

Walk Bridge Project

Norwalk Shellfish Commission

January 3, 2019



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Meeting Agenda

1. Welcome & Introductions
2. Project Overview
3. Goals & Expectations
4. Construction Activities & Protective Measures
5. Next Steps
6. Questions & Comments

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Christian Brown, HNTB

Chris Samorajczyk, CTDOT

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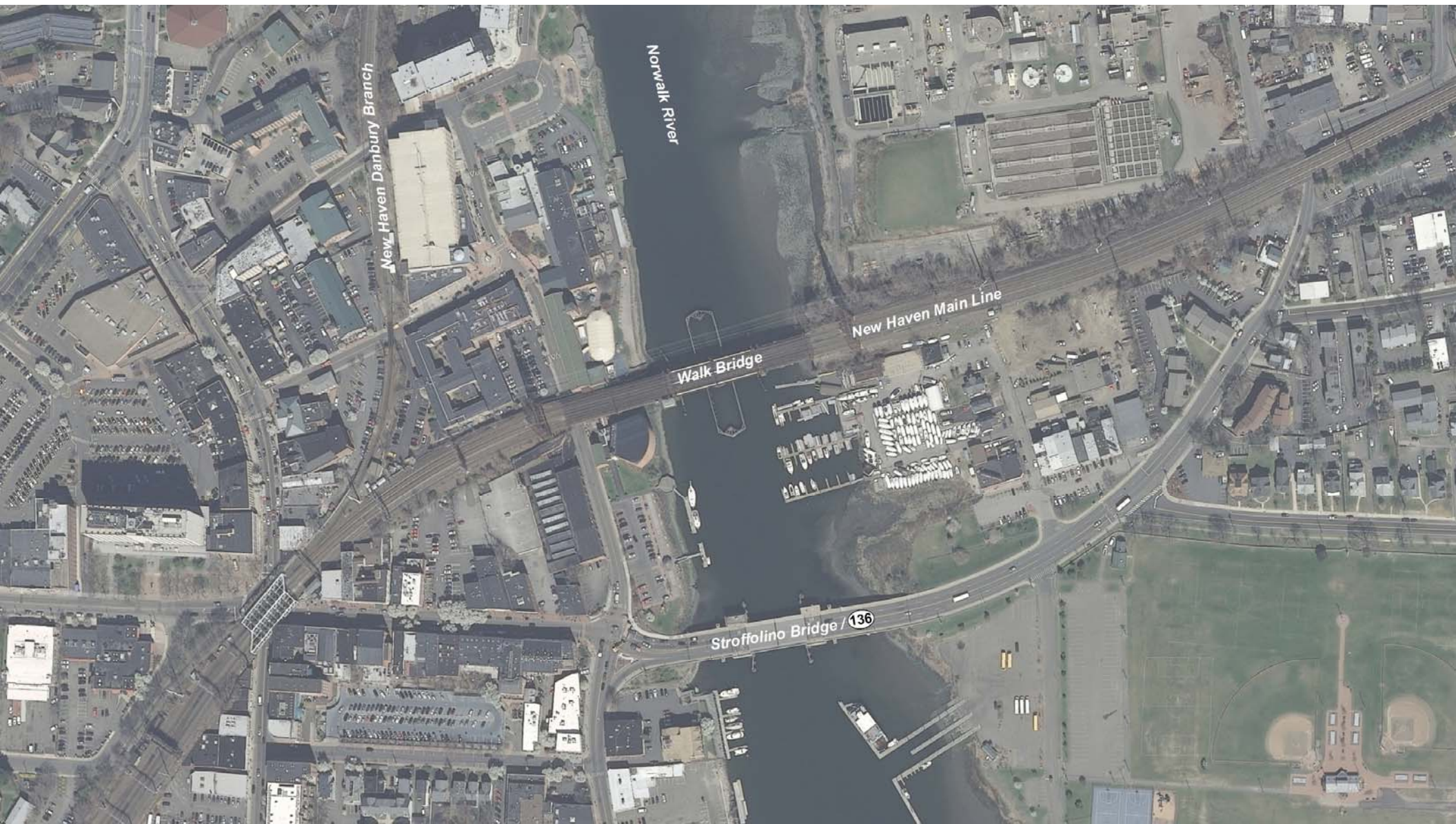


