

**ACEC Energy, Environment & Utilities
Markets Conference
October 20, 2026**

**Boston Water and Sewer
Commission Updates**



**Boston Water and
Sewer Commission**
(617) 989-7000 | www.bwsc.org

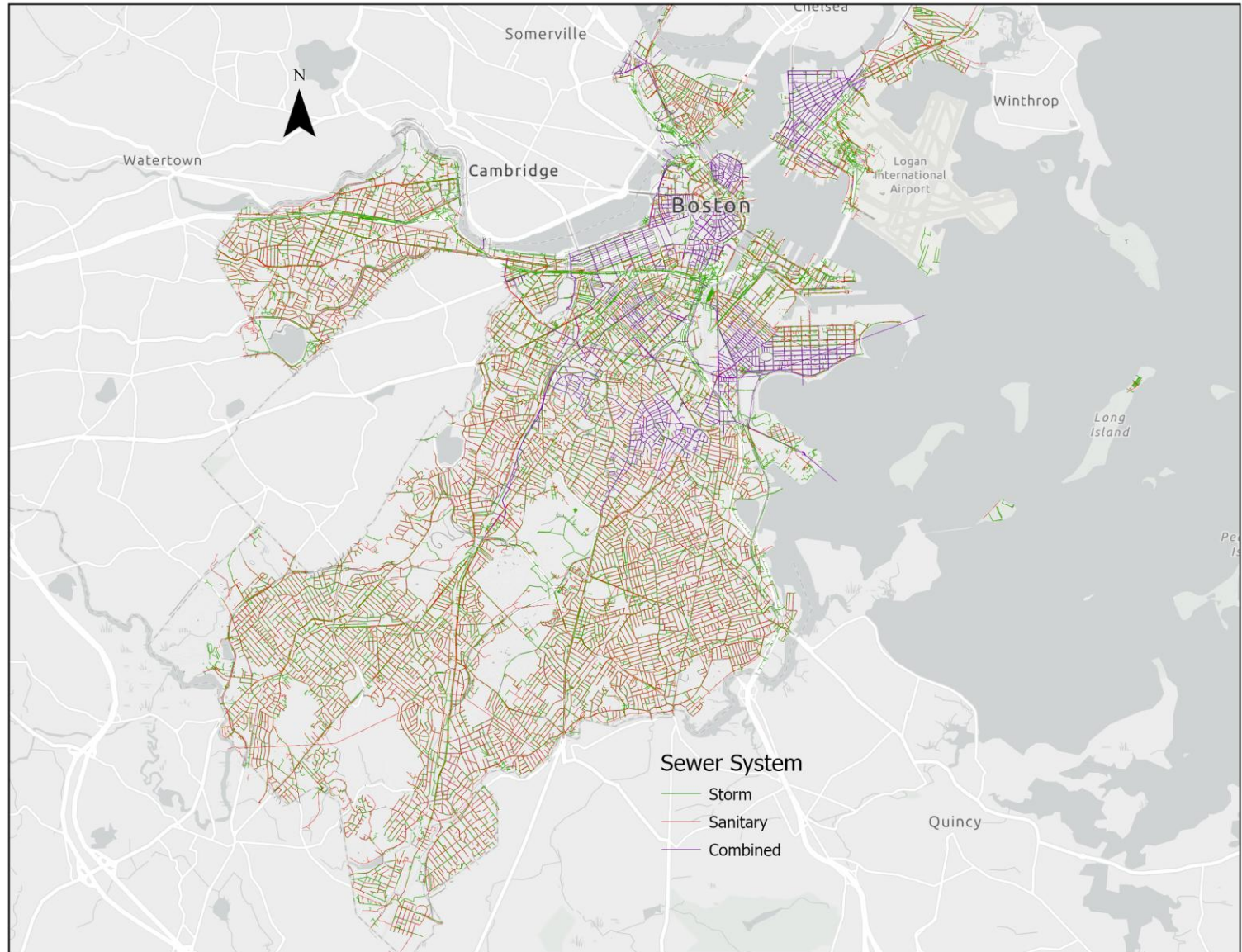
**Peter Salvatore, P.E.
Deputy Chief Engineer**

**Emma Page, P.E.
Director of Planning and Sustainability**

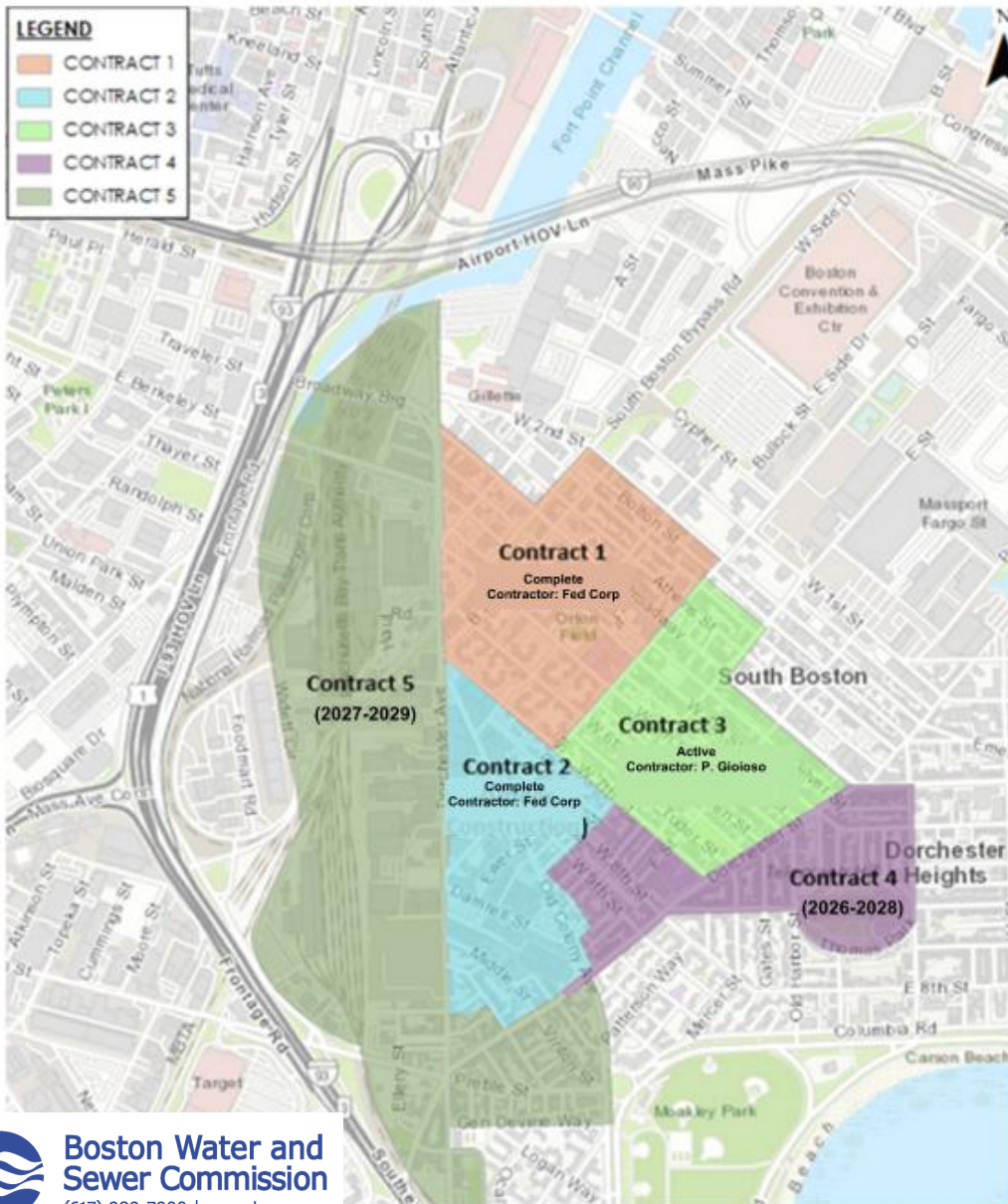


About BWSC

- 1,500 miles of sewer, drain and combined sewer pipe
- 980 miles of water main
- Ongoing Work
 - Sewer Separation
 - Water Main Program
 - Sewer & Drain Program
 - Large Diameter Water Mains
 - Sewer & Drain Monitoring
 - Climate Resilience
 - Stormwater Program
 - SSES



South Boston Sewer Separation: 403 Acres



South Boston Sewer Separation Phase III

Phase	Start Date	End Date	Duration (Months)	2021	2022	2023	2024	2025	2026	2027	2028	2029
Construction Contracts	7/6/2021	10/2/2029	87									
Contract 1 - Complete	7/6/2021	2/13/2023	19									
Contract 2 - Closeout	9/11/2023	4/6/2026	37									
Contract 3 - In Progress	10/7/2024	3/11/2027	29									
Contract 4*	9/8/2026	10/3/2028	24									
Contract 5*	9/27/2027	10/2/2029	24									

*Future contracts. Construction dates are approximate.

Permanent trench repair (paving) contracts to follow construction.

