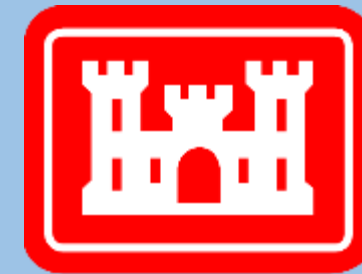


# Community Advisory Group

Raymark Industries,  
Inc. Superfund Site  
Stratford, CT

Jim DiLorenzo, EPA  
Jeff Saunders, EPA  
Mike Looney, USACE  
Rachel MacPhee, USACE  
Alivia Coleman, Health Dept.

September 27, 2023



**US Army Corps  
of Engineers®**

To download presentation slides visit:

**[Stratfordct.gov/Raymark](http://Stratfordct.gov/Raymark)**

# Hybrid Meeting Guidelines

## Virtual Attendees:

- Everyone will be muted throughout the presentations - please stay muted to eliminate background noise.
- Hold questions until the end of each presentation.
  - Use the chat box.
  - Mute yourself after speaking

## Everyone:

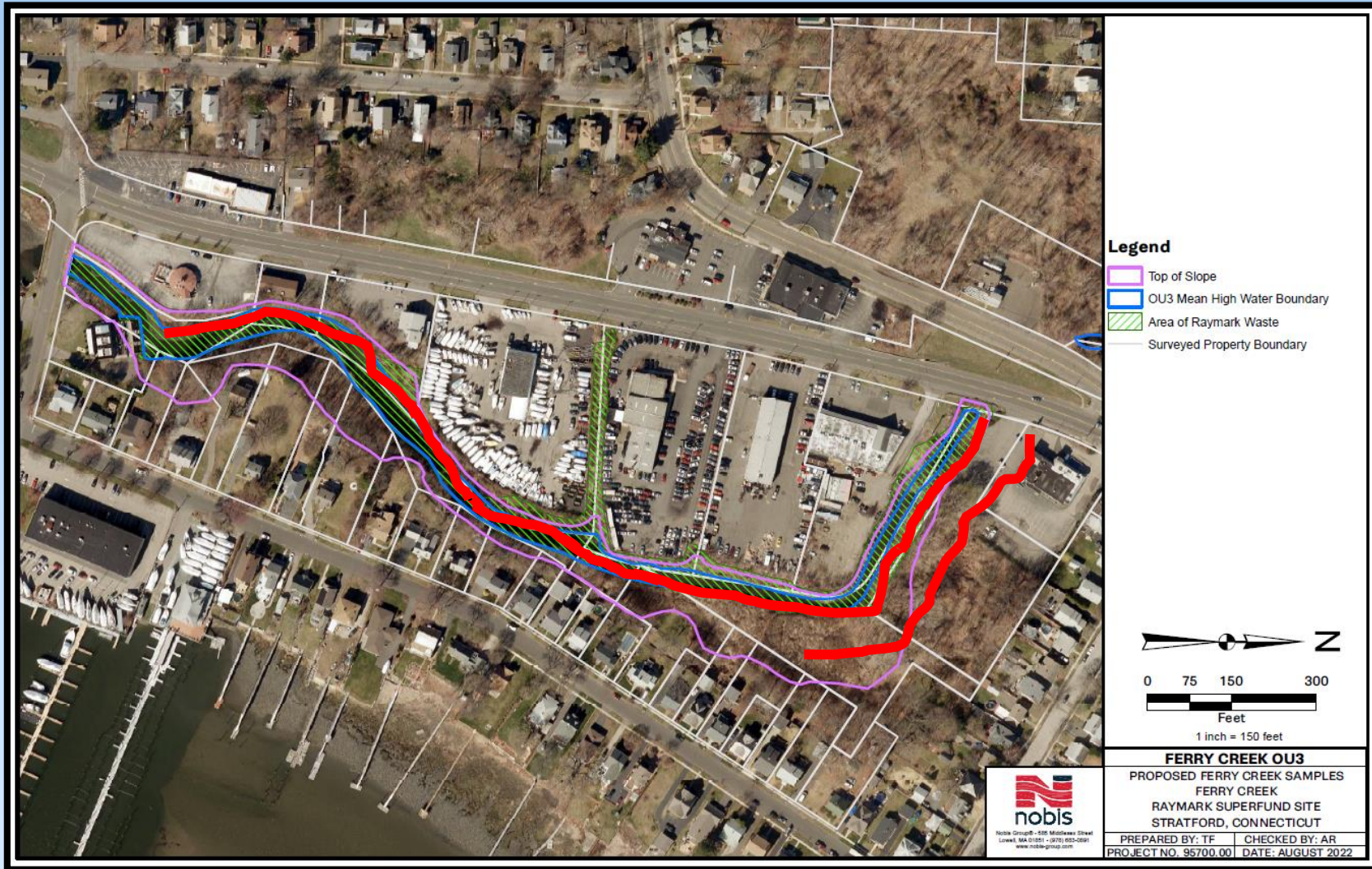
- Ask questions related to the presentation topic
- Please be respectful of time, so everyone has a chance to speak
- Be respectful and patient.
- Talk one at a time.
- **This meeting will be recorded.**

# AGENDA

- INTRODUCTIONS AND MEETING RULES
- OPERABLE UNIT 3 and 6 (OU3, OU6) UPDATES
- RAYBESTOS MEMORIAL FIELD (OU4)
- STORMWATER CONVEYANCE SYSTEM
- OTHER OPERABLE UNITS
- OVERALL PROJECT SCHEDULE

# OU3 Update

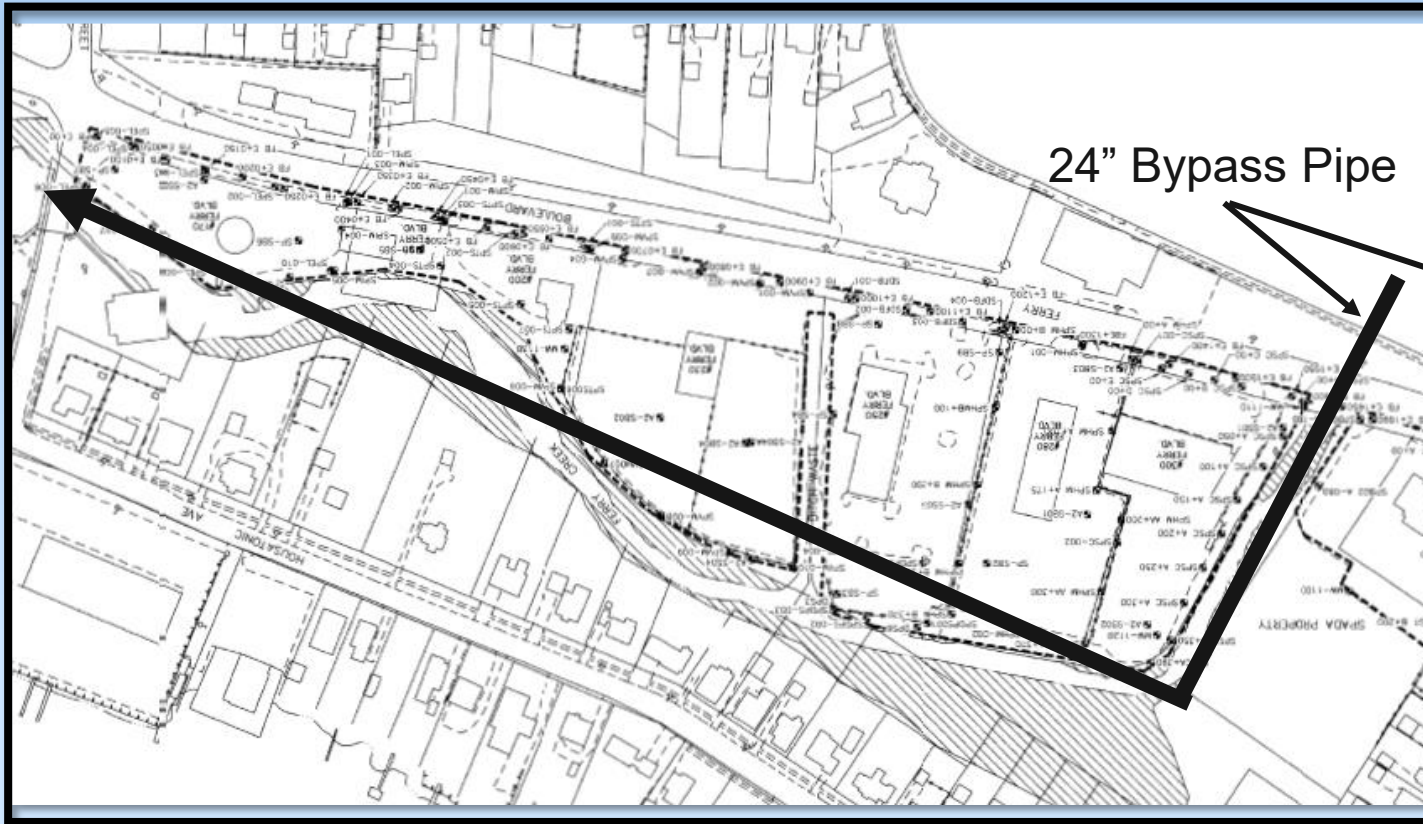
# OU3 Ferry Creek Remediation



## OVERVIEW

- Ferry Blvd to Broad St (1/3 mile)
- Mobilized in May/June
- Channel: 2ft (removed 4 to 6ft on average)
- RW in Banks (red line): 4ft
- RW Removed: 12,100cy
- PHC removed: 277cy
- Water treatment plant
- Excavation done this week (more than 2 months early)
- Restoration
  1. Seeded coco mats for banks (now)
  2. Trees/shrubs top of bank (Spring 2024)

