

Public Information & Scoping Meeting

**Interstate 84-Route 8 Interchange
City of Waterbury**

**Rehabilitation of Bridges Nos.
03190A/B/C/D/E/F and 03191A/B/D/E**

State Project Nos. 151-312, 151-313 and 151-326

November 18, 2015

Connecticut Department of Transportation



Introductions

- **Connecticut Department of Transportation**

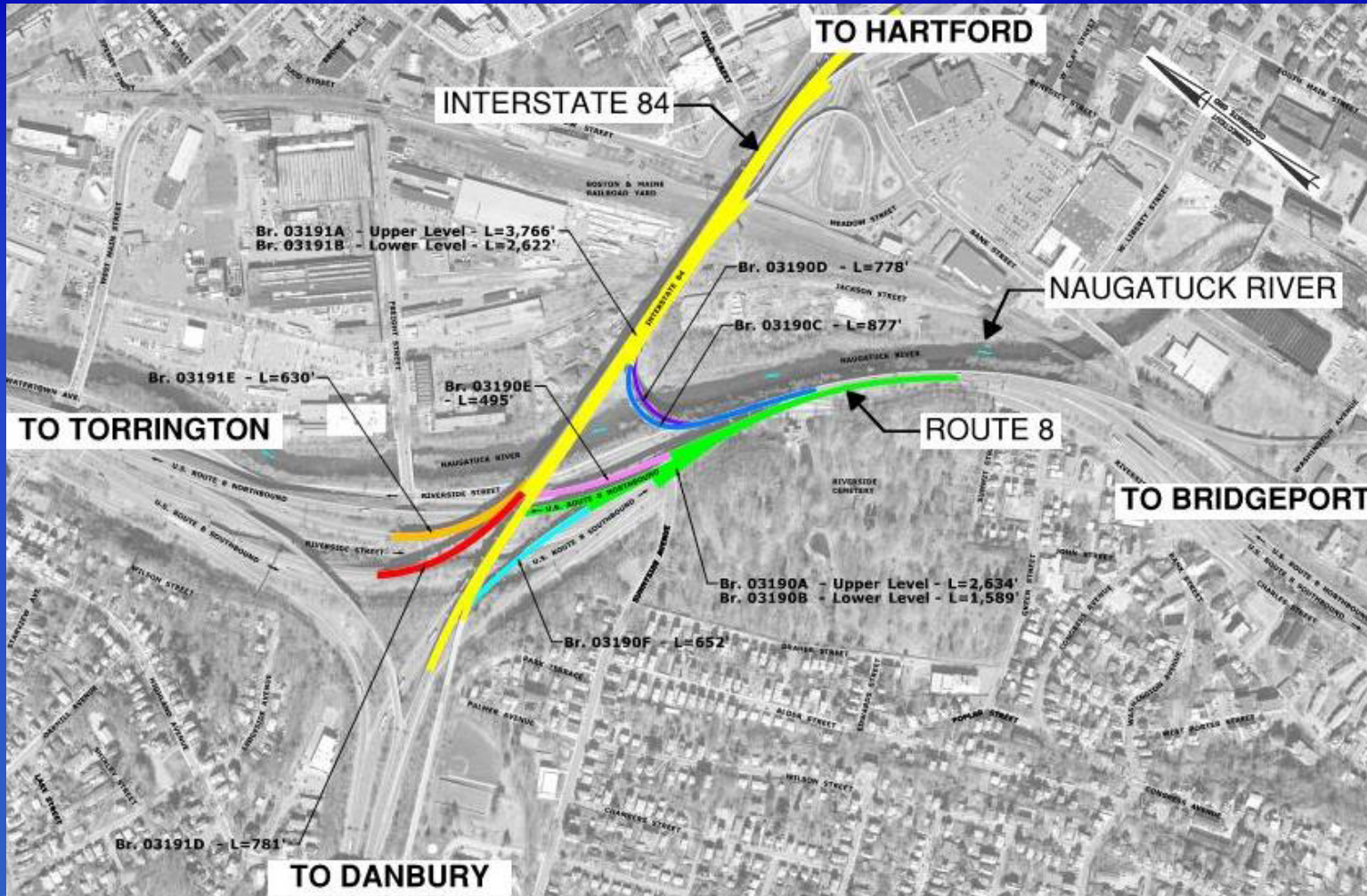
- Theodore Nezames – Manager of Bridges
- Timothy Fields – Principal Engineer (Bridges)
- Robert Brown – Supervising Engineer (Bridges)
- Alireza Jamalipour – Project Engineer (Bridges)
- Michelle Miller – Project Coordinator (ROW)
- Philip Cohen – Supervising Engineer (Traffic)
- David Ferraro – Project Engineer (Construction)
- Mandy Ranslow – Transportation Planner (OEP)

- **HNTB Corporation**

- Carrie Rocha – Office Leader
- David Schweitzer – Project Manager
- Myles Kuchas – Senior Bridge Engineer



Proposed Project Limits



Purpose and Need

- The purpose and need of the project is to rehabilitate bridges within the Interstate 84 and Route 8 Interchange to extend the service life by approximately 25 years until the interchange is replaced.
- A Temporary Bypass Roadway is proposed to minimize disturbance for the traveling public for the Route 8 Northbound Bridge Deck Replacement.



Department's Responsibilities

- Systematically inspect bridges for deficiencies and schedule the rehabilitation of structures
- Oversee the development of technical drawings and bid documents of projects
- Administration and inspection during construction



Project Overview

- Project is in preliminary design stage
 - We are looking for your input
- Rehabilitation of 10 bridges within the interchange including several connecting ramps
- Rehabilitation and span replacement on Route 8 Southbound (lower deck)
- Full deck replacement on Route 8 Northbound (upper deck)



Reasons for Rehabilitation

- Bridges are rated as **Structurally Deficient** due to the deteriorated conditions of the decks and superstructures
- Structurally Deficient bridges:
 - Load carrying elements are in poor condition due to deterioration or are below current design standards
 - Does *not* mean the bridges are unsafe, but are in need of repairs and updates



Bridge Rehabilitation

- Deck repairs
 - Mill pavement, patch deck & replace overlay
- Joint replacement
- Parapet modifications
- Steel repairs
- Substructure repairs



Existing Deck Conditions



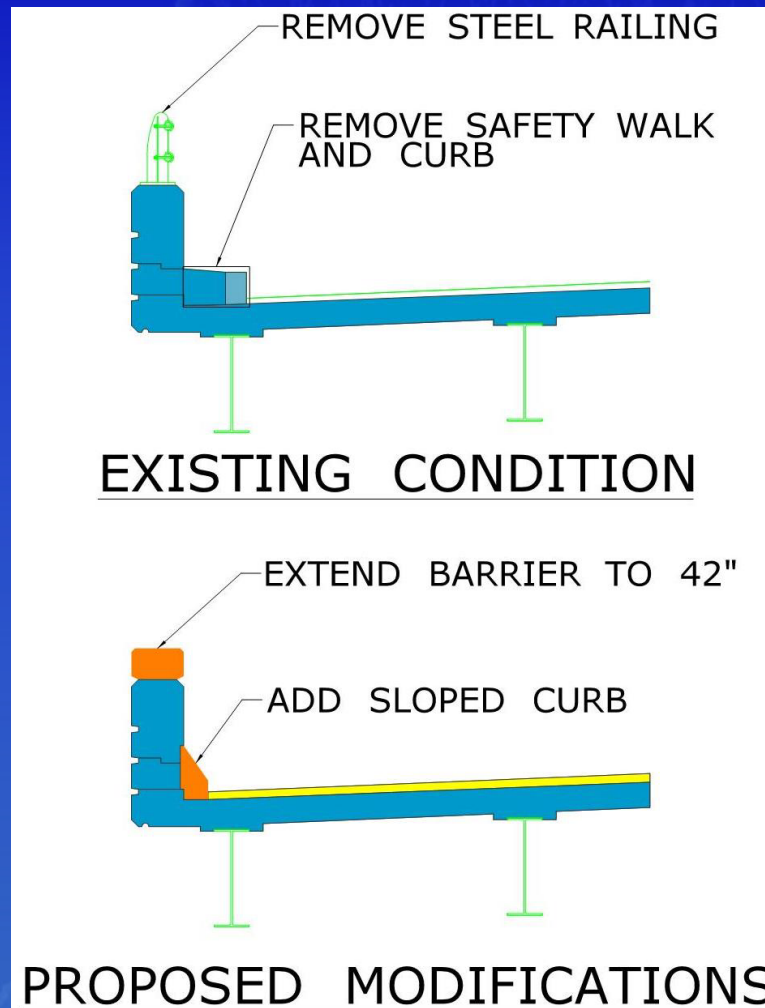
Existing Underside Deck Conditions



Connecticut Department of Transportation



Existing Parapet Conditions



Existing Steel Conditions



Existing Substructure Conditions



Transportation Management Plan

- A plan to manage traffic during construction
- Identify stakeholders and include them in public involvement/public outreach
- Project website will be provided to inform public of traffic detours and construction updates
- Mitigate traffic issues during construction
- Maintenance & Protection of Traffic Plans
 - Schedule
 - Coordination

