



Meeting Agenda

- Welcoming Remarks
- Introductions
- Quarterly update on MDC's Integrated Plan, with current focus on North Hartford
 - Quarterly Report from January 1, 2024 to March 31, 2024 (Q1 2024)
 - An update on projects completed and under construction
 - A schedule for projects under construction or yet to start construction
 - A status of use of minority and disadvantaged business enterprises, including efforts and success at recruiting labor and contractors from the area where projects are or will be occurring
 - Next Quarterly Report Meeting = September 12, 2024 (Q2 2024)
- Public Comments and Questions

Presentation Outline

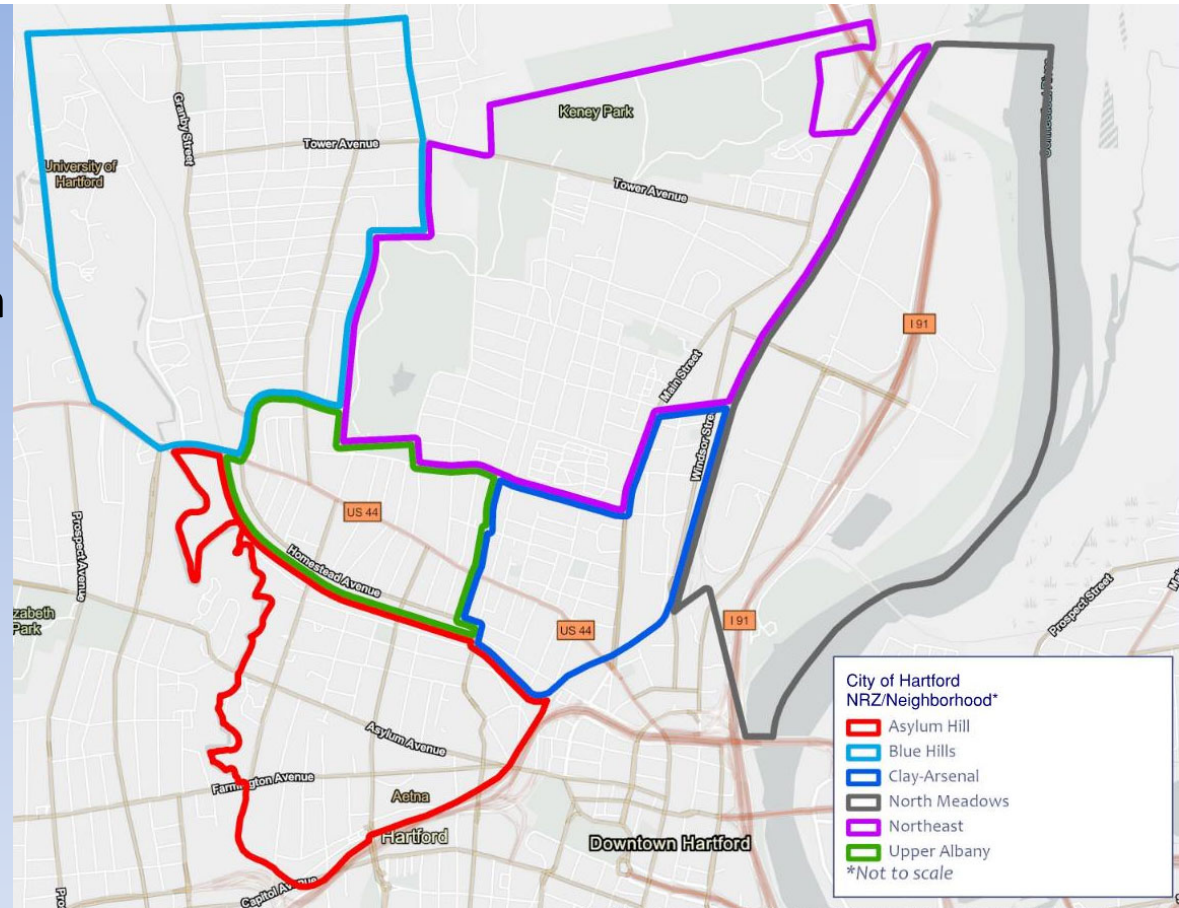
- Background on focus area (North Hartford)
- Quarterly Consent Order (CO) reporting requirements
- Overview of CO projects in:
 - North Hartford
 - Hartford (outside of North Hartford)
 - Outside Hartford
- Update on key performance indicators
- MDC's recruiting efforts for Small, Minority, Women and Disadvantaged Businesses (SBE, MBE, WBE, DBE) and Local Labor
- Closing remarks

The North Hartford Area

Focus is:

- Sewer separation: remove public and private stormwater from sewer system
- Private property sewer work (which was not the prior focus)
- Reduce flooding
- Reduce sewer surcharge
- Reduce private property backups
- Reduce combined sewer overflows (CSOs) to rivers

MDC listened to the North Hartford Community and responded with an altered program that provides immediate community benefit



Consent Order Modification Reporting Requirements

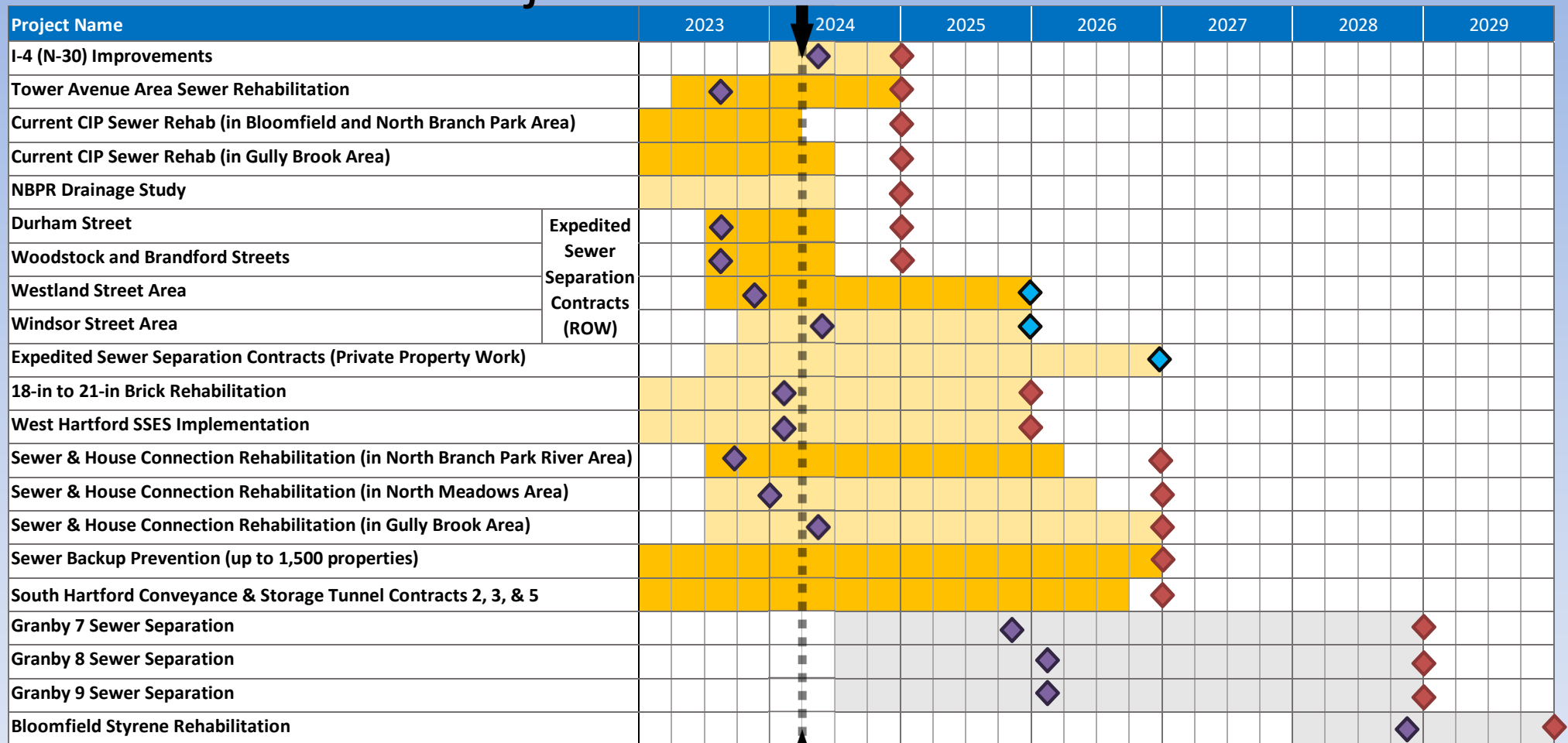
Quarterly and Annual Reporting Required under Consent Order Modification

