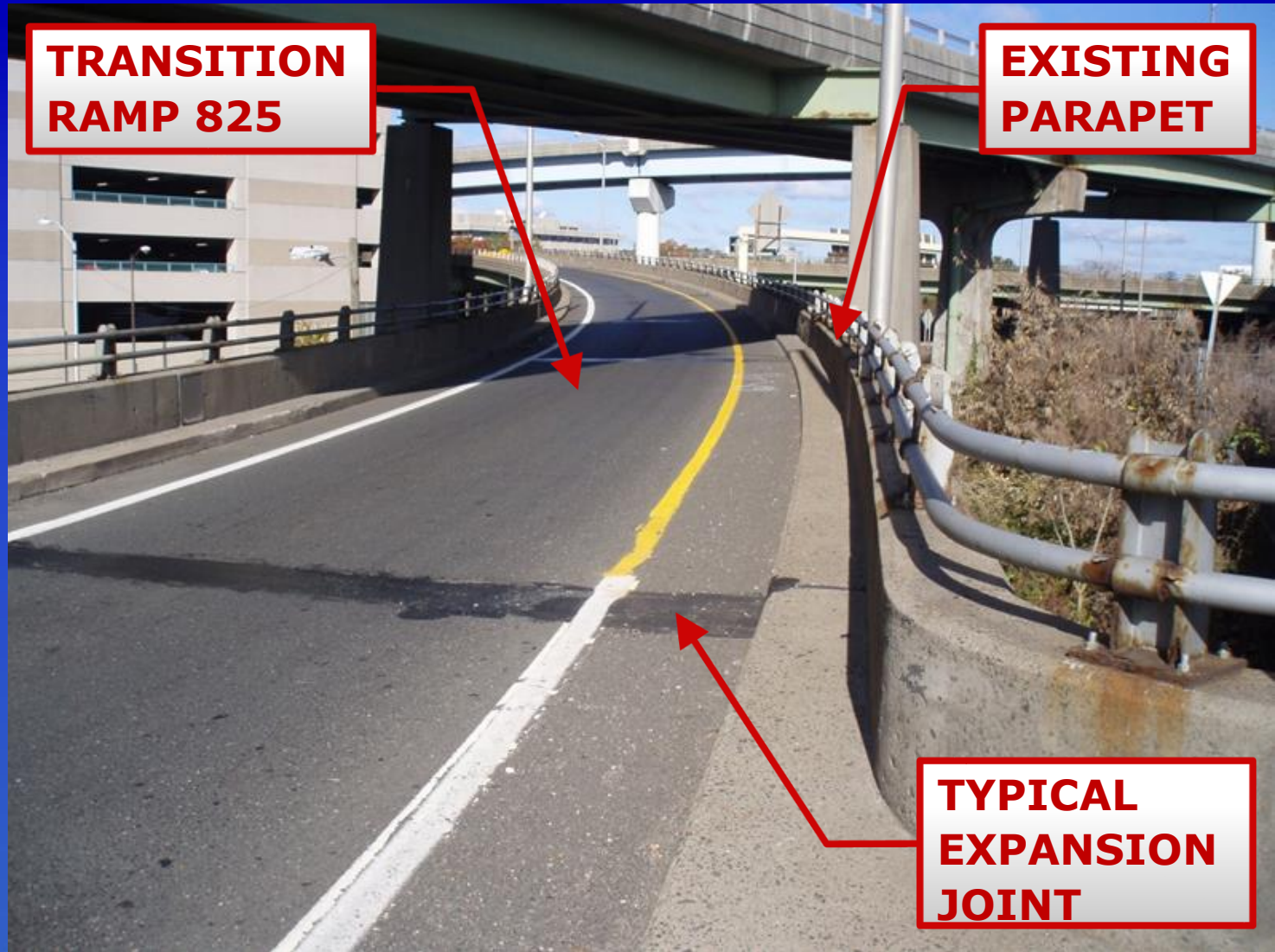
**TRANSITION  
RAMP 825**

**EXISTING  
PARAPET**

**Bridge Deck at I-84 Exit 52**  
***Bridge No. 01686B***

Connecticut Department of Transportation





**Bridge Deck at I-91 SB Transition**  
*Bridge No. 01686B*

Connecticut Department of Transportation





# Project Purpose

*Bridge No. 01686B*

The existing bridge needs to be rehabilitated due to the poor condition of the deck and substructure deterioration.