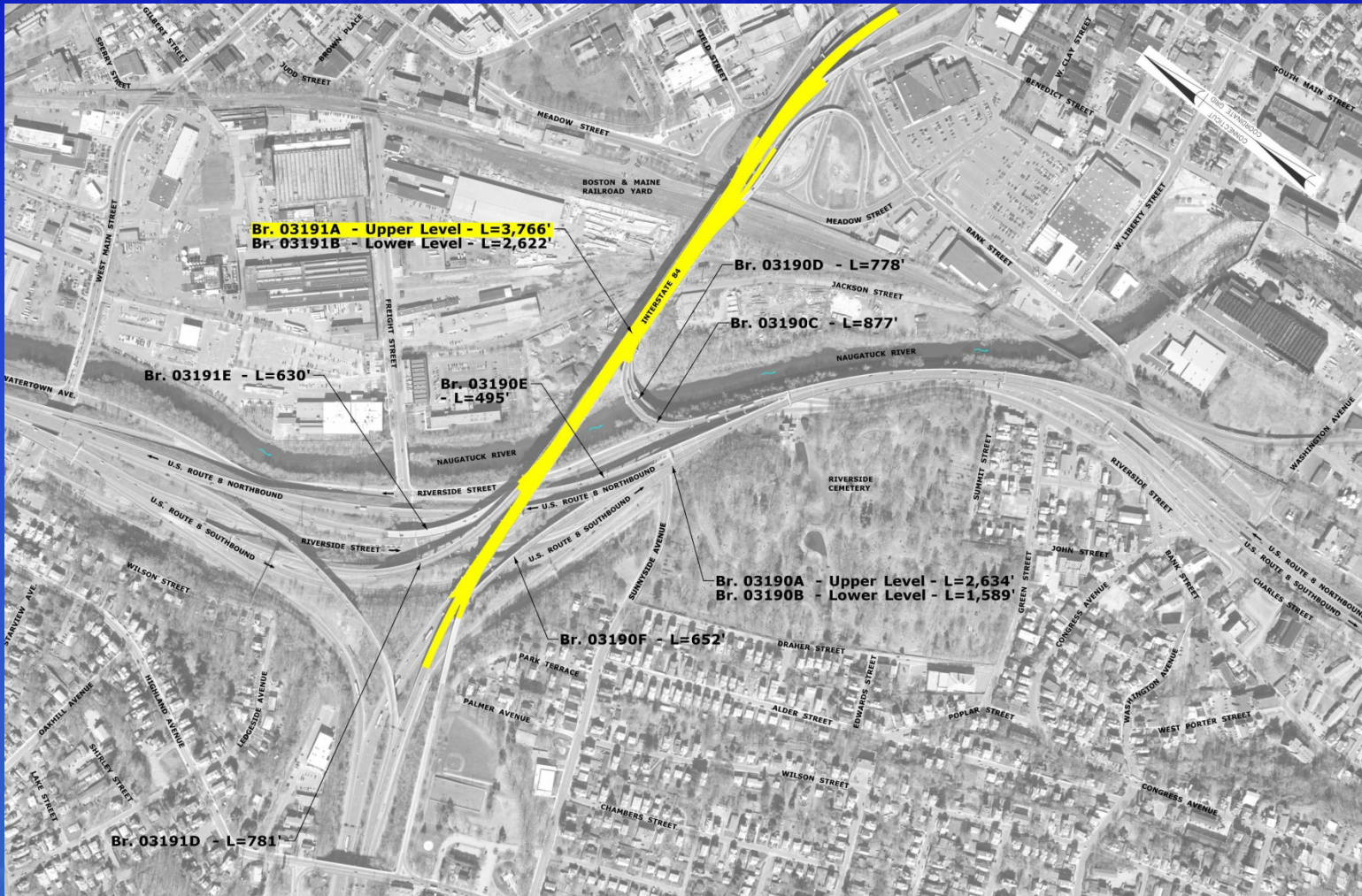


CTDOT Project #151-312

- Interstate 84 Eastbound (Upper Deck)
- Existing geometry
 - 3,766 feet long
 - 46 Spans
 - Varies 30 - 66 feet wide
 - 2-3 Through lanes, 1 auxiliary lane
- Existing conditions
 - Deck: Poor (Rating 4)
 - Superstructure: Poor (Rating 4)
 - Substructure: Poor (Rating 4)
 - Structural Evaluation: Requires structural strengthening
 - Average Daily Traffic: Varies – 56,900 vehicles max.



Interstate 84 Eastbound Bridge 03191A



Year 1

Connecticut Department of Transportation



Maintenance & Protection of Traffic for Interstate 84 Eastbound

- Component of the Transportation Management Plan
- Lane closures on Interstate 84 Eastbound will be during approved times
- Peak Hours
 - All travel lanes will be open
 - Exit ramps will be open
 - During off peak hours, ramps may be closed, detours will be provided

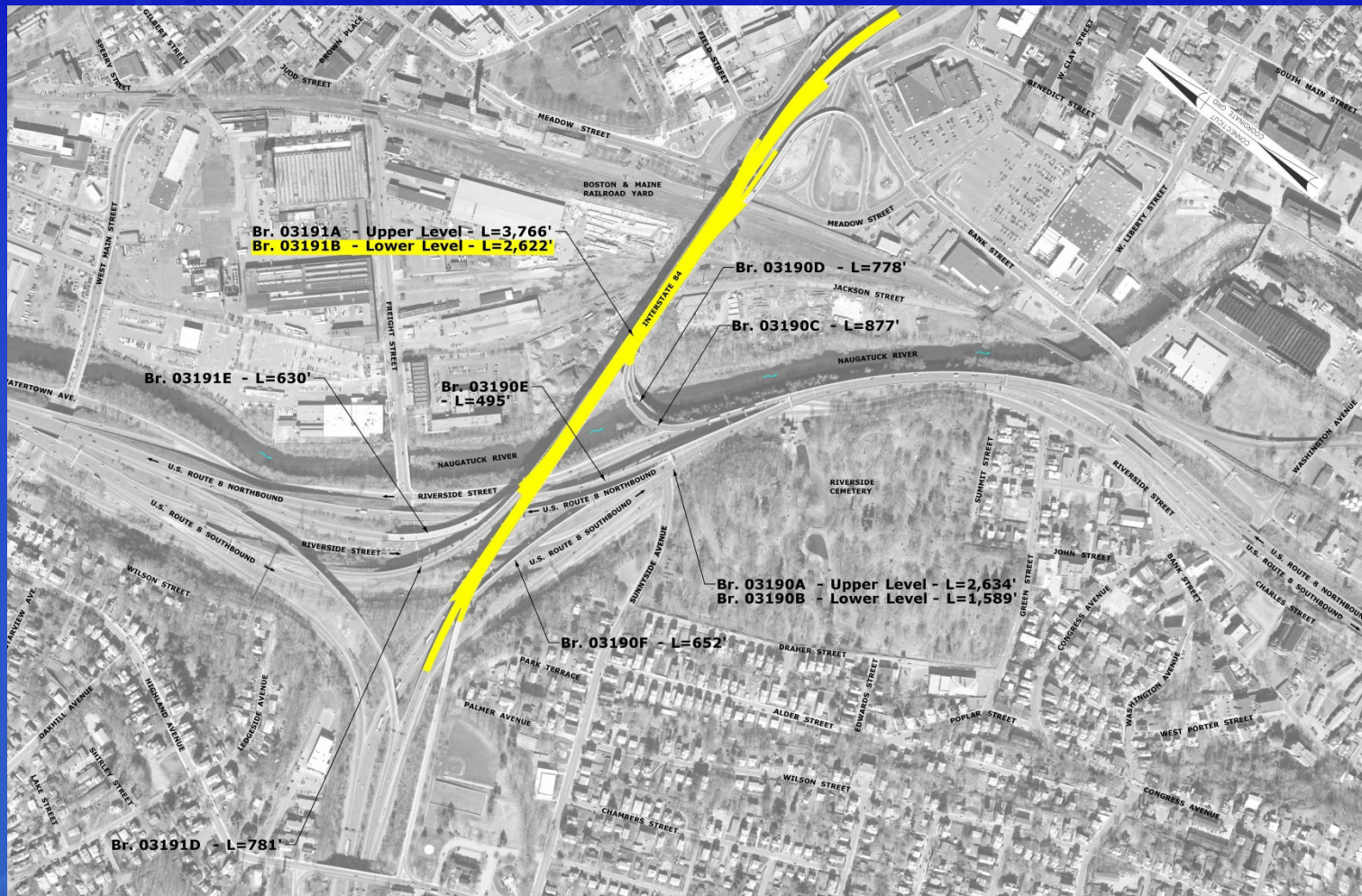


CTDOT Project #151-313

- Interstate 84 Westbound (lower level)
- Existing geometry
 - 2,622 feet long
 - 30 Spans
 - Varies 42 - 66 feet wide
 - 3 Through lanes, 2 auxiliary lanes
- Existing Conditions
 - Deck: Poor (Rating 4)
 - Superstructure: Poor (Rating 4)
 - Substructure: Fair (Rating 5)
 - Structural evaluation: Requires steel strengthening
 - Average Daily Traffic: Varies - 66,200 vehicles maximum



Interstate 84 Westbound Bridge 03191B



Years 2 & 3

Connecticut Department of Transportation



Maintenance & Protection of Traffic for Interstate 84 Westbound

- Component of the Transportation Management Plan
- Lane closures on Interstate 84 Westbound will be during approved times
- Peak Hours
 - All 3 travel lanes will be open
 - Entrance and exit ramps will be open
 - During off-peak hours, ramps may be closed, detours will be provided