- 1) An update on projects completed and under construction
- 2) A schedule for projects under construction or yet to start construction
- 3) A status of use of minority and disadvantaged business enterprises, including efforts and success at recruiting labor and contractors from the area where projects are or will be occurring
- 4) Other items as requested by Commissioner
 - *None received this quarter*

Other Items Voluntarily Included by the MDC

- MDC committed to 30% Hartford based workforce for North Hartford work associated with Consent Order modification
 - 30% based on similar City of Hartford goal on municipal projects

Consent Order Projects & Timeline



Not Yet Started
 In Design
 In Construction

Bid Advertisement
 Consent Order Deadline
 Consent Order Deadline (pending DEEP approval)

*To view bids, please visit: <https://themdc.org/ebid>

Expedited Sewer Separation Program – Schedule Update (PENDING DEEP APPROVAL)

- Existing CO Milestone Dates:
 - Milestones for Multiple “Projects”
 - Right-of-way (ROW) Work = 12/31/24
 - Private Property Work = 12/31/25
- CO Scope:
 - ROW Work = Installation of up to 8,000 LF of new storm drains & associated laterals
 - Private Property Work = Separation work at up to 160 properties
 - Preliminary Plan of Streets:
 - Branford Street (between Blue Hills Avenue & Coventry Street) & Woodstock Street (Blue Hills Ave to Coventry Street)
 - Durham Street (Granby Street to Palm Street)
 - Westland Street (between Love Lane & Clark Street)
 - Windsor Street (between Main Street & Sanford Street)

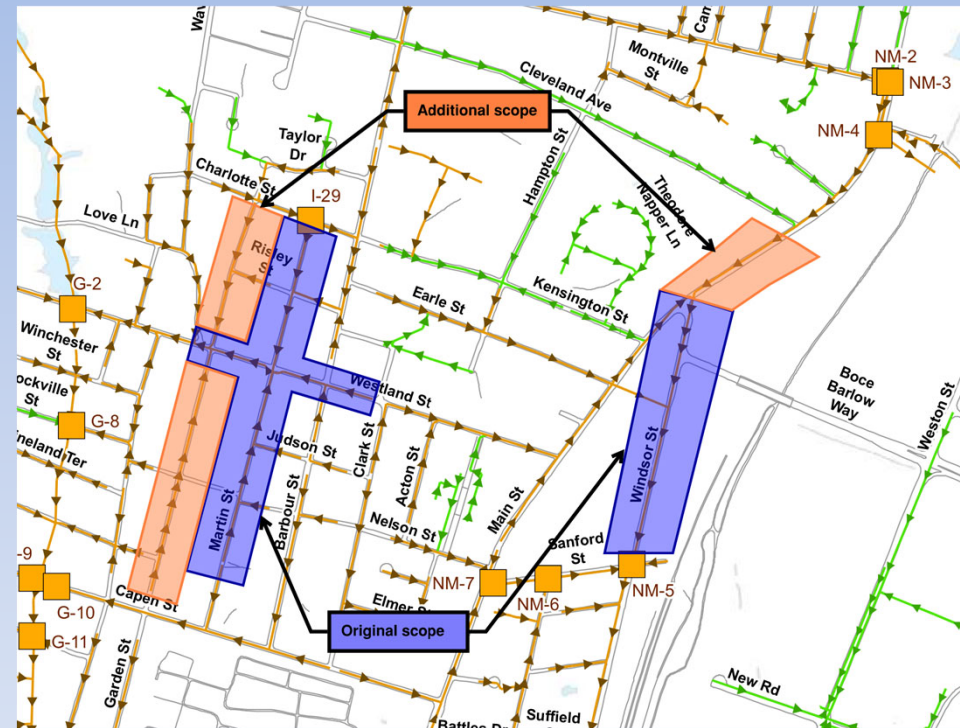
Expedited Sewer Separation Program – Schedule Update (PENDING DEEP APPROVAL)

- Scope Additions:
 - Westland Street Area Project:
 - Added Garden Street (between Capen Street & Charlotte Street)
 - Added Risley Street (entire street)
 - Windsor Street Area Project:
 - Added Main Street (between Windsor Street & Cleveland Avenue)
 - Value Engineering session scheduled for June 2024; review design, costs, constructability, and possible alternatives
 - Additional 1,320 LF of storm drains & associated laterals
 - Additional 1,730 LF of new sanitary sewers & associated laterals (to facilitate separation)
 - Additional 112 properties to be included in separation program
- Utility Conflicts:
 - Westland Street Area Project:
 - Relocations of Water Mains & CNG Pipelines required for new storm drains and sanitary sewers
 - Windsor Street Area Project:
 - Relocation of Frontier Communications conduits required for new storm drains
- Additional Water Main Work:
 - 730 LF of water main replaced on Durham Street in advance of storm drain installation
 - 1,525 LF of water main replaced on Branford Street in advance of storm drain installation
 - 5,550 LF of water main replacement included in the Westland Street Area Project in conjunction with storm drain and other water main relocation work.

Expedited Sewer Separation Program – Schedule Update

(PENDING DEEP APPROVAL)

- Project Specific Schedules:
 - Durham Street:
 - ROW work completed in February 2024, with restoration to follow
 - Private property separation to be completed by end of July 2024 (restoration on going as needed)
 - **No schedule extension required**
 - Branford & Woodstock Streets:
 - ROW work to be completed by mid-2024
 - Private property work to be completed by mid-2025
 - **No schedule extension required**
 - Westland Street Area:
 - ROW work to be completed by Fall 2025
 - Private property work to be completed by end of 2026
 - **Requires schedule extension**
 - Windsor Street Area:
 - ROW work to be complete by Fall 2025
 - Private property work to be complete by end of 2026
 - **Requires schedule extension**
- Schedule Update Request (sent to DEEP February 2024):
 - ROW work = 12/31/25
 - Private Property work = 12/31/26



Consent Order Projects: NRZ Impact and CSO Reduction

Project Name		Neighborhood Revitalization Zone and/or Neighborhood	1 Yr CSO Reduction (MG)	Typical Year CSO Reduction (MG)
I-4 (N-30) Improvements		West End	<0.1	<0.1
Tower Avenue Area Sewer Rehabilitation		Northeast	0.2	3.0
Current CIP Sewer Rehab (in Bloomfield and North Branch Park Area)		Blue Hills, Clay Arsenal, South Downtown, South Behind the Rocks	0.2	2.4
Current CIP Sewer Rehab (in Gully Brook Area)		Clay Arsenal, Asylum Hill, South Behind the Rocks	1.3	10.0
NBPR Drainage Study		Blue Hills, West End, Asylum Hill	*	*
Durham Street	Expedited Sewer Separation Contracts (ROW)	Blue Hills	0.1	1.2
Woodstock and Brandford Streets		Blue Hills	0.1	1.4
Westland Street Area		Northeast	0.3	2.9
Windsor Street Area		North Meadows	1.1	14.3
Expedited Sewer Separation Contracts (Private Property Work)		Blue Hills, Northeast, North Meadows	**	**
18-in to 21-in Brick Rehabilitation		Asylum Hill, Clay Arsenal, South End, Marg	0.8	7.0
West Hartford SSES Implementation Contract		N/A	0.2	1.2
Sewer & House Connection Rehabilitation (in North Branch Park River Area)		Blue Hills	0.9	11.5
Sewer & House Connection Rehabilitation (in North Meadows Area)		North Meadows	1.0	28.4
Sewer & House Connection Rehabilitation (in Gully Brook Area)		Northeast	0.9	11.0
Sewer Backup Prevention (up to 1,500 properties)		All North Hartford NRZs/Neighborhoods	**	**
South Hartford Conveyance & Storage Tunnel Contracts 2, 3, & 5		South End, Marg, South Behind the Rocks	3.8	21.9
Granby 7 Sewer Separation		Blue Hills	0.4	3.8
Granby 8 Sewer Separation		Blue Hills	0.3	3.4
Granby 9 Sewer Separation		Blue Hills	0.4	3.6
Bloomfield Styrene Rehabilitation		N/A	<0.1	<0.1

* CSO Reductions for the NBPR Drainage Study included in individual Granby Separation Contracts