Rehabilitation of the New Boston Main Interceptor:

Phase I & II: Complete

Phase III: Ongoing

South Boston Sewer Separation

South Boston Sewer Separation Phase III

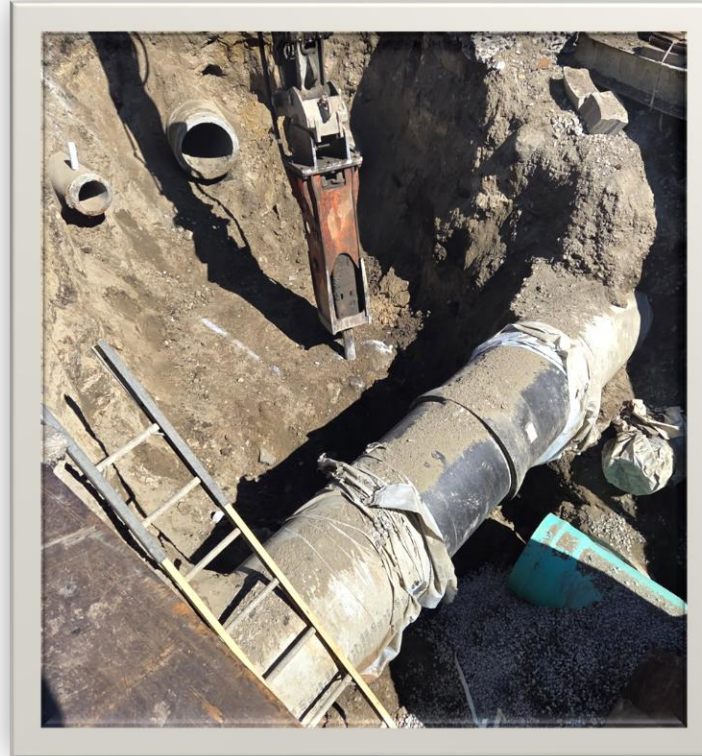
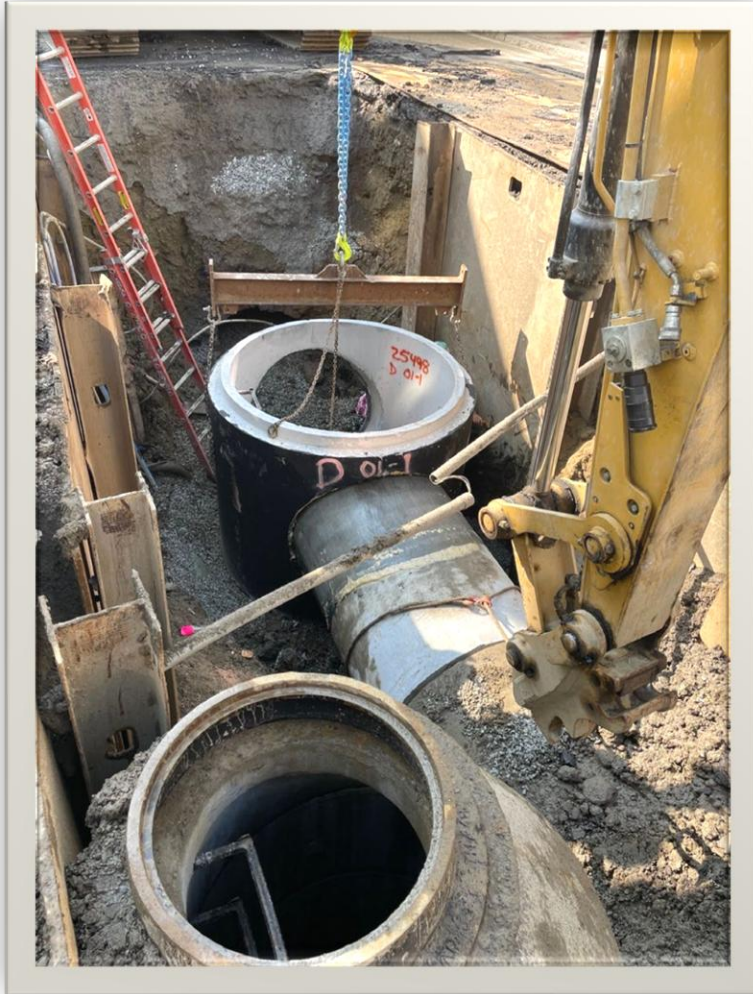
Contracts		2022	2023	2024	2025	2026	2027	2028	2029	Total
Contract 1	Drain	\$ 2,496,621.52	\$ 1,853,089.17	\$ 20,244.90	\$ 49,086.91					\$ 4,419,042.50
	Sewer	\$ 3,651,570.01	\$ 3,491,708.18							\$ 7,143,278.18
	Water	\$ 3,293,221.54	\$ 2,225,297.43	\$ 425,584.89						\$ 5,944,103.85
	Rehab	\$ 114,435.15	\$ 114,435.15							\$ 228,870.30
Contract 2	Drain		\$ 3,267,412.00	\$ 4,917,080.36	\$ 2,235,898.95	\$ 210,926.69				\$ 10,631,318.00
	Sewer		\$ 140,555.51	\$ 3,176,951.26	\$ 909,991.39	\$ 51,900.00				\$ 4,279,398.16
	Water		\$ 563,861.65	\$ 4,654,961.22	\$ 3,071,217.59	\$ 6,229.62				\$ 8,296,270.08
	Rehab			\$ 427,725.00						\$ 427,725.00
Contract 3	Drain			\$ 1,113,067.14	\$ 4,452,268.55	\$ 4,452,268.55	\$ 742,044.76			\$ 10,759,649.00
	Sewer			\$ 966,099.00	\$ 3,864,396.00	\$ 3,864,396.00	\$ 644,066.00			\$ 9,338,957.00
	Water			\$ 790,111.97	\$ 3,160,447.86	\$ 3,160,447.86	\$ 526,741.31			\$ 7,637,749.00
	Rehab									\$ -
Contract 4*	Drain					\$ 2,235,082.00	\$ 4,470,164.00	\$ 4,470,164.00		\$ 11,175,410.00
	Sewer					\$ 1,113,914.00	\$ 2,227,828.00	\$ 2,227,828.00		\$ 5,569,570.00
	Water					\$ 2,031,479.00	\$ 4,062,958.00	\$ 4,062,958.00		\$ 10,157,395.00
	Rehab					\$ 151,325.00	\$ 302,650.00	\$ 302,650.00		\$ 756,625.00
Contract 5*	Drain						\$ 1,382,051.00	\$ 2,073,077.00	\$ 1,554,808.00	\$ 5,009,936.00
	Sewer						\$ 1,987,152.00	\$ 2,980,727.00	\$ 2,235,545.00	\$ 7,203,424.00
	Water						\$ 1,624,769.00	\$ 2,437,154.00	\$ 1,827,866.00	\$ 5,889,789.00
	Rehab						\$ 2,025,511.00	\$ 3,038,267.00	\$ 2,278,700.00	\$ 7,342,478.00
TOTAL		\$ 9,555,848.21	\$ 11,656,359.08	\$ 16,491,825.73	\$ 17,743,307.25	\$ 17,277,968.72	\$ 19,995,935.07	\$ 21,592,825.00	\$ 7,896,919.00	\$ 122,210,988.07

*Future contracts. Costs based on design estimates.