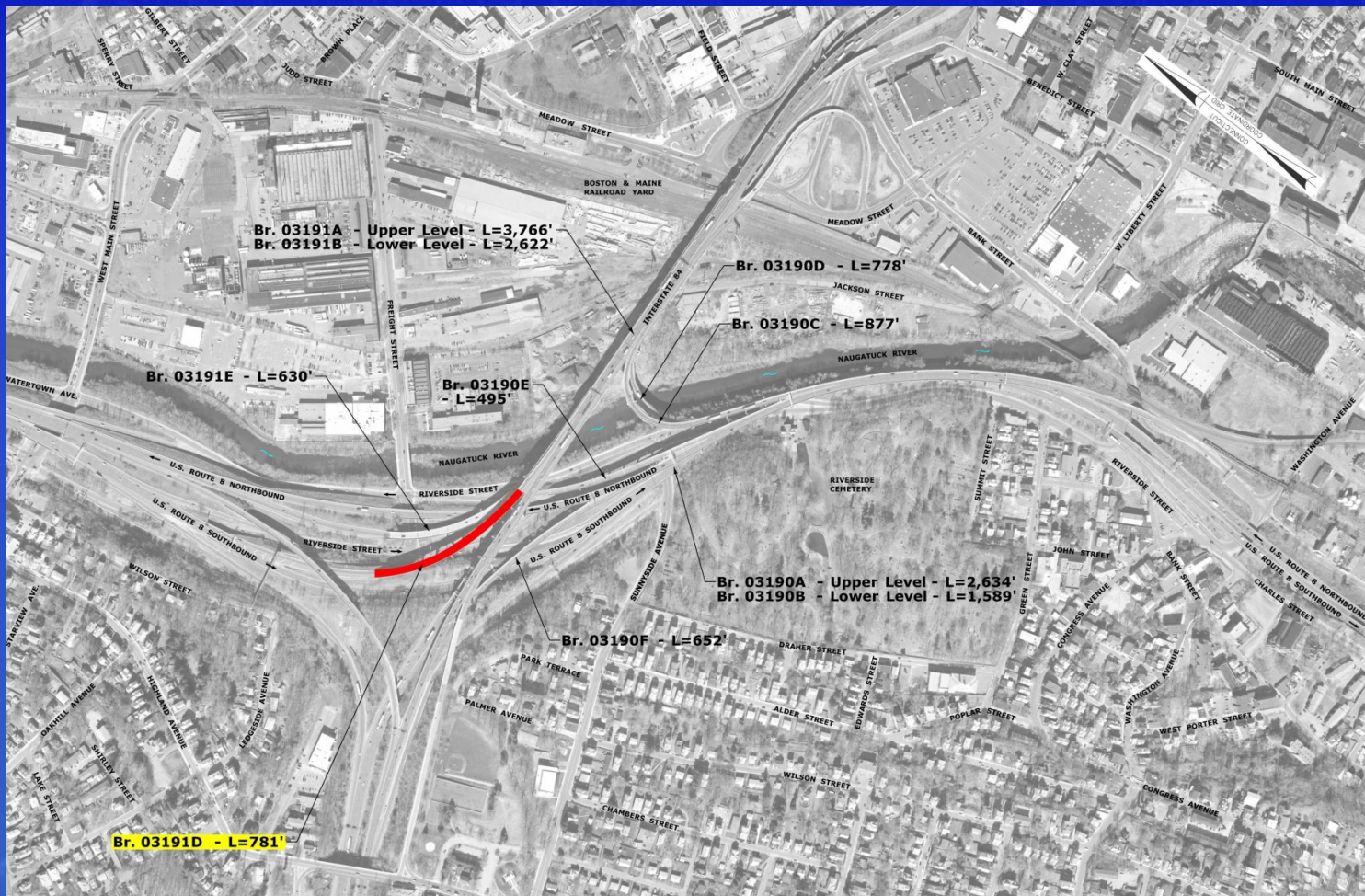


CTDOT Project#151-326

- 8 bridges
- Route 8 Northbound and Southbound
- 6 ramp structures



Route 8 Southbound to Interstate 84 Eastbound



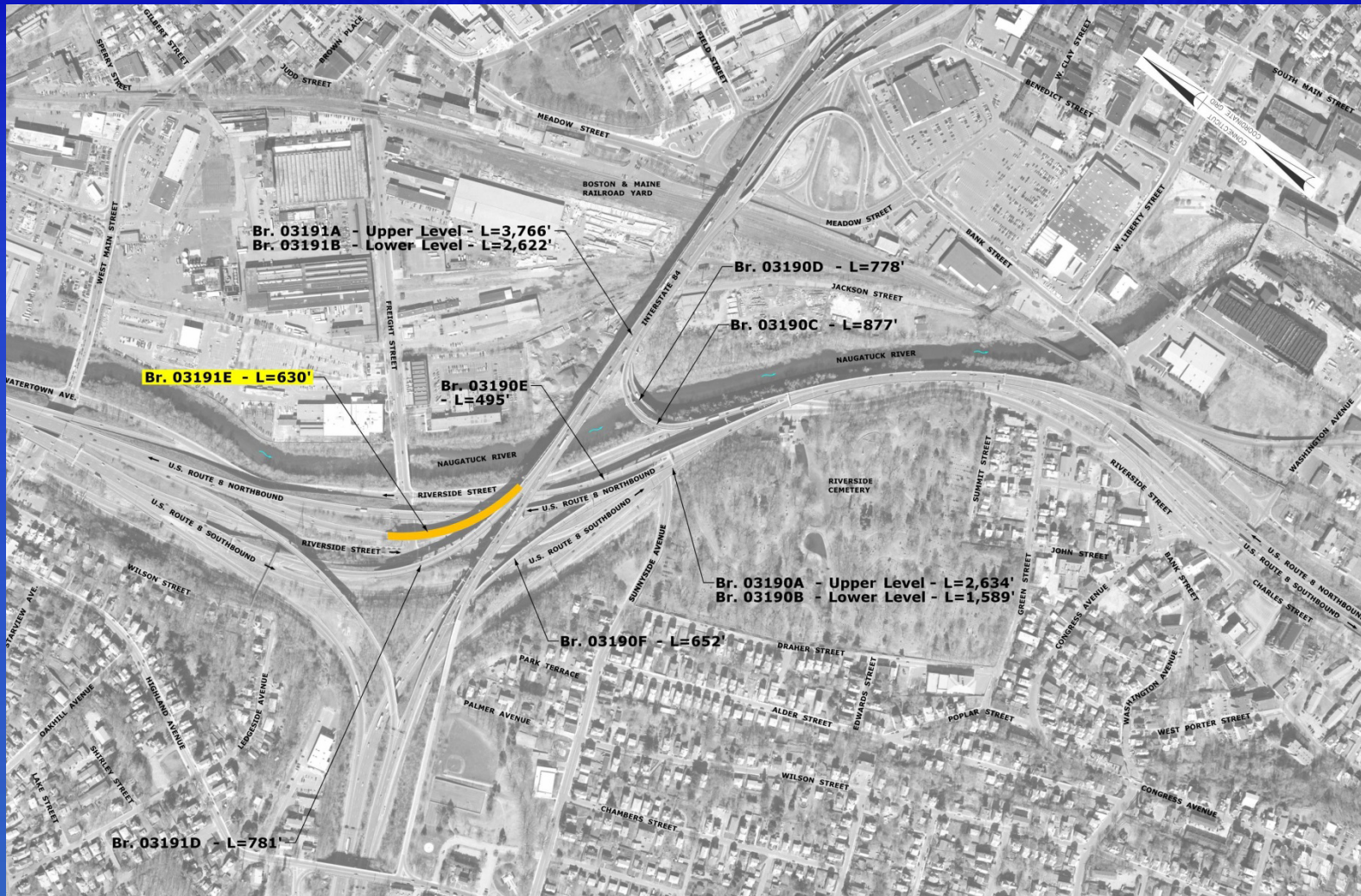
Bridge is 30 feet wide

Year 1

Connecticut Department of Transportation



Interstate 84 Westbound to Route 8 Northbound



Bridge is 30 feet wide

Year 2

Connecticut Department of Transportation

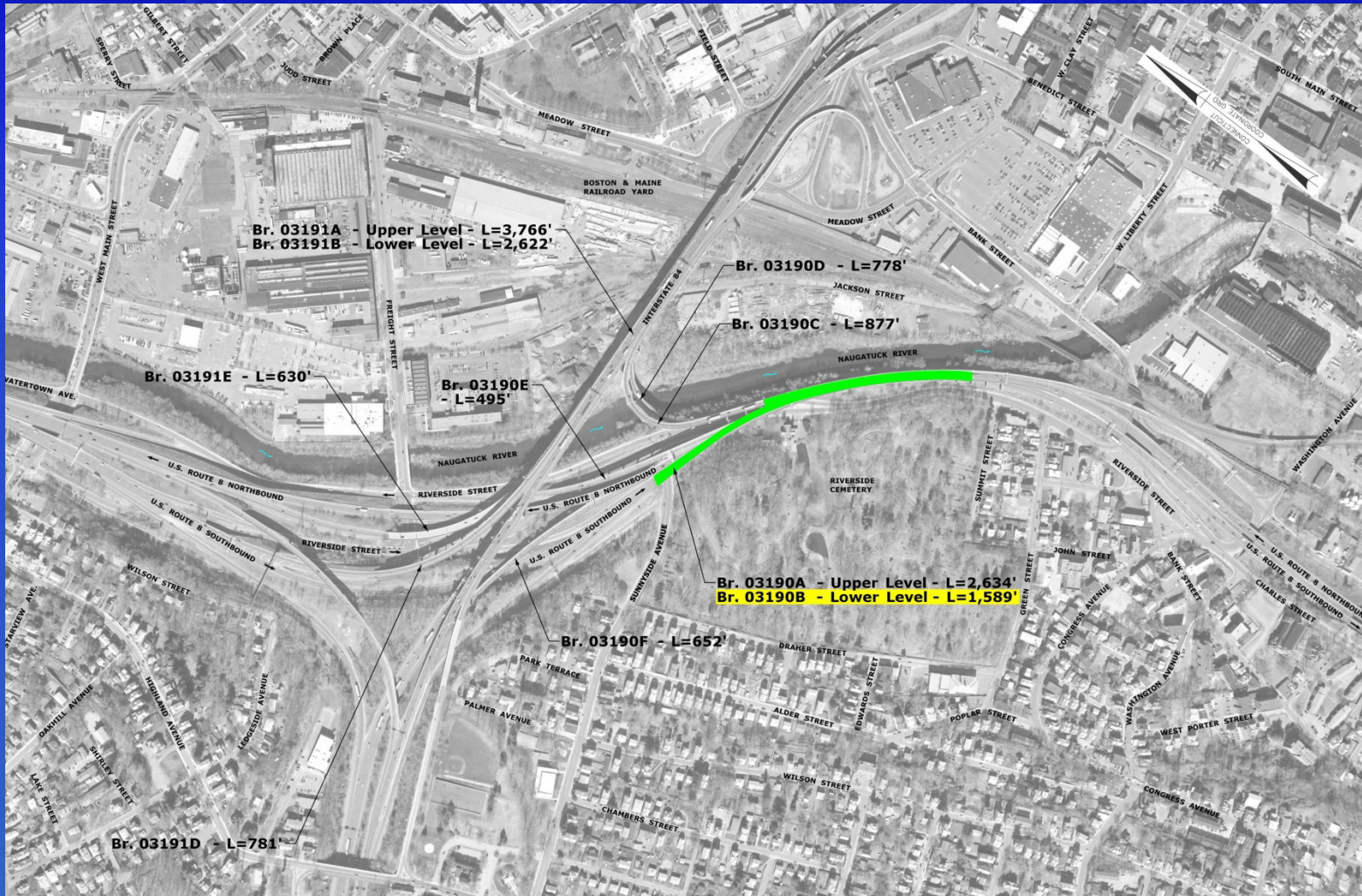


Maintenance and Protection of Traffic Ramps RT 8 SB to I84 EB & I84 WB to RT 8 NB

- These bridges are wider, travel lanes are proposed to be shifted to accommodate construction and the traveling public.
- During off-peak hours ramps may be closed, detours will be provided.



Route 8 Southbound Bridge 03190B



Year 4

Connecticut Department of Transportation



Route 8 Southbound BRIDGE 03190B Existing Conditions

- Existing Geometry
 - Route 8 Southbound
 - 1,589 feet long
 - 21 Spans
 - Varies 30 - 42 feet wide
 - 2 Through lanes, 1 lane add
- Existing Conditions
 - Deck: Poor (Rating 4)
 - Superstructure: Poor (Rating 4)
 - Substructure: Fair (Rating 5)
 - Structural evaluation: Requires steel strengthening
 - Average Daily Traffic: Varies 29,500 vehicles maximum



Route 8 Southbound Bridge 03190B Proposed Improvements

- 18 Spans of the 21 spans – rehabilitation
 - Lane Closures on Route 8 Southbound proposed during approved times
- Peak Hours
 - All travel lanes proposed to be open
 - Entrance and exit ramps will be open
 - During off peak hours, ramps may be closed, detours will be provided



Route 8 Southbound Bridge 03190B Proposed Improvements

- 3 spans will be replaced
 - Weekend closure (Friday pm to Monday am) with detour
 - One span per weekend
 - Precast concrete slabs