# Dual-Phase Dewatering System



# OU3 Box Culvert Cleaning

**Box culvert inlet at East Broadway**



**Box culvert outlet at Ferry Blvd**





# OU3 Construction Road

**Looking towards Willow Ave**

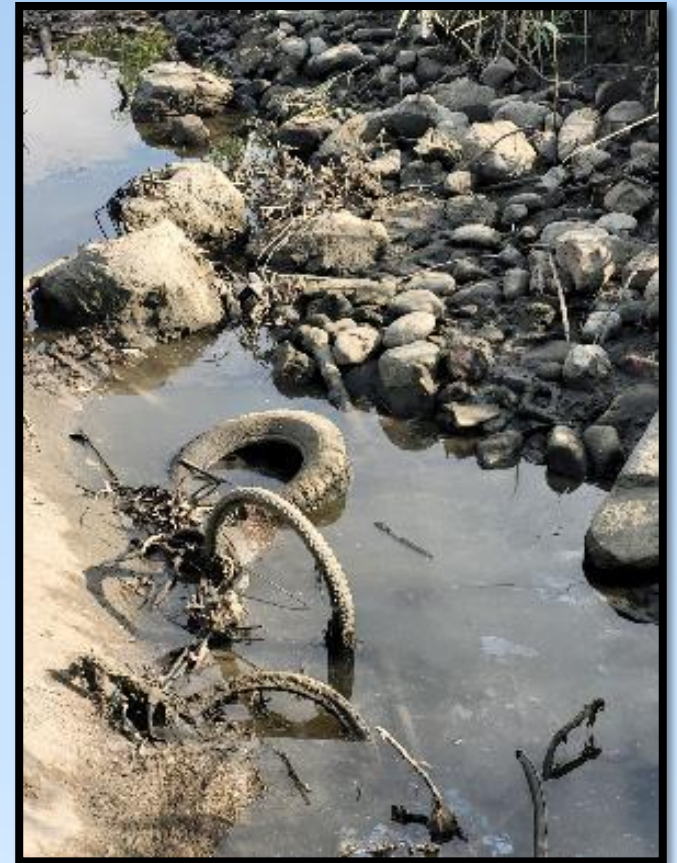
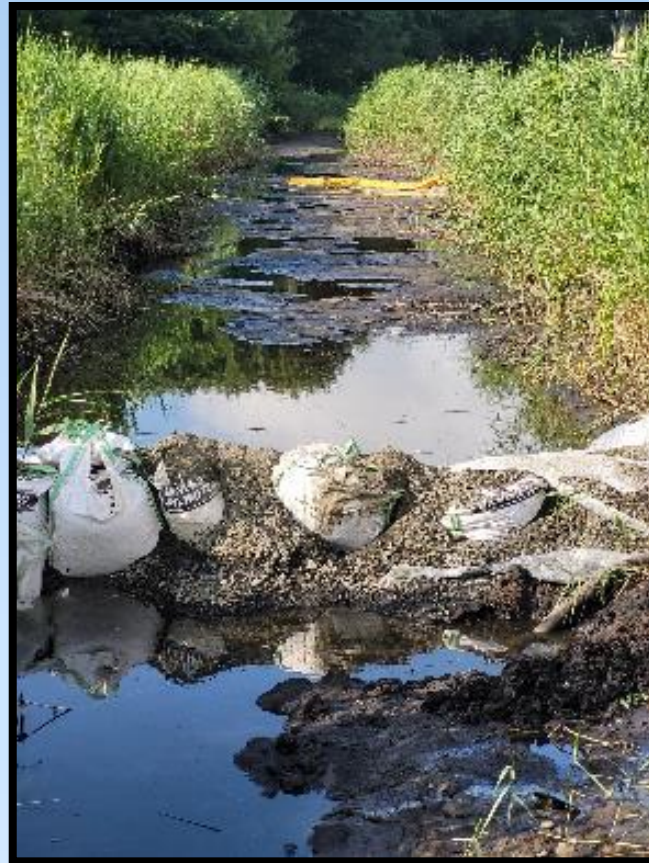


**Looking towards Broad Street**



# OU3 Excavation

## Temporary Dams and Debris



# Removing 4 to 6 Feet of Sediment on Average



# OU3 Banks

**Bank Along Rear EPA Office Lot**



**Bank Along Rear Vacant Lot**



# Most recent (Yesterday)



# Overview Photos



**Before**



**After**

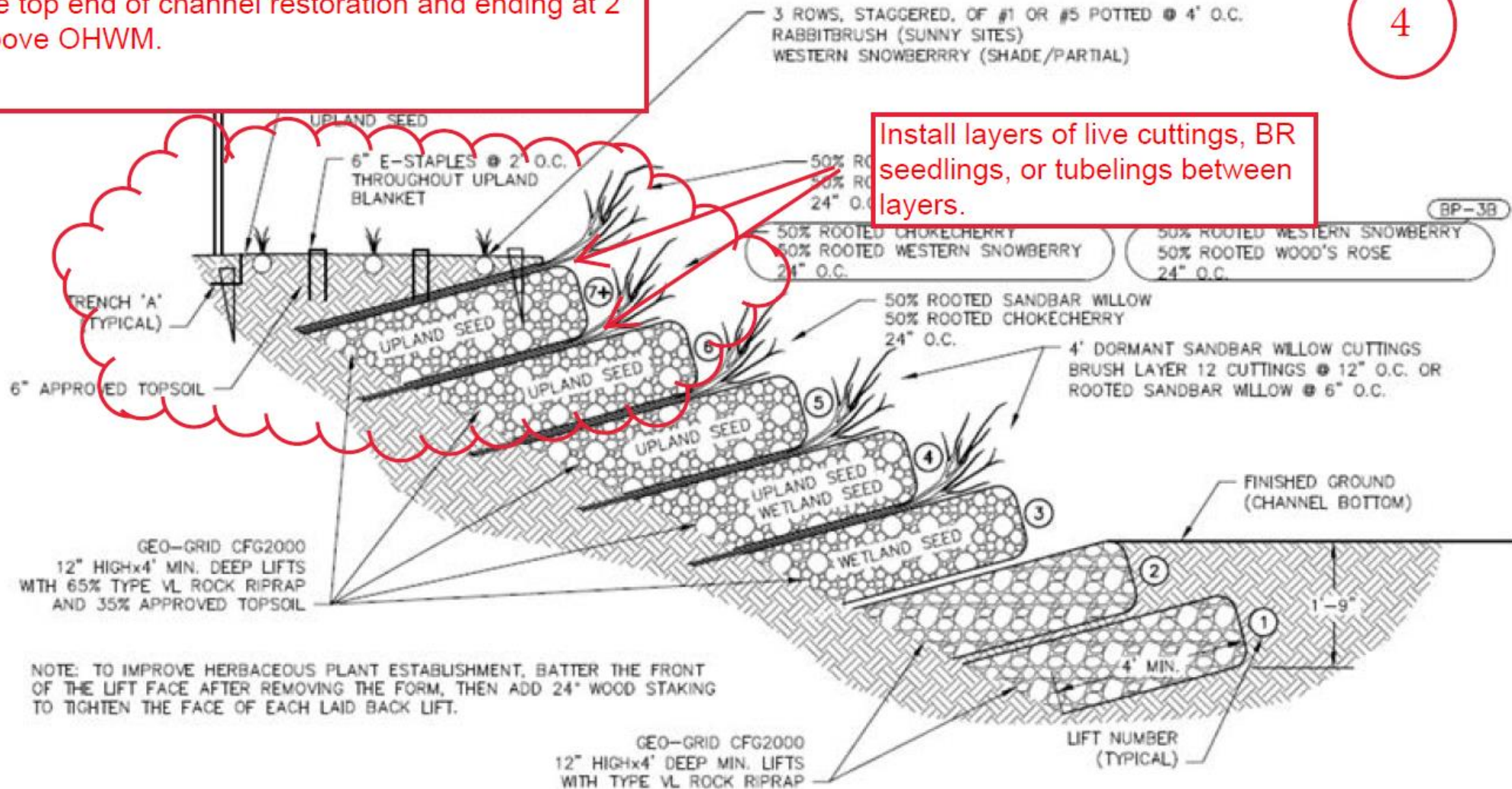


# OU3 Restoration – Creek Banks

Substitute 1-2 lifts of brush layering starting from the top end of channel restoration and ending at 2' above OHWM.

4

Install layers of live cuttings, BR seedlings, or tubelings between layers.

