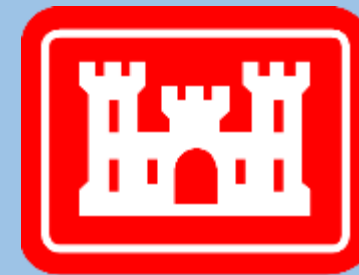


# Community Advisory Group

Raymark Industries,  
Inc. Superfund Site  
Stratford, CT

Jim DiLorenzo, EPA  
Mike Looney, USACE  
Rachel MacPhee, USACE

September 28, 2022



**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 the meeting.
  - 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 6 (OU6) UPDATES
- RAYBESTOS MEMORIAL FIELD (OU4)
- AIR MONITORING UPDATES
- STORMWATER CONVEYANCE SYSTEM
- OVERALL PROJECT SCHEDULE

# OU6 Updates

# Vacant Lots Behind the Blue Goose

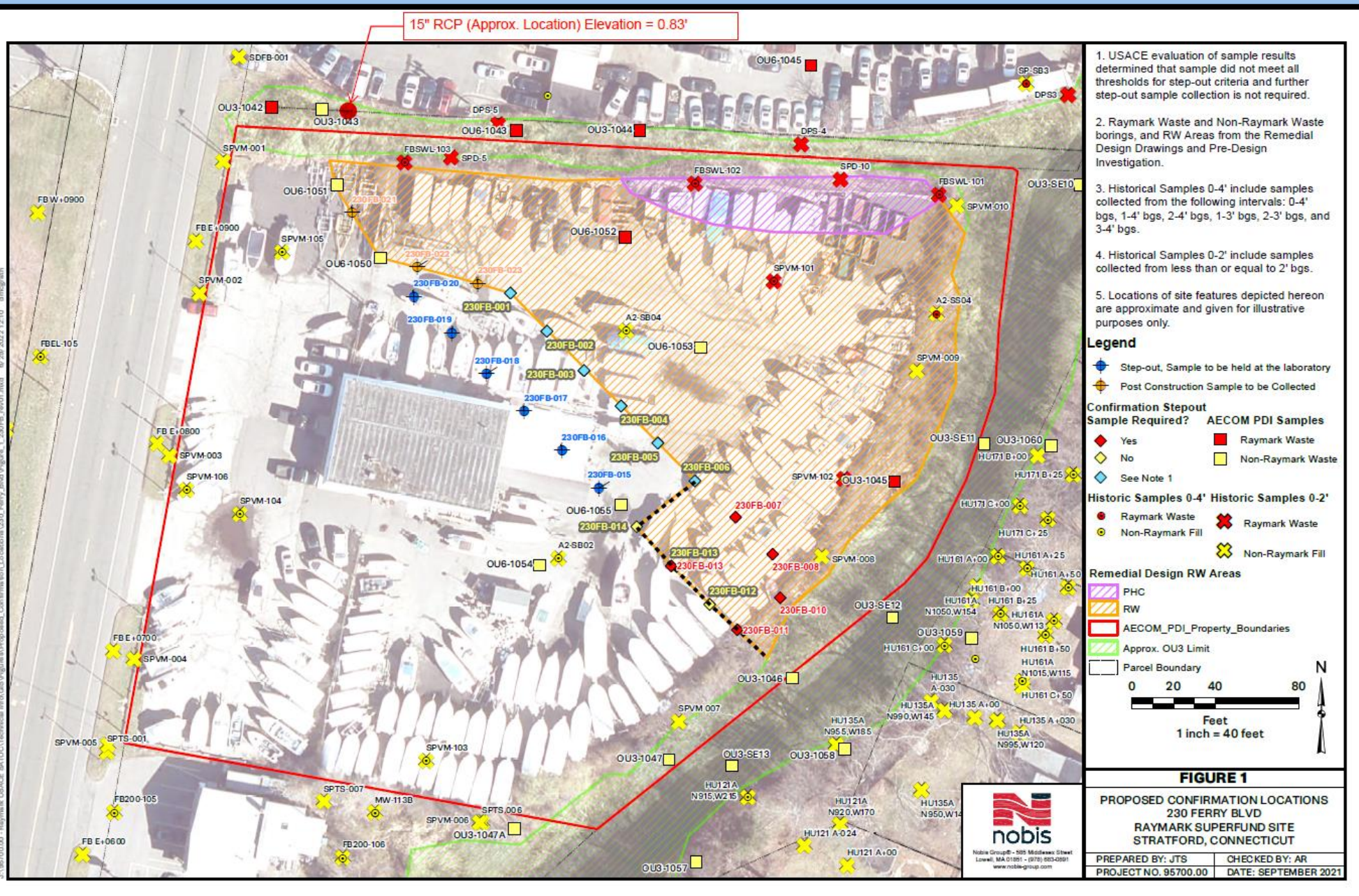


- Jan. 18<sup>th</sup> to May 11<sup>th</sup> 2022
- 9,622cy (905 trucks)
- 1,362cy PHC (121 trucks)
- Buried foundation
- Wetland area in rear
- Restoration
  - Parking lot repaved/striped
  - Fence replaced
  - About 40 border trees/arborvitae
  - Compacted gravel

# Hitchcock Marine

## Plus, adjacent drainage ditch

- June 13 to July 27
- Most boats in water
- 4,974cy (457 loads)
- PHC 715cy (72 lds)
- Active leach field
- Restoration of drainage channel