Temporary Route 8 Southbound On Ramp



Year 4

Connecticut Department of Transportation

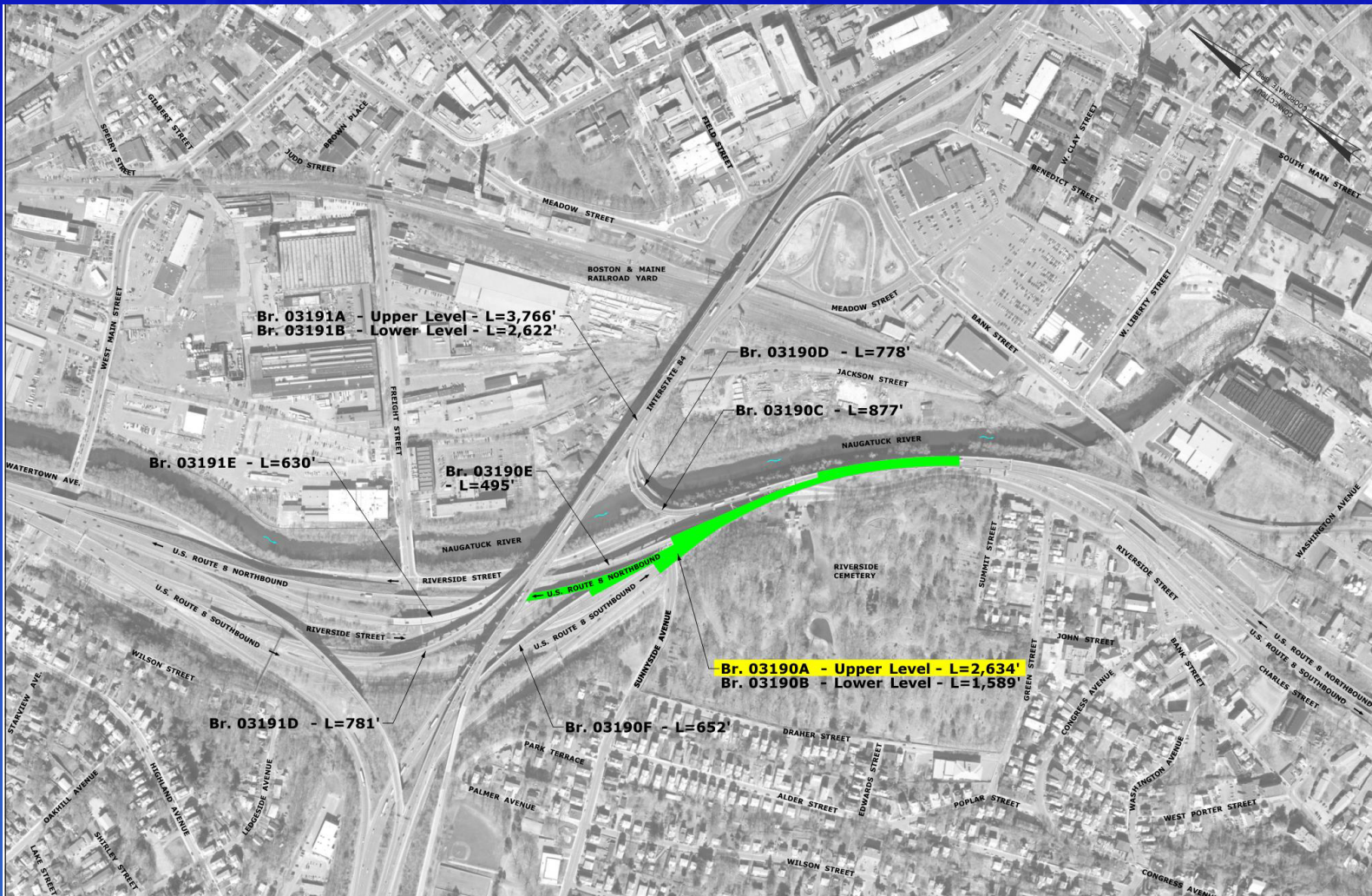


Bridge 03190B - Detours

- Route 8 Southbound Traffic
 - Use exit 32 to Southbound Riverside Street
 - Exits 31 & 33 to remain open
 - Temporary on ramp to Route 8 Southbound
 - Ramp from I-84 Westbound to remain open
 - I-84 Eastbound Exit 19 will be closed and traffic detoured to Exit 21
- Local Traffic
 - Detour local traffic



Route 8 Northbound Bridge 03190A



Years 2 & 3

Connecticut Department of Transportation



Route 8 Northbound - BRIDGE 03190A

Existing Conditions

- Existing Geometry
 - Route 8 Northbound
 - 2,634 feet long
 - 36 spans
 - Varies 30 - 42 feet wide
 - 2 Through lanes, 1 auxiliary lane
- Existing Conditions
 - Deck: **Serious (Rating 3)**
 - Superstructure: Poor (Rating 4)
 - Substructure: Fair (Rating 5)
 - Structural Evaluation: Requires steel strengthening
 - Average Daily Traffic: Varies – 30,800 vehicles maximum

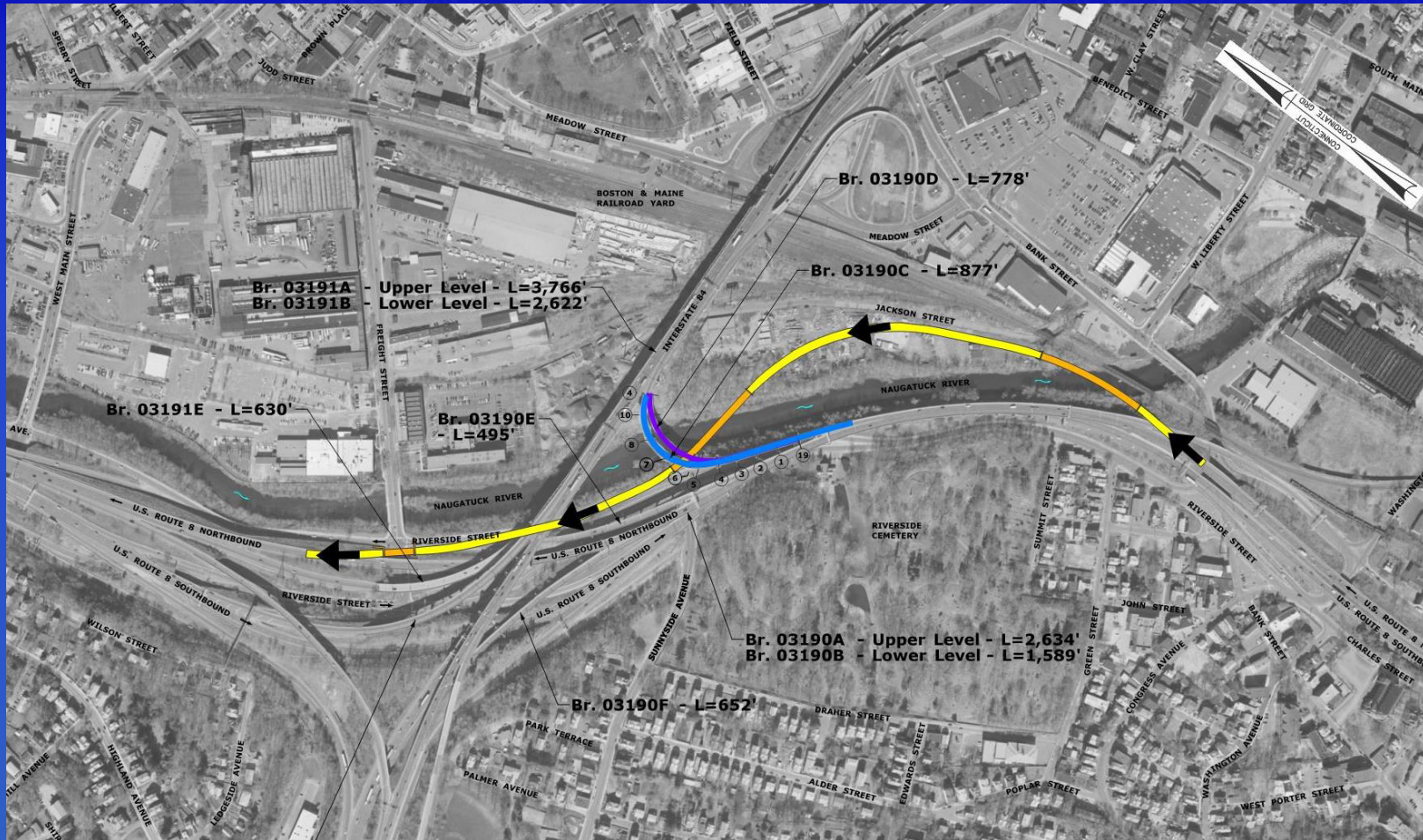


Route 8 Northbound - Bridge 03190A Proposed Improvements

- Replace concrete deck on all 36 spans
- Bridge deck construction best alternatives
 - Closure of Route 8 Northbound - Weekend Detour
Alternate minimum 36 weekends
 - Construct Two Lane Temporary Bypass to support
conventional bridge deck construction



Temporary Bypass Alternate

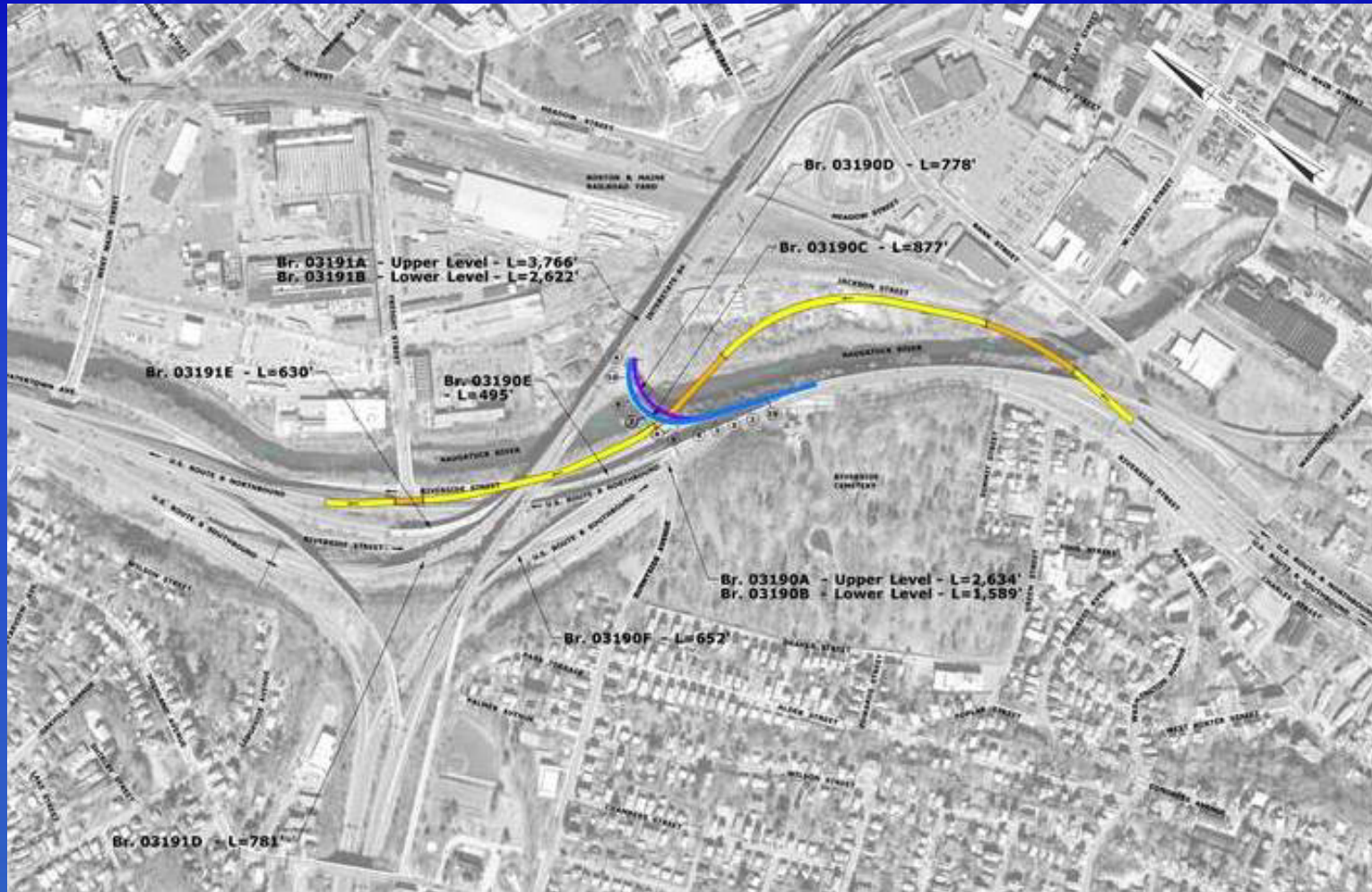


Reasons for Temporary Bypass

- Less impact to City of Waterbury
- Impact to commuters
- Reduced risk
- Quality of work
- Cost