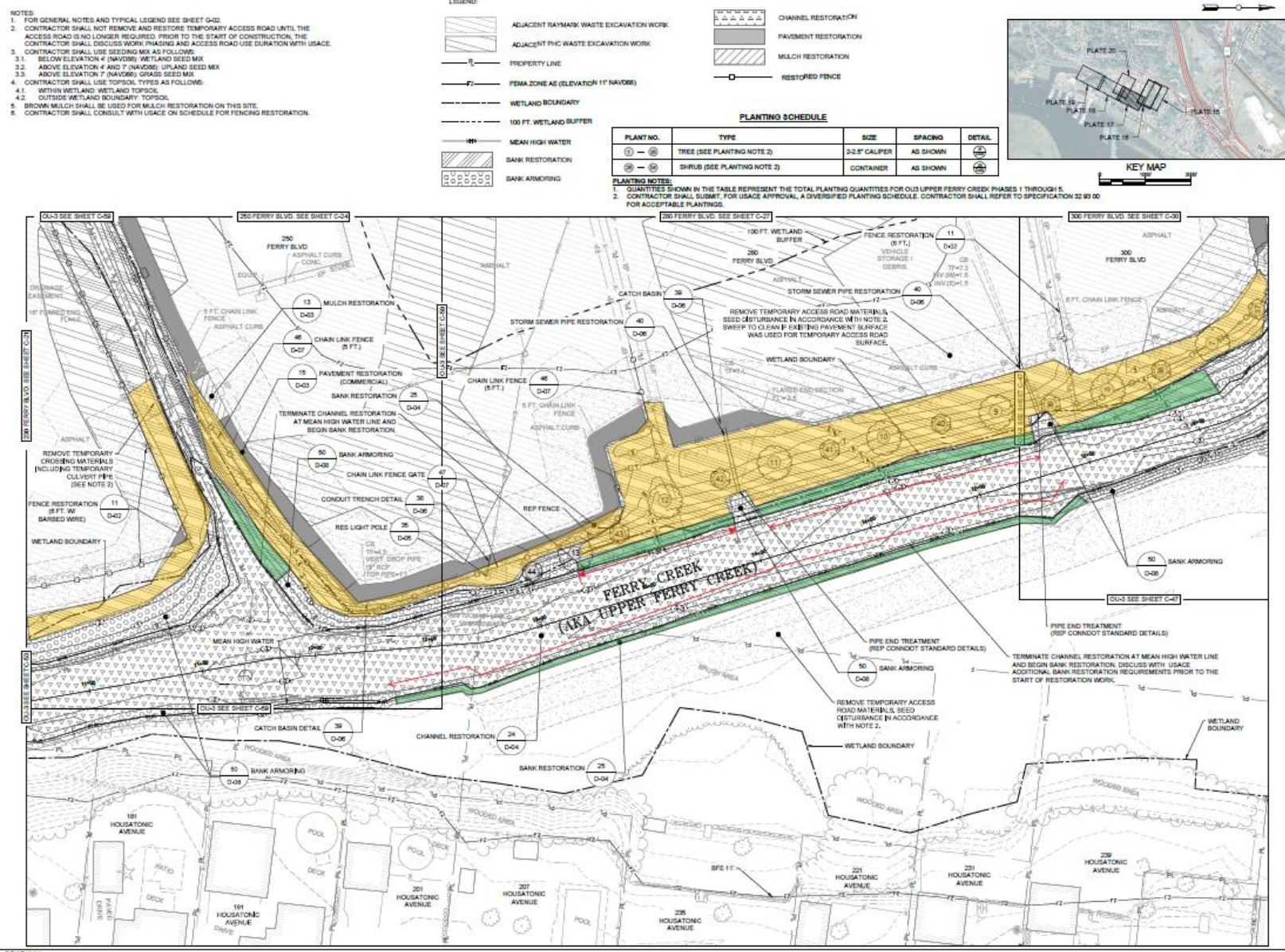


2  
DT3

BP-3A AND BP-3B: SLOPE PROTECTION FOR SLOPES STEEPER THAN 3:1  
Scale: NOT TO SCALE



# OU3 Restoration – Top of Bank



**AECOM**

**PROJECT**  
REMEDIAL DESIGN DRAWINGS  
RAYMARK SUPERFUND SITE  
Stratford, Connecticut

**CLIENT**  
US Army Corps of Engineers  
New England District

**CONSULTANT**  
AECOM  
500 Enterprise Drive Suite 300  
Rocky Hill, CT 06067-3913  
860.526.8852 fax 860.526.3691  
www.aecom.com

**REGISTRATION**

**100% DESIGN**

**Brush Mattress or Brush Layering**

**ISSUE/REVISION**

NO.	DATE	DESCRIPTION
1	09/13/2019	100% DESIGN
1/1		

**PROJECT NUMBER**  
80648668.8.4

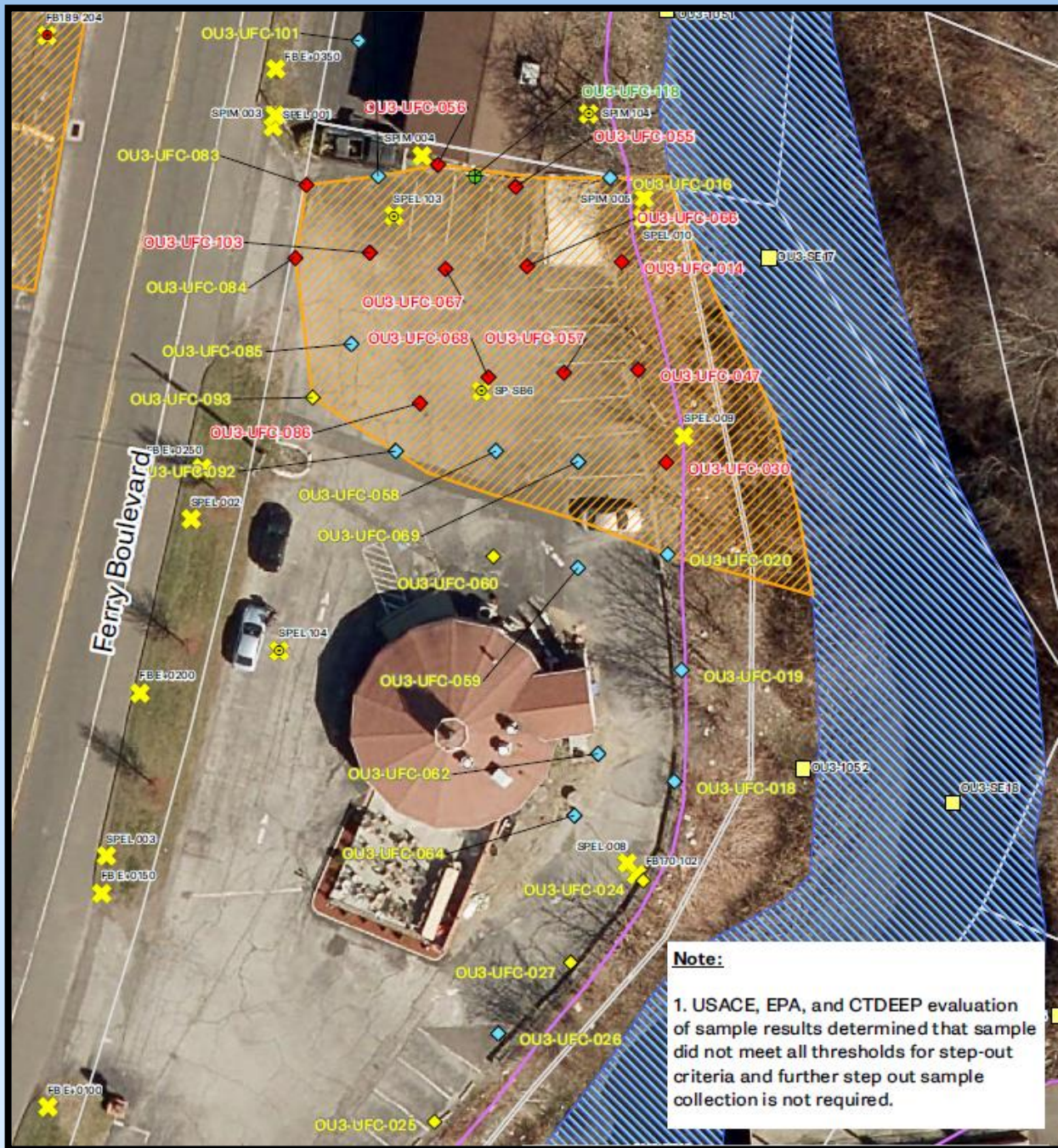
**SHEET TITLE**  
PROPOSED GRADING AND RESTORATION PLAN - OU3 - PLATE 17 UPPER FERRY CREEK PHASE 2

**SHEET NUMBER**  
C-50

# Remaining OU6 Properties

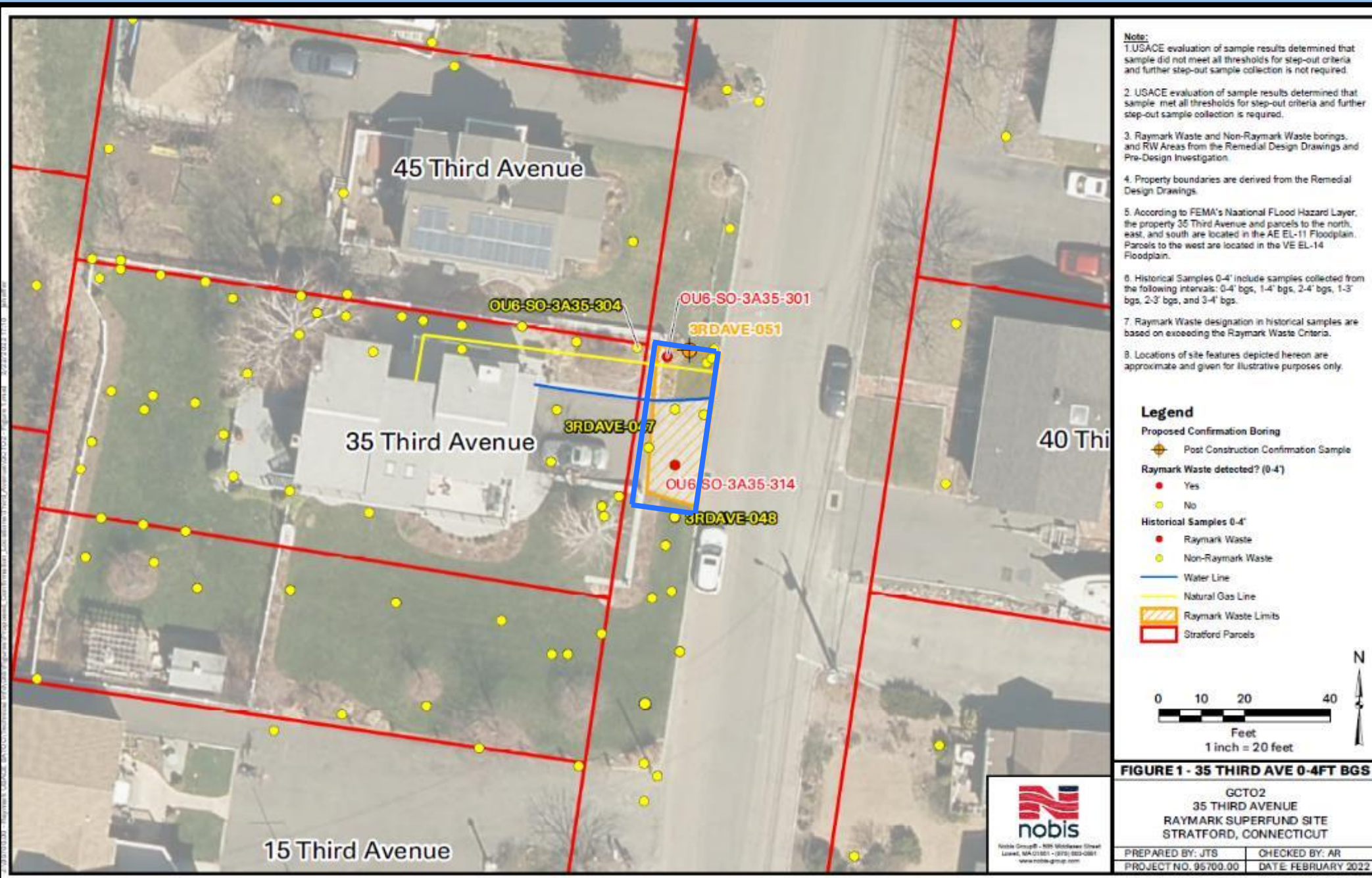
# Big Jim's Galley

- No previous history of RW
- Found when sampling the bank
- Est 1,300cy Raymark Waste
- Excavation on Monday (155cy)
- Will be complete in early October