# Start of Excavation Looking Towards Ferry Creek





# Excavation and Loading



# Restoration

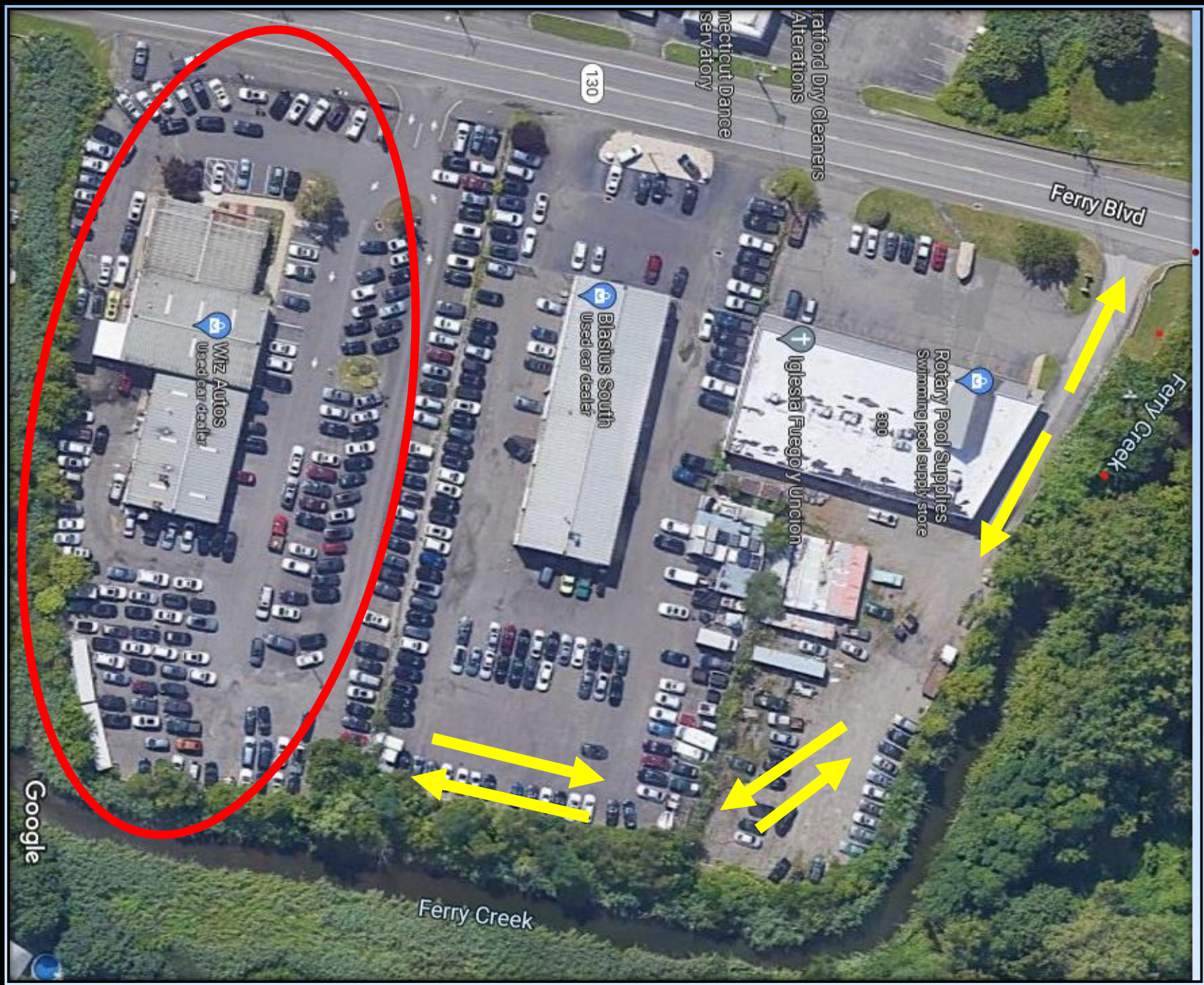


# Clearing of Drainage Ditch



# Restoration of Drainage Ditch



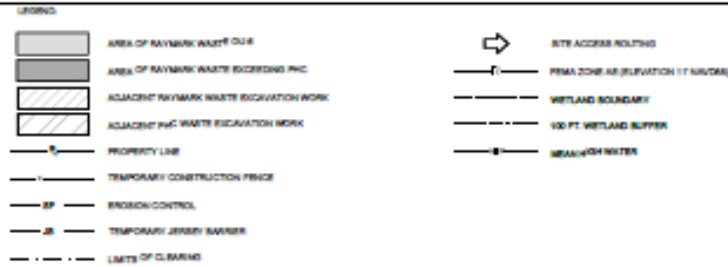


# Wiz Auto

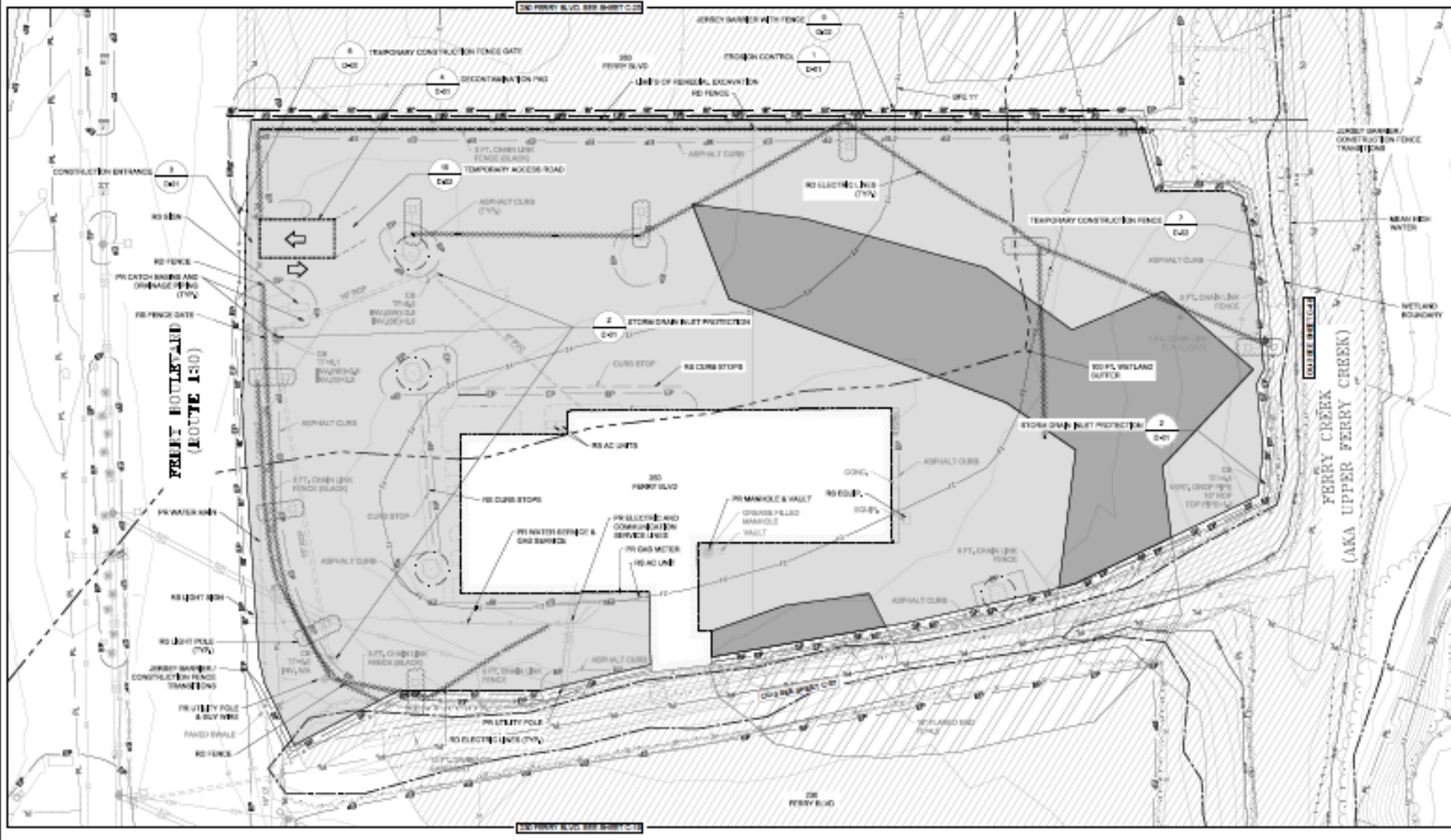
## 250 Ferry Blvd

- Started on Sept 21
- Phased approach
- About 3 months
- est. 8,220cy (600 lds)
- PHC est. 1,750cy (150 lds)

- NOTES:
- FOR GENERAL NOTES AND TYPICAL LEGENDS SEE SHEET C-22
  - THE WORK AREA IS WITHIN THE FEMA 500 FLOOD PLAIN, THEREFORE RESTORATION GRADES SHALL NOT EXCEED PRECONSTRUCTION GRADES
  - CONTRACTOR SHALL MINIMIZE WORK IN PREVIOUSLY RESTORED AREAS, DAMAGE TO PREVIOUSLY RESTORED AREAS WILL BE AT CONTRACTOR'S EXPENSE
  - CONTRACTOR SHALL COORDINATE WORK WITH ADJACENT WORK AS TO ELIMINATE REDUNDANT MINOR DUE TO LACK OF COORDINATION WILL BE AT CONTRACTOR'S EXPENSE
  - CONTRACTOR SHALL ACQUIRE ROAD CLOSURE PERMITS INCLUDING REQUIRED POLICE DETAILS AND REQUIRED TRAFFIC MANAGEMENT PLAN



KEY MAP



PROJECT  
 REMEDIAL DESIGN DRAWINGS  
 RAYMARK SUPERFUND SITE  
 Stratford, Connecticut

CLIENT



US Army Corps  
 of Engineers  
 New England District

CONSULTANT

AECOM  
 100 Eisenhower Drive Suite 100  
 Wallingford, CT 06495-0813  
 860.225.8822 ext. 4400  
 www.aecom.com