Temporary Bypass

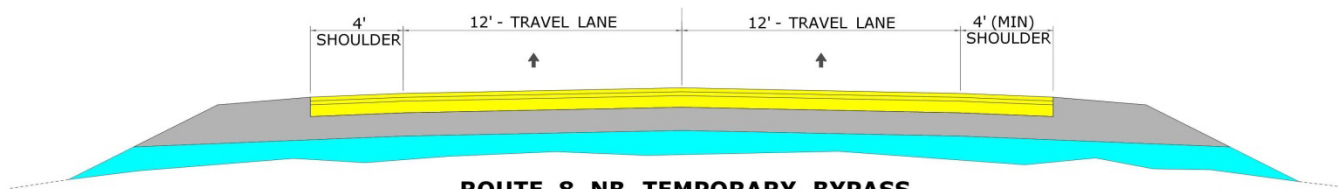


Years 2 & 3

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Temporary Bypass Typical Cross Section



**ROUTE 8 NB TEMPORARY BYPASS
ROADWAY SECTION**

NOT TO SCALE

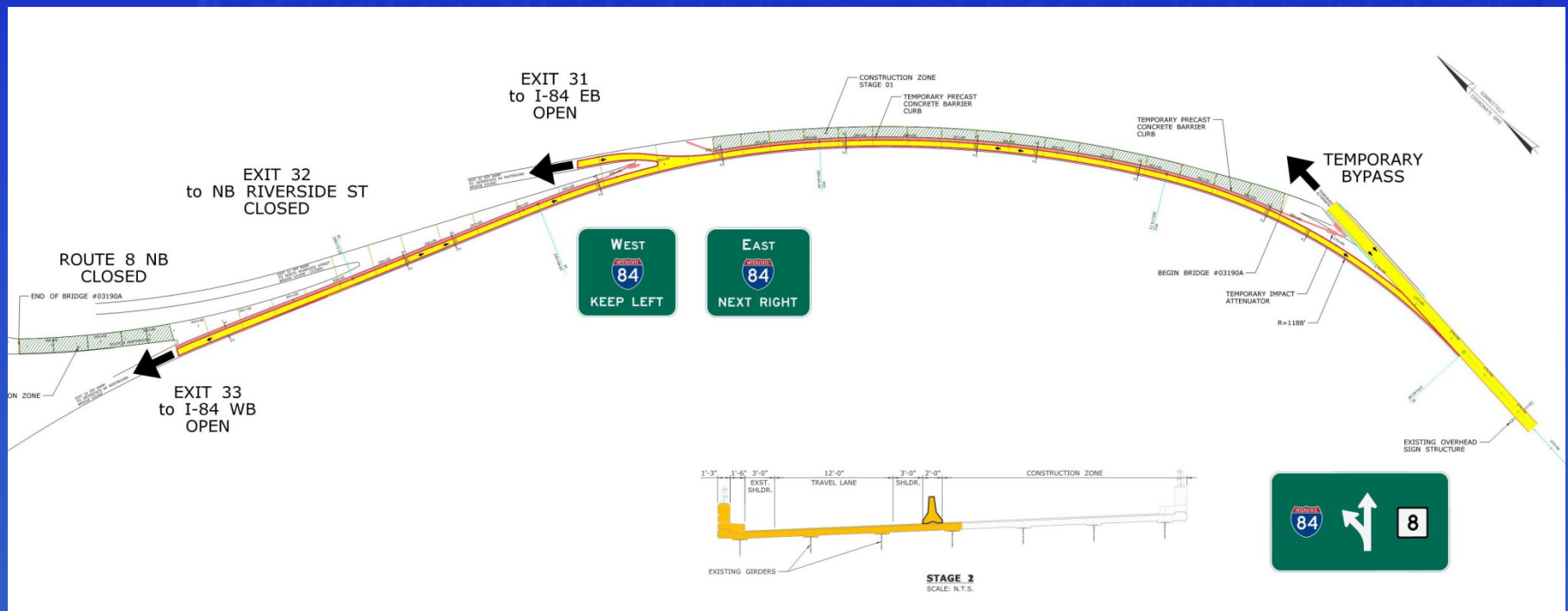
NOTE:
MINIMUM 4' WIDE RIGHT SHOULDER WILL BE
WIDENED TO 8' WHERE POSSIBLE TO ALLOW
FOR EMERGENCY VEHICLE PULLOFF

Stage Construct Route 8 Northbound Bridge 03190A

- Existing Bridge is proposed to be used as a ramp for the Interstate movements when possible
- Route 8 Northbound is proposed to use the Temporary Bypass
- Minimum of 3 Construction Stages
- The movements to Interstate 84 Eastbound and Westbound will not be closed at the same time



Route 8 Northbound Stage 1 – Bridge 03190A

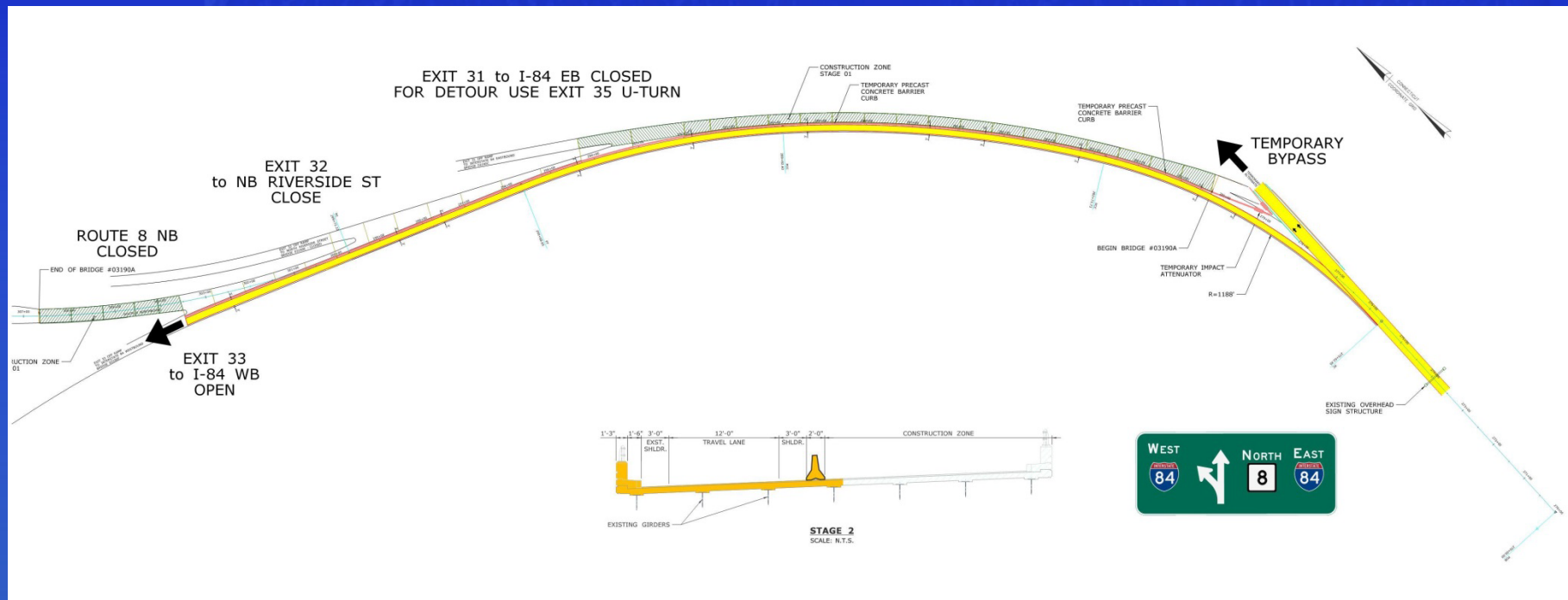


Year 2

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Route 8 Northbound Stage 2 – Bridge 03190A