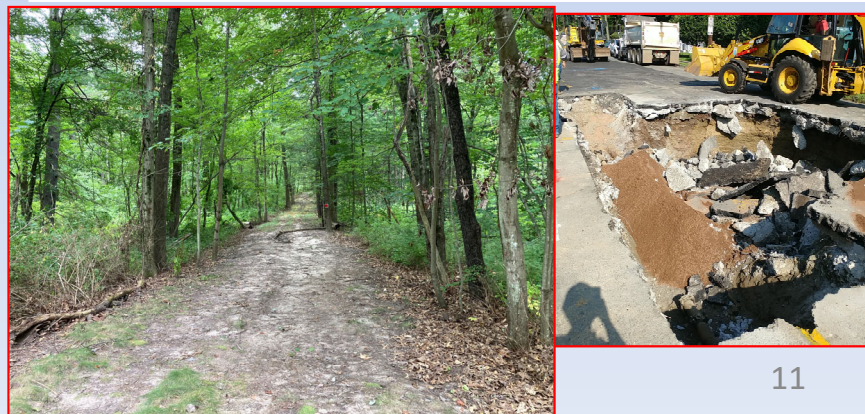
** CSO Reductions associated with Private Property Improvements included in associated ROW Project Reduction Estimates

Additional Sewer Improvement Projects

Non-Consent Order (2019 through Q1 2024)

- Clearing Sewer Easements on Private Property
 - Completed = Bloomfield, Rocky Hill, East Hartford, Windsor
 - In progress = Newington
 - Other Member Towns to follow
- Easement Sewer Rehabilitation
 - Bloomfield currently
 - Other Member Towns to be evaluated/scheduled
- On-Call Sewer Rehabilitation/Repair
 - 230,000 feet rehabilitated from 2019 to 2023;
10,000 feet in Q1 2024
 - Performed in all Member Towns
 - In 2024 Q1: work performed in Bloomfield, East Hartford, Hartford, Rocky Hill, West Hartford, Wethersfield, and Windsor
 - Asset management/paving program coordination

Town	Easement Clearing Length (feet)
Bloomfield	98,000 (completed)
Rocky Hill	59,100 (completed)
East Hartford	66,200 (completed)
Windsor	132,300 (completed)
Newington	51,300 (in progress)
Hartford	55,800 (2025-2027)
West Hartford	54,300 (2025-2027)
Wethersfield	59,200 (2025)
Total (feet)	576,000
Total (miles)	109



Consent Order Projects (as of 3/31/24): North Hartford

Sewer & House Connection Rehabilitation (in North Branch Park River Area):

Rehabilitation of sewer mains and house connections upstream of CSOs N-2 and N-4

Expedited Sewer Separation Contracts (ROW):

Construction of storm drains in streets
(Additional separation added per MDC review)

Expedited Sewer Separation Contracts (Private):

Private property storm separation (to follow ROW Separation Contracts)

North Branch Park River Drainage Study:

Evaluating the North Branch Park River and surrounding sewer and drainage infrastructure in support of future river improvements and sewer separation

Granby 7/8/9 Sewer Separation:

Sewer separation with new storm drains and private property disconnections (final location based on North Branch Park River Study)

Tower Avenue Area

Sewer Rehabilitation:




Rehabilitation of sewer mains and house connections upstream of CSOs NM-2, NM-3, and NM-4

Sewer & House Connection Rehabilitation (in North Meadows Area)

Rehabilitation of sewer mains and house connections upstream of CSOs NM-5, NM-6, and NM-7

Sewer & House Connection Rehabilitation (in Gully Brook Area):

Rehabilitation of sewer mains and house connections upstream of CSO G-13W

-  Not Yet Started
-  In Design
-  In Construction

Consent Order Projects: Private Property Benefit

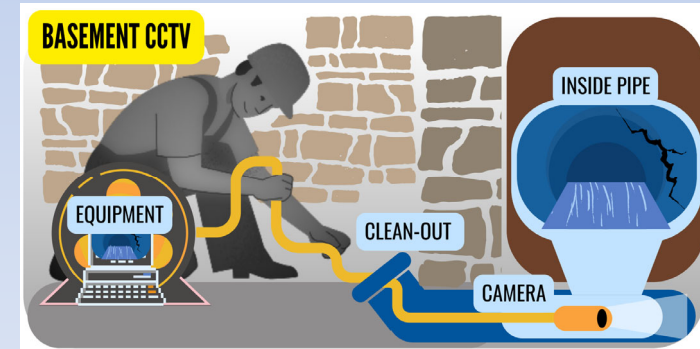
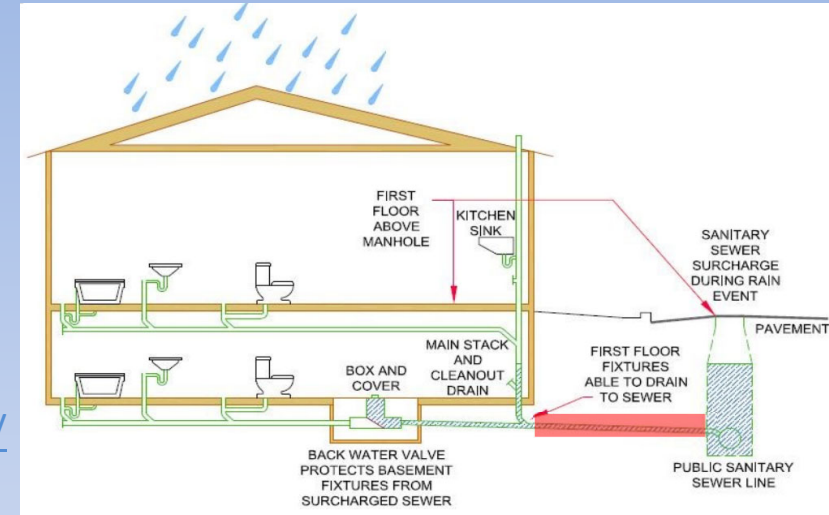
Sewer Backup Prevention Program (“Backwater Valve Program”)

- Separates homes’ foundation drains (via installing sump pumps) and gutters from the sewer system, reducing surcharging during wet weather
- Install backwater valves to prevent basement backups
- \$12.2 million (up to 1,500 homes) for North Hartford properties (Consent Order project)
- <https://themdc.org/utility-services/backwater-valve-program/>
- To **schedule a free assessment** of your property, contact MDC Utility Services at **(860) 278-7850, ext. 3123**

Sewer House Connection Program – voluntarily included by MDC

- MDC Board initiative to provide same benefit District-wide that was being offered to North Hartford residents
- Emergency and non-emergency maintenance and inspection services at no cost to the property owner
- Provides funding for renewal of the house connection, if needed
- <https://themdc.org/utility-services/sewer-house-connection-program/>

Contractors for both programs are anticipated to be all SBE (Small Business Enterprise)



Consent Order Projects (as of 3/31/24): Outside of North Hartford

Gully Brook Area Sewer Rehabilitation:

Rehabilitation of sewer mains and house connections

18-in to 21-in Brick Rehabilitation:

Rehabilitation of brick sewer mains

I-4 (N-30) Improvements:

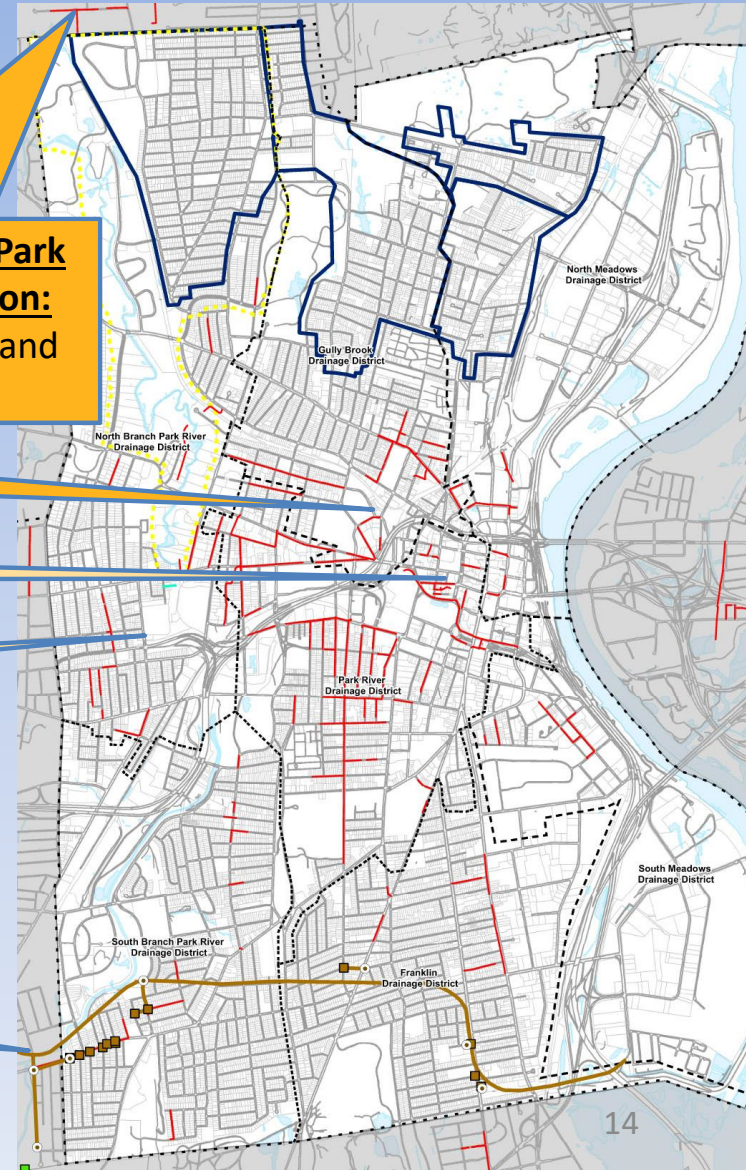
Rehabilitation of sewer mains downstream of CSO I-4 (N-30)