Program Overview



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Project Overview



240' Vertical Lift Span

- Shortest construction schedule
- Lowest risk during construction
- Shortest period of navigation restrictions
- Fewest foundations in water
- Improved alignment with Stroffolino Bridge

Anticipated Duration: 4-5 years



Coordination

- NOAA National Marine Fisheries Service Coordination
- U.S. Fish and Wildlife Service Federal Listed Species Coordination
- CT DEEP Marine Fisheries Division Coordination
- CT DEEP NDDB/Wildlife Coordination
- U.S. Coast Guard Coordination
- U.S. Army Corps of Engineers Navigation Consultation
- CT DEEP LWRD/USACE Permit Coordination
- CT Department of Agriculture/Bureau of Aquaculture Consultation
- Norwalk Harbor Management Commission Consultation
- Norwalk Shellfish Commission Consultation
- Norwalk Harbor Master



Goals and Expectations

- Discuss the Walk Bridge construction activities and methodologies
- Develop an awareness of protective measures and timelines for construction activities
- Provide Commission with a full understanding of construction activities and protective measures in support of permit filings



Trestles



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Trestles



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Trestles



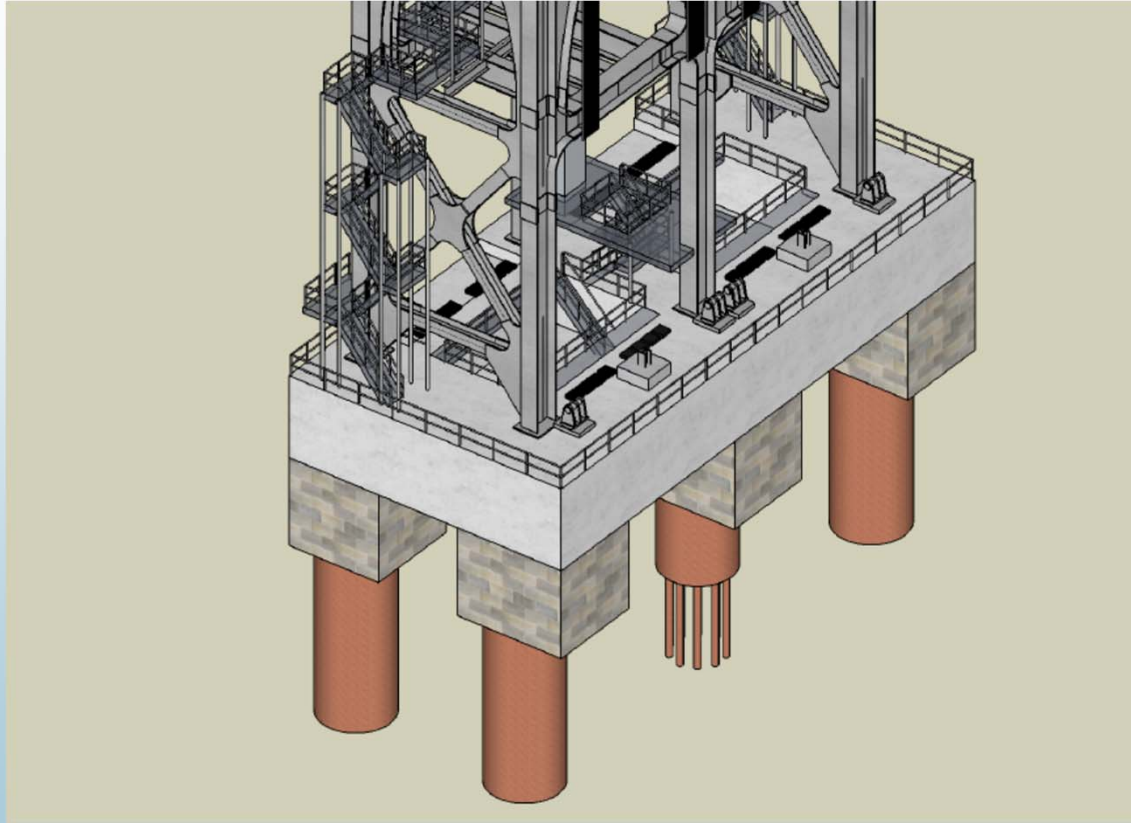
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Trestle Construction In-water Protective Measures