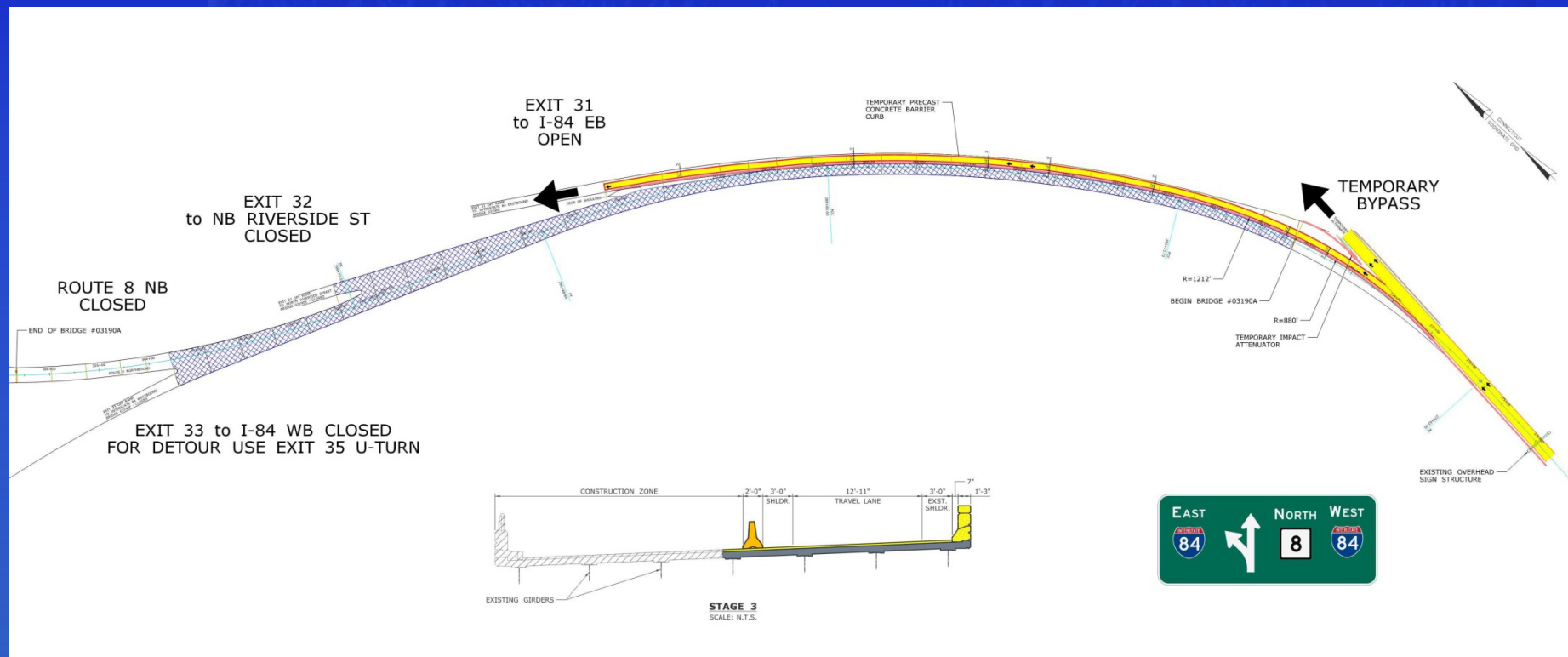


Year 2

Connecticut Department of Transportation



Route 8 Northbound Stage 3 – Bridge 03190A

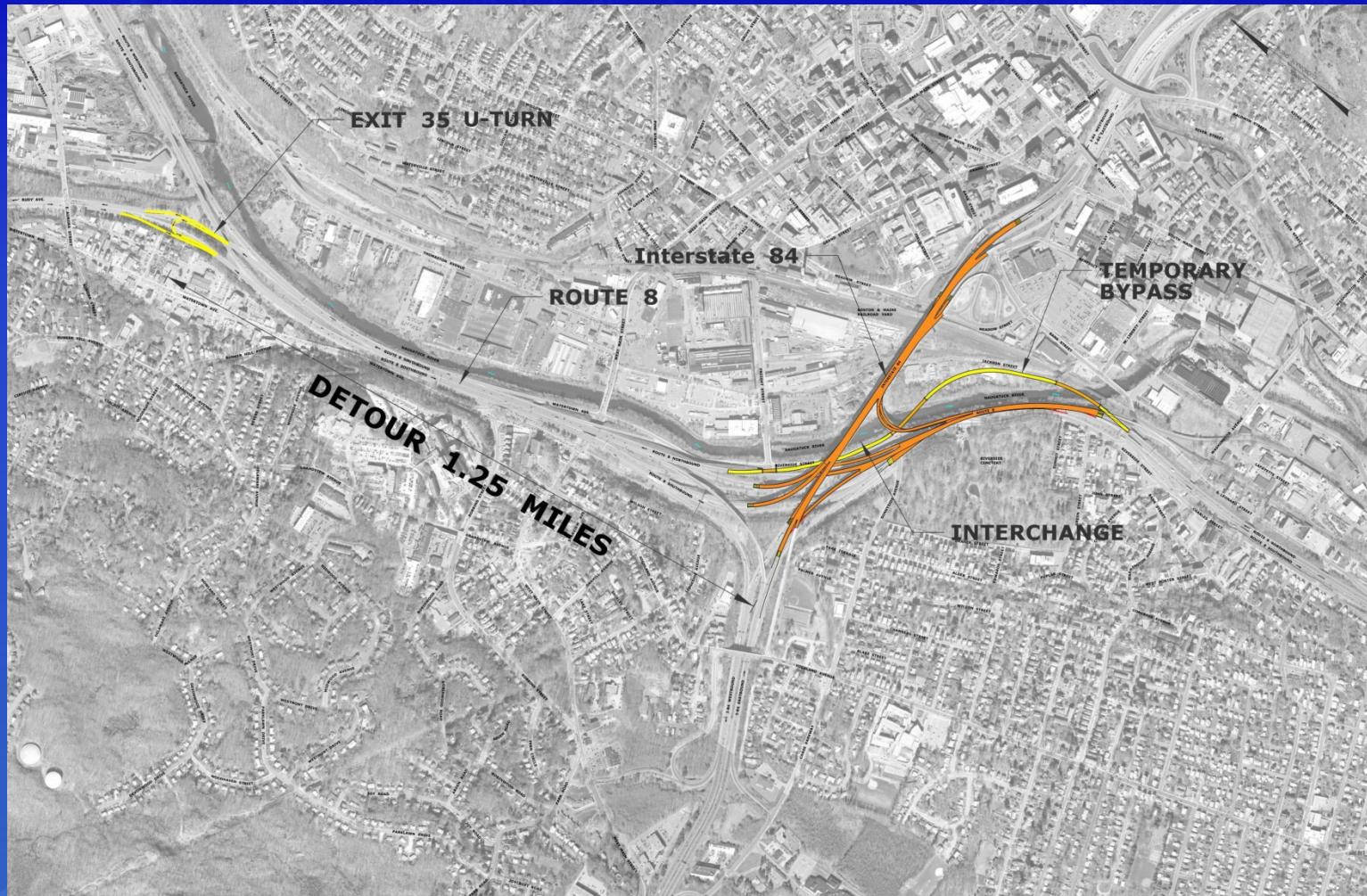


Year 3

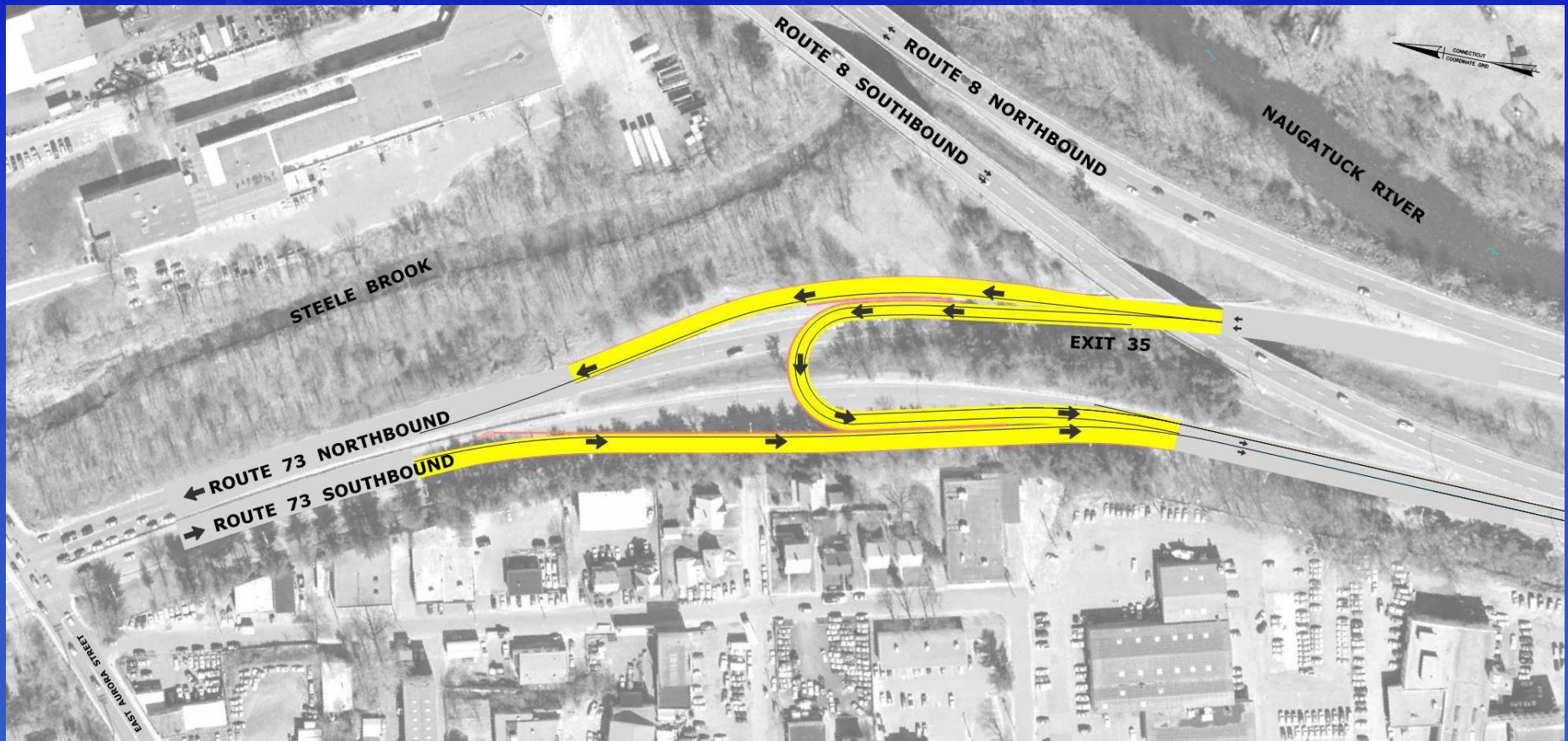
Connecticut Department of Transportation



Detour Aerial View



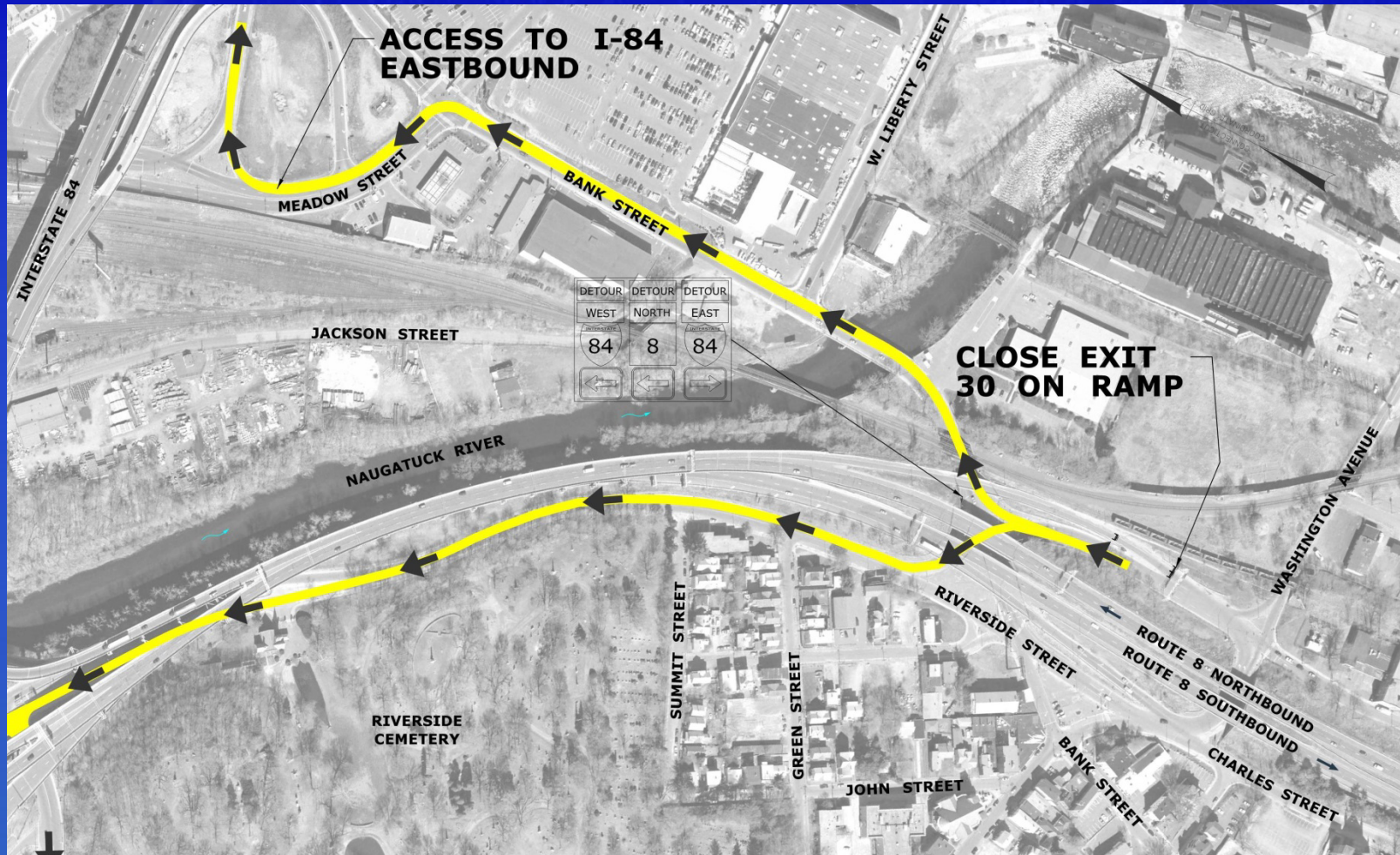
Exit 35 Median U-turn



Connecticut Department of Transportation



Detour Exit 30 Northbound On Ramp



Years 2 & 3

Connecticut Department of Transportation



Route 8 Ramp Structures

- **22 foot width – Ramps/Bridges MUST be closed during construction activity**
- **Movements remain within CTDOT ROW**
 - **Temporary Bypass & Exit 35 Median U-Turn**
 - **Staged construction of Route 8 Northbound**