REGISTRATION

100%  
 DESIGN

REVISIONS

NO.	DATE	DESCRIPTION
1	08/02/10	10% DESIGN
2		
3		

PROJECT NUMBER

805888-0-4

SHEET TITLE

EXISTING CONDITIONS / SITE  
 PREPARATION PLAN - CUE - PLATE 2  
 200 FERRY BOULEVARD

SHEET NUMBER

C-22

# Wiz Auto

RW: light gray

PHC: dark gray

OU6 Area	Location	Excavation Dates	Volume (cy)	Number of truck trips?	Number of Properties	Notes
Glyne Manufacturing	380 East Main	Sept 16 -17, 2020	51.70	4	1	Phase 1 ELUR needed
Karate Studio	190 Ferry Boulevard	Dec 2 - 10, 2020	87.31	10	1	Phase 1 ELUR needed Not in 2016 ROD
Liquor Store	200 Ferry Boulevard	Dec 2 - 10, 2020	481.83	64	1	Phase 1 ELUR needed
DOT ROW along 190/200 Ferry Blvd	190/200 Ferry Boulevard ROW	Dec 2 - 10, 2020	109.30	11	1	Phase 1 ELUR needed Not in 2016 ROD
DOT Exit 33	Barnum Ave	Jan 19 – 20, 2021	345.57	19	1	DOT via Haul Road Not in 2016 ROD
Ashcroft (front), Dry Cleaner and Hair Salon	250, 304 and 340 East Main Street	Feb 16 – April 19, 2021	2,785.3	251	3	Phase 1 ELUR needed
			794.60	60	3	To Emelle, AI
302/350 East Main Street	302/350 East Main Street	Sept 15 - 16, 2021	127	9	2	Phase 2 ELUR needed Not in 2016 ROD
DOT ROW	Ferry Blvd and East Broadway	Sept 20 to Oct 1, 2021	430	47	1	Phase 2
		Supp on March 31, 2022	48	6		
171 Ferry Blvd	Snaxx Plus Convenience Store	October 4 to 19, 2021	389	41	1	Phase 2 ELUR needed Not in 2016 ROD
Ashcroft Rear	250 East Main Street	June 9 to Nov 3, 2021	9,281	745	1	Phase 2 ELUR needed
			377	35	1	To FTS/bind lead
Wooster Park	Quail Street	Nov 9, 2021 to Jan 5, 2022	4,872	433	1	Phase 1 ELUR needed
			130	15	1	To FTS/bind lead
Vacant Lots	Behind 326 FB	Jan 18 to 2022 to May 11, 2022	9,622	905	2	Phase 2 ELUR needed
			1,362	121	2	To FTS/bind lead
Hitchcock Marine	230 Ferry Blvd	June 13 to July 27, 2022	4,974	457	1	Phase 3 ELUR needed
			715	72	1	To FTS/bind lead
<b>TOTALS TO DATE =</b>		<b>Raymark Waste</b>	<b>33,217</b>	<b>2,881</b>	<b>17</b>	
		<b>PHC Waste</b>	<b>3,379</b>	<b>303</b>	<b>8</b>	