- Turbidity Curtains
- Turbidity Monitoring
- Time of Year Restrictions
 - No unconfined in-water silt producing activities from Feb. 1 – Sept. 30 (for demolition only)
- Use of soft starts at the beginning of each shift from Mar. 15 to Oct. 31
- Maintain one navigation channel, except for limited closures
- All temporary construction access restored to pre-construction conditions



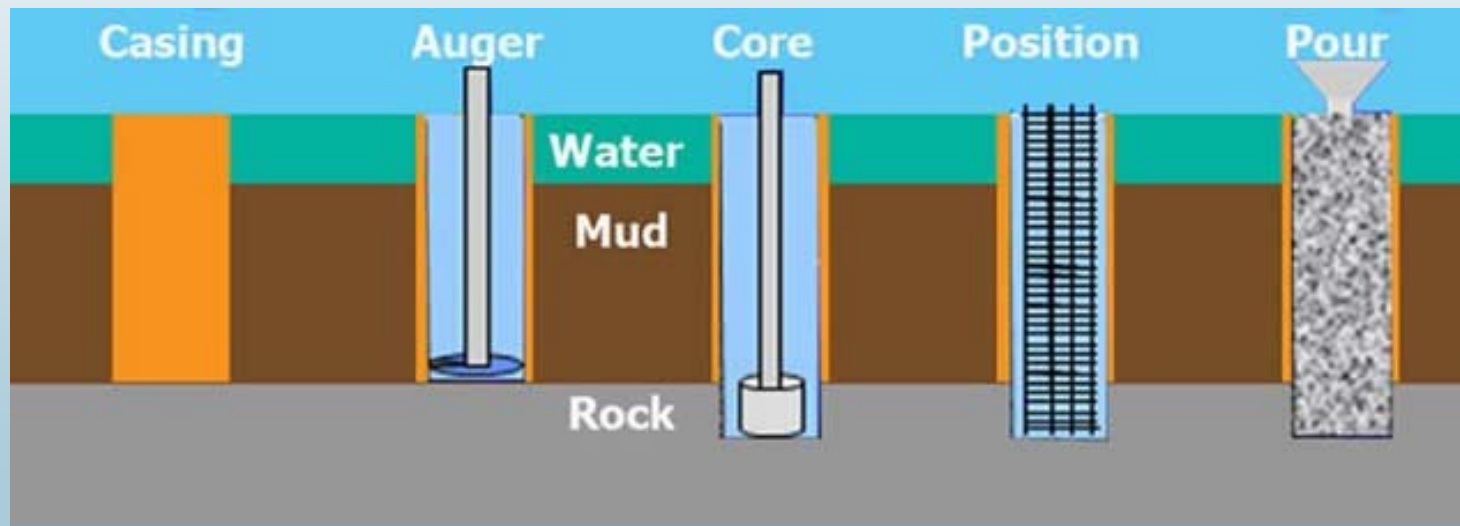
Lift Span Piers



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Lift Span Piers