**HEAVY RUSTING**



**SPALLS WITH  
EXPOSED REBAR**

# **Proposed Construction**

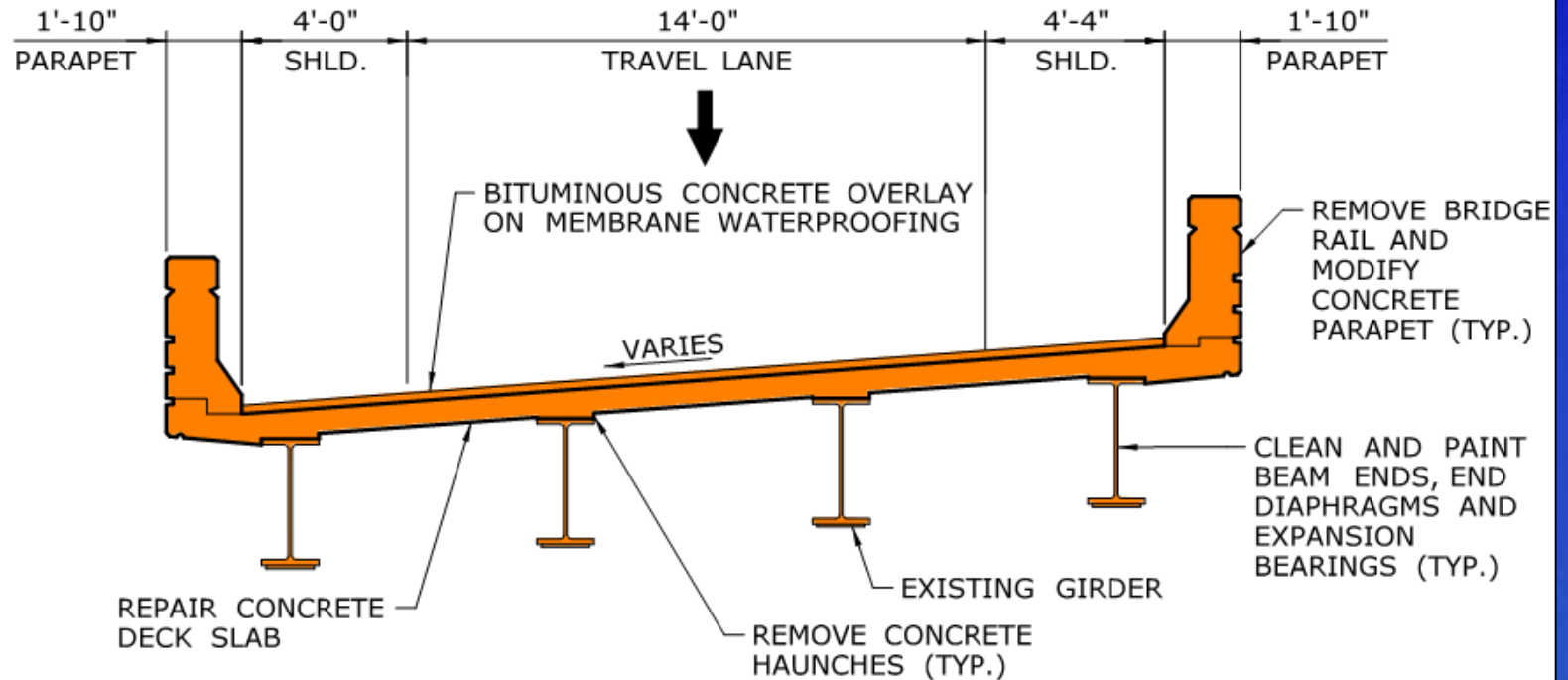
## *Bridge No. 01686B*

**Repairs to improve the structural deficiencies of the existing superstructure and substructure, including:**

- **Replace existing expansion joints**
- **Patch deteriorated deck concrete in all spans**
- **Install new bituminous membrane water proofing and bituminous concrete wearing surface**
- **Modify/Repair existing parapets**
- **Repairs and spot painting of superstructure steel and full painting of Pier 1 steel cap girder**
- **Patch spalled concrete on the substructure**
- **Remove concrete haunches**