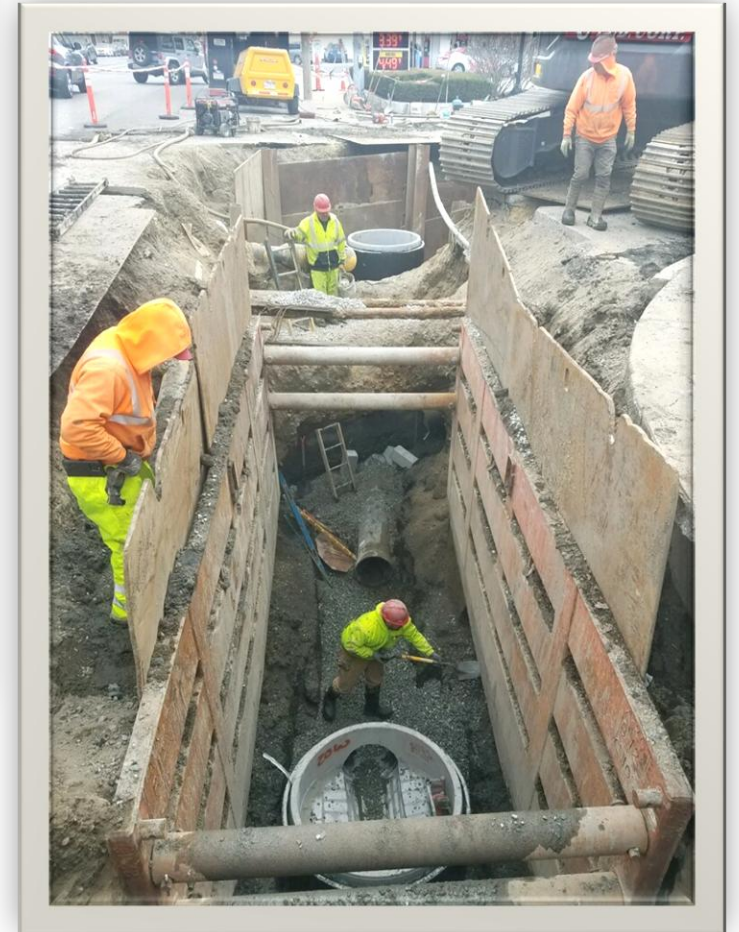


South Boston Sewer Separation

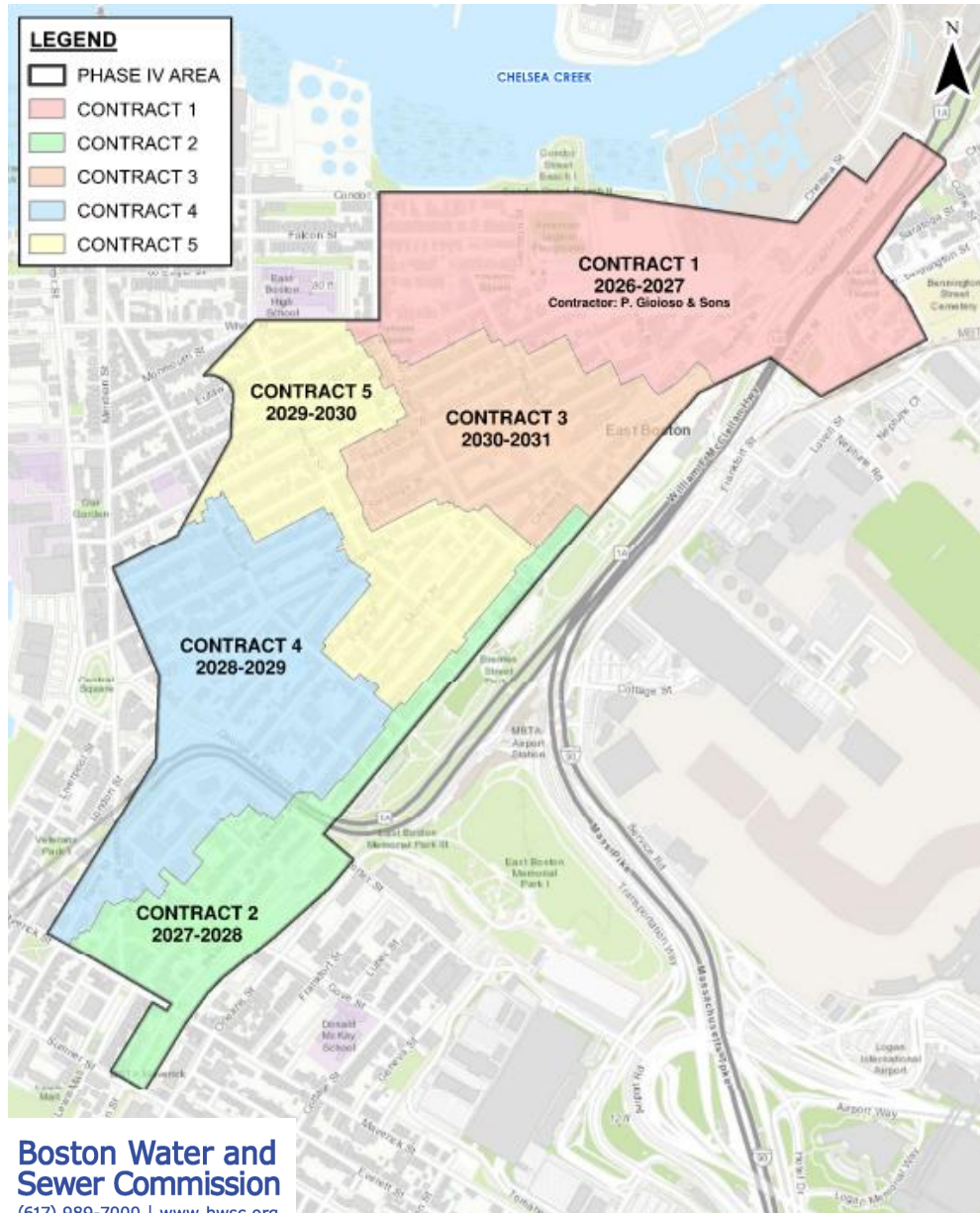
South Boston I & II Construction Photos
Completed by Fed. Corp in 2024



Sewer, Drain and
Water main
Installation



East Boston Sewer Separation: 230 Acres



East Boston Sewer Separation Phase IV

Phase	Start Date	End Date	Duration (Months)	2025	2026	2027	2028	2029	2030	2031
Construction Contracts	9/15/2025	9/15/2031	72							
Contract 1 - In Progress	9/15/2025	9/15/2027	24							
Contract 2*	9/15/2026	9/15/2028	24							
Contract 4*	9/15/2027	9/15/2029	24							
Contract 5*	9/16/2028	9/15/2030	24							
Contract 3*	9/15/2029	9/15/2031	24							

*Future contracts. Construction dates are approximate.

Permanent trench repair (paving) contracts to follow construction.



East Boston Sewer Separation

East Boston Sewer Separation Phase IV

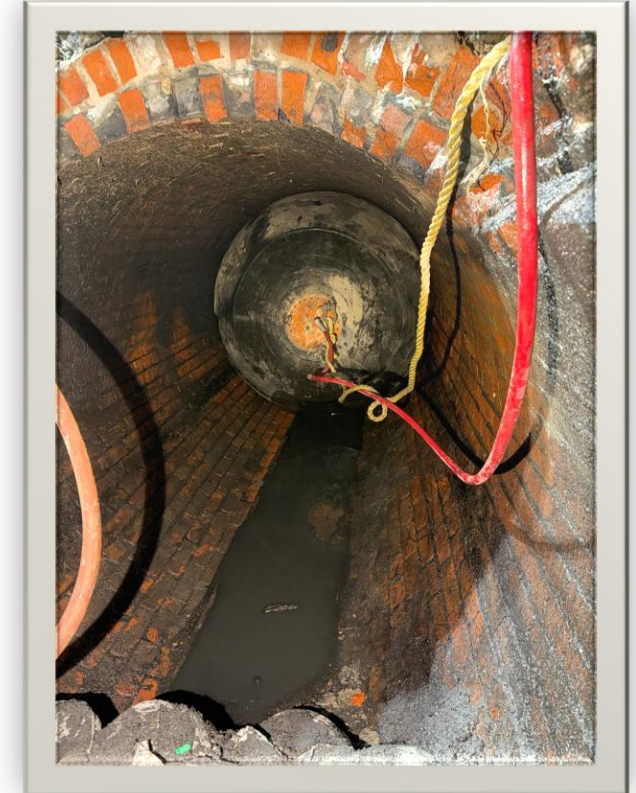
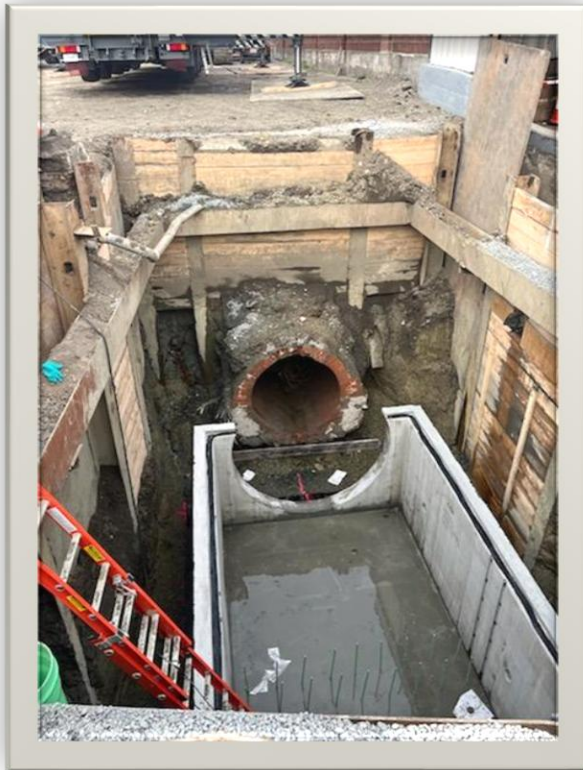
Contracts		2026	2027	2028	2029	2030	2031	Total
Contract 1	Drain	\$ 6,434,237.32	\$ 6,434,237.32					\$ 12,868,474.64
	Sewer	\$ 2,467,236.67	\$ 2,467,236.67					\$ 4,934,473.34
	Water	\$ 3,876,302.85	\$ 3,876,302.85					\$ 7,752,605.70
Contract 2 *	Drain		\$ 5,901,471.00	\$ 5,901,471.00				\$ 11,802,942.00
	Sewer		\$ 3,325,052.50	\$ 3,325,052.50				\$ 6,650,105.00
	Water		\$ 2,894,671.00	\$ 2,894,671.00				\$ 5,789,342.00
Contract 4 *	Drain			\$ 5,379,824.50	\$ 5,379,824.50			\$ 10,759,649.00
	Sewer			\$ 4,669,478.50	\$ 4,669,478.50			\$ 9,338,957.00
	Water			\$ 3,818,874.50	\$ 3,818,874.50			\$ 7,637,749.00
Contract 5 *	Drain				\$ 5,150,703.00	\$ 5,150,703.00		\$ 10,301,406.00
	Sewer				\$ 4,019,271.00	\$ 4,019,271.00		\$ 8,038,542.00
	Water				\$ 6,678,203.00	\$ 6,678,203.00		\$ 13,356,406.00
Contract 3 *	Drain					\$ 4,366,446.00	\$ 4,366,446.00	\$ 8,732,892.00
	Sewer					\$ 3,142,342.50	\$ 3,142,342.50	\$ 6,284,685.00
	Water					\$ 4,216,458.50	\$ 4,216,458.50	\$ 8,432,917.00
TOTAL		\$ 12,777,776.84	\$ 24,898,971.34	\$ 25,989,372.00	\$ 29,716,354.50	\$ 27,573,424.00	\$ 11,725,247.00	\$ 132,681,145.68

*Future contracts. Costs based on design estimates.