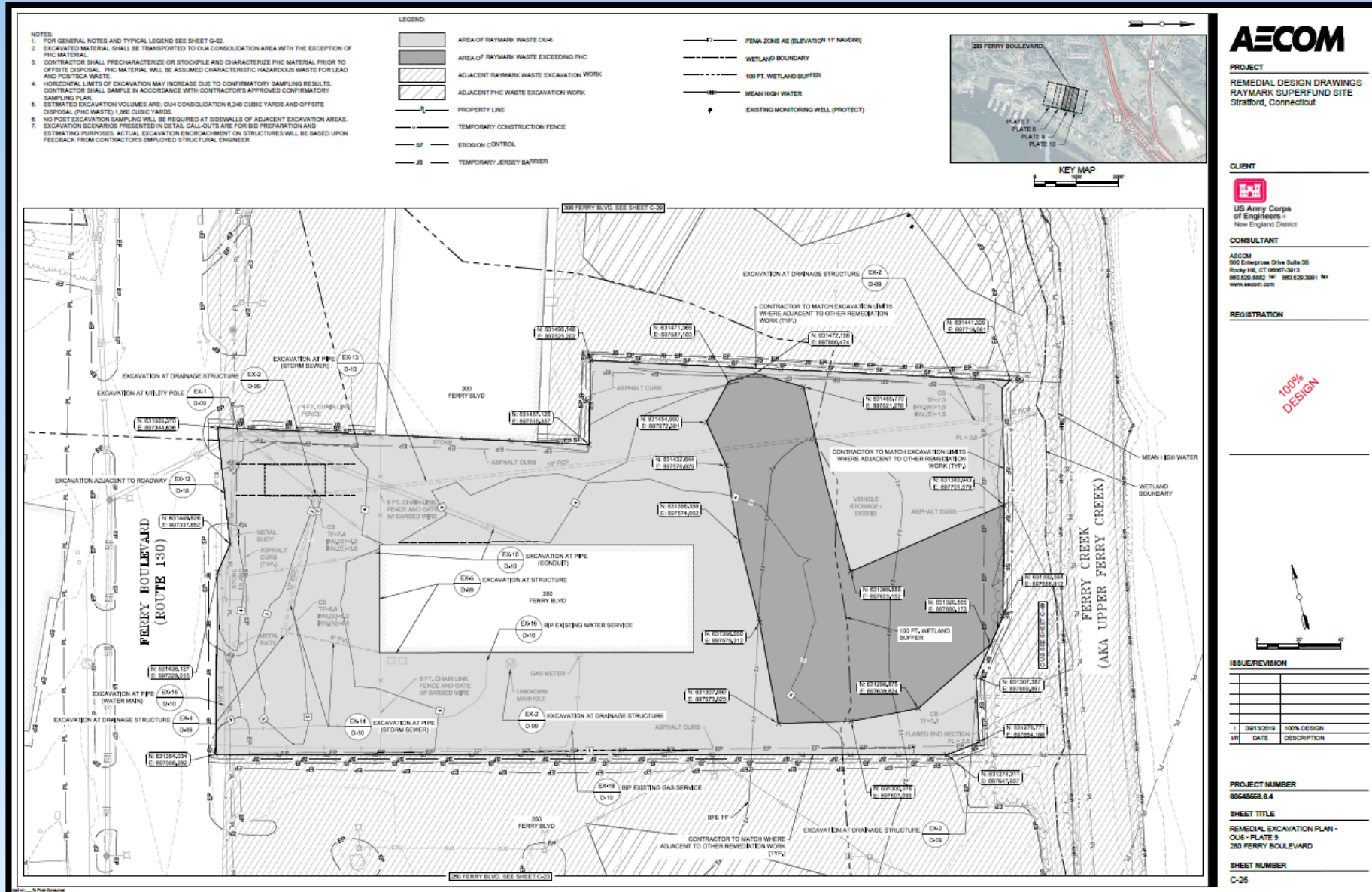


# Third Ave ROW

August 2023



# 280 Ferry Blvd – Blasius South



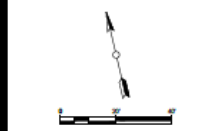
**AECOM**

PROJECT  
 REMEDIAL DESIGN DRAWINGS  
 RAYMARK SUPERFUND SITE  
 Stratford, Connecticut

CLIENT  
  
 US Army Corps of Engineers  
 New England District  
 CONSULTANT  
 AECOM  
 500 Enterprise Drive Suite 300  
 Rocky Hill, CT 06067-3913  
 860.539.5662 fax 860.539.5661  
 www.aecom.com

REGISTRATION

100% DESIGN



ISSUE/REVISION

NO	DATE	DESCRIPTION
1	08/13/2019	100% DESIGN

PROJECT NUMBER  
 80648668.8.4  
 SHEET TITLE  
 REMEDIAL EXCAVATION PLAN -  
 CUE - PLATE 9  
 280 FERRY BOULEVARD  
 SHEET NUMBER  
 C-26



# Lockwood Ave (2023-2024)



- 4.8 acres
- About \*20,000cy of Raymark Waste. No PHC. 2-foot?
- Phase 1 tidal wetlands
- Phase 2 upland/inland wetland
- Various channels and culverts (stormwater, Selby Pond, Ferry Blvd wetland)
- Bulkhead around upland
- Coastal resiliency (1 foot)

# OU3/OU6 Remediation Tracking Table

Area	Location	Excavation Dates	Volume (cy)	Truck Trips?	No. Prop	Notes
Big Jim's Galley	170 Ferry Blvd	Sept 25 to xx, 2023	155	15	1	ELUR
OU3 Ferry Creek	Ferry Blvd to Broad Street	June to xx, 2023	12,080	1,231	1	ELUR
		May 8 to 10, 2023	727	69	1	Behind car dealerships
<b>TOTALS =</b>		<b>Raymark Waste</b>	<b>65,109</b>	<b>5,761</b>	<b>24</b>	
		<b>PHC Waste</b>	<b>6,381</b>	<b>598</b>	<b>14</b>	

## OU6 Remaining Properties

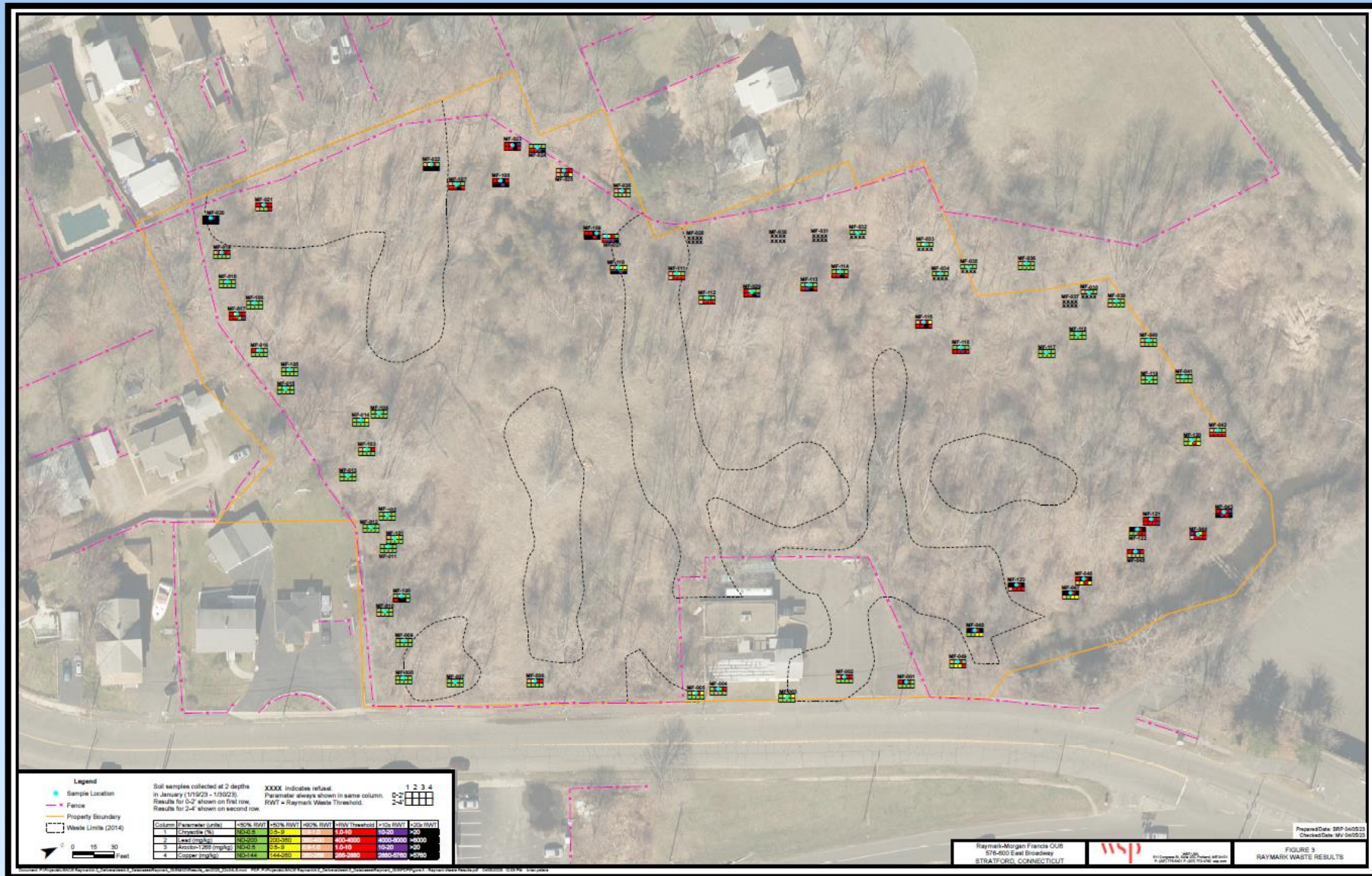
Area	Location	Excavation Dates	Estimated Volume (cy)
Big Jim's Galley	170 Ferry Blvd	October 2023	12,845
Blasius	280 Ferry Blvd	Oct/Nov 2023	6,240 (1,860)
3 <sup>rd</sup> Avenue	3 <sup>rd</sup> Avenue	Oct/Nov 2023	100
EPA Office	300 Ferry Blvd	Nov/Dec 2023	5,010 (1,090)
Lockwood Ave	Lower Ferry Creek	Jan to June 2024	*20,000
<b>Estimated Remaining Volumes =</b>		<b>Raymark Waste</b>	<b>44,195</b>
		<b>PHC Waste</b>	<b>2,950</b>