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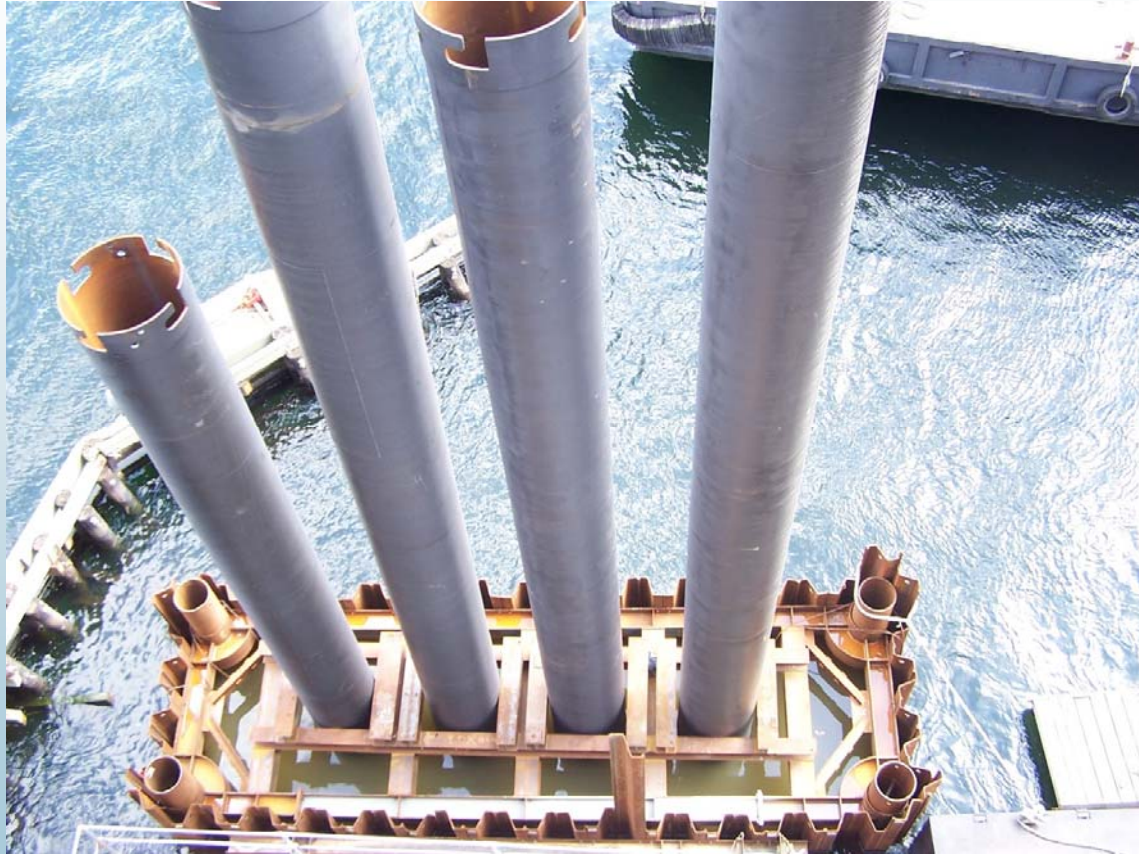
Marine Enclosures



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Drilled Shaft Casings



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Drilled Shaft Cleanout



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Drilled Shaft Concrete



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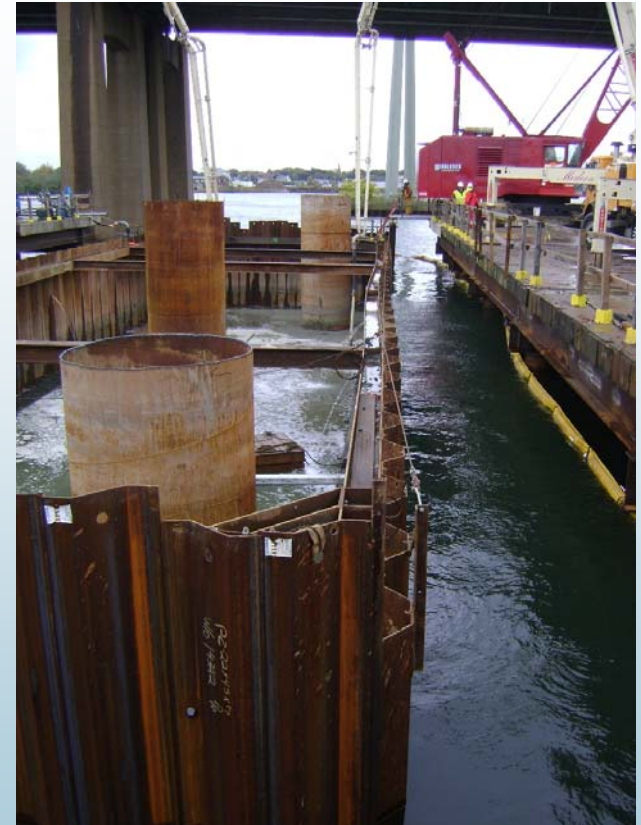
Pier Construction In-water Protective Measures