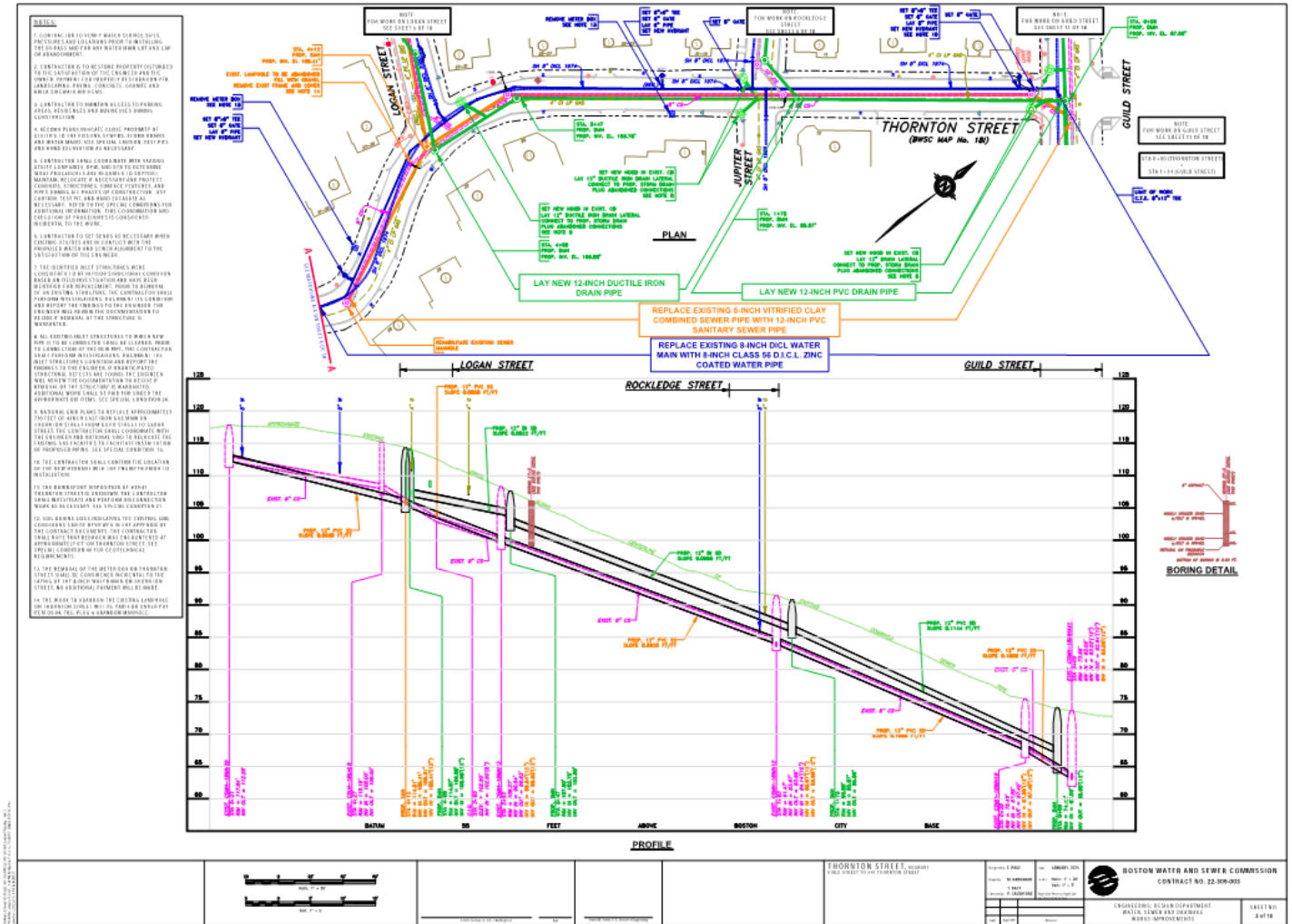
East Boston Sewer Separation

Eagle Square Tide Gate Chamber Installation
On-going work by P. Gioioso



On-Call Water and Sewer Design Services

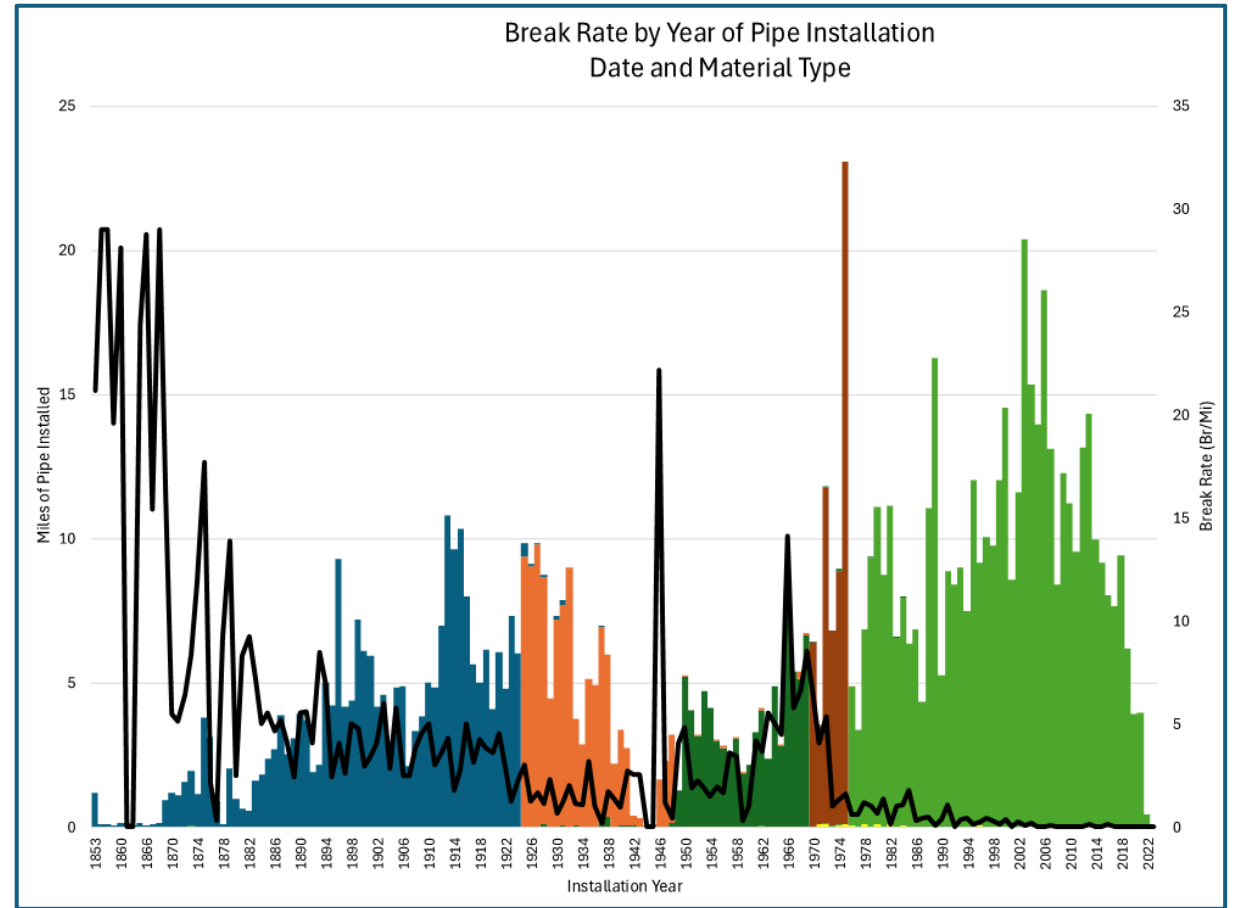
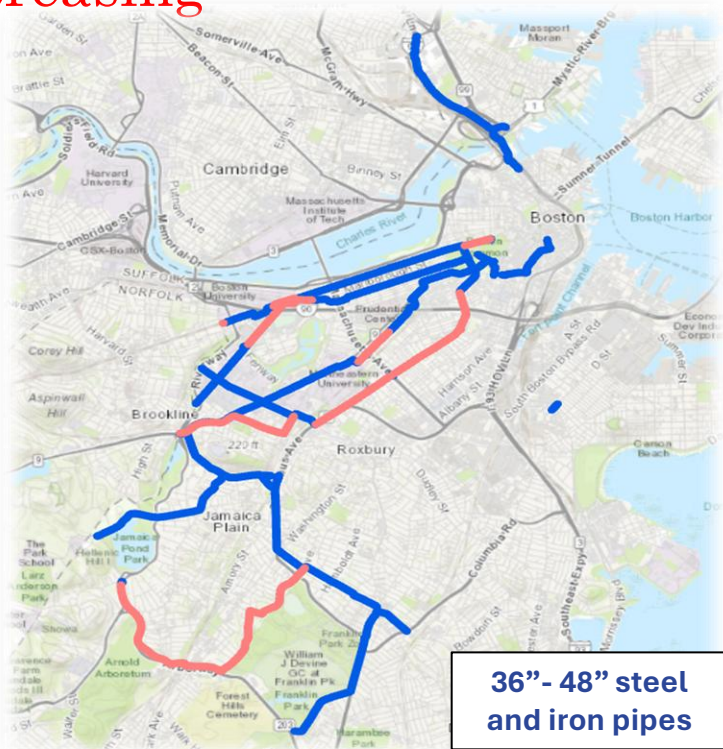
- Contract to supplement in-house design of water, sewer and storm drain rehab and replacement work
- One three-year contract awarded in June 2026
- Second three-year contract expected to be advertised in late 2026



Water Distribution Model Update and Evaluation

Main Break Trends

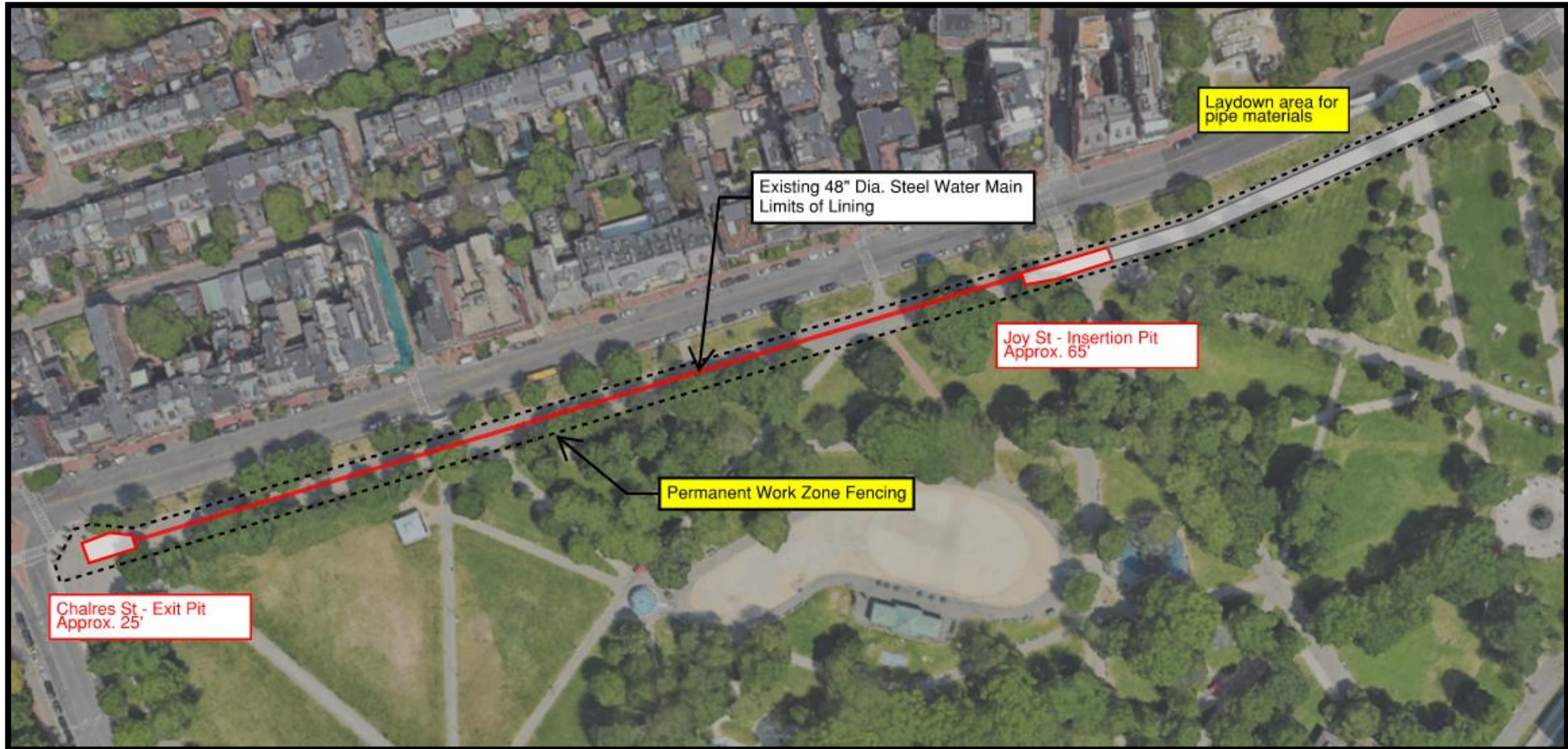
- Avg. age of broken pipes - increasing
- Number of breaks per year - decreasing
- Avg. diameter of broken pipes - increasing