South Hartford Conveyance & Storage Tunnel (SHCST) Contracts 2, 3, & 5:

Construction of the SHCST, drop shafts, consolidation conduits and dewatering pumpstation

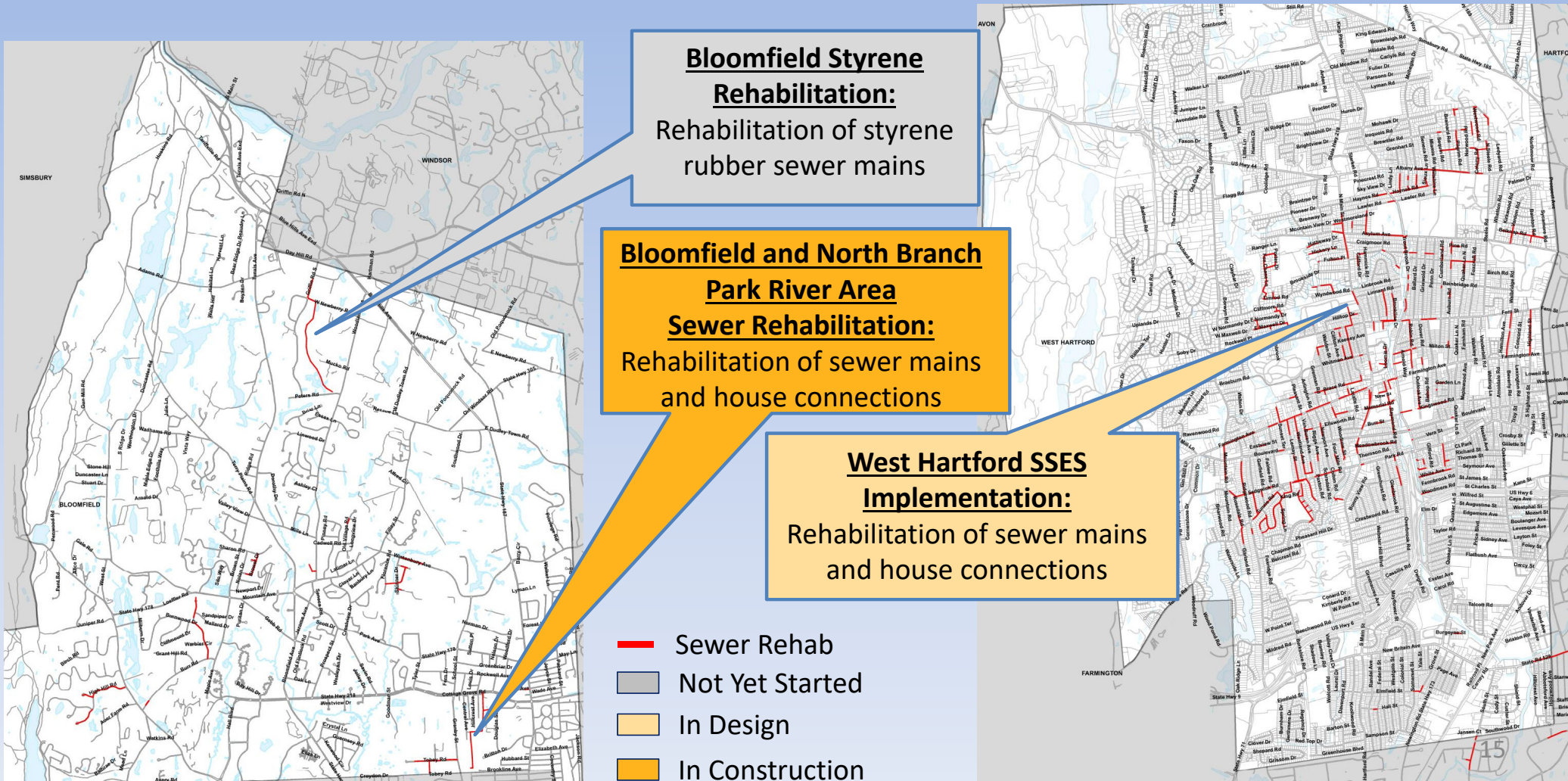
Bloomfield and North Branch Park River Area Sewer Rehabilitation:

Rehabilitation of sewer mains and house connections



Not Yet Started In Design In Construction Sewer Rehab

Consent Order Projects (as of 3/31/24): Outside of Hartford



North Branch Park River Drainage Study Update

- Importance of Study
 - NBPR has sediment buildup (i.e., from streets) and blockages (i.e., from downed trees); needs attention as these contribute to street and localized flooding and backups
- Study needed to determine
 - Required flood control and stream improvements (COH priority)
 - Approach to remove stormwater from sewers to eliminate CSOs (MDC priority)
- River assessment complete
- Short term improvements performed to date
 - City cleaned Park River Conduit inlet
- Durham Street sewer separation in ROW complete, private property separation to be completed by July 2024
- Conceptual sewer separation design underway
- Study estimated to be completed in Summer 2024



Status of Projects: Key Performance Indicators (District Wide*)