- Marine Enclosures
- Turbidity Curtains
- Turbidity Monitoring
- Time of Year Restrictions
 - No unconfined in-water silt producing activities from Feb. 1 – Sept. 30
- Use of soft starts at the beginning of each shift from Mar. 15 to Oct. 31
- Maintain one navigation channel, except for limited closures
- All temporary construction access restored to pre-construction conditions



Marine Enclosures

- Interlocked steel sheeting
- Turbidity curtain on outside of sheeting
- Minor seepage
- Water levels inside and outside of enclosure differ
- “non-dewatered” cofferdam
- Use for new bridge pier construction and demolition of existing piers



Turbidity Curtains

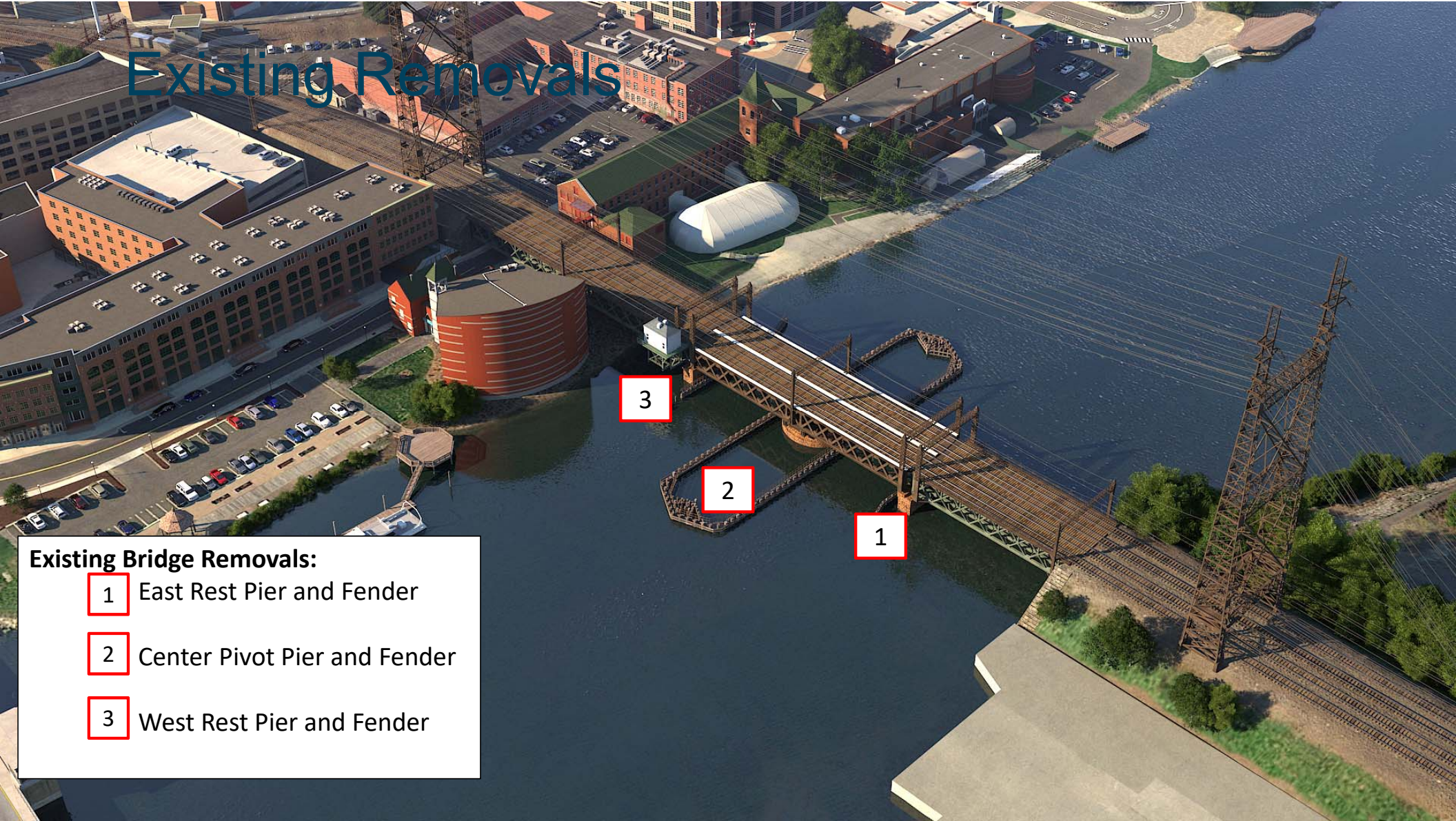
- Around all marine enclosures
- Around all pile driving and extraction activities
- Around all dredging activities
- Around submarine cable work
- Around mitigation sites requiring excavation