Next Steps - Evaluate transmission mains and develop a replacement strategy

Large Diameter Water Main Lining – Boston Common

Installation of 48" HDPE Transmission Main Liner on the Beacon St Mall
Performed by Albanese D&S in 2025



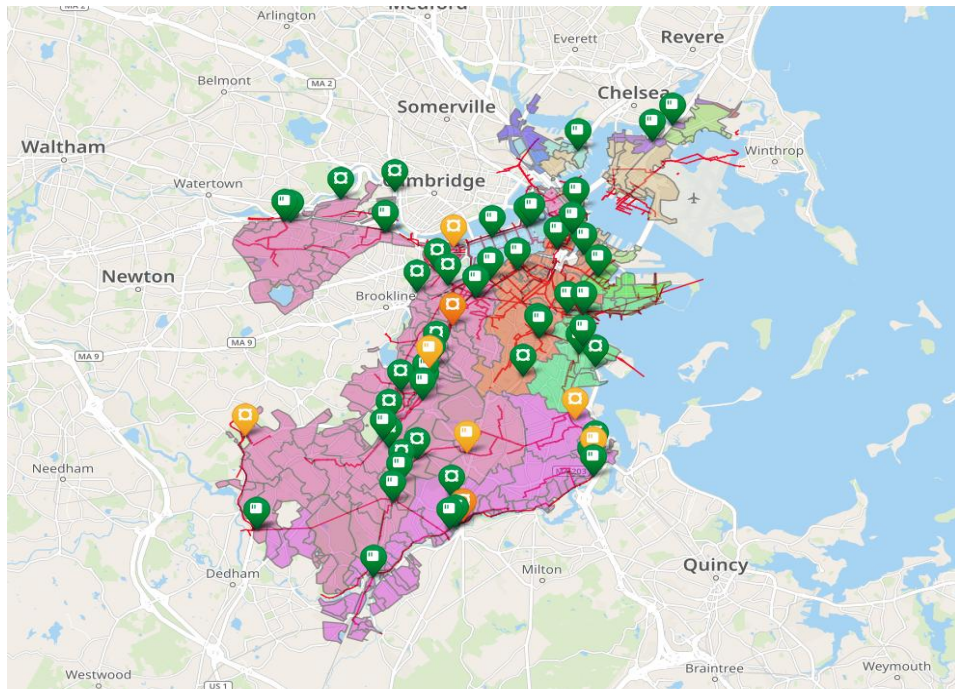
Large Diameter Water Main Lining – Boston Common



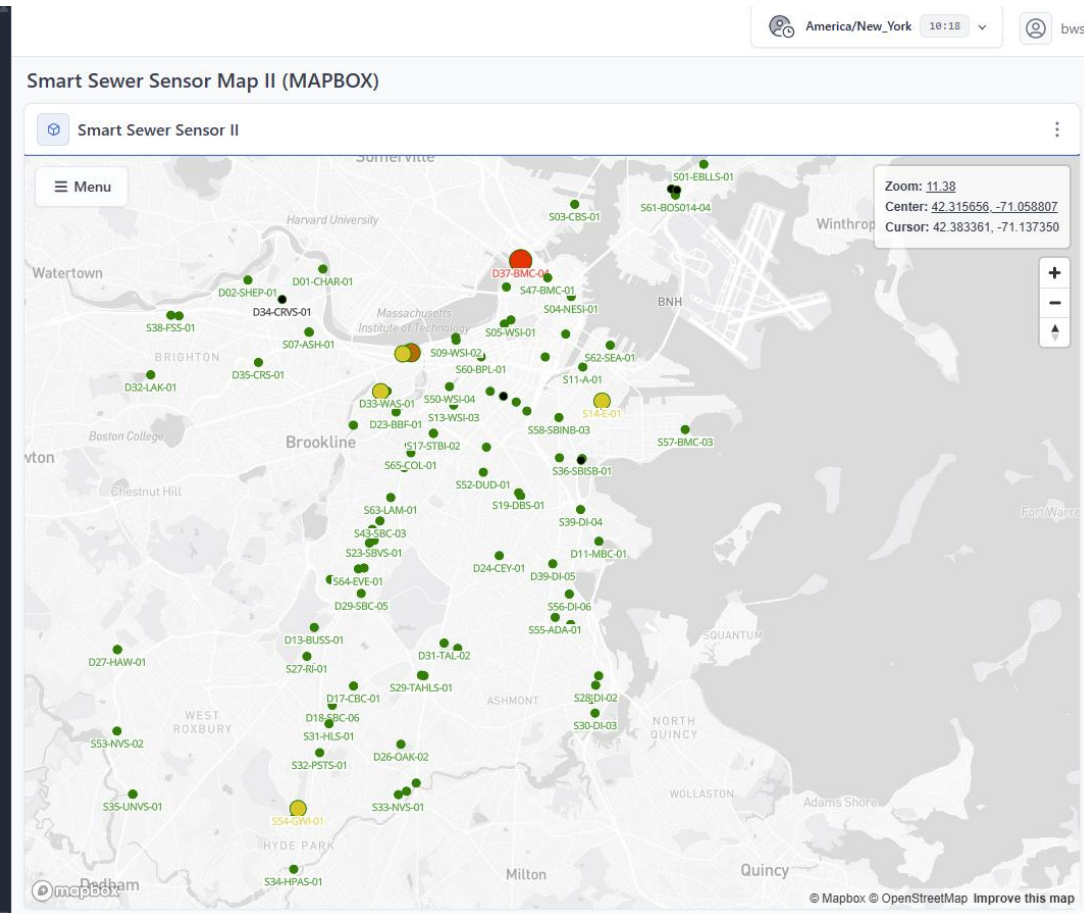
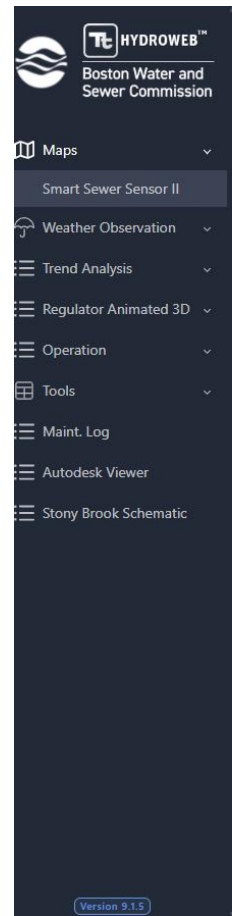
Heath Street: Replacement of 3,480 feet of 36-inch Water Main