# OU6 Remediation Tracking Table

PHC volumes in RED font

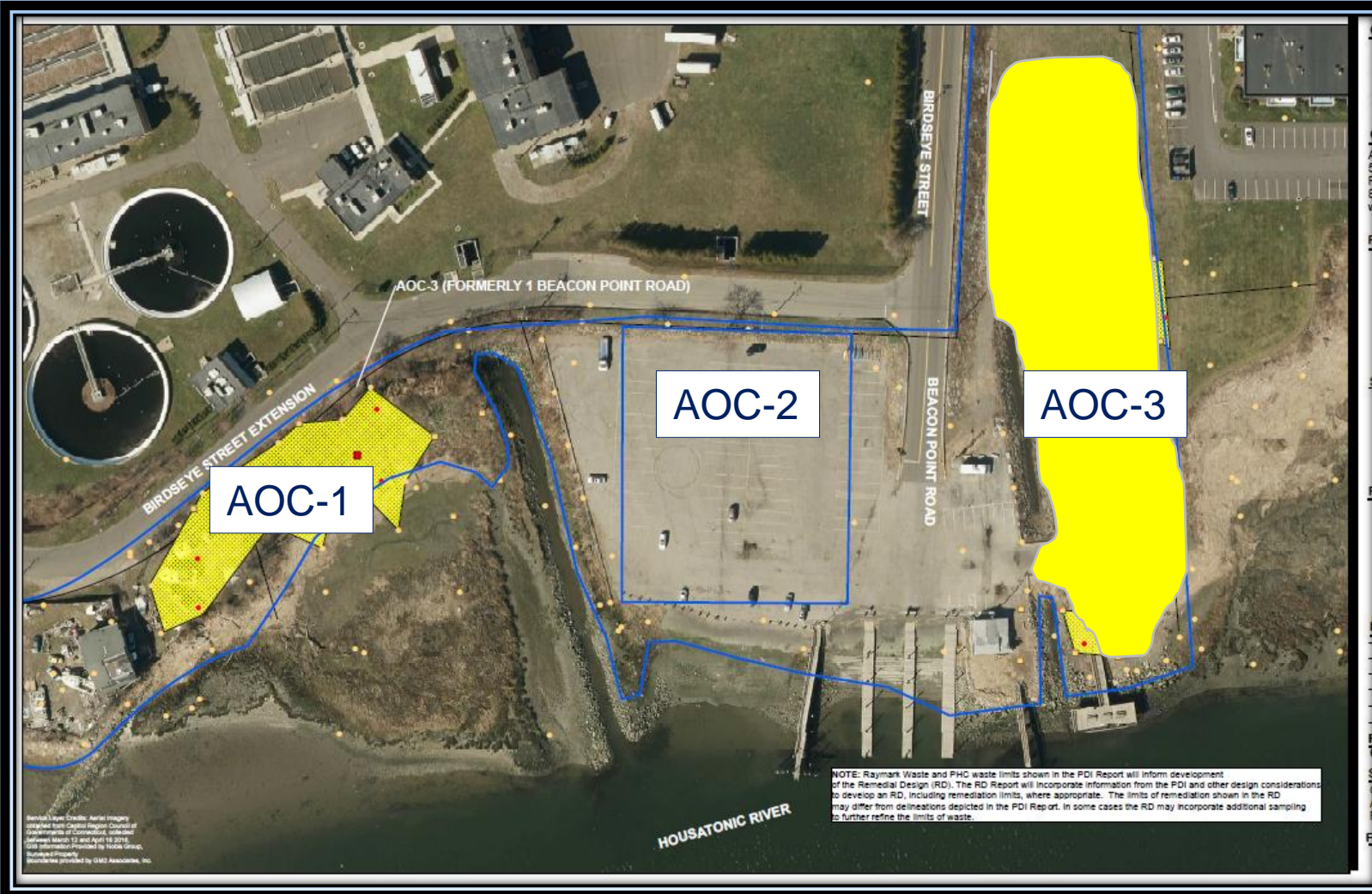
# Remaining OU6 Properties

17 properties completed

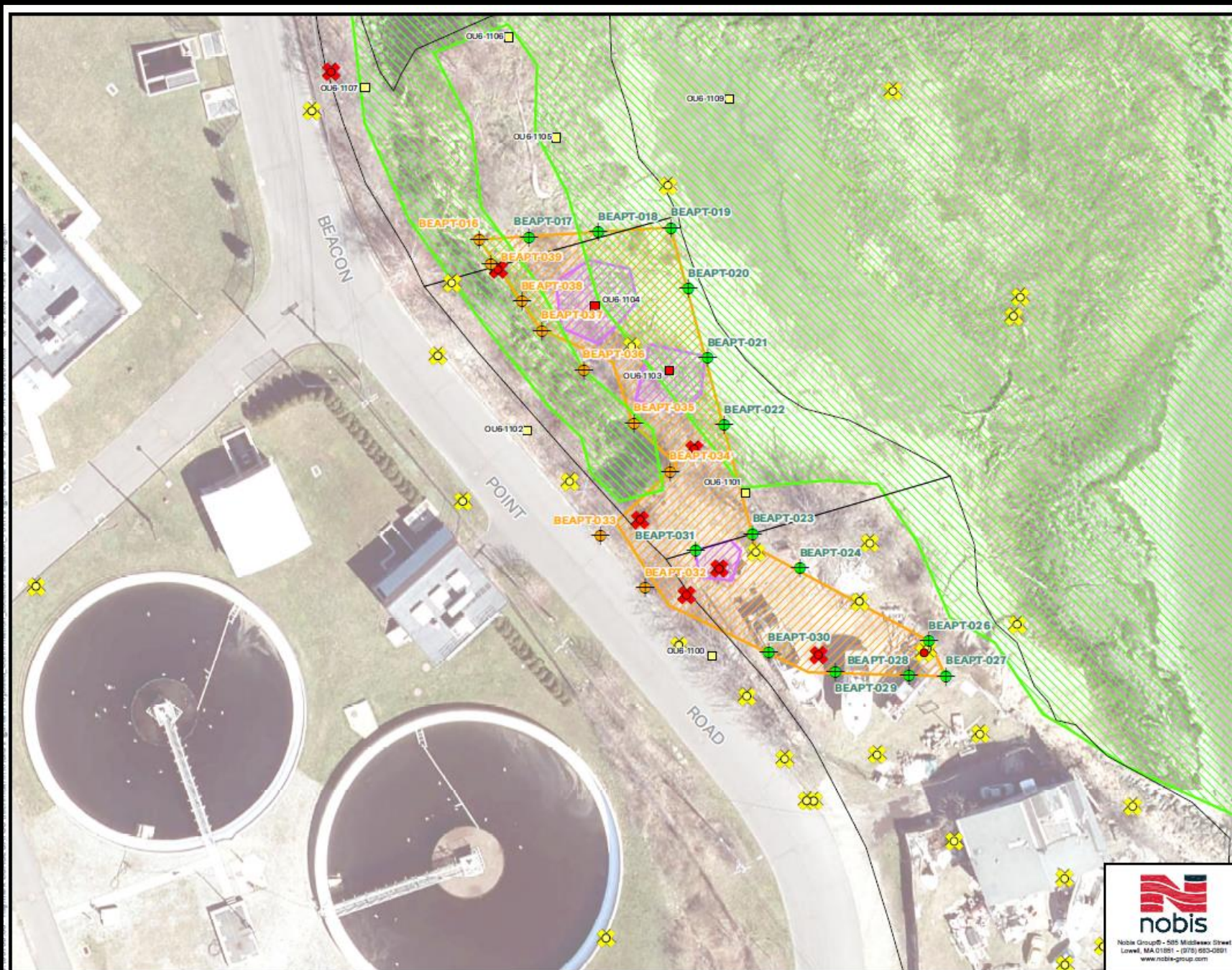
9 properties remaining



# Beacon Point Area (January to May 2023)



- 3 Areas of Concern (AOCs)
  - AOC-1: Town and Private Boat Yard
  - AOC-2: 2011 ROD/ELUR in place
  - AOC-3: Town and Condo
- RW: est 11,000 yds (700 lds)
- PHC: est 250 yds (20 lds)
- Coastal Resiliency
  - Raise elevation by 1 foot
  - Excavate 3ft; replace 4ft



**Note:**  
 Raymark Waste and Non-Raymark Waste borings, and RW Areas from the Remedial Design Drawings and Pre-Design Investigation.

Property boundaries are derived from the Remedial Design Drawings.

Historical Samples 0-4' include samples collected from the following intervals: 0-4' bgs, 1-4' bgs, 2-4' bgs, 1-3' bgs, 2-3' bgs, and 3-4' bgs.

Historical Samples 0-2' include samples collected from less than or equal to 2' bgs.

Raymark Waste designation in historical samples are based on exceeding the Raymark Waste Criteria.

**Legend**

- Proposed Confirmation Boring
- ⊕ Post Construction Confirmation Sample

**AECOM PDI Samples**

- Raymark Waste
- Non-Raymark Waste

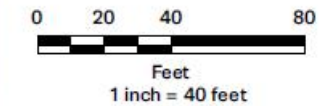
**Historical Samples 0-4'**

- Raymark Waste
- Non-Raymark Waste

**Historical Samples 0-2'**

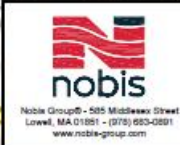
- ✕ Raymark Waste
- ✕ Non-Raymark Waste

- Approx. Survey Boundaries
- Operable Unit 8
- PHC Waste Limits
- Raymark Waste Limits



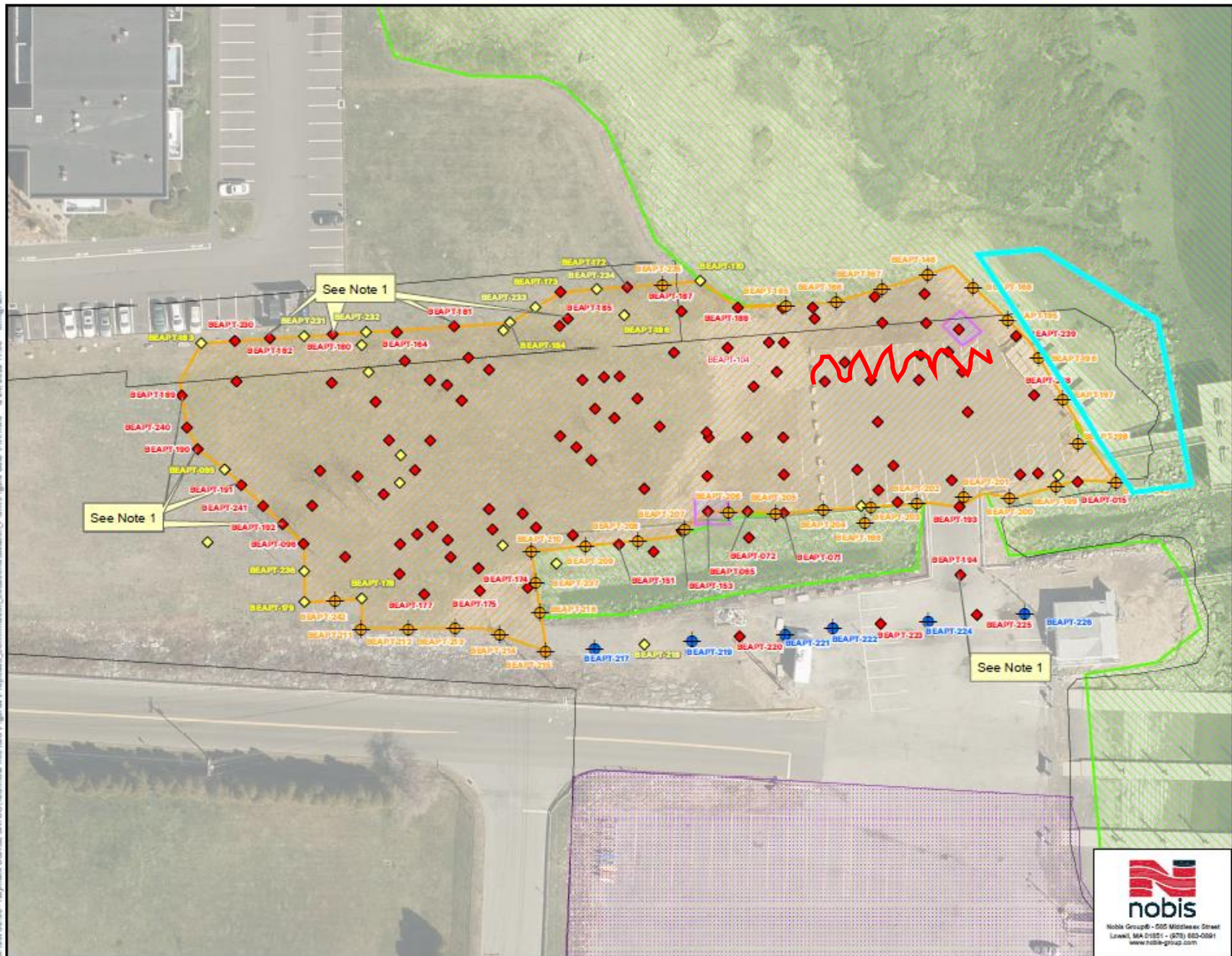
**FIGURE BEAPT-1B**

PROPOSED CONFIRMATION LOCATIONS  
 BEACON POINT & 1 BEACON POINT ROAD  
 RAYMARK SUPERFUND SITE  
 STRATFORD, CONNECTICUT



PREPARED BY: DFM      CHECKED BY: AR  
 PROJECT NO. 95700.00      DATE: JAN 2021

AOC-1



**Note:**  
 USACE evaluation of sample results determined that sample did not meet all thresholds for step-out criteria and further step-out sample collection is not required.