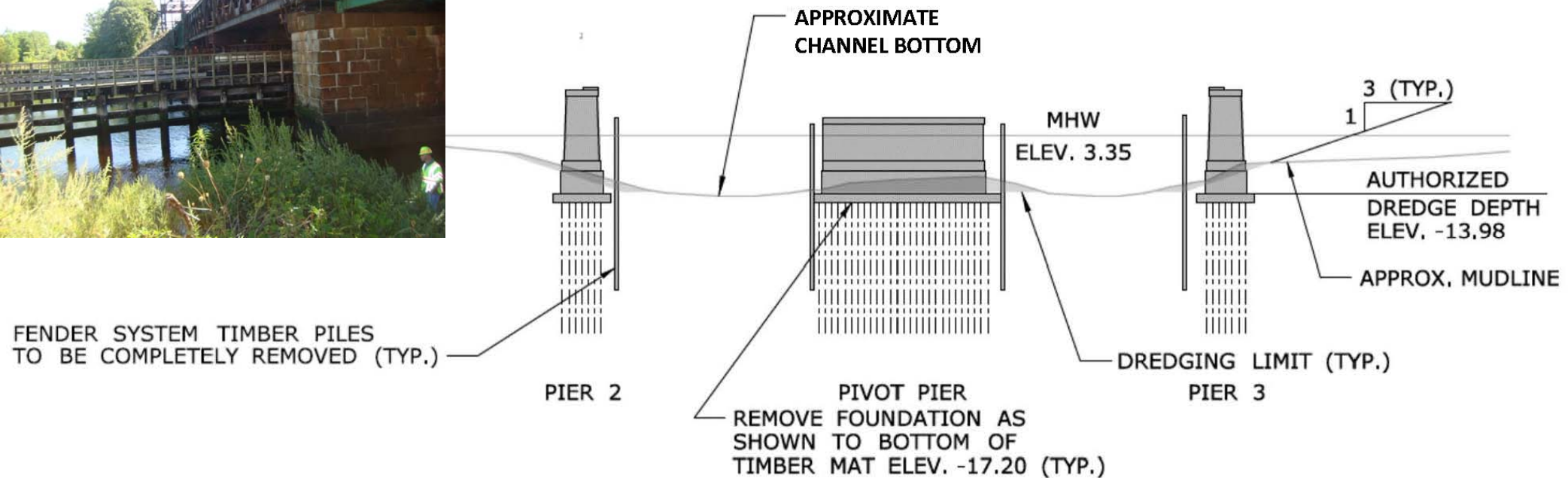
Existing Removals

Existing Bridge Removals:

- 1 East Rest Pier and Fender
- 2 Center Pivot Pier and Fender
- 3 West Rest Pier and Fender



Existing Pier Removal



Pier Removal In-water Protective Measures

- Marine Enclosures
- Turbidity Curtains
- Turbidity Monitoring
- Time of Year Restrictions
 - No unconfined in-water silt producing activities from Feb. 1 – Sept. 30
- Maintain one navigation channel, except for limited closures
- All temporary construction access restored to pre-construction conditions