**Estimated Overall Volume**  
 Raymark Waste = 109,304cy  
 PHC Waste = 9,331cy



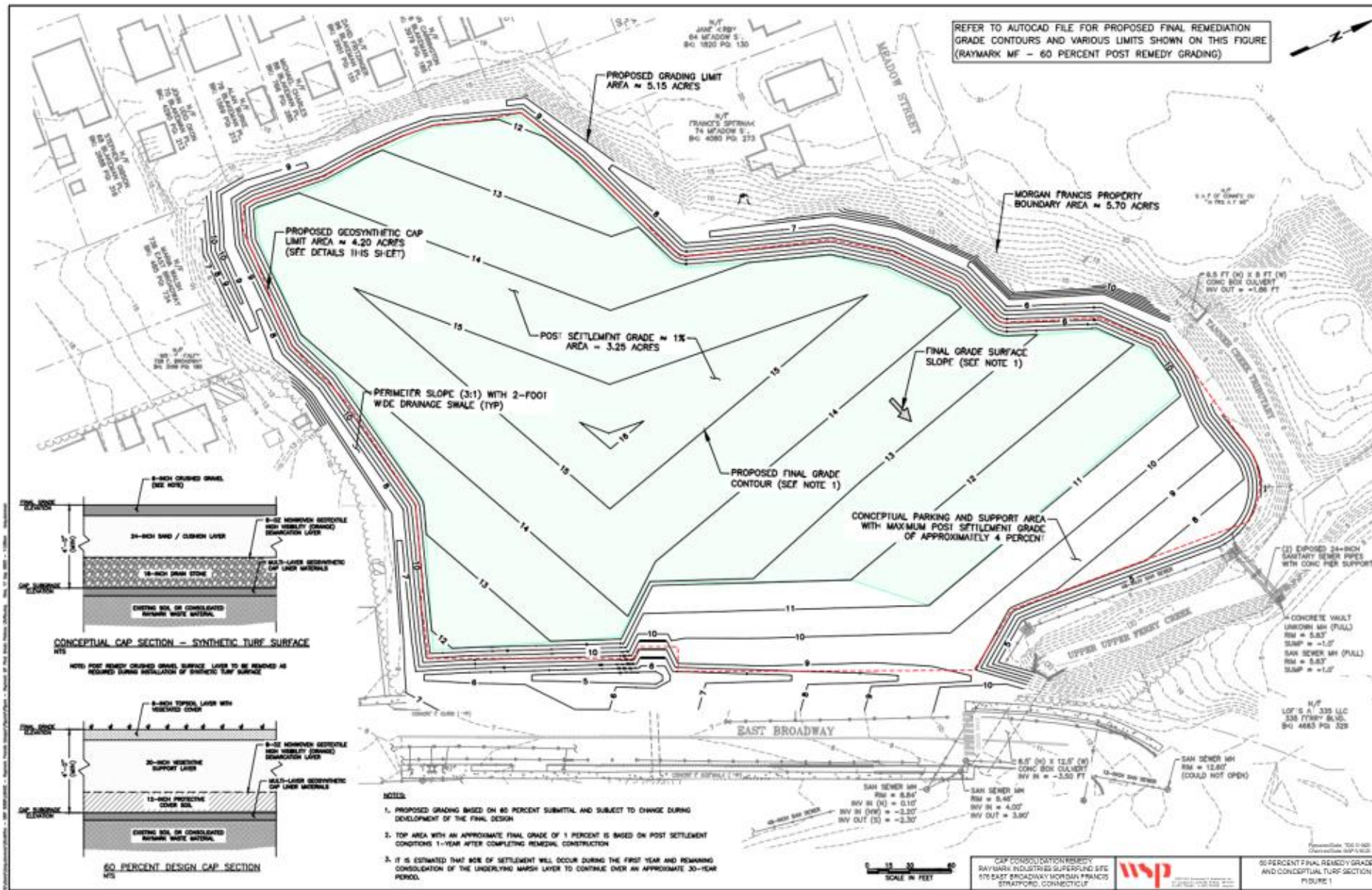
OU6 Morgan Francis  
576/600 East Broadway

# 576/600 East Broadway - Morgan Francis

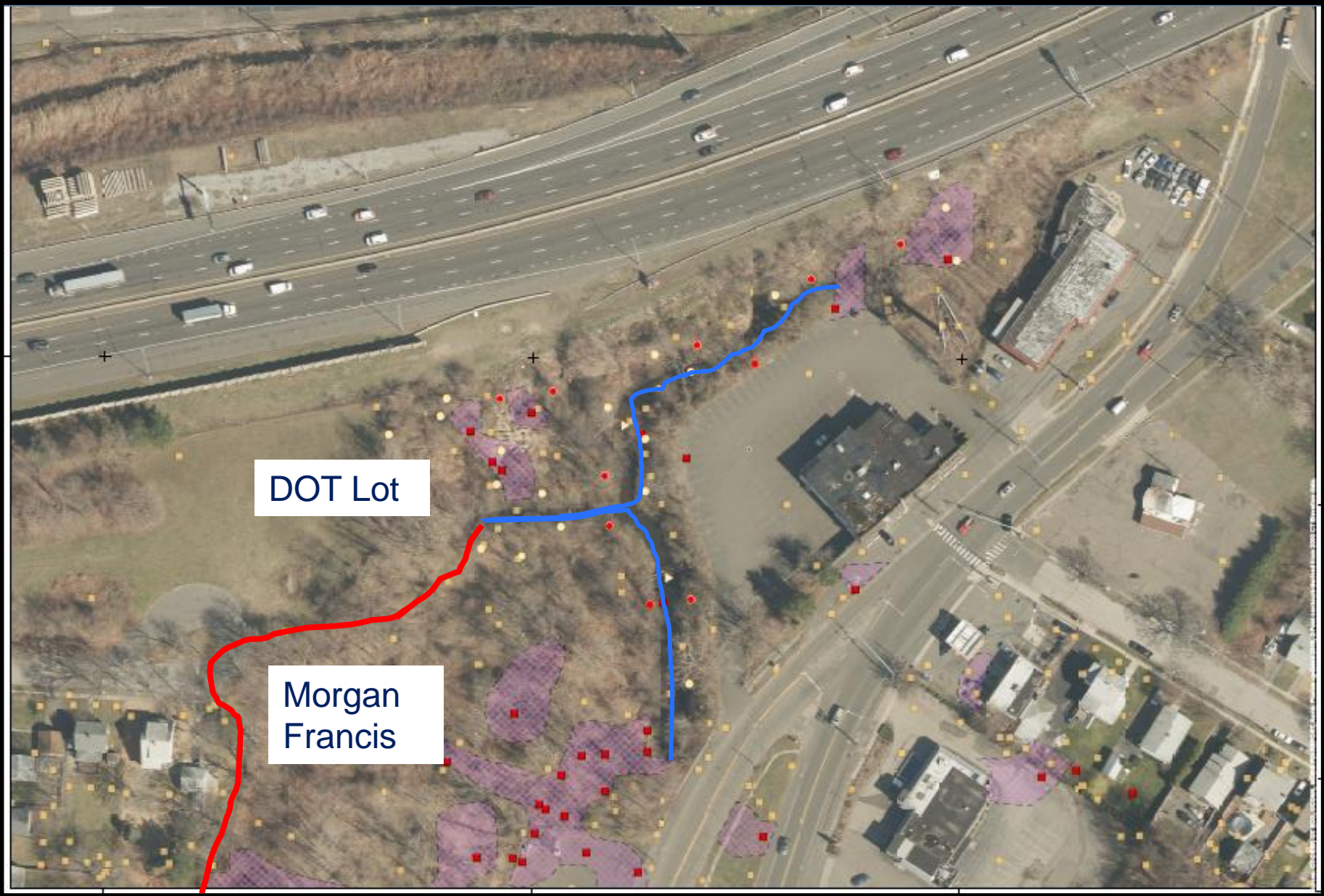


- 2011 ROD
  - 44,000cy RW (low)
  - Cap in place
- Update design
  - Recreational use
  - Consolidate adjacent RW
  - 60% design done
- Contracting in 2024
- Expect cleanup to start early 2025