Smart Sewer and Drain Program

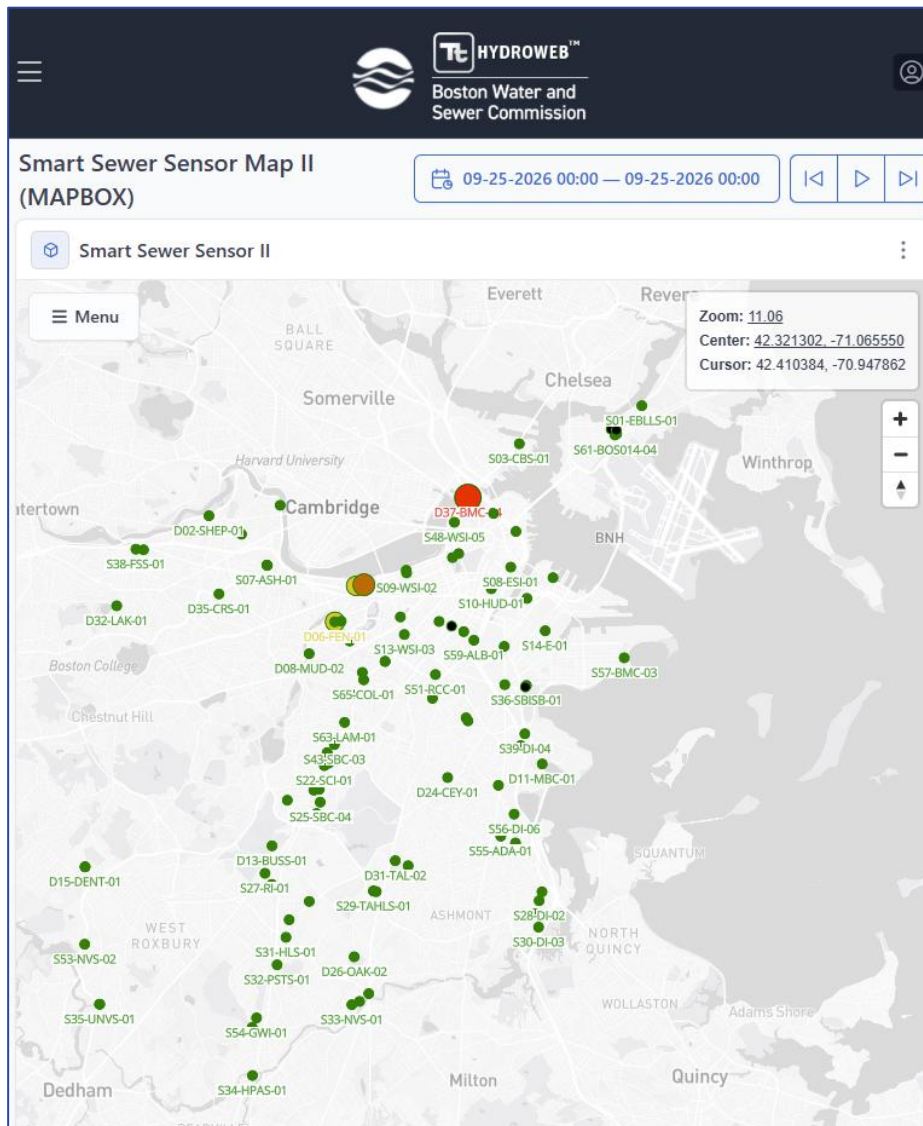


Phase One (2022-2025)
70 sewer and drain level sensors

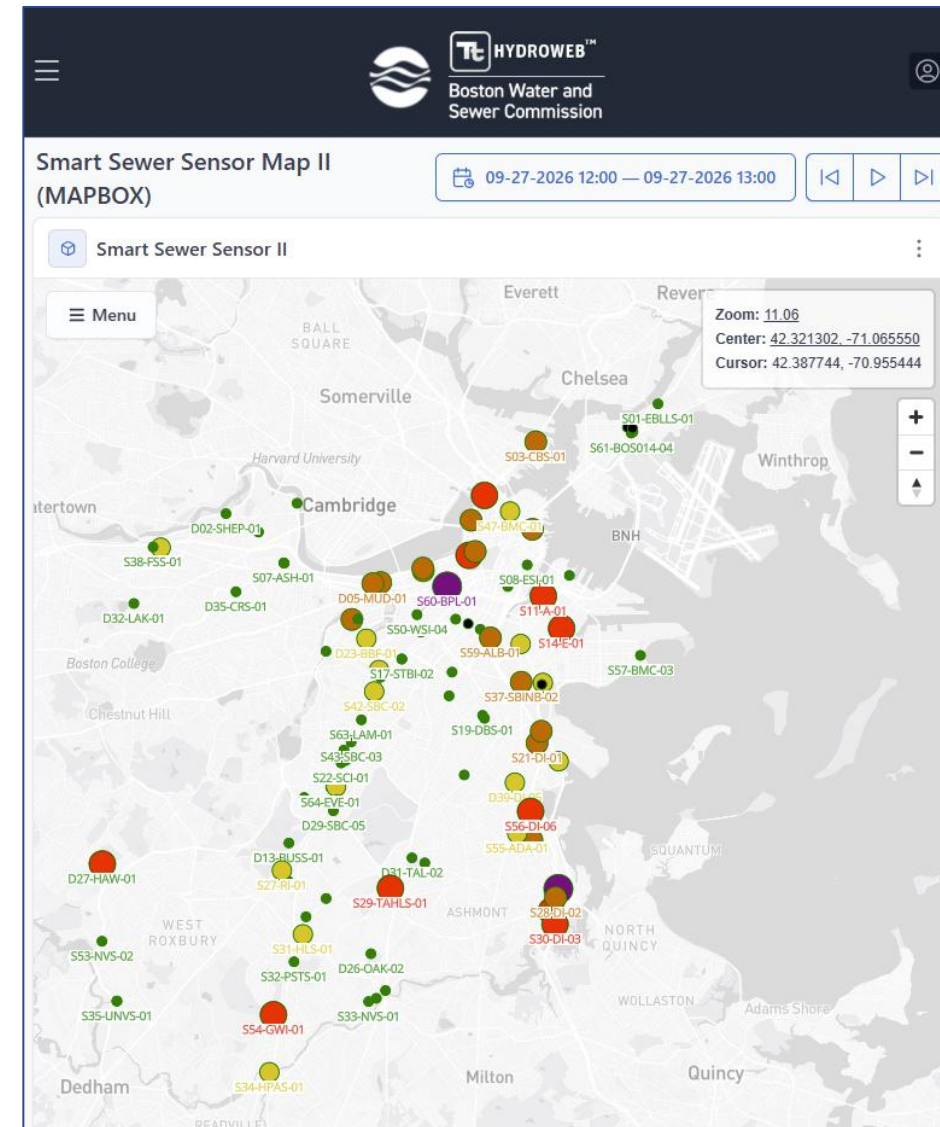


Phase Two (2025-2028)
125 sewer and drain level sensors
10 flow meters

Smart Sewer and Drain Program



Dry Weather



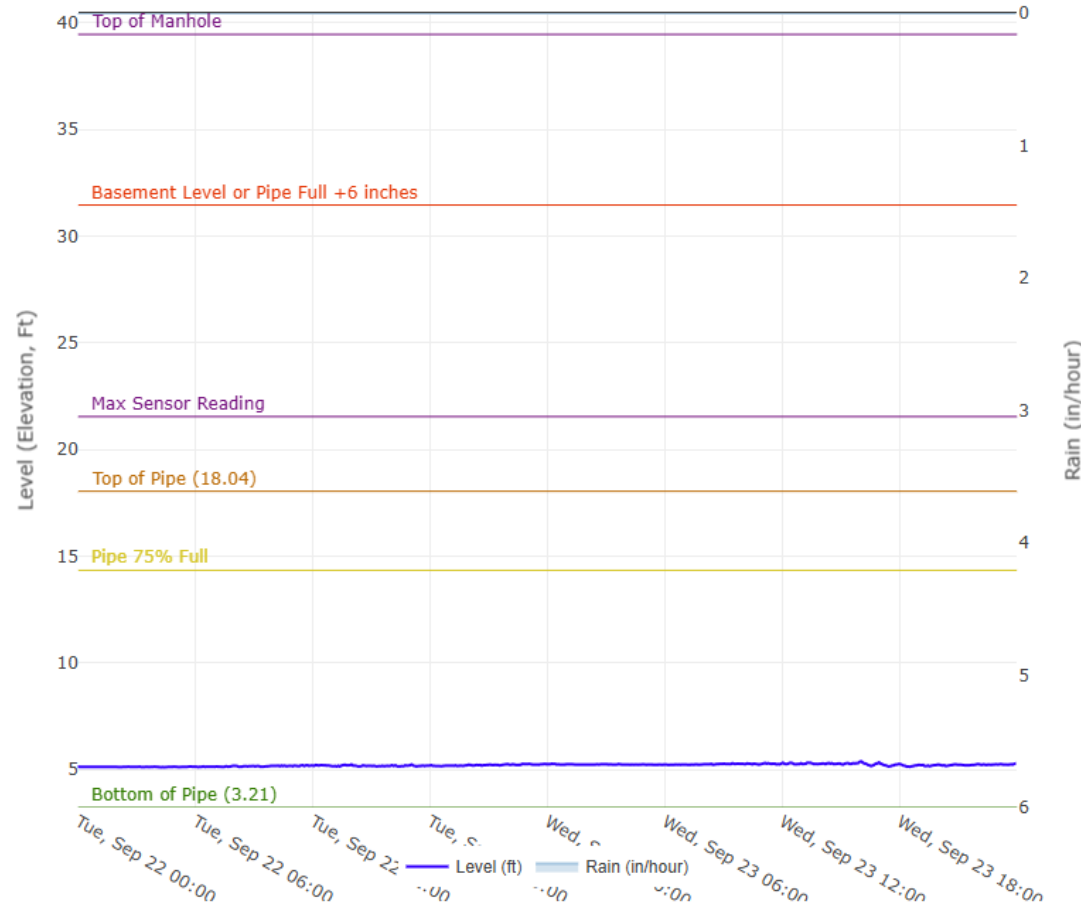
Wet Weather

Wet Weather Monitoring

S42-SBC-02 (1406 MA-28 - JAPL - 19HMH306 -
Stony Brook Conduit)

09-22-2026 00:00 — 09-24-2026 00:00

SBC-02 - Site Report

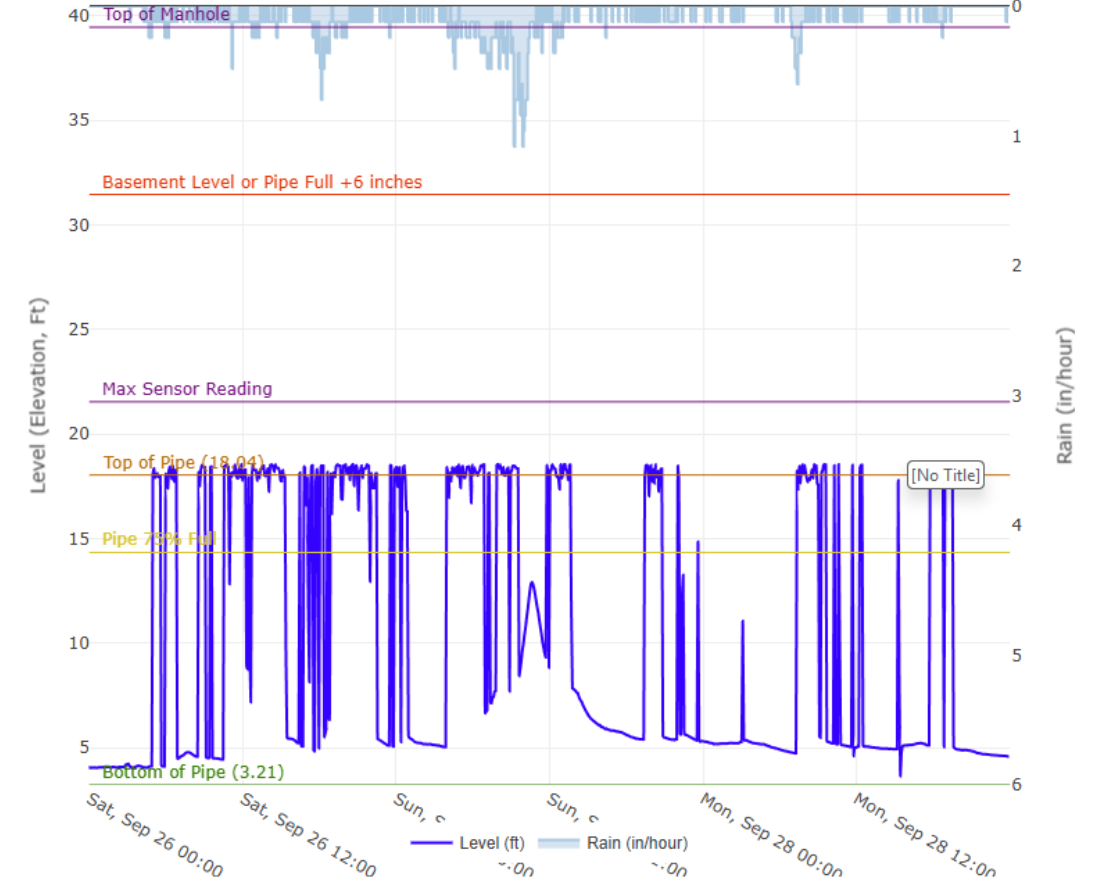


Dry Weather

S42-SBC-02 (1406 MA-28 - JAPL - 19HMH306 -
Stony Brook Conduit)