Vegetated Tidal Wetland Restoration



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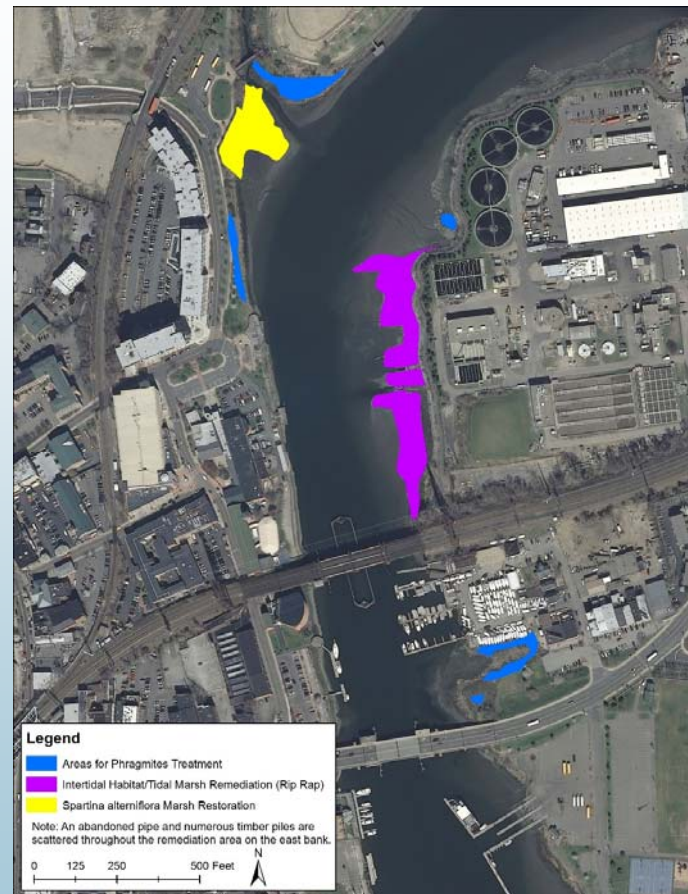
Vegetated Tidal Wetland Restoration



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Wetland Restoration Locations



- Phragmites Treatment
- Intertidal Habitat/Tidal Marsh Remediation
- Spartina alterniflora Marsh Restoration

Wetland Restoration Protective Measures

- Turbidity curtains around sites requiring grading or excavation
- Turbidity Monitoring
- Work only above tide cycle
- All temporary construction access restored to pre-construction conditions



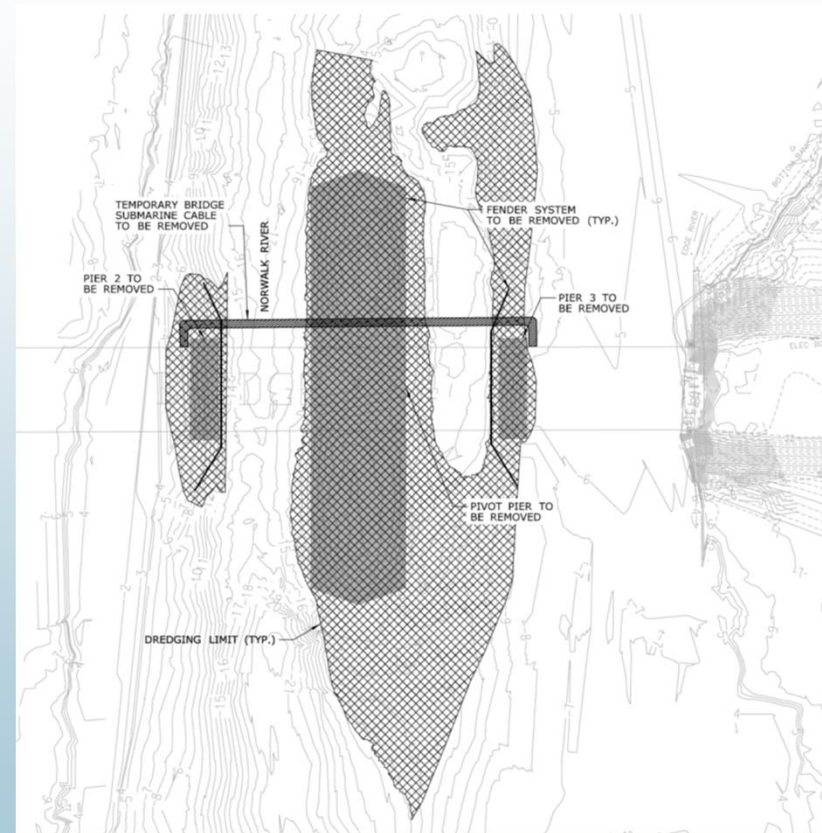
Dredging

- Bridge/Channel Area
- Vessel Relocation Area
- Marine Staging Yard
- Dredging in main channel will occur over multiple construction seasons