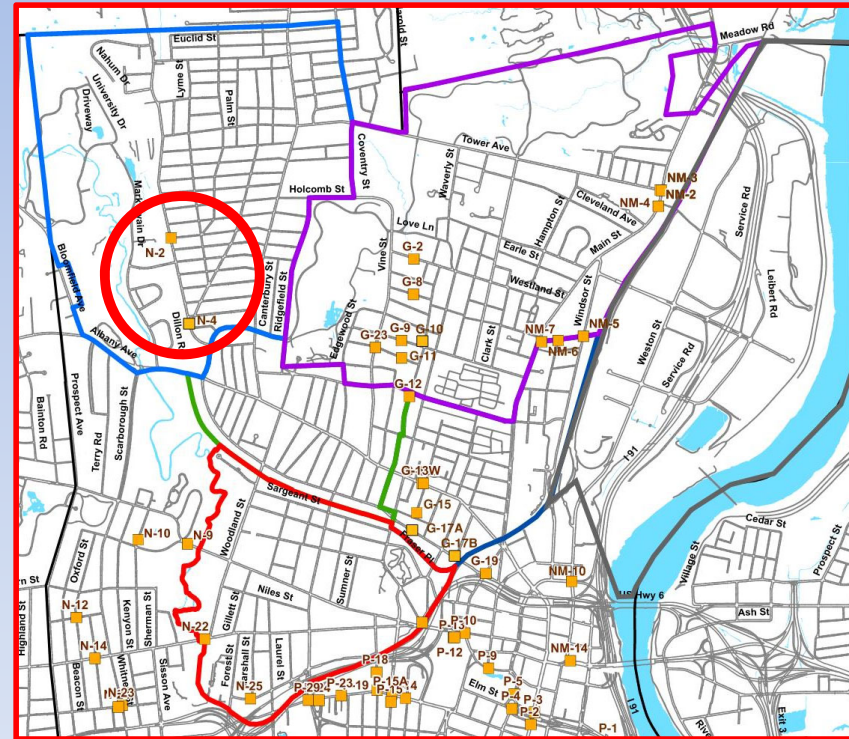
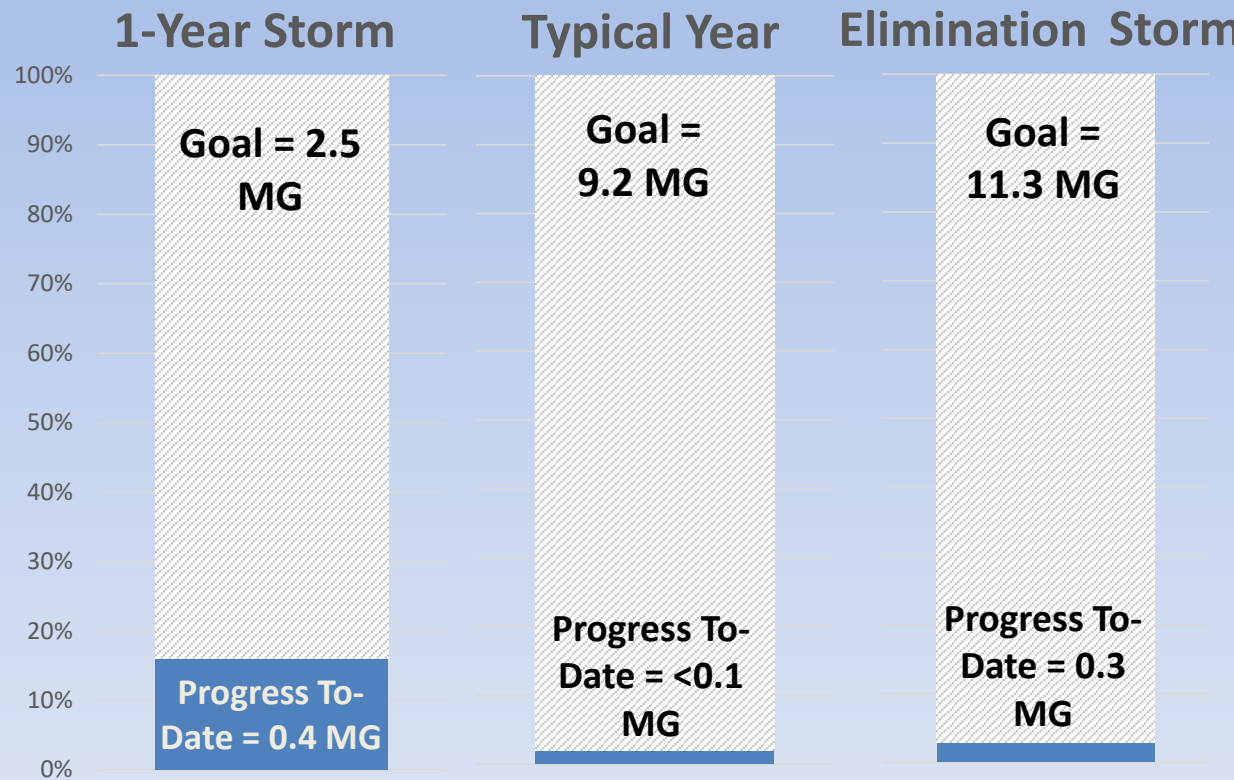
Key Performance Indicators	Q1 2024 (Jan 1 through March 31)	2024 Annual (Jan 1 through Dec 31)	Total To Date (since 2019)
Storm drains or sanitary sewers installed (feet)	101'	101'	31,732'
Sewer mains rehabilitated (feet) (miles)	13,276' (2.5)	13,276' (2.5)	337,049' (63.8)
Sewer laterals inspected (# of properties)	876	876	4,068
Sewer laterals renewed (# of properties) (feet)	456 (13,751')	456 (13,751')	837 (25,990')
Backwater valve/surcharge protection (# of properties)	94	94	1,111
Private property internal disconnects (# of properties)	11	11	122
Sewer or storm laterals installed via separation (to property line) (# of properties)	0	0	0
Private property separation completed (# of properties)	0	0	0

*Work in all Member Towns, including North Hartford

Status of Projects: Key Performance Indicators (North Hartford)

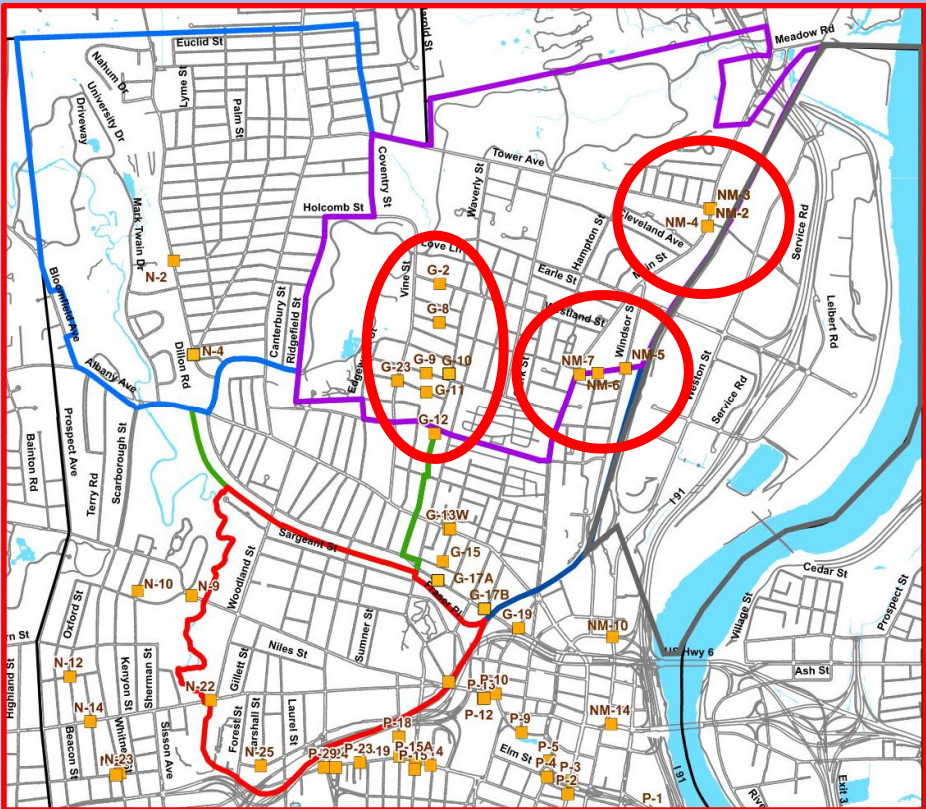
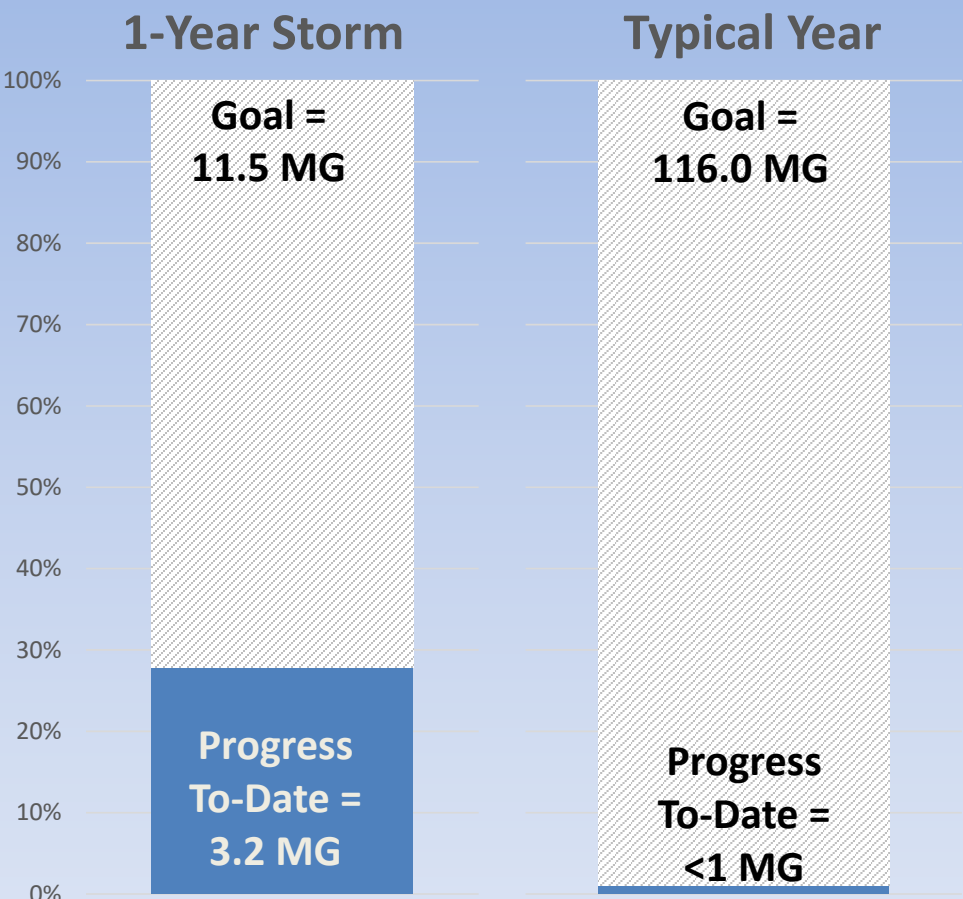
Key Performance Indicators	Q1 2024 (Jan 1 through March 31)	2024 Annual (Jan 1 through Dec 31)	Total To Date (since 2019)
Storm drains or sanitary sewers installed (feet)	101'	101'	9,232'
Sewer mains rehabilitated (feet) (miles)	704' (0.13)	704' (0.13)	38,573' (7.3')
Sewer laterals inspected (# of properties)	250	250	673
Sewer laterals renewed (# of properties) (feet)	84 (3,220')	84 (3,220')	185 (7,785')
Backwater valve/surcharge protection (# of properties)	25	25	371
Private property internal disconnects (# of properties)	2	2	59
Sewer or storm laterals installed via separation (to property line) (# of properties)	0	0	0
Private property separation completed (# of properties)	0	0	0