Route 8 NB to Interstate 84 EB Bridge 03190C

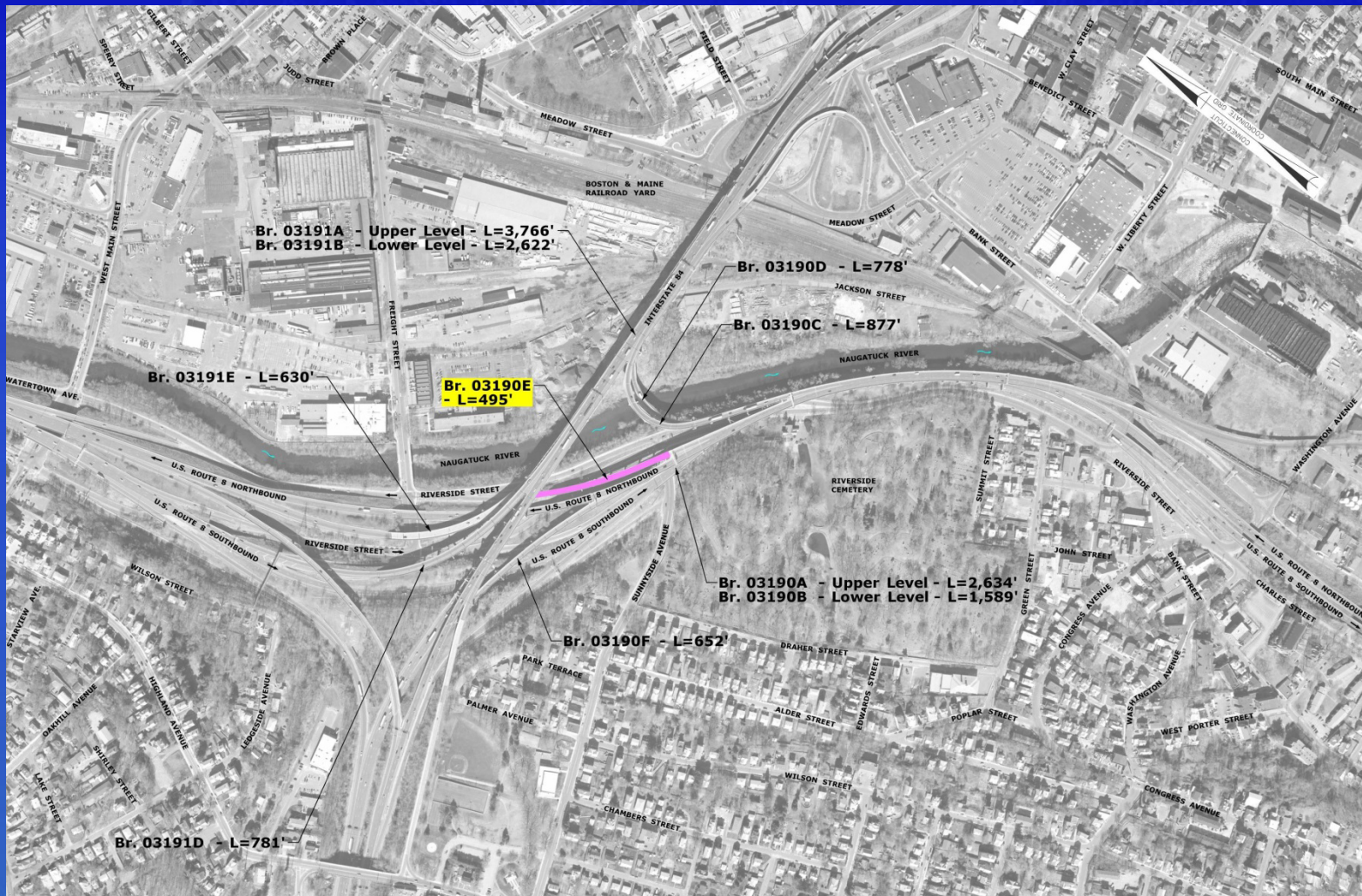


Year 2

Connecticut Department of Transportation



Route 8 NB to NB Riverside Street Bridge 03190E

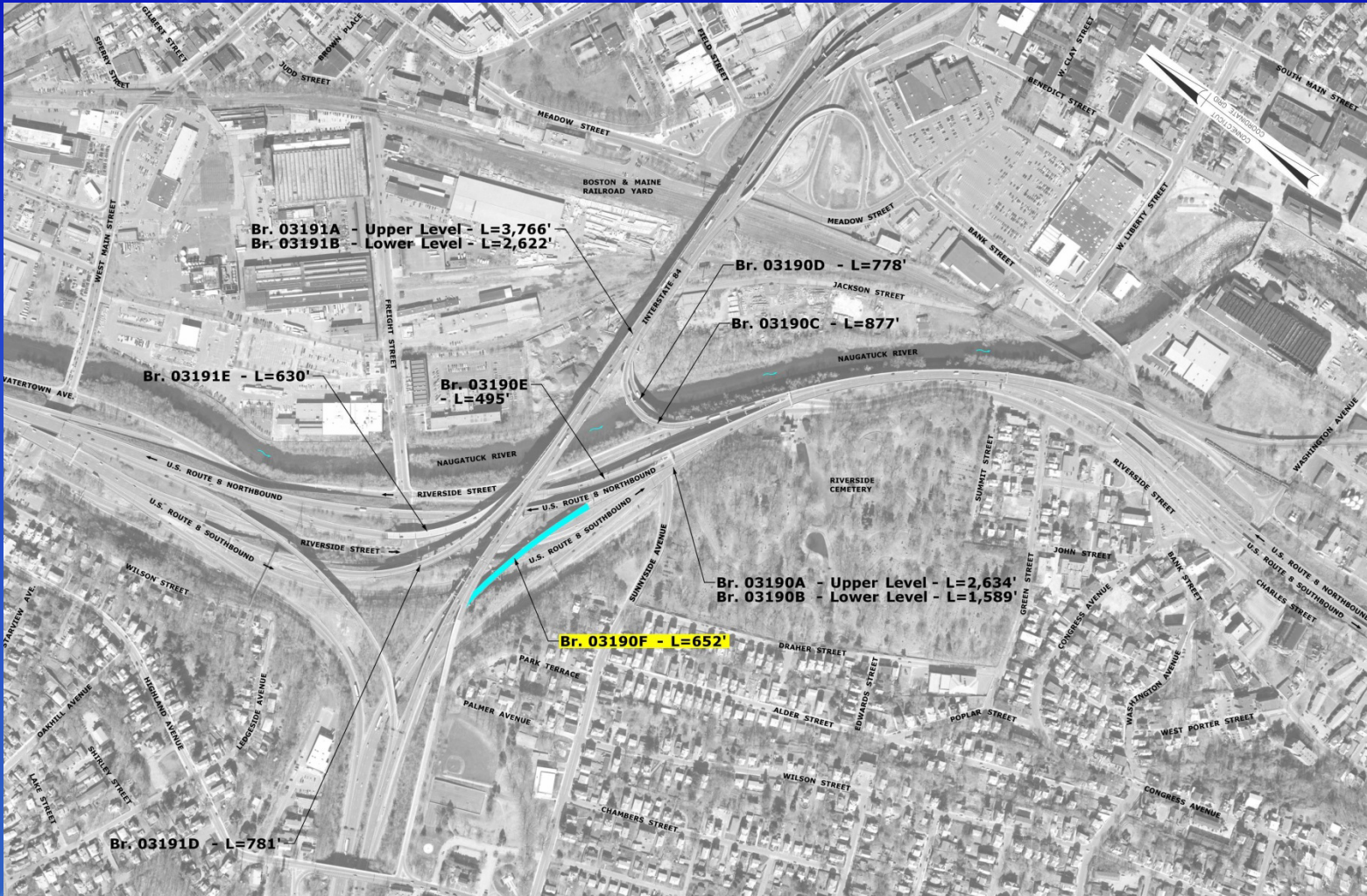


Year 2

Connecticut Department of Transportation



Route 8 NB to Interstate 84 WB Bridge 03190F

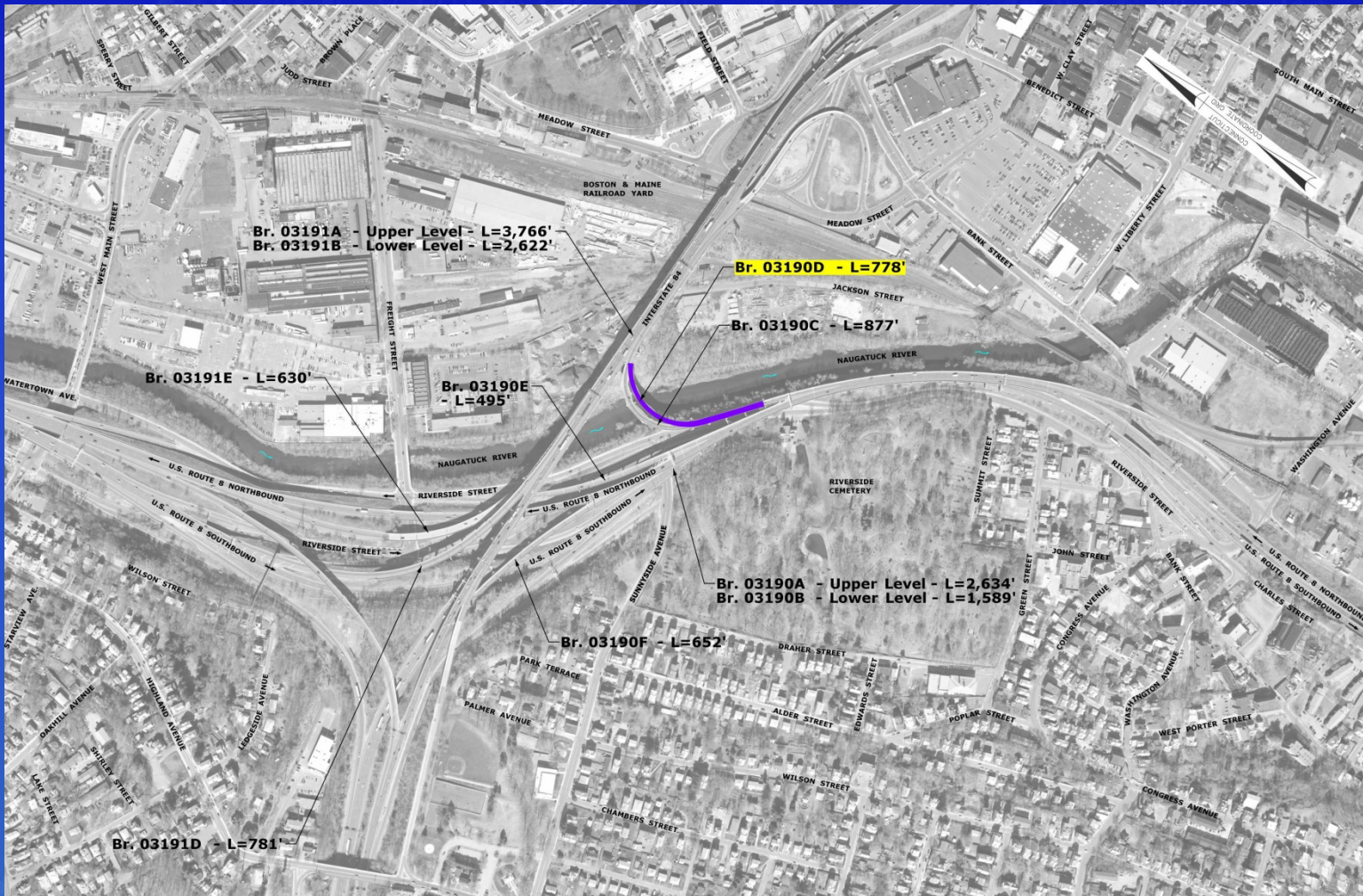


Year 3

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Interstate 84 WB to Route 8 SB Bridge 03190D



Year 4

Connecticut Department of Transportation

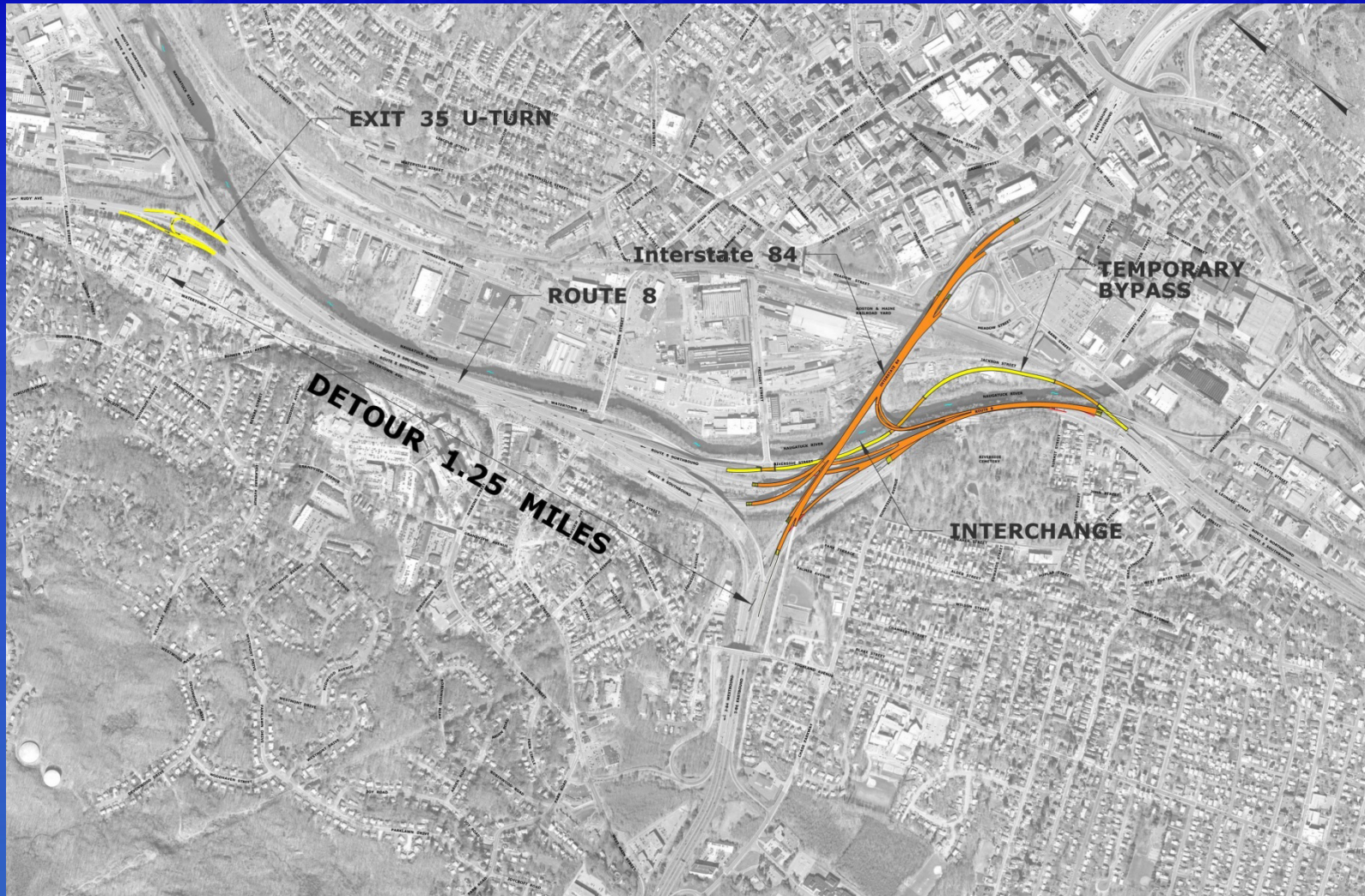


Bridge 03190D

- **Exit 19, Left Hand Off Ramp, Interstate 84 Westbound to Route 8 Southbound**
- **Due to the narrow width – Ramps/Bridges MUST be closed during construction activity**
- **Proposed Detour is to use Exit 20, Route 8 Northbound to the Exit 35 Median U-Turn to Route 8 Southbound**



Detour Aerial View



Department of Transportation
Division of Rights of Way
(ROW)

Michelle Miller
Project Coordinator
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

Connecticut Department of Transportation



Function

- **Acquire all property/property rights necessary for transportation projects.**



Statutory References

- **State of Connecticut**

C.G.S. Sections 13a-73 & 13a-98c

- **Federal**

Uniform Relocation Assistance and Real Properties Acquisition Act of 1970, as amended.



Property Impacts

- **Total Acquisitions (3 parcels)**
- **Partial Acquisitions (none)**
- **Rights (none)**
- **Easements (none)**
- **Construction Easements (7 parcels)**

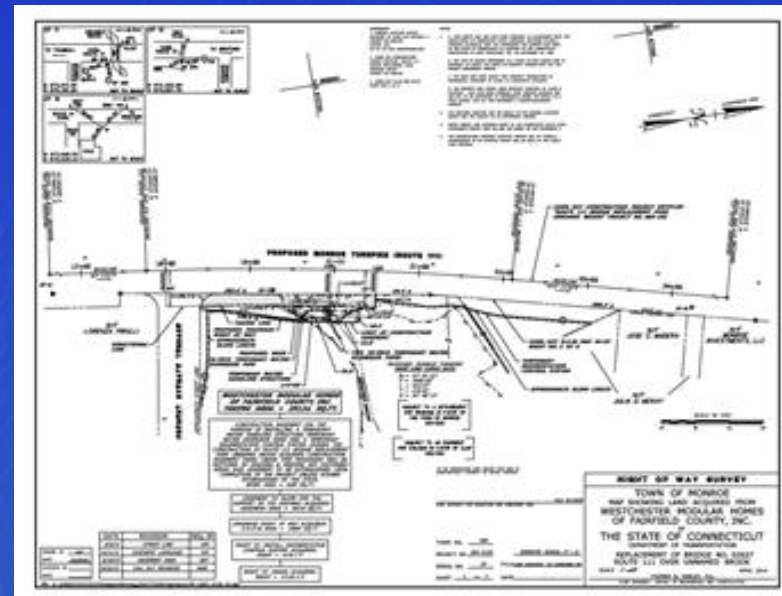


*** Note: Specific impacts are subject to change as the design progresses.**



ROW Acquisition Process

- Letter of Intent to Acquire
- Valuation
- Offer of Just Compensation
- Negotiation
- Acquisition
 - Agreement
 - Eminent Domain/Condemnation
 - » 6 month appeal period



Relocation Benefits

- **Advisory Services**
- **Moving & Related Expenses**
- **Replacement Housing Payment (Residential)**
- **Business Re-establishment (Commercial)**

***A Right of Way agent will provide you with detailed relocation information specific to your situation.**



Timing for Acquisitions

- All property rights must be acquired by the project advertising date.