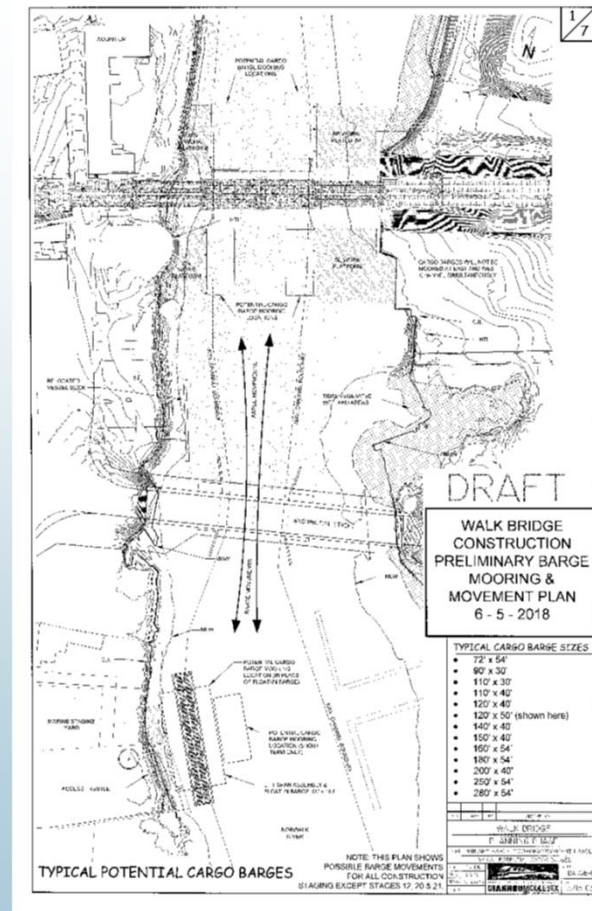


Dredging Protective Measures

- Turbidity Curtains
- Turbidity Monitoring
- Time of Year Restrictions
 - Dredging will occur between Dec. 1 – Jan. 31



Barge Movements



Summary of In-water Protective Measures

- Turbidity Curtains
- Turbidity Monitoring
- Time of Year Restrictions
 - Dredging will occur between Dec. 1 – Jan. 31
 - No unconfined in-water silt producing activities from Feb. 1 – Sept. 30
- Use of soft starts at the beginning of each shift from Mar. 15 to Oct. 31
- Maintain one navigation channel, except for limited closures
- All temporary construction access restored to pre-construction conditions



Permits

- NOAA/NMFS Section 7 Informal Consultation
- NOAA/NMFS Essential Fish Habitat Assessment
- U.S. Army Corps of Engineers Section 408 Permit
- U.S. Army Corps of Engineers Section 10/Section 404 Permit
- CTDEEP Structures, Dredge and Fill Permit, Tidal Wetlands Permit, Section 401 Water Quality Certification, Coastal Consistency Review (CZM)
- CTDEEP Flood Management Certification
- CTDEEP Construction Stormwater General Permit
- U.S. Coast Guard Section 9 Bridge Permit
- General Permit for Contaminated Soil/Sediment Management
- General Permit for the Discharge of Groundwater Remediation Wastewater
- FAA Notice of Proposed Construction



Permit Plates

- Overview Plates
 - Existing & Proposed Conditions
 - Temporary Conditions
 - Tidal Wetland Mitigation
- Construction Activity Plates – 15 Major Activities
 - Trestle Construction
 - Pier Construction
 - Submarine Cable Installation
 - Dredging
- More than 140 plates



Next Steps

- Submit Permit Plates in groups to Commission - within the next 2 months
- Commission Meetings – to discuss construction methodologies, activities, and protective measures and other topics
- Full understanding of construction activities and mitigation measures
- Permit Filing – Spring 2019





Questions & Comments



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