NOTE: REPAIRS ALSO INCLUDE  
REPLACEMENT OF EXISTING  
EXPANSION JOINTS



**LEGEND**

■ PROPOSED STRUCTURE

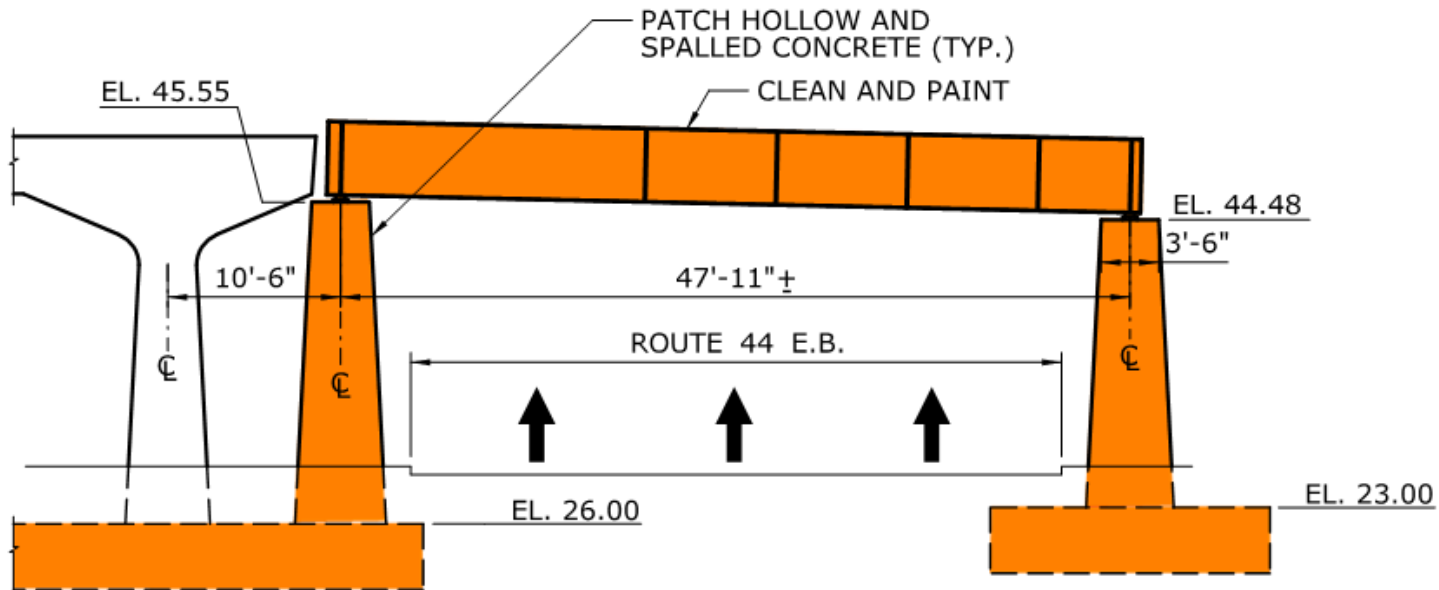
PROPOSED BRIDGE SECTION

# Proposed Bridge Section and Repairs *Bridge No. 01686B*

Connecticut Department of Transportation



NOTE: REPAIRS DEPICTED ON PIER 1 ARE REPRESENTATIVE OF PROPOSED REPAIRS ON OTHER SPANS. EACH PIER WILL BE REPAIRED PER A PRESCRIPTIVE REHABILITATION PLAN THAT MEETS THE INDIVIDUAL NEEDS OF THAT PIER. REPAIRS GENERALLY CONSIST OF CLEANING AND PAINTING BEAM ENDS, END DIAPHRAGMS AND BEARINGS, PATCHING HOLLOW AND SPALLED CONCRETE ON SUBSTRUCTURE, AND REMOVING CONCRETE HAUNCHES.



**LEGEND**

PROPOSED STRUCTURE

PIER 1 - WEST ELEVATION

**Proposed Substructure Repairs**  
***Bridge No. 01686B***

Connecticut Department of Transportation



# **Maintenance and Protection of Traffic**

## *Bridge No. 01686B*

- **It is anticipated that traffic along the connecting ramp (TR825) will require a series of weekend closures with a detour.**
- **Off-peak lane/shoulder closures will be utilized along U.S. Route 44 (Morgan Street South) and Columbus Boulevard.**
- **The sidewalk along Morgan Street and Columbus Boulevard will be intermittently closed, parking spaces in the Columbus Boulevard Parking Lot will be temporarily cordoned; and on-street parking, bus routes, and access to the Morgan Street Garage may be impacted at times during construction.**



# **Anticipated Environmental Permits**

## *Bridge No. 01686B*

- **The proposed rehabilitation of Bridge No. 01686B should not require environmental permits.**



# **Public Utilities**

## *Bridge No. 01686B*

- **The proposed rehabilitation of Bridge No. 01686B should not impact utilities.**



# **Right-of-Way (ROW) Impacts**

*Bridge No. 01686B*

- **As a result of the proposed rehabilitation, there are no anticipated ROW impacts anticipated for this project.**





# **Project Costs & Schedule**

*Bridge No. 01686B*

- **Estimated Cost Allocated: \$4,400,000**
- **Funding: Federal (80%) and State (20%)**
- **Construction is anticipated to begin in the Fall of 2020.**
- **Construction is anticipated to be complete Fall 2021.**
- **Schedule is preliminary and is predicated upon the availability of funding.**



# THANK YOU

Please send comments and/or  
questions to:

[DOT.Project.0063-0654@ct.gov](mailto:DOT.Project.0063-0654@ct.gov)



# Contact Information

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▪ <https://ct.gov/dot/I84EBexit52>