- Current Advertising Date:
11/8/2017



Environmental Permitting

- **U.S. Army Corps of Engineers (ACOE) Section 404 Individual Permit**
- **Section 401 Water Quality Certification and an Inland Wetlands and Watercourse Individual Permit**
- **CTDEEP General Permit for Stormwater and Dewatering Wastewaters Associated with Construction Activities**
- **Coordination with United States Coast Guard to determine need for USCG Bridge Permit**
- **CTDOT Flood Management Certification**



Project/Public Scoping

- **To limit impacts to the local traffic, a Temporary Bypass is proposed for the Route 8 Northbound Deck Replacement.**
- **The gathering and analysis of information to establish the breadth, or scope, of environmental review of a proposed project.**
- **Comment Period runs for 30 days after Scoping Notice published in the Environmental Monitor. This Comment Period ends December 9, 2015.**
- **The public can submit scoping comments in writing, via email, or offer oral comments at this Public Information/Public Scoping Meeting**



Environmental Considerations

- **Land Use/ Zoning**
- **Socioeconomics**
- **Air Quality & Noise**
- **Natural Resources**
- **Cultural Resources**
- **Hazardous Materials / Contamination**
- **Soils**
- **Utilities & Energy Consumption**
- **Wetlands, Endangered Species, etc.**
- **Traffic**
- **Secondary / Cumulative Impacts**



Archaeological Site

- Former Jackson Street Neighborhood
 - Mid 19th to early 20th Century Homes
 - Demolished in the 1920s
 - Eligible for National Register of Historic Places



Submit comments to Charles Speal @ 860-594-2918
Or email charles.speal@ct.gov

Connecticut Department of Transportation



Project Cost and Schedule

- Cost is currently estimated at \$190,000,000.
- Bridge Rehabilitation will be undertaken with State and Federal Funds
- Proposed Schedule
 - Start Date: Spring 2018
 - Finish Date: Autumn 2021



Contact Information

Thank you
Questions and Comments

Scoping Comments

Mark Alexander

dot.environmentalplanning@ct.gov

All Other Comments

Robert Brown

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2800 Berlin Turnpike
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Connecticut Department of Transportation