Raymark Waste and Non-Raymark Waste borings, and RW Areas from the Remedial Design Drawings and Pre-Design Investigation.

Property boundaries are derived from the Remedial Design Drawings.

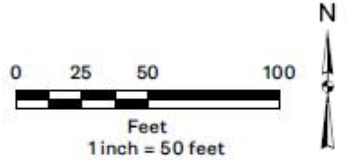
Historical Samples 0-4' Include samples collected from the following Intervals: 0-4' bgs, 1-4' bgs, 2-4' bgs, 1-3' bgs, 2-3' bgs, and 3-4' bgs.

Historical Samples 0-2' Include samples collected from less than or equal to 2' bgs.

Raymark Waste designation in historical samples are based on exceeding the Raymark Waste Criteria.

**Legend**

- ◆ Post Construction Confirmation Sample
- ◆ Sample to be held at the laboratory
- Confirmation Stepout Sample Required?
  - ◆ Yes
  - ◆ No
- Approx. Survey Boundaries
- ▨ ELUR Boundary
- ▨ Raymark Waste Limits
- ▨ PHC
- ▨ Operable Unit 8



**FIGURE BEAPT-1A**

PROPOSED CONFIRMATION LOCATIONS  
 BEACON POINT & 1 BEACON POINT ROAD  
 RAYMARK SUPERFUND SITE  
 STRATFORD, CONNECTICUT



PREPARED BY: JTS	CHECKED BY: AR
PROJECT NO. 95700.00	DATE: MAY 2022

AOC-3

Protect or  
 replace  
 dock

Remove  
 pavement  
 nearest  
 wetlands

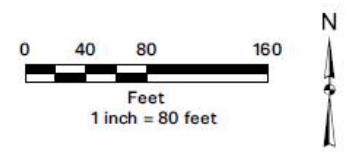
# Lockwood (June to August 2023)



- Note:**
1. Raymark Waste and Non-Raymark Waste borings, and RW Areas from Seed TO Spec Figures.
  2. Raymark Waste and Non-Raymark Waste borings, and RW Areas from the Remedial Design Drawings and Pre-Design Investigation.
  3. Property boundaries are derived from the Remedial Design Drawings.
  4. Raymark Waste designation in historical samples are based on the Raymark Waste Criteria.

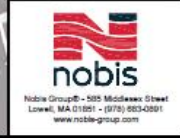
**Legend**

- Confirmation Boring Type**
- ◆ To be collected
- AECOM PDI Samples**
- Raymark Waste
  - Non-Raymark Fill
- Historic Samples 0-4'**
- Raymark Waste
  - Non-Raymark Fill
- Waste Limits**
- ▨ PHC Waste Limits
  - ▨ Raymark Waste Limits