09-26-2026 00:00 — 09-29-2026 00:00

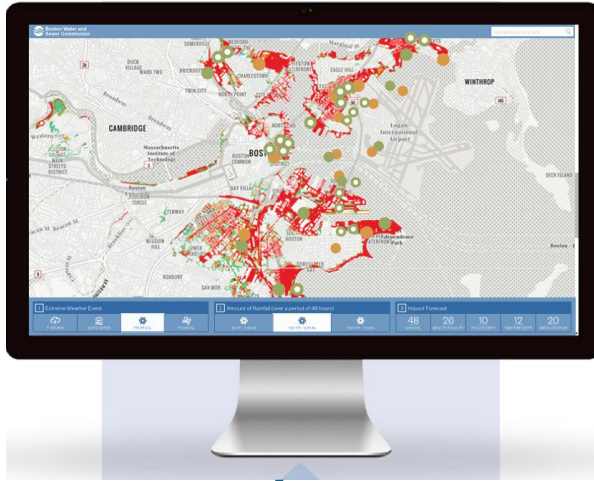
SBC-02 - Site Report



Wet Weather



Climate Resilience Projects



2020

Coastal Stormwater Discharge Analysis

Development of conceptual solutions to address flood vulnerable areas



2026-2028

Adaptation Design Advancement

Progress the designs of two key conceptual solutions from the CSDA

2018

Inundation Model

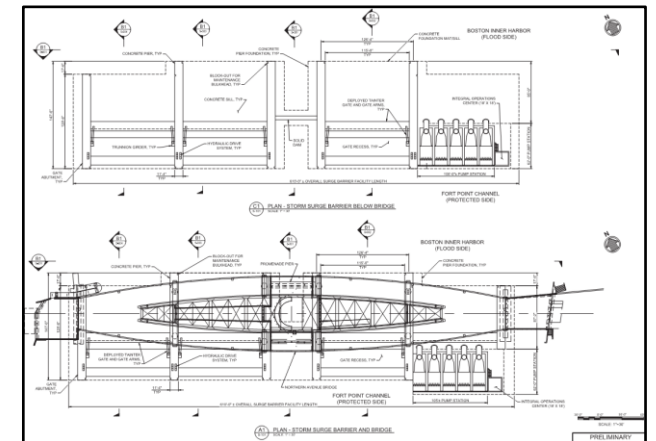
Development of Commission's first ever 2D inundation model and interactive viewer



2024-2027

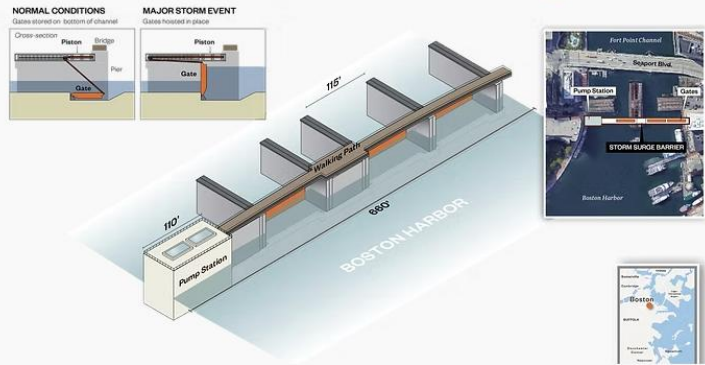
Inundation Model Update

Update and expand inundation model and develop additional conceptual solutions



Fort Point Channel and Dorchester Bay Basin Design Advancement

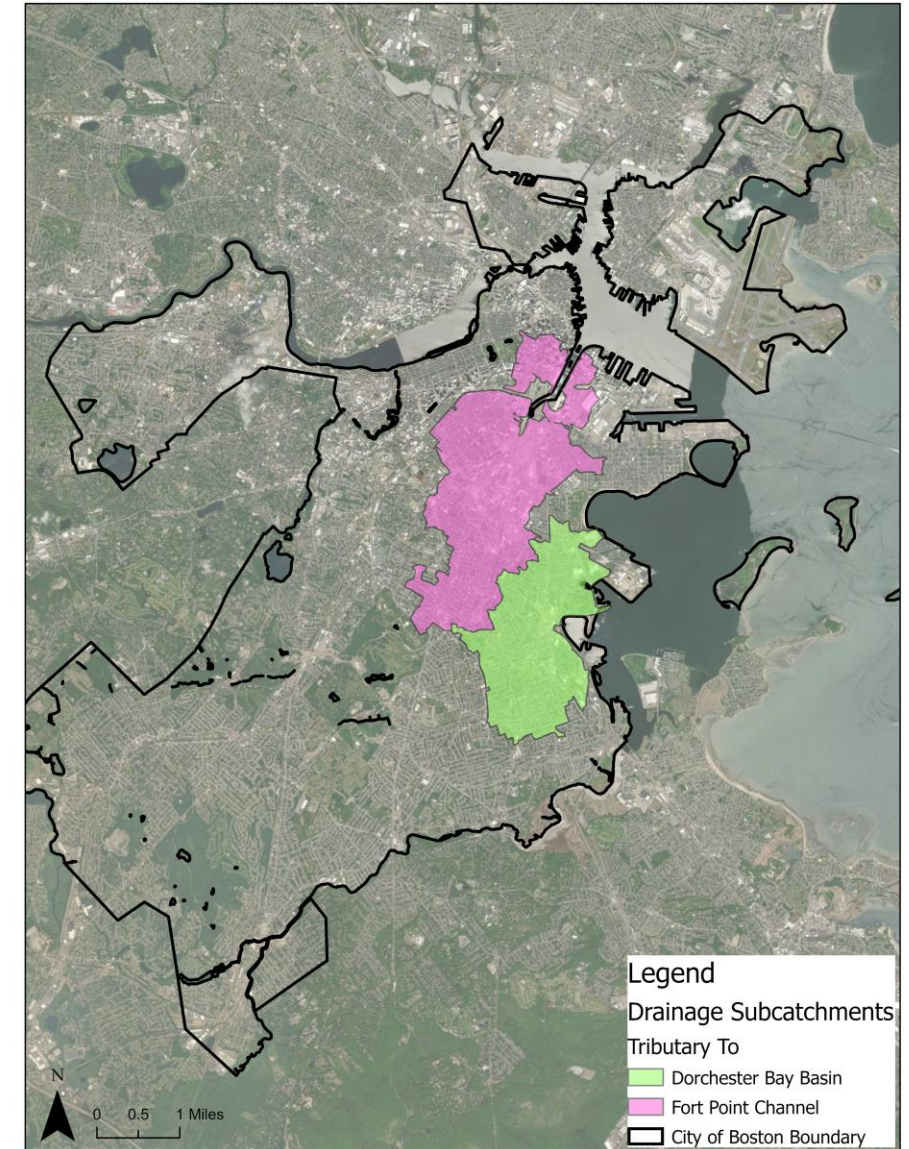
Fort Point Channel Storm Surge Barrier



Dorchester Bay Basin



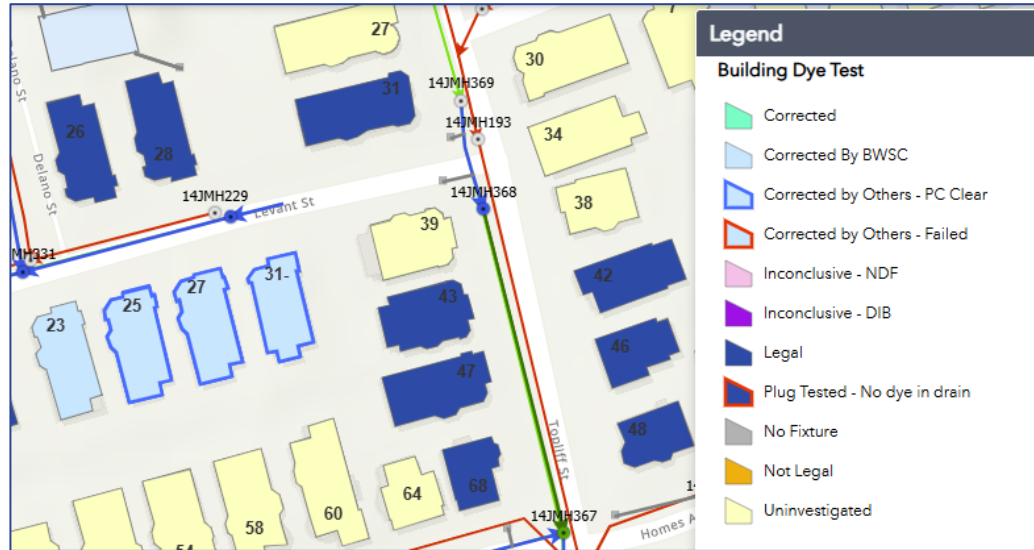
- Nearly 20% of Boston's drainage area protected by Dorchester Bay and Fort Point Channel concepts
- FPC concept included in the USACE draft CSRM for Boston
- BWSC is advancing these conceptual solutions to a 15% design level