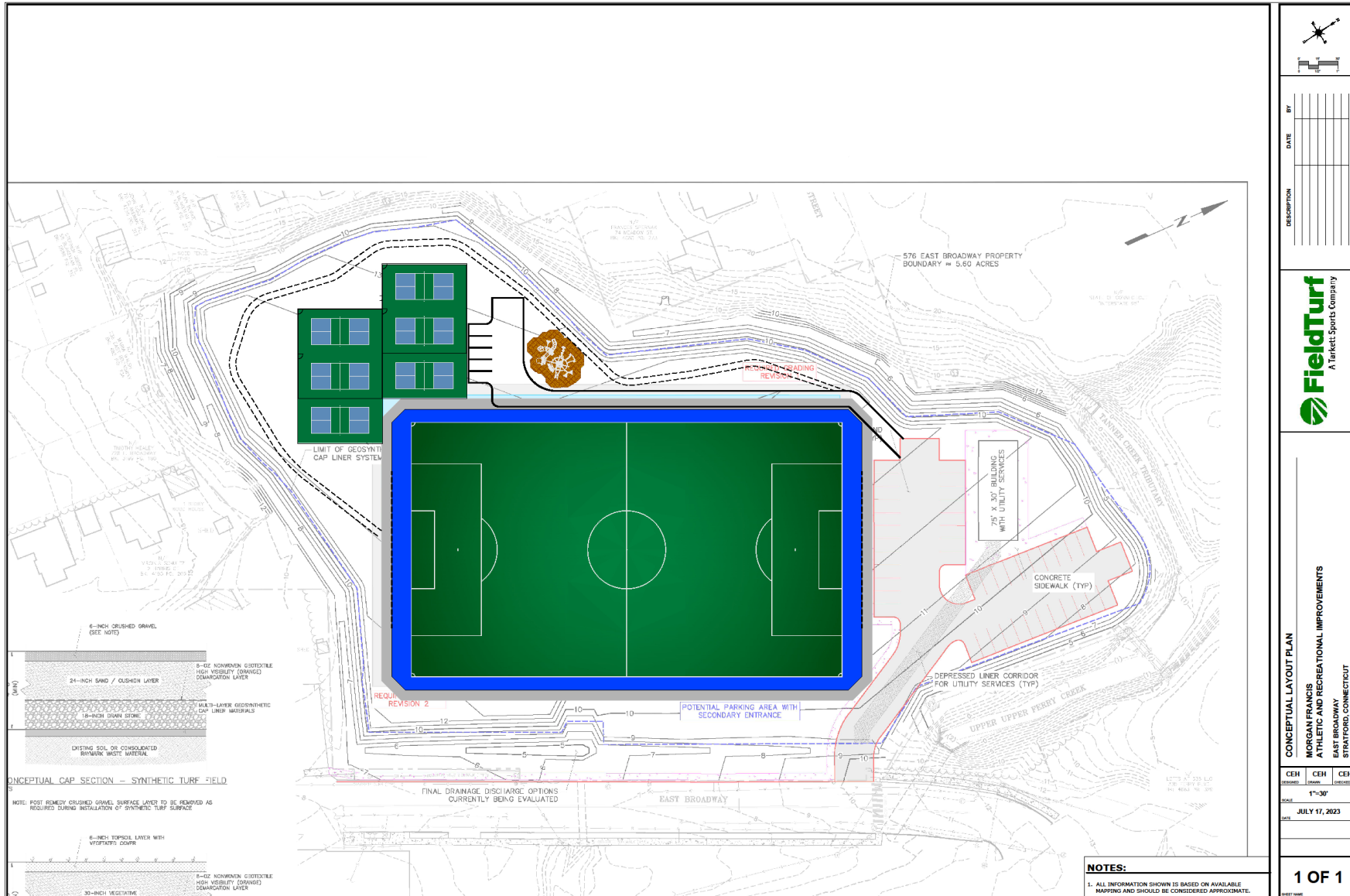
# 60% Remedial Design




# Uppermost Ferry Creek and DOT Lot



# Recreational Concept



DESCRIPTION	BY	
	DATE	
 <b>FieldTurf</b> A Tarkett Sports Company		
<b>CONCEPTUAL LAYOUT PLAN</b> <b>MORGAN FRANCIS</b> <b>ATHLETIC AND RECREATIONAL IMPROVEMENTS</b> EAST BROADWAY STRATFORD, CONNECTICUT		
DESIGNED BY	CEH	CEH
DRAWN BY	CEH	CEH
SCALE	1"=30'	
DATE	JULY 17, 2023	
<b>1 OF 1</b>		

# OU4 Updates

# OU4 Ballfield Work Completed or Ongoing Since July



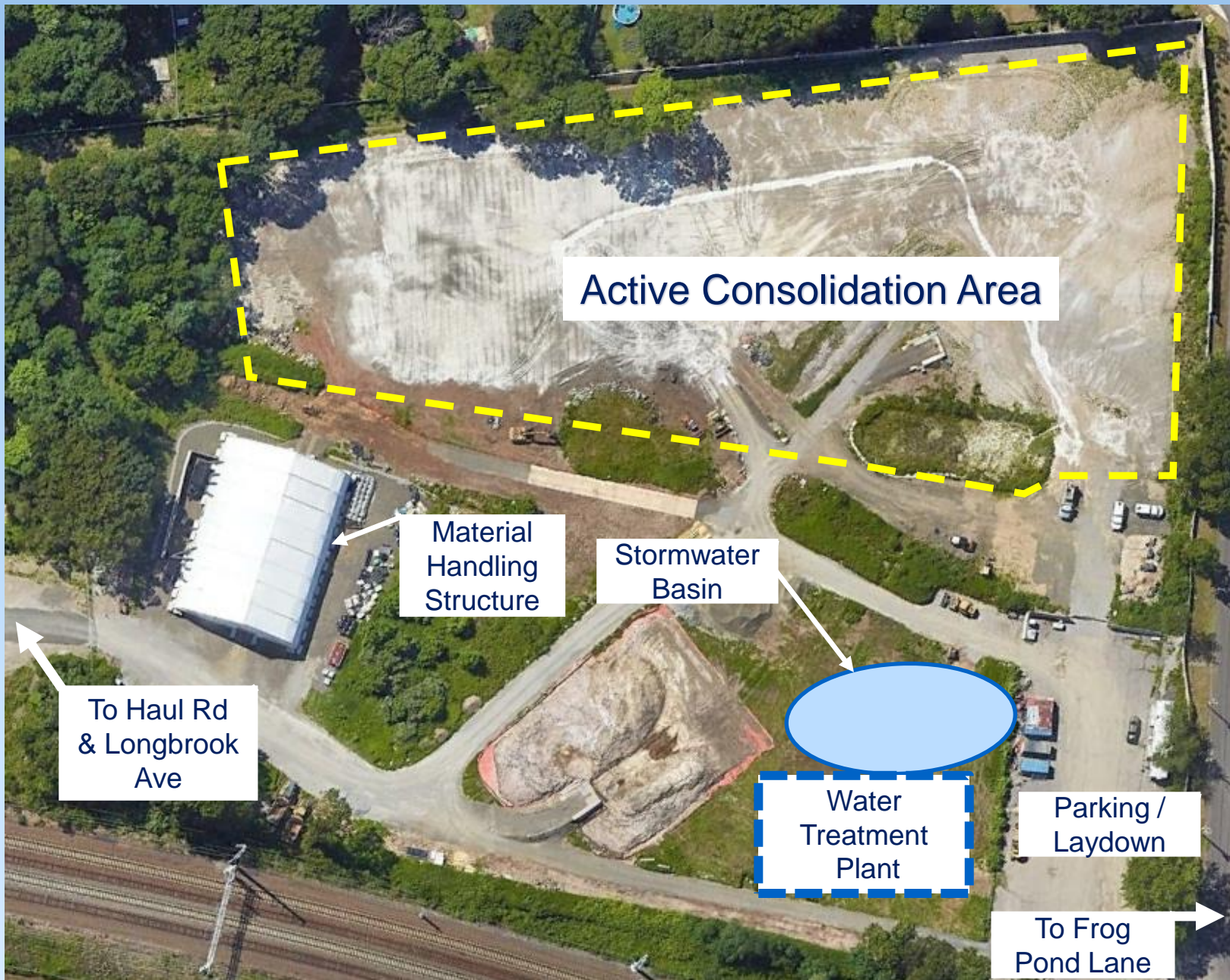
<https://www.ipcamlive.com/5fc7c1899d5a3>



<https://www.ipcamlive.com/5fc7c13309700>

- Approximately 65,000 CY of material has been consolidated, compacted, and covered to date
- Posi-Shell cover has been applied on all previously imported Raymark Waste at the Ballfield
- Stormwater treatment plant has been established at the consolidation area
- Stormwater conveyance line construction complete
- Pumpstation construction is underway
- 6 perimeter air monitors at OU4 are operating daily

# OU4 Consolidation Area



- Approximately 65,000 CY of material has been consolidated, compacted and covered
- Actively stockpiling material from Ferry Creek (OU3)
- Creek material is very wet with a high organic content
- Creek sediment is amended with cement in the handling structure then stockpiled and allowed to dewater further before consolidation



# OU4 Consolidation Area



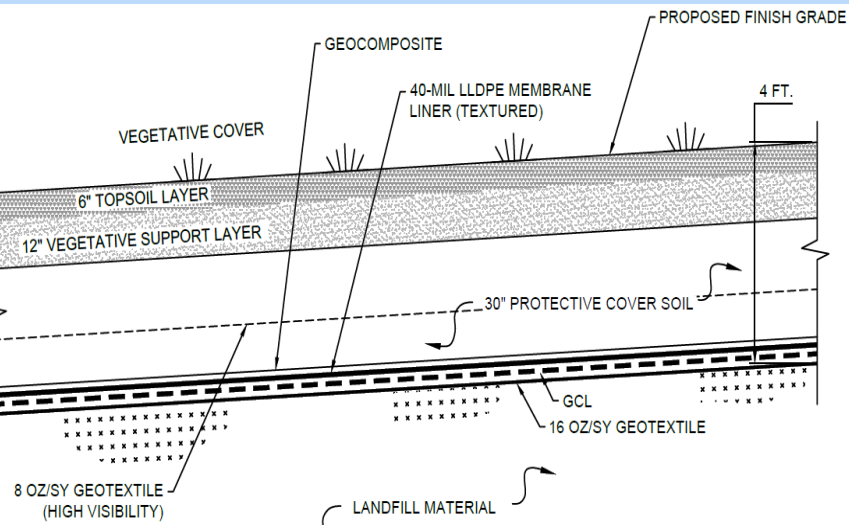
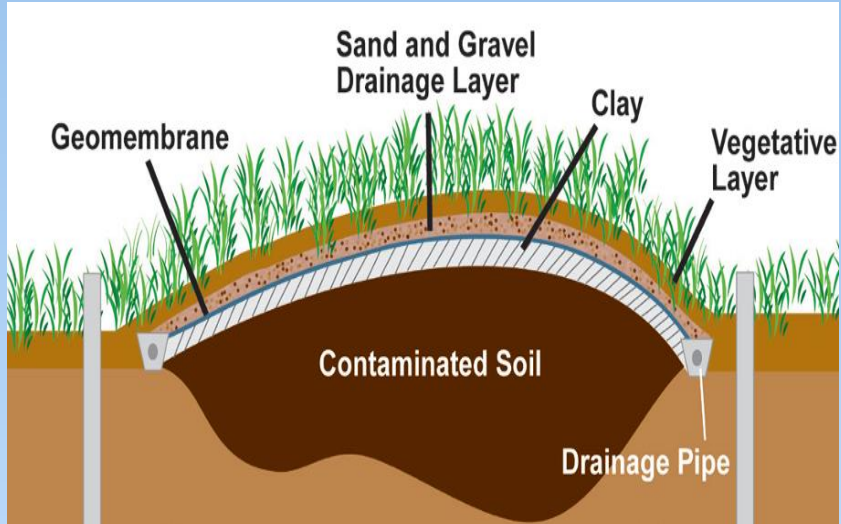
# OU4 Consolidation Area