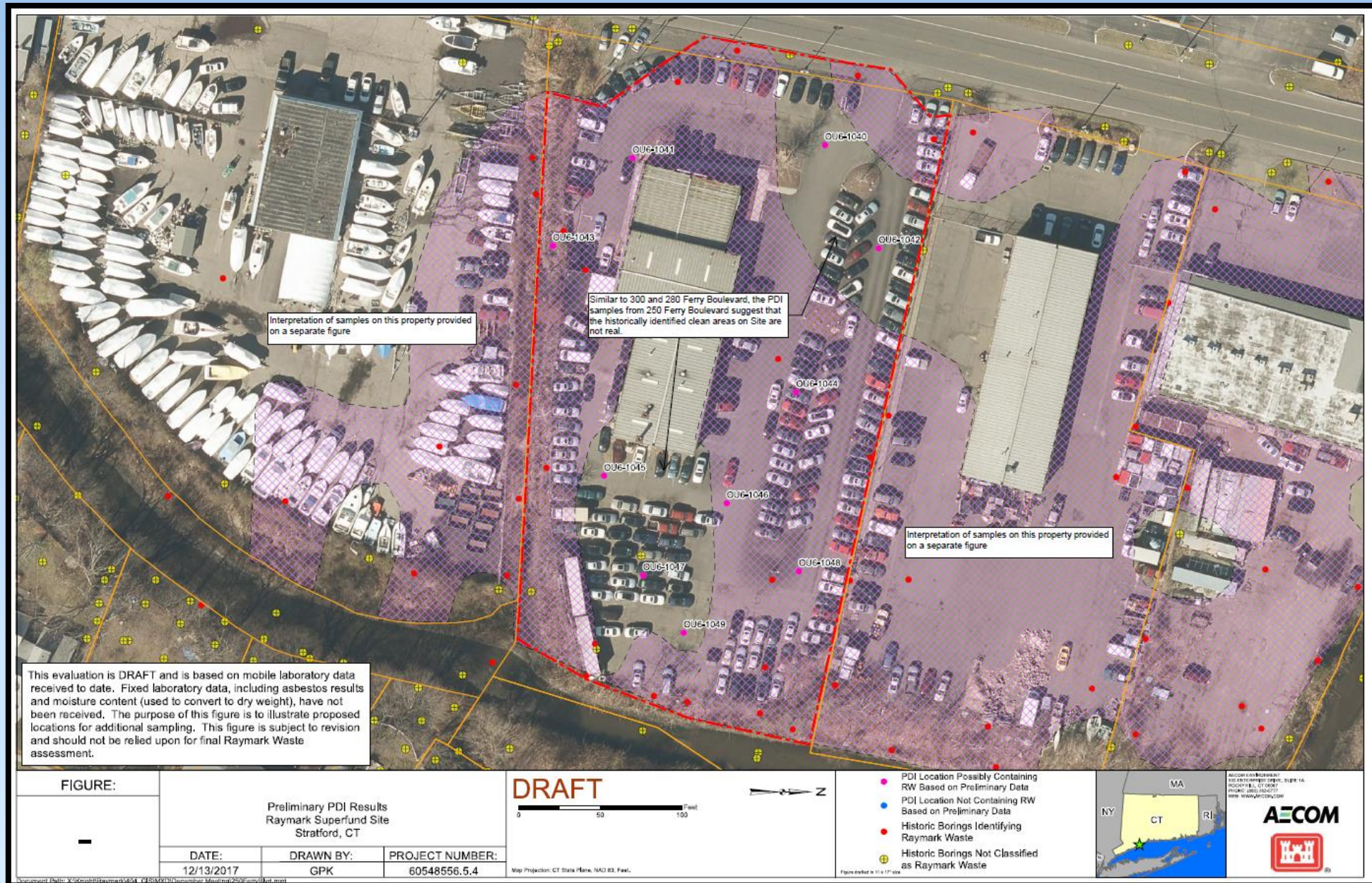
**FIGURE 1**

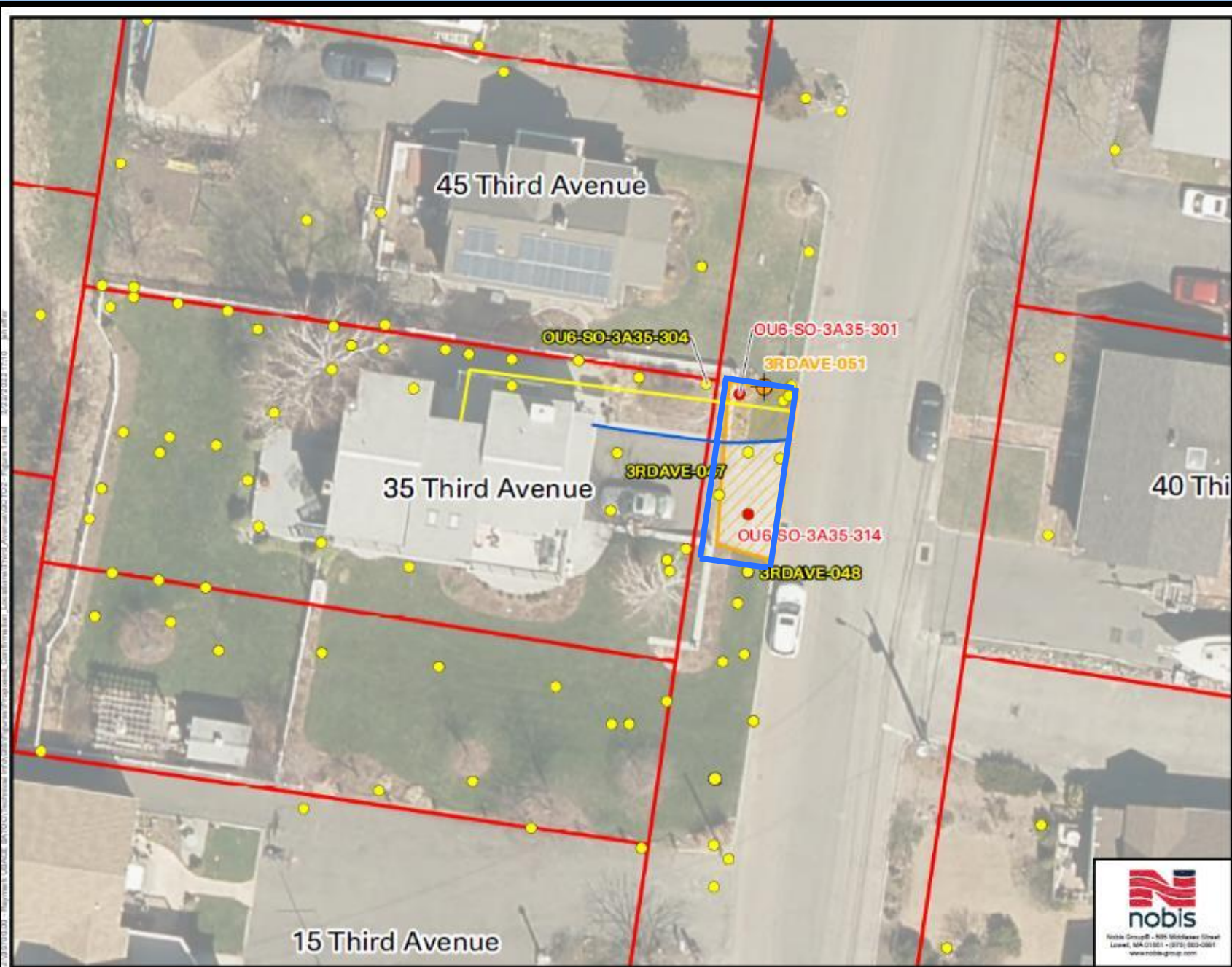
PROPOSED SAMPLE LOCATIONS  
 LOCKWOOD AVENUE  
 RAYMARK SUPERFUND SITE  
 STRATFORD, CONNECTICUT



PREPARED BY: JTS	CHECKED BY: AR
PROJECT NO. 95700.00	DATE: NOVEMBER 2021

# Blasius Auto and EPA Office (Aug to Dec 2023)

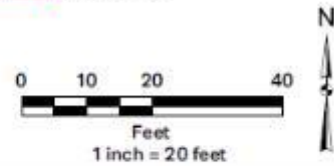




- Note:**
1. USACE evaluation of sample results determined that sample did not meet all thresholds for step-out criteria and further step-out sample collection is not required.
  2. USACE evaluation of sample results determined that sample met all thresholds for step-out criteria and further step-out sample collection is required.
  3. Raymark Waste and Non-Raymark Waste borings, and RW Areas from the Remedial Design Drawings and Pre-Design Investigation.
  4. Property boundaries are derived from the Remedial Design Drawings.
  5. According to FEMA's National Flood Hazard Layer, the property 35 Third Avenue and parcels to the north, east, and south are located in the AE EL-11 Floodplain. Parcels to the west are located in the VE EL-14 Floodplain.
  6. Historical Samples 0-4' include samples collected from the following intervals: 0-4' bgs, 1-4' bgs, 2-4' bgs, 1-3' bgs, 2-3' bgs, and 3-4' bgs.
  7. Raymark Waste designation in historical samples are based on exceeding the Raymark Waste Criteria.
  8. Locations of site features depicted hereon are approximate and given for illustrative purposes only.

**Legend**

- Proposed Confirmation Boring
  - Post Construction Confirmation Sample
- Raymark Waste detected? (0-4')
  - Yes
  - No
- Historical Samples 0-4'
  - Raymark Waste
  - Non-Raymark Waste
- Water Line
- Natural Gas Line
- Raymark Waste Limits
- Stratford Parcels