Status of Projects: N-2 and N-4 CSO Reduction



Notes: Per the Consent Order, combined sewer overflows (CSOs) from N-2 and N-4 must be eliminated. Million gallon (MG) goals are per 2018 Integrated Plan.

Status of Projects: Gully Brook & North Meadows CSO Reduction



Notes: Per the Consent Order, CSOs from Gully Brook and North Meadows must be controlled to the 1-year storm. Goal represents the total million gallon (MG) of CSO that occurs in a 1-year storm and typical year.

Community Outreach Efforts

- In the beginning of 2024, MDC continued efforts to prepare for opening of Community Outreach Office
- Office to be staffed to support project activities
- Ribbon Cutting May 2024
- MDC Communications team continued:
 - To update website
 - Distribute project flyers and conduct appointments with homeowners for permission forms
 - Advertise in local newspapers
 - Attend NRZ meetings



MDC's Recruiting Efforts for Small, Minority, Women and Disadvantaged Businesses (SBE, MBE, WBE, DBE)

- CT Department of Administrative Services (DAS) SBE/MBE/WBE and SAM.gov Registration Clinic with CT Apex Accelerator, National Association of Women in Construction (NAWIC), and University of Hartford
 - MDC Training Facility – January 17th, February 28th, and March 20th
 - Reviewed new applications
 - Assisted Contractors with recertification application
 - Q&A for new SAM.gov ID process
- Targeted Outreach for attendance to third round of application submissions from SBE/MBE/WBE Contractor's
 - Focused on engaging new Hartford based companies for Prime Contractor and Subcontractor opportunities
- Vendor and Contractor Relationship Building for Backwater Valve and House Connection Programs
 - Established partnerships for local community banking - HEDCO
 - Secured equality in material pricing from regional supplier - F.W. Web
 - Provided MDC training and guidance on installing plumbing fixtures under Back Water Valve Program – February 8th
 - Ensure contractors understand and adhere to MDC installation standards

CT Small/Minority Business Enterprise (S/MBE)
Certification and [SAM.gov](#) Registration

2024 Hands-On Certification Clinics

S/MBE certification helps companies build revenue and find potential new customers through growth and marketing opportunities.

Representatives from the state's Procurement Division and Connecticut APEX Accelerator will be onsite to review your applications for the S/MBE Certification and the SAM.gov registration (required for certification).

- Review your initial application
- Assist in updating your recertification application
- Answer your questions
- And more!

Location:
The Metropolitan District (MDC) Training Center
125 Maxim Road, Hartford, CT 06114

Time: 12:00 PM—2:00 PM

2024 Clinic Schedule: Clinics are held on these Wednesdays:

• January 17	• June 12
• February 28	• August 21
• March 20	• September 18
• April 17	• October 16
• May 15	• November 20

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MDC


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APEX
ACCELERATOR


NAWIC
National Association of
Women in Construction
Hartford, CT

Pre-Registration is Required to Attend.

EMAIL: Kevin Nodwell at: kevin.nodwell@ct.gov.

Register to attend one clinic, or more, as needed. If you register and cannot make it, please cancel in advance.

LUNCH IS PROVIDED.
NO COST TO ATTEND.
SPACE IS LIMITED.

MDC's Seeds of Partnership: Transforming Local Labor Recruitment

- Attended to provide updates on MDC bidding and match making opportunities
 - Synergy High School – January 26th
 - Interview and Resume Student Clinic
 - HEZBA Annual Minority Business Luncheon – February 23rd
 - Greater Hartford African American Alliance (GHAAA) Weekly Meetings
 - EGT Pathway Mini Career Expo at Hartford Public High School – April 3rd

MDC

The Metropolitan District's (MDC) Worked-based Learning Program is a paid internship program developed in partnership with various workforce development partners to help build a strong pipeline of knowledgeable workers into the water and wastewater industries.

CONTACT INFORMATION

themdc.org/careers/

555 Main Street
Hartford, CT 06103

(860) 278-7850 x3268

@MDCWater

facebook.com/themetropolitandistrict

@MDC Hartford

MDC WORK-BASED LEARNING PROGRAM

PAID INTERNSHIP OPPORTUNITIES

themdc.org

PARTNERSHIPS

- CTECS
- Gateway Community College
- Urban League of Greater Hartford
- Greater Hartford African American Alliance

MDC

METROPOLITAN DISTRICT COMMISSION

MDC's Seeds of Partnership: Transforming Local Labor Recruitment

- Workforce Development relationship building, including:
 - MDC Work Based Learning Program Brochure Promotions
 - CTECS Work-Based Learning Portal for undergraduate and graduate students.
 - Ready CT & Community Partners 2024 Breakfast – January 31st
 - Program Promotion and Internship / Training Recognition
 - MDC, CT Pre-Apprenticeship and CT DOT - Try a Trade Schedule Selection and Student Selection Process Completed.
 - Q2 event during April Vacation. Partnership with CT Pre-Apprenticeship Laborers, Operators, Iron Workers, Electrical and Carpenter Unions
 - Capital Workforce Partners, Veteran and Second Chance sponsorships opportunities Hartford County Residents – Water and Wastewater Treatment Operator Online Training through Sacramento University

Try a TRADE

**NOW OFFERING
FULL SCHOLARSHIPS
FOR HIGH SCHOOL SENIORS**

PROGRAM DETAILS
DATES: April 8th - 12th, 2024
TIME: 8:00 am - 2:30 pm
LOCATION: MDC Training Center
125 Maxim Road, Hartford, CT
COST: FULL Scholarship for those that are accepted into the program. Transportation may be included. Space is limited - Apply Now! Scan the code or visit CTPAHSTP.com

The best way to find out if you like something is to give it try!
Try a TRADE is a one week hands on program to do just that! Join us as we explore several different and profitable career paths through hands on learning! Students will have the opportunity to earn several certificates as well as gain knowledge and a better understanding of each trade and how to apply. Instruction may include Fall Protection, Ladder Safety, Flagger Certification, Work Zone Safety, Fire Extinguisher Safety, Silica Awareness, Concrete Work, OSHA-10 Certification, CPR/AED/First Aid Certification, Hoisting and Rigging, etc. Participants will receive Personal Protective Equipment including a Hard Hat, Safety Glasses, Work Gloves and PPE bag.