# OU4 Consolidation Area



# OU4 Cap and Future Concept



- 3-D concept based on current design
- Site design accommodates future use by the Town
- 200' x 300' building pad for future development. Will accommodate a variety of options.
- Access from Frog Pond Lane and Longbrook Ave via Haul Road
- Site stormwater will be collected and carried via new conveyance system and pumpstation

# OU4 Stormwater System

# Stormwater System Upgrades



New  
Stormwater  
Pump Station



Ashcroft

New Stormwater  
Conveyance Line  
(Complete)

STM-CL-SB06  
STM-CL-SB05  
STM-CL-SB04

STM-CL-SB03

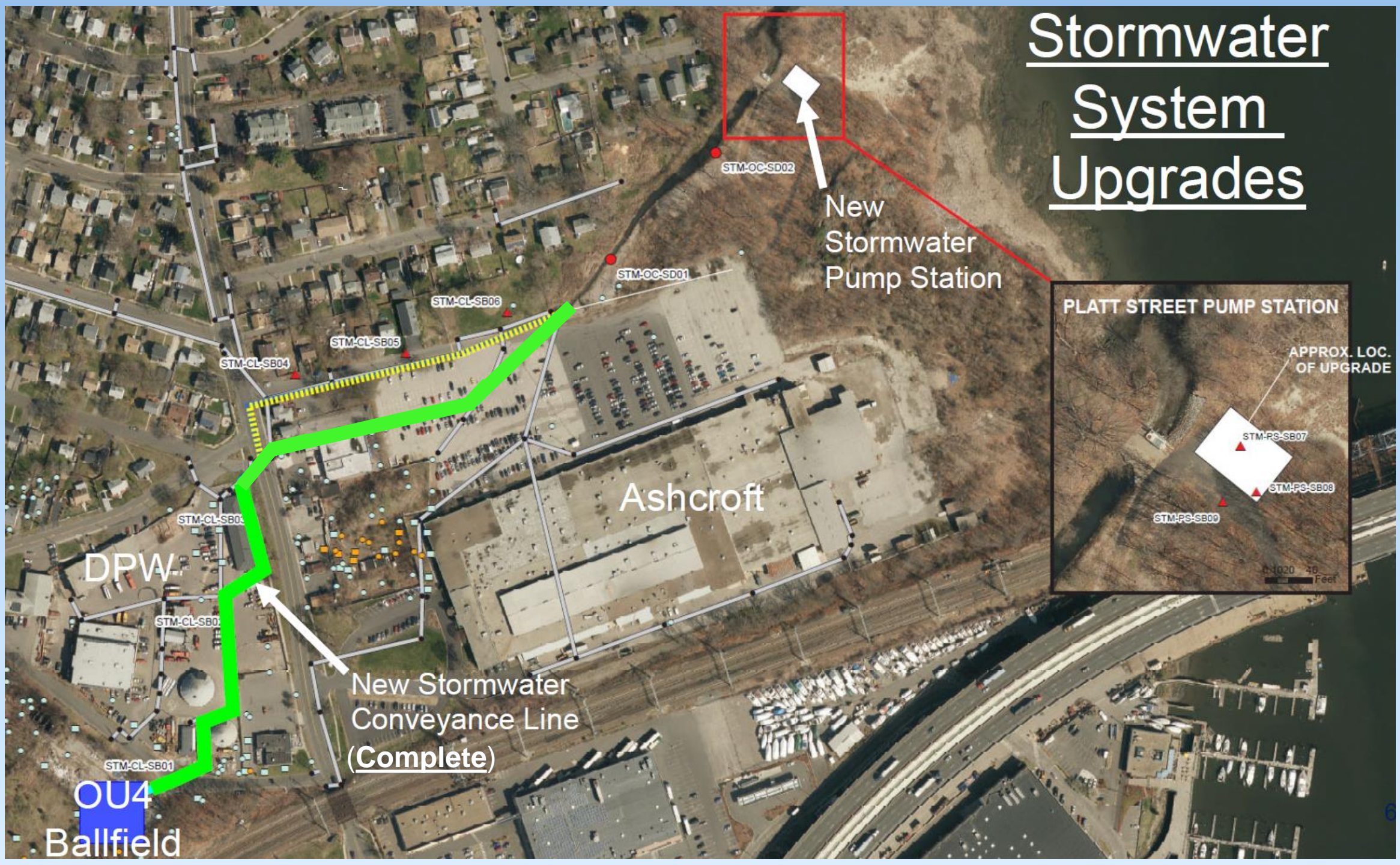
STM-CL-SB02

STM-CL-SB01

DPW

OU4

Ballfield



# Stormwater Conveyance



Open Channel Armoring

# Stormwater Conveyance



Culvert Installation and Site Restoration



# New Pump Station

- Will manage future stormwater runoff from OU4 and adjacent Town stormwater systems
- P&S Construction – Prime contractor
- Construction underway
- Construction expected complete December 2024
- Operates during significant storm and high-water events



# Pumpstation – completed and upcoming site work

- Blasting operations began in late August
- 7 successful blast events since
- The blasts went as planned, safely and with minimal noise, dust, and vibration
- Measured ground motions and noise have been below the predicted values and significantly below the limits set in the specifications and blasting plan
- Excavation of the broken rock and additional site prep is underway
- Line drilling and the second phase of blasting and excavation is expected to begin early October with blasting operations expected complete by mid October



# Pumpstation Excavation



Charge Holes and Blast Mat Placement

# Pumpstation Excavation



Blasting and rock spoils



# Air Monitoring

# Raymark Air Monitoring Program

- Dust monitoring protects workers and abutting community
  - Dust Action Levels based on property and type of work
  - Action Levels = 0.014 (OU4) and 0.019 mg/m<sup>3</sup> (OU3 and OU6) when Raymark Waste handled.
  - Action Levels = 0.075 mg/m<sup>3</sup> (OU4 Early Detection Station)
  - Action Level = 0.150 mg/m<sup>3</sup> when only clean soil handled
  - Chemical samples collected for lab analysis when Raymark Waste is handled
  - Low safety threshold – STOP WORK before any potential risk to workers or community
- Vibration monitoring conducted
  - STOP Work = 0.5 inches/second



Chemical Sampling Port

Dust Monitoring Station

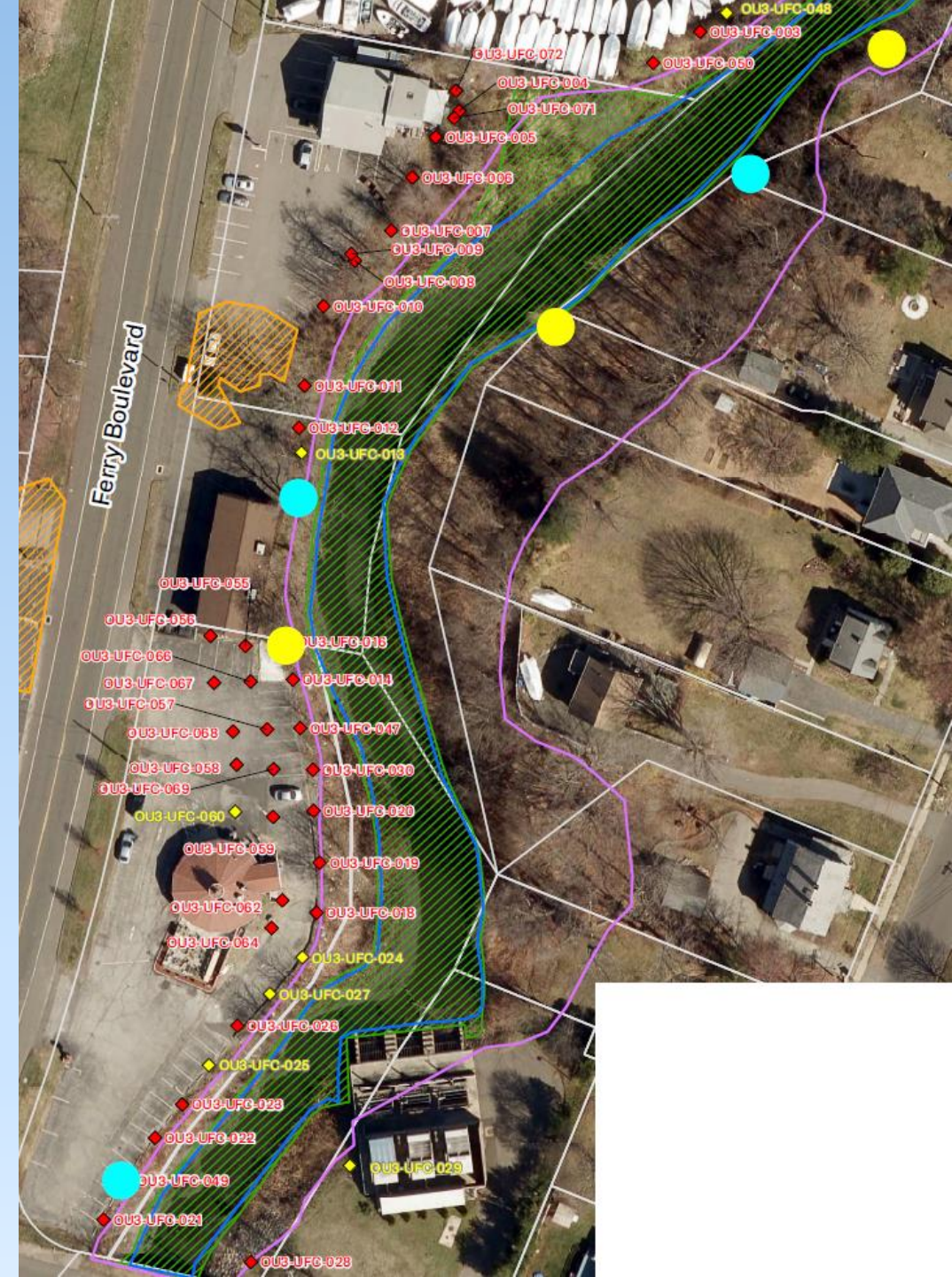


Personnel Monitoring



# Air Monitoring Results

- No exceedances of the applicable Daily Dust Action Levels during this period!
- No elevated chemical concentrations above the action level criteria during this period!
- Copper and lead analysis for one of the five air samples collected at OU4 on 9/11 - 9/13 was not processed by the lab. When the sample arrived at the lab, it was damaged and unusable. Origin of the damage is unknown.