**FIGURE 1 - 35 THIRD AVE 0-4FT BGS**

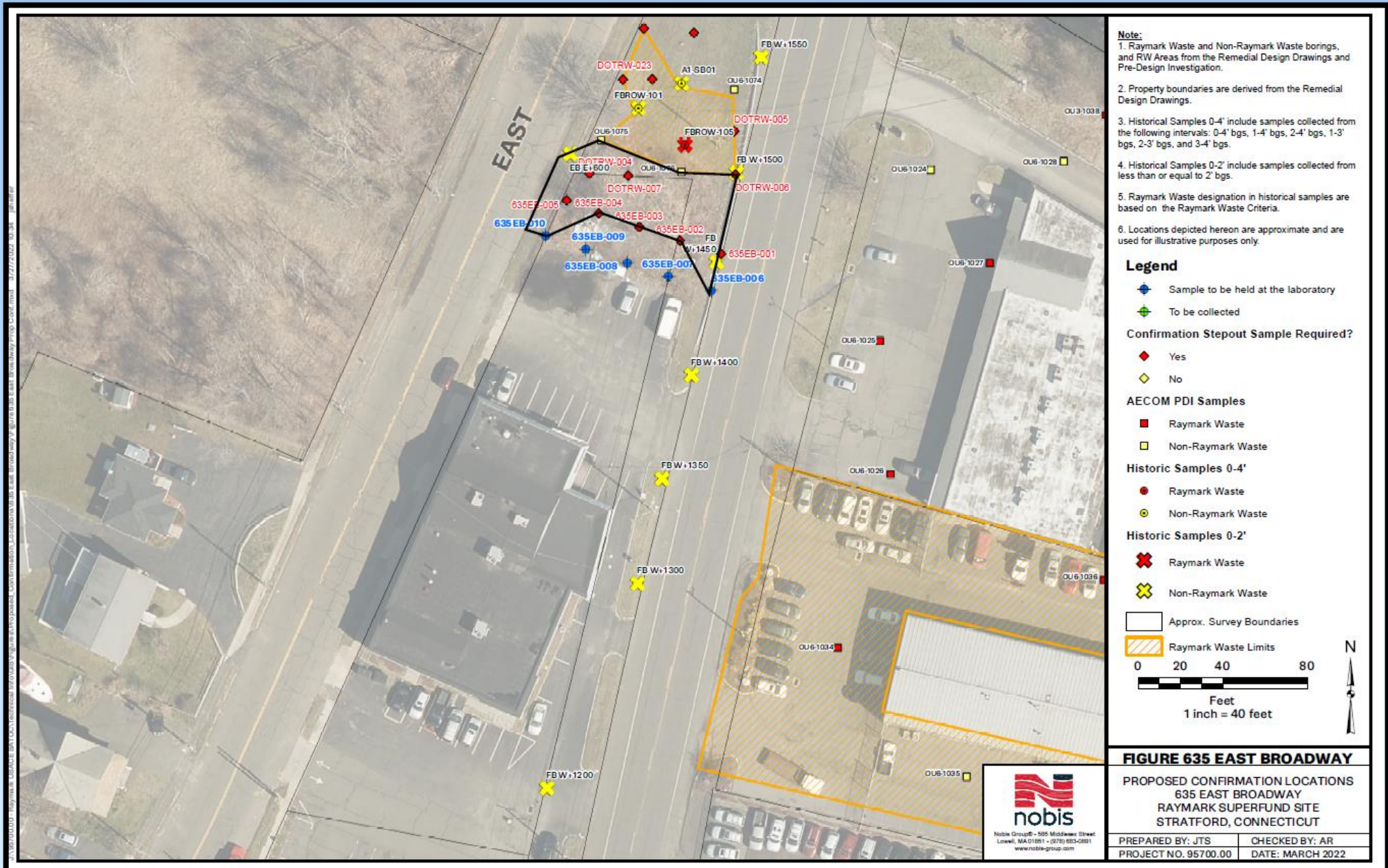


GCTO2  
 35 THIRD AVENUE  
 RAYMARK SUPERFUND SITE  
 STRATFORD, CONNECTICUT

PREPARED BY: JTS	CHECKED BY: AR
PROJECT NO. 95700.00	DATE: FEBRUARY 2022

# Third Ave ROW

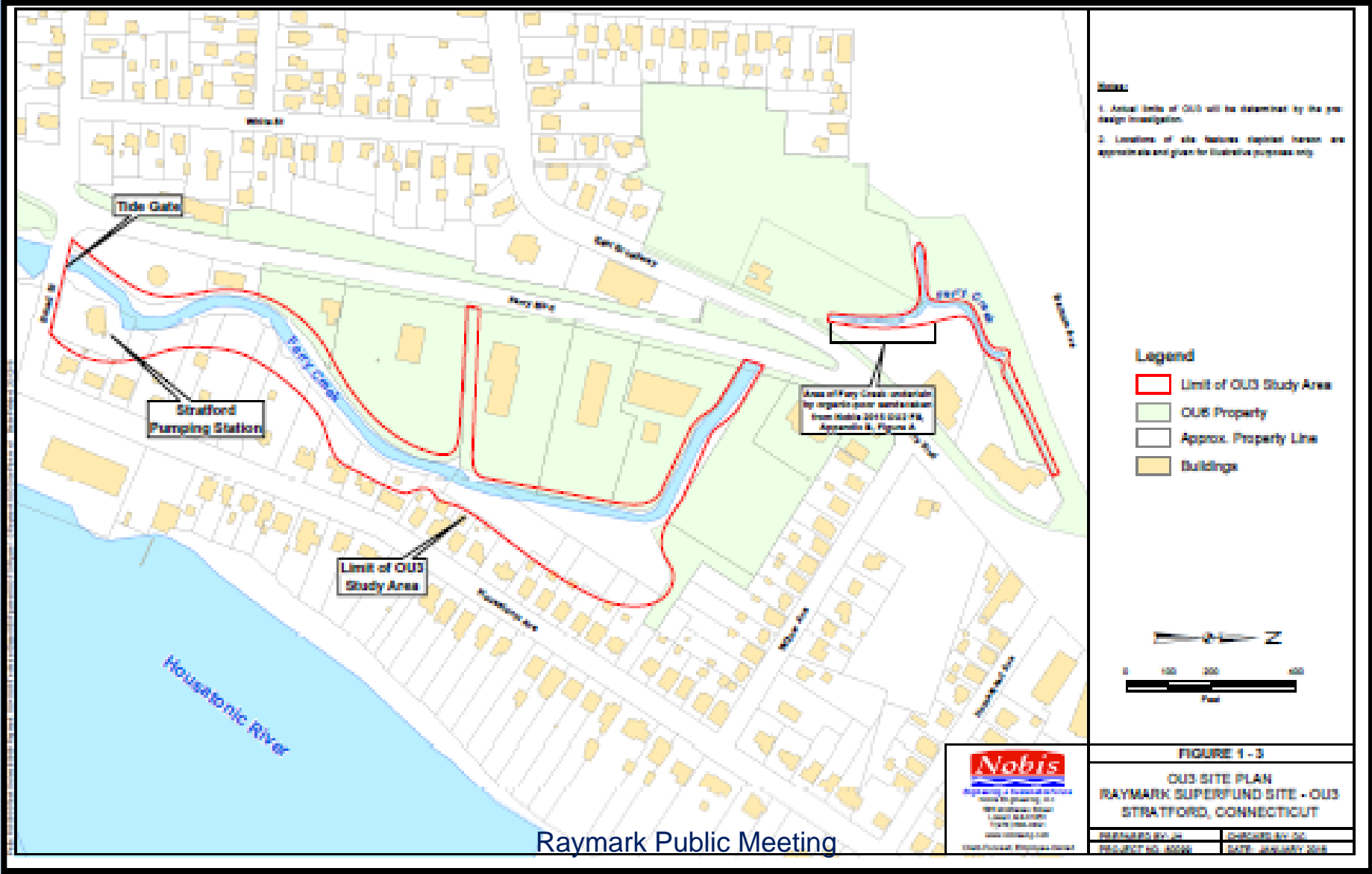
# 635 Ferry Boulevard



# OU3 Ferry Creek



# Upper Ferry Creek Study Area (OU3)



# Aerial Photography

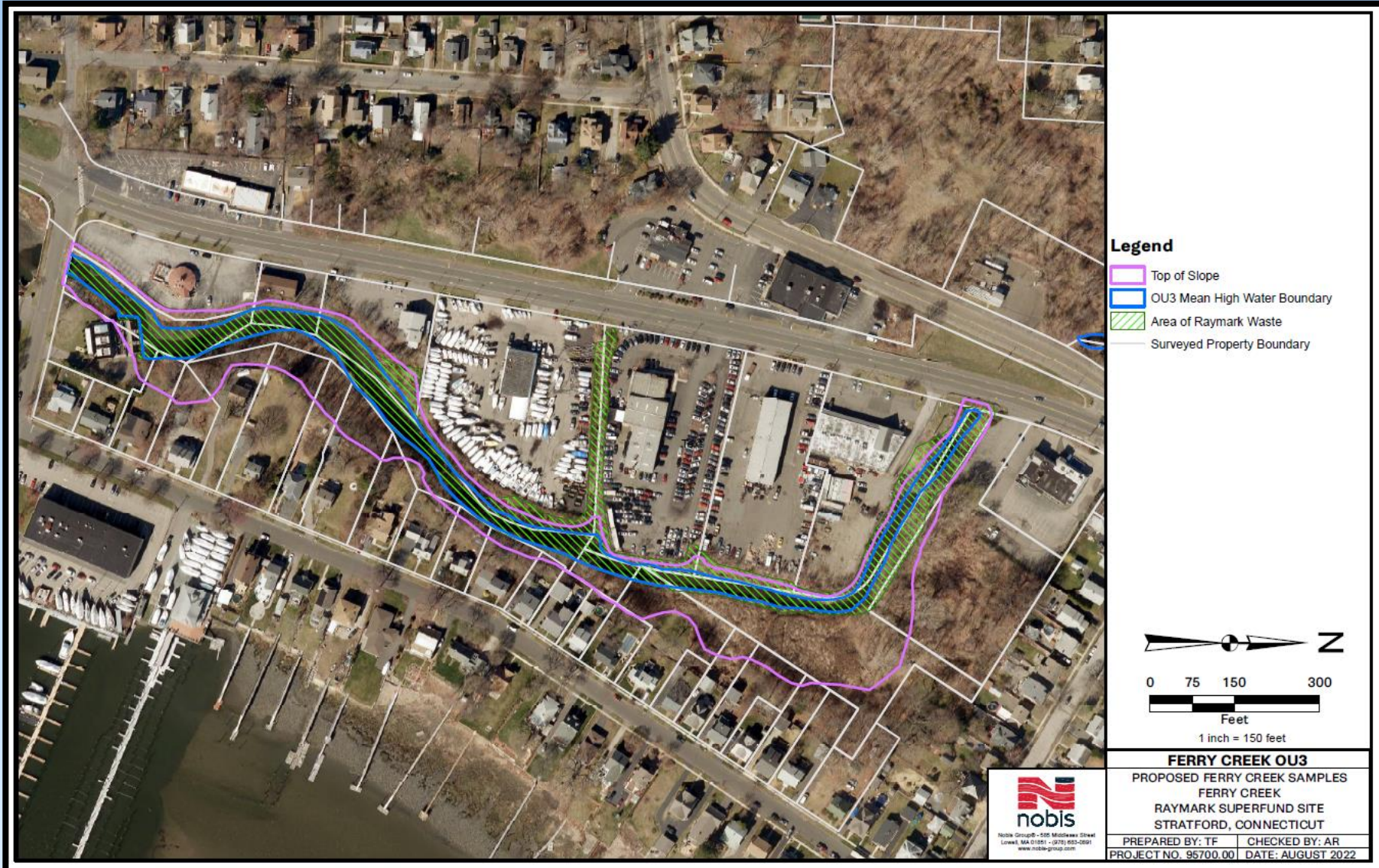
1960



1969