- Metropolitan District Commission
- Electricians Union
- Operating Engineers Union
- Iron Workers Union
- Carpenters Union
- Laborers Union

This program is funded by:

CONNECTICUT
The Apprenticeship
High School Training Program

MDC
The Metropolitan District
Hartford, Connecticut

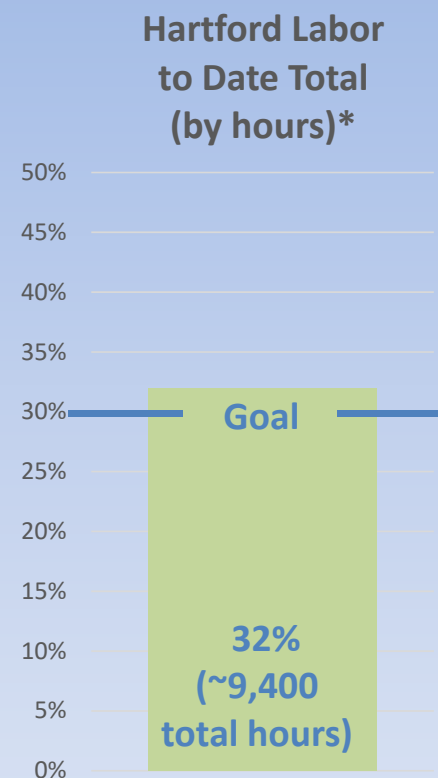
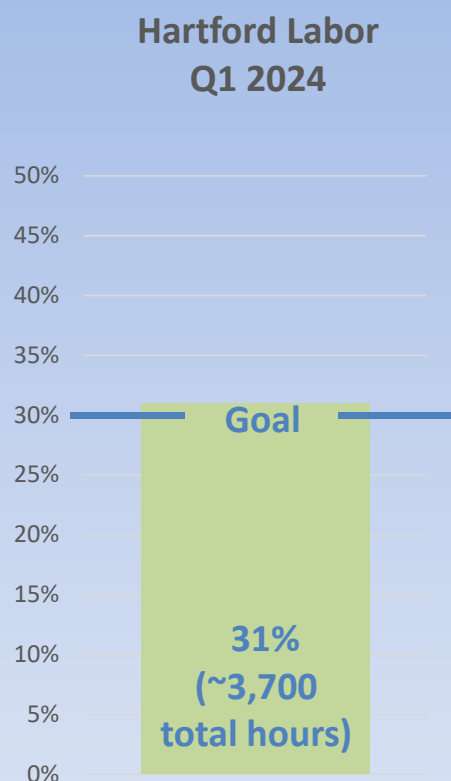


MDC's Partnership Metrics from Transforming Local Labor Recruitment

- 30% Hartford resident workforce goal
- Developing Prime Contractors and Match Making qualified Hartford residents to Prime and Sub Contractors working for MDC in the North End of Hartford
 - 2 Hartford residents hired by MDC Contractors in Q1
 - 1 Hartford contractor certified as MBE and awarded new contract work under Backwater Valve Program.
 - 3 Hartford residents employed under new training and award initiative
- Work Based Learning Program coordination with local school and/or Non-Government Organizations (NGOs)
 - Coordination with E.C. Goodwin, A.I. Prince Tech., Howell Cheney Tech., Hartford, East Hartford, Bloomfield, Newington, Wethersfield, Windsor, Manchester, Meriden, and South Windsor Public Schools
 - Outreach via school presentations, construction site visits, and job fairs Workforce Development at MDC and student training programs (partnership with the CT Pre-apprenticeship, Ready CT, DOT, Capital Workforce Partners, EGT Pathway Schools)



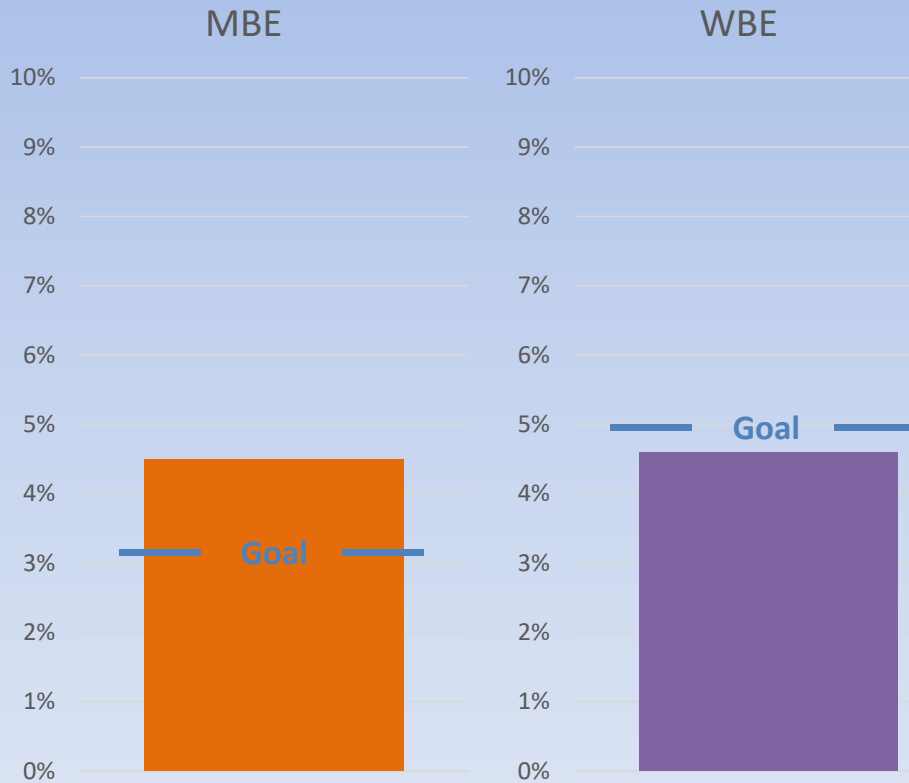
Hartford Labor Status



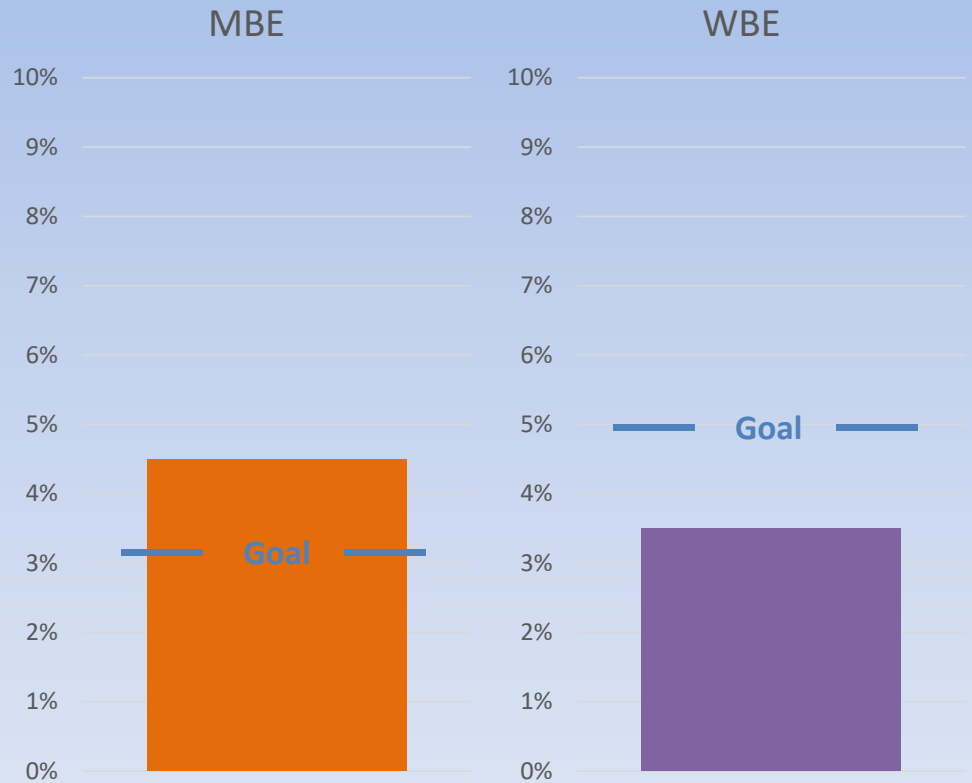
Note*: Statistics are based on all Hartford Consent Order projects started after July 2023 under construction. 30% target based on similar City of Hartford goal on municipal projects.