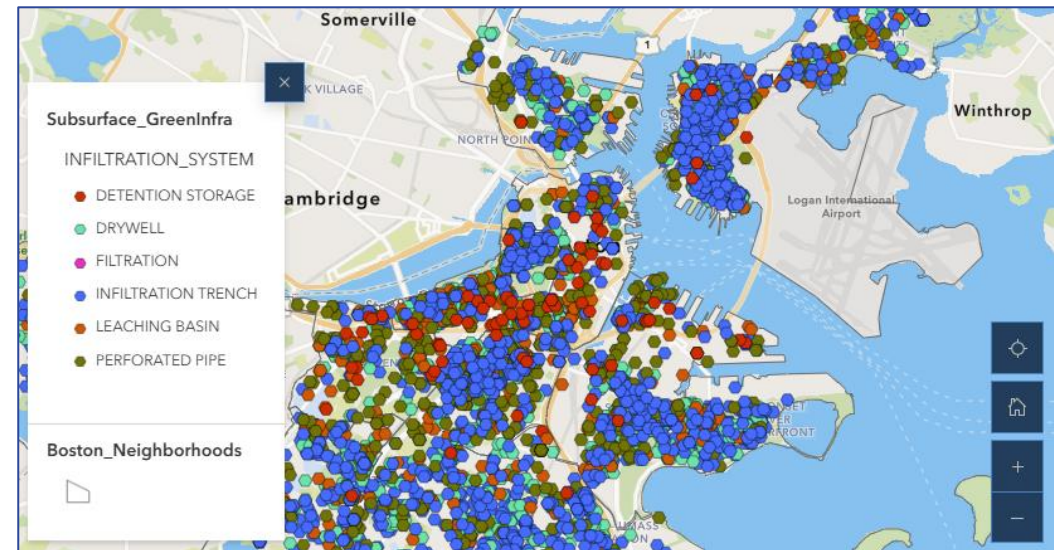
Stormwater Projects

Ongoing Programs

- **Illicit Connection Investigation**
 - Phase 6 of citywide investigation program 2026-2028
- **Green Infrastructure**
 - Continued coordination with other City Departments
- **Storm Drain Model**
 - Updates to water quality component
- **NPDES Permit**
 - Potential for new permit in 2027?



Illicit Connection Database



Green Infrastructure Database



SSES Progress

Completed

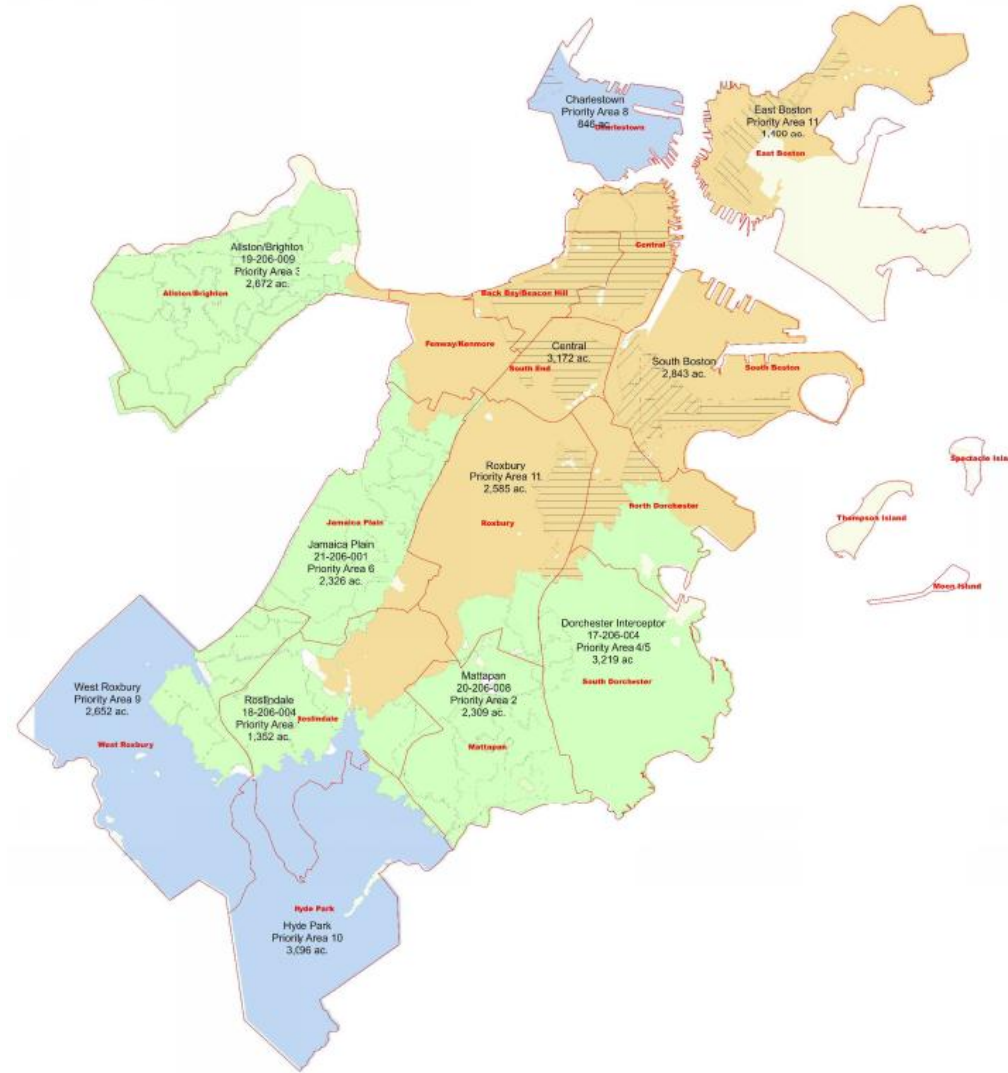
- Dorchester
- Roslindale
- Allston / Brighton
- Mattapan
- Jamaica Plain

In-Progress

- Charlestown
- West Roxbury / Hyde Park

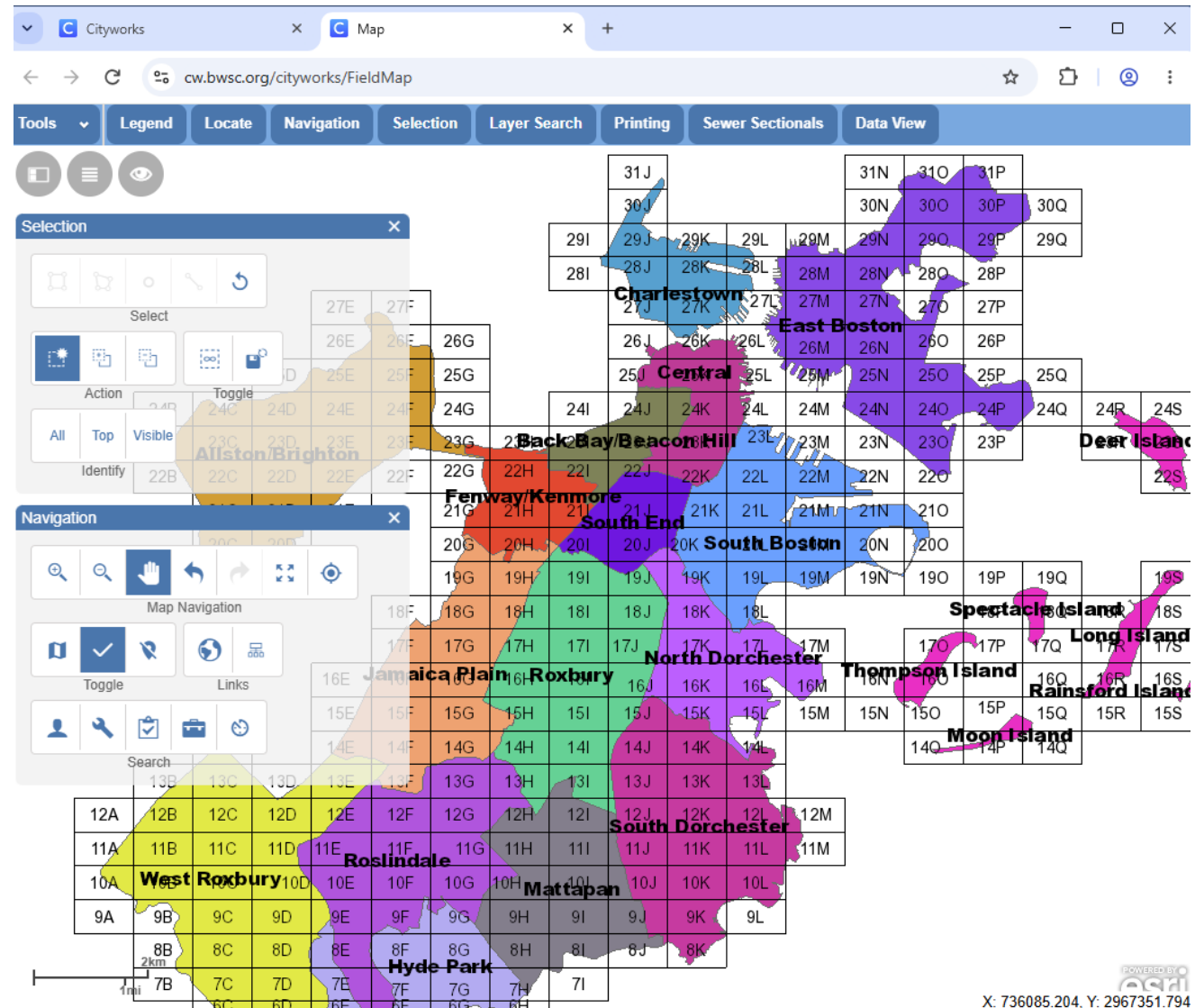
Scheduled

- **Roxbury – 2026**
- Central – 2028
- South Boston – TBD (Following separation)
- East Boston – TBD (Following separation)



GIS & Asset Management Modernization

- BWSC is upgrading Esri GIS and Trimble Cityworks systems
- RFP issued for consulting services to support planning and oversight of the upgrades



Questions?

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