# Vibration Results

- On 7/25, 8/18 and 9/13 vibration exceedances due to thunderstorms were observed.
  - Exceedances on 7/25 and 8/18 occurred outside of working hours.
- A vibration complaint was received 8/8 from an Avery Street resident.
  - Cause was vibratory roller compaction during restoration work.
  - Contractor immediately notified and reduced their work to stop the disturbance.
  - A vibration meter was deployed the morning of 8/9 and vibration monitoring will continue until restoration is complete.



Excavating saturated Raymark Waste from Upper Ferry Creek

Asphalt paving Ashcroft Parking Lot



# Poor Air Quality Index

- Implemented a revised air monitoring procedure for OU4 when EPA's Air Quality Index (AQI) is greater than 75 in response to Canadian wildfires.
- Not applicable to OU3/6 because not fixed stations and can be located to represent specific work area.
- AQI has not exceeded this threshold since July.
- AQI monitoring will continue, and revised procedure will be implemented as needed.

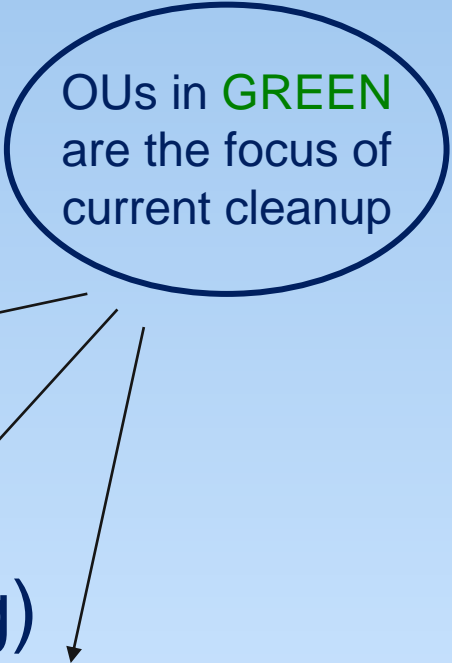


# Other Raymark Operable Units (OUs)

# Nine Operable Units

- OU1: Former facility. (2005 ROD)
- OU2: Groundwater/Vapor Intrusion (2016 ROD)
- OU3: Upper Ferry Creek (2016 ROD)
- OU4: Raybestos Memorial Ball Field (2016 ROD)
- OU5: Shore Road Boat Club (2023 ROD – pending)
- OU6: Additional Fill Properties (2011 and 2016 RODs)
- OU7: Lower Ferry Creek
- OU8: Beacon Point Boat Launch
- OU9: Short Beach Park/Stratford Landfill

OU's in **GREEN**  
are the focus of  
current cleanup

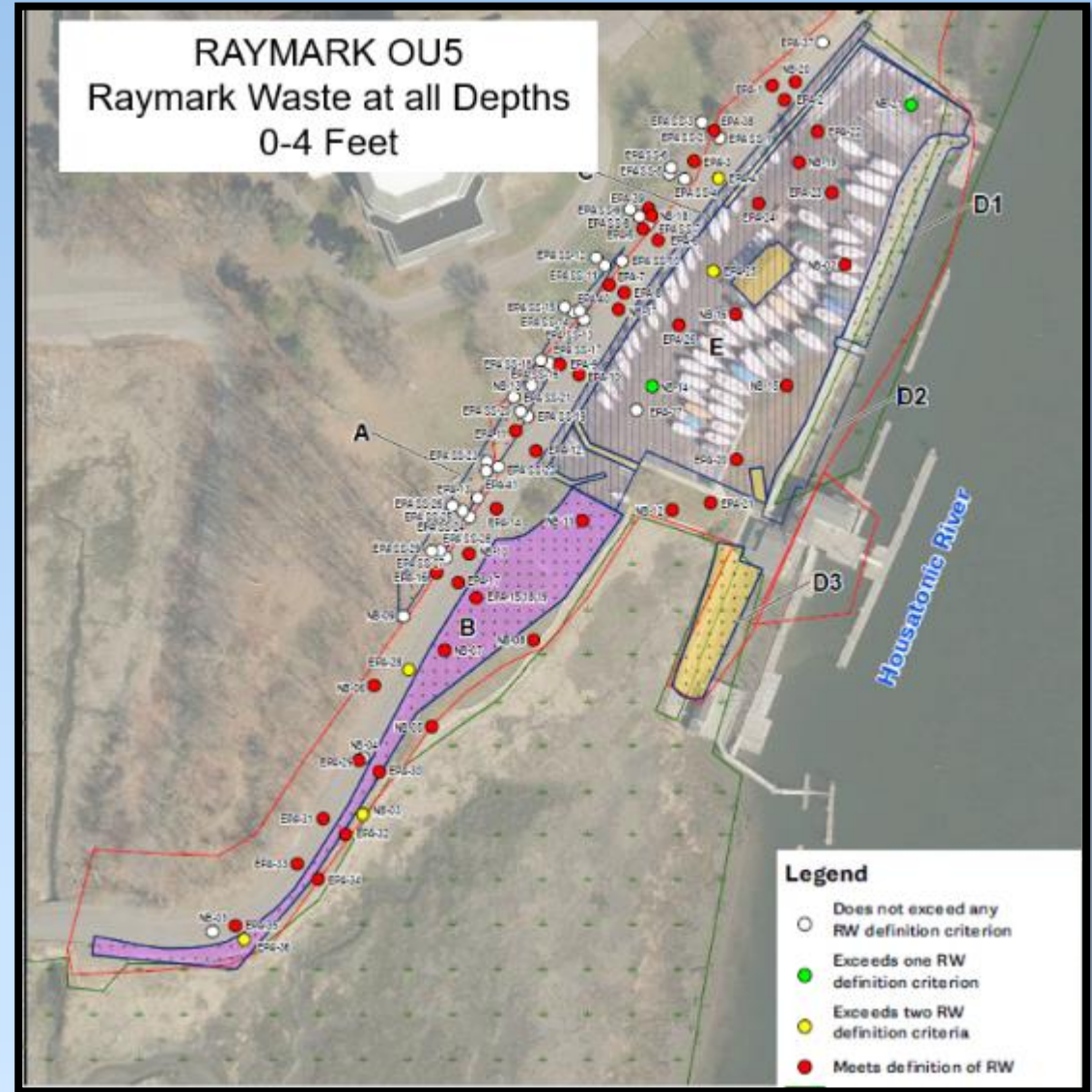


# Explanation of Significant Differences (ESD)

- Documents “significant” changes to EPA’s previous clean-up plans (Record of Decision or ROD)
  1. Floodplain changes (Morgan Francis, Beacon Point and Lockwood Avenue)
  2. Change to plan to manage stormwater at OU4
  3. Less than 4-foot excavation at a DOT property along I95
- Public meeting held on August 15<sup>th</sup>
- 15-day comment period has closed
- ESD has been issued

# Record of Decision (ROD) for OU5 Shore Road Area

- ROD to include a combination of excavation and capping in place (About 9,500cy)
- Incorporates Coastal Resiliency
- Public meeting held on August 8<sup>th</sup>
- Public hearing held on September 6<sup>th</sup>
- 30-day public comment period closed
- Expect to issue ROD in October
- Cleanup in 2025
- Ron Jennings is the EPA Project Manager



# Operable Unit 9

- Study area is approx. 94-acres including the former Stratford Landfill (northern ~30 acres) and Short Beach Park (southern ~64-acres).
- Continuation of Remedial Investigation (RI) activities including portions of Short Beach Park, Stratford Landfill and the Marine Basin
  - Investigation includes geophysics, borings/wells, landfill gas survey, conductivity testing, tidal study, ecological evaluation, etc.
  - Remedial Investigation report, Feasibility Study and decision document development.
- Anticipated Schedule:
  - Mobilization (Sept./Oct. 2023).
  - Limited vegetation clearing and surface geophysics (Oct. 2023).
  - Data collection (Nov. 2023 to ~May 2024).



# Overall Schedule



- **OU6**

- October – Big Jim's and 3rd Ave ROW
- October/November 2023 – Blasius South Dealership
- November/December 2023: EPA Office/Formal Ski Shop
- 2023-2024– Lockwood Ave
- December 2023 – Complete Morgan Francis Design

- **OU4**

- 2024: Construct cap
- 2025: OU4 final restoration
- Complete pump station

- **OU5**

- 2024: Complete design of cleanup
- 2025–2026: Conduct cleanup



# Next CAG Meeting November 29<sup>th</sup> at 6:30pm

For more information about the Raymark Superfund Site, including copies of presentation slides, documents and meeting minutes, please visit: [stratfordct.gov/raymark](http://stratfordct.gov/raymark)

Email Alivia at: [acoleman@townofstratford.com](mailto:acoleman@townofstratford.com) with further questions, concerns, feedback or to sign up for the Raymark email distribution list.