Minority/Women Business Enterprises Status

MBE and WBE Q1 2024 (by \$)



MBE and WBE To Date Total (by \$)*



Note*: Statistics are based on all Consent Order related projects under construction, beginning in July 2023.
MBE and WBE targets based on CT DEEP Clean Water Fund (CWF) goals

Closing Remarks

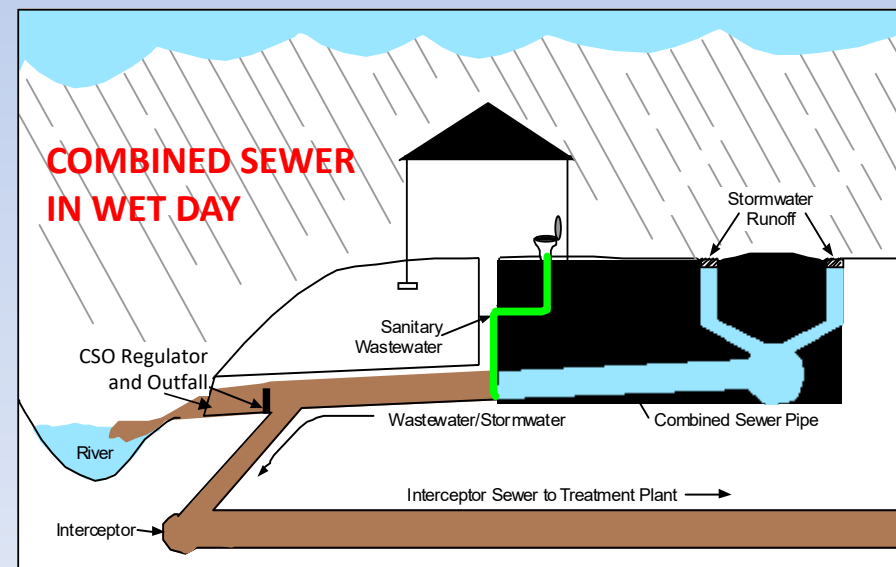
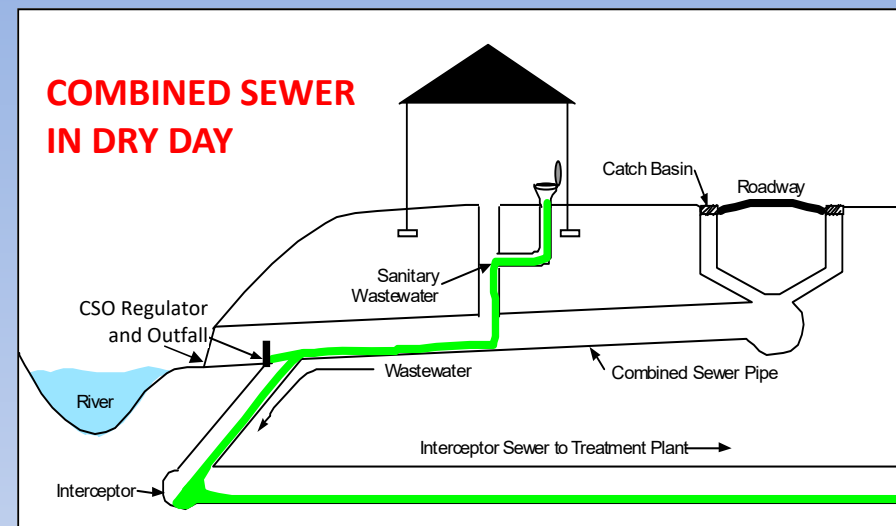
- Many ongoing initiatives and projects
- Many ways to **stay informed**
 - Visit - <https://themdc.org/north-hartford-sewer-improvement-projects/>
 - Via your local NRZ
- Quarterly Consent Order Meetings
 - Second Thursday of the months of March, June, September, and December
 - Each meeting will also be virtual
- Comments and Questions

List of Acronyms

- AFSCME = American Federation of State, County and Municipal Employees
- AHNA = Asylum Hill Neighborhood Association
- BWV = Backwater Valve
- CSO = Combined Sewer Overflow
- CT DEEP = Connecticut Department of Energy and Environmental Protection
- CWF = Clean Water Fund
- CWPC = Clean Water Project Charge
- DAS = Department of Administrative Services
- DBE = Disadvantaged Business Enterprise
- EPA = Environmental Protection Agency
- GHAAA = Greater Hartford African American Alliance
- IP/CSO LTCP = Integrated Plan/CSO Long-Term Control Plan
- MBE = Minority-Owned Business Enterprise
- MCC = Minority Construction Council
- MG = Million Gallons
- NAWIC = National Association of Women in Construction
- NBPR = North Branch Park River
- NGOs = Non-Government Organizations
- NRZs = Neighborhood Revitalization Zones
- PPID = Private Property Inflow Disconnect
- Q3 = Quarter 3 (period from July 1, 2023 to September 30, 2023)
- RFP = Request for Proposal
- RFQ = Request for Qualifications
- ROW = right-of-way
- SBE = Small Business Enterprise
- SHCST = South Hartford Conveyance & Storage Tunnel
- SSES = Sanitary Sewer Evaluation Survey
- SSO = Sanitary Sewer Overflow
- WBE = Women-Owned Business Enterprise

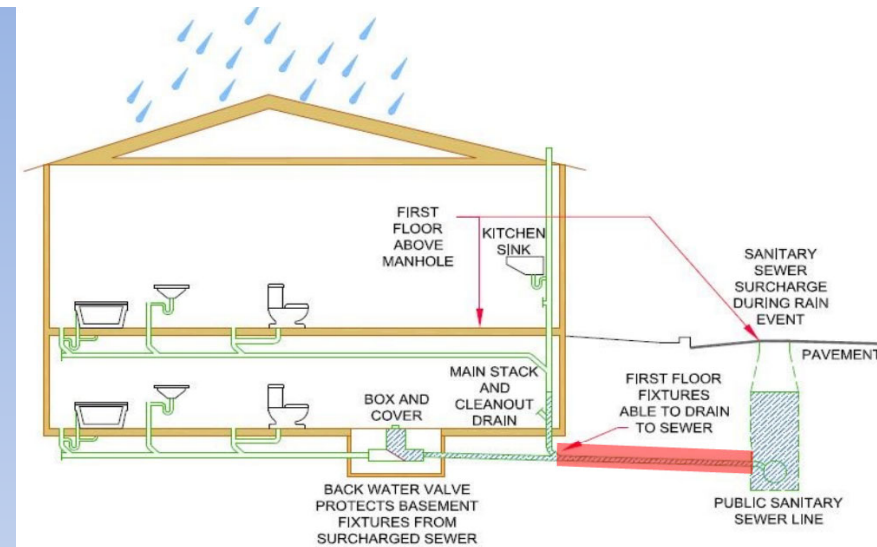
Common Terms & Definitions

- **Separate/sanitary sewer**
 - pipe designed to only convey wastewater
 - how sewers are built now, all member towns except Hartford
- **Storm drain**
 - pipe designed to convey only stormwater
- **Combined sewer**
 - pipe designed to convey **both** sanitary and stormwater (including catch basins)
 - How sewers were built 100 years ago
 - Issues with Combined Sewers:
 - **Dry Day:** No issues, enough capacity for household sewage (toilet, showers, etc)
 - **Wet Day:** Stormwater enters sewer (example: through catch basins). The combined sewer becomes too full, causing overflows (CSOs) into streams/rivers



Common Terms & Definitions

- **Lateral/House Connections**
 - Pipe (shown in red) connecting the wastewater from homes to the District's sewer main
- **Combined Sewer Overflow (CSO)**
 - condition that occurs when wet weather flows in a combined sewer system exceed the treatment capacity at the plant and/or in the pipes, causing it to discharge flow into typically a storm drain or river (via a CSO regulator and outfall)
 - Example: "N-2" and "N-4"
- **Sanitary Sewer Overflow (SSO)**
 - a condition that may occur due to blockage/clog in a pipe, broken infrastructure, or due to significant rainfall



Common Terms & Definitions

- **1-Year Design Storm**

- The historic event from October 1951 with a 24-hour depth of 2.4 inches and an average recurrence interval (ARI) of 1 year. This design storm has been used to control all CSO regulators except those that discharge to the North Branch Park River or Wethersfield Cove.

- **Typical Year**

- The typical year evaluated had 42-inches of rain. The selection was agreed to by CT DEEP and followed the approach described by the USEPA's "Combined Sewer Overflows Guidance for Monitoring and Modeling" (USEPA, 1999), which includes analyzing individual storm event return periods, annual precipitation, and simulated CSO volume for each year in the historic record to find a representative typical year.

- **Elimination Storm**

- Tropical Storm Tammy was adopted for CSO elimination alternatives analysis through correspondence with CT DEEP during the 2012/2014 LTCP Update. The event referred to in the LTCP as Tammy was a combination of the remnants of that storm in combination with Subtropical Depression Twenty-Two. From October 7 to 15, 2005, 13 inches of rain fell at Bradley Airport. The heaviest rain fell on the 8th and the 9th and from the 14th to the 15th, with 5.0 and 5.8 inches falling over respective 24-hour periods