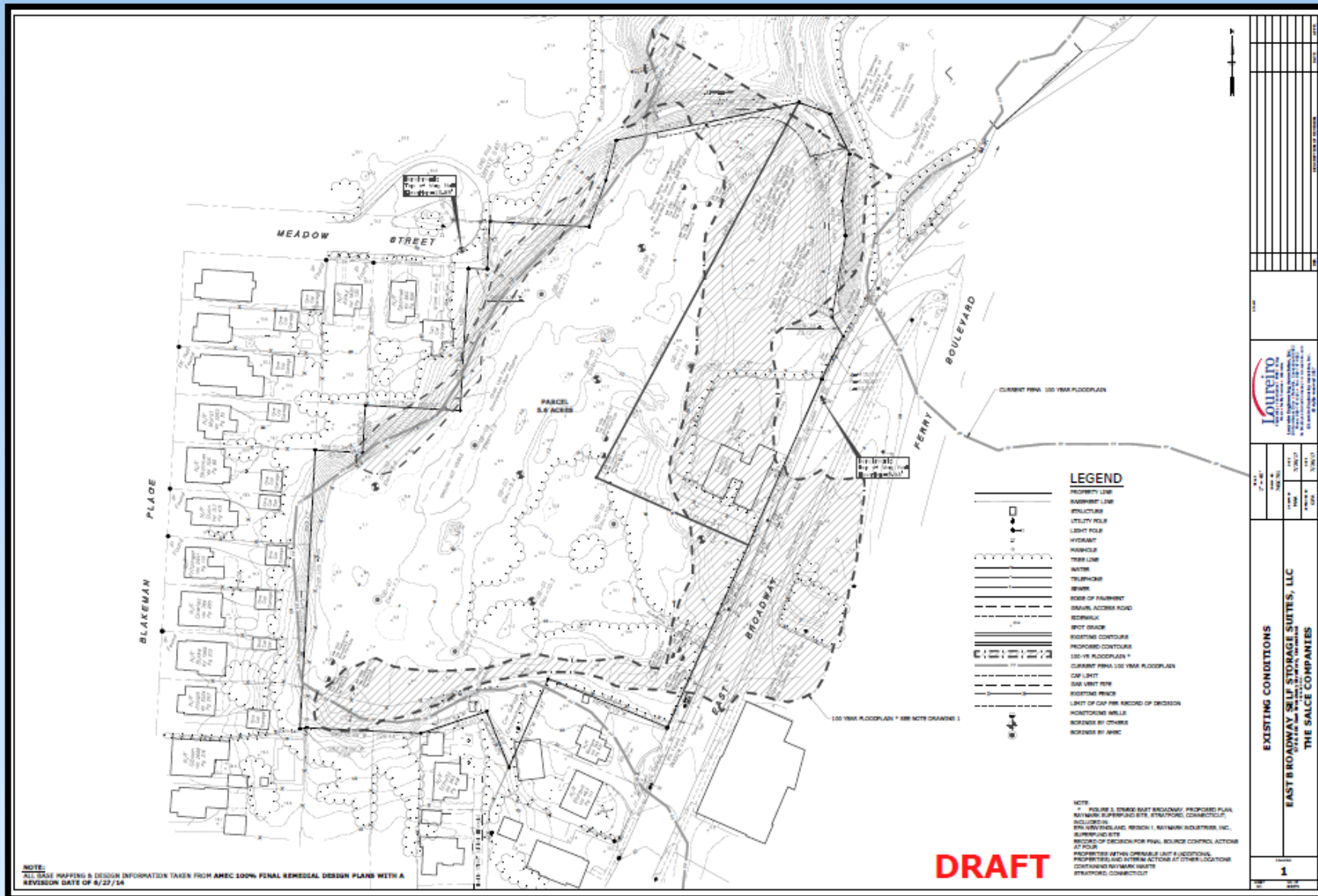


# Ferry Creek Remediation (2023)



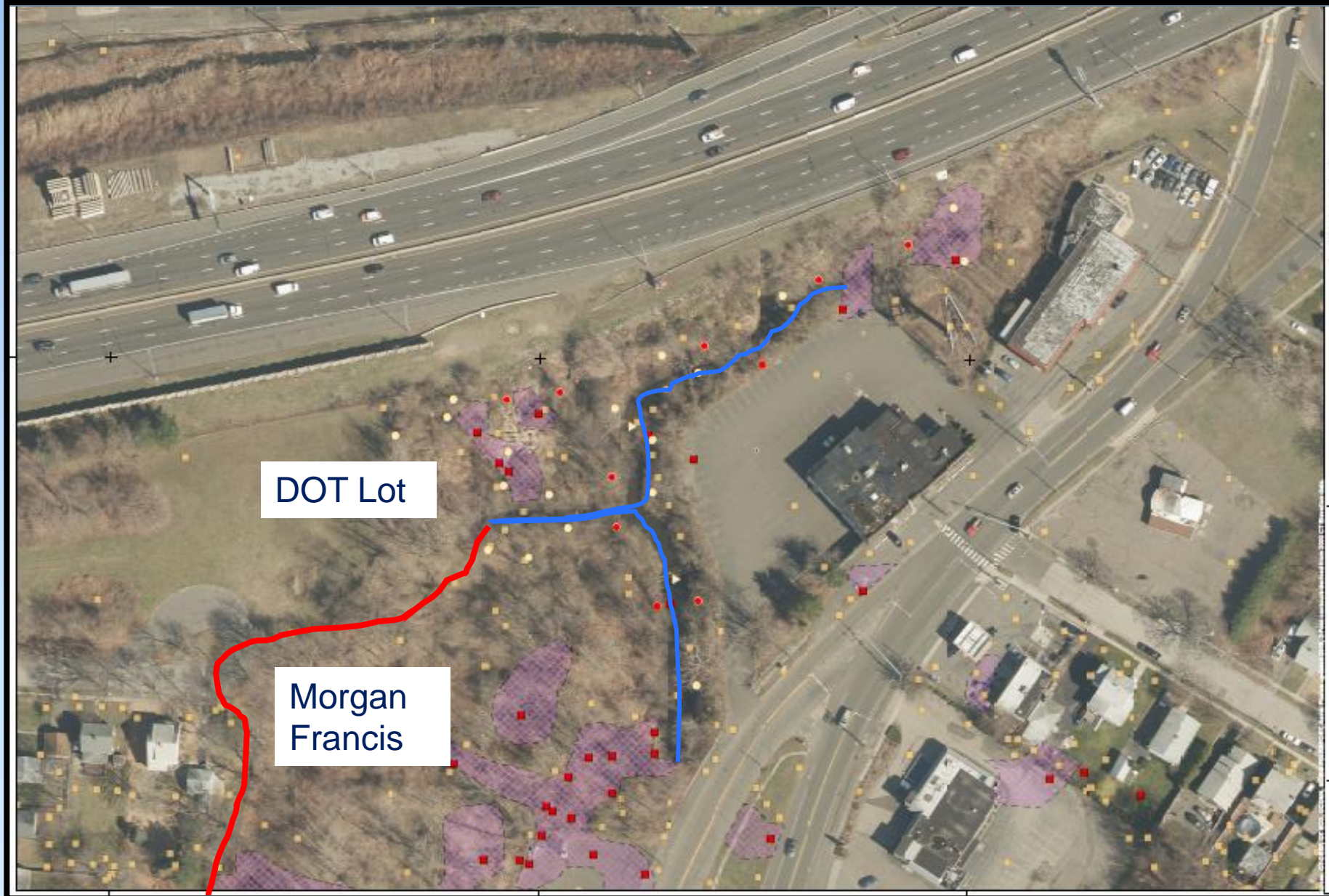
- Ferry Blvd to Broad Street
- About ½ mile
- Channel: 2ft of sediment
- Portions of banks: 4ft
- Total volume estimate:
  - Approx. 16,000 CY

# 576/600 East Broadway - Morgan Francis



- 2011 ROD
- 2014 design
  - Cap in place
  - Storage units
- Update design
  - Recreational use
  - Consolidate adjacent RW
- Remedy decision in 2023

# Upper Ferry Creek and DOT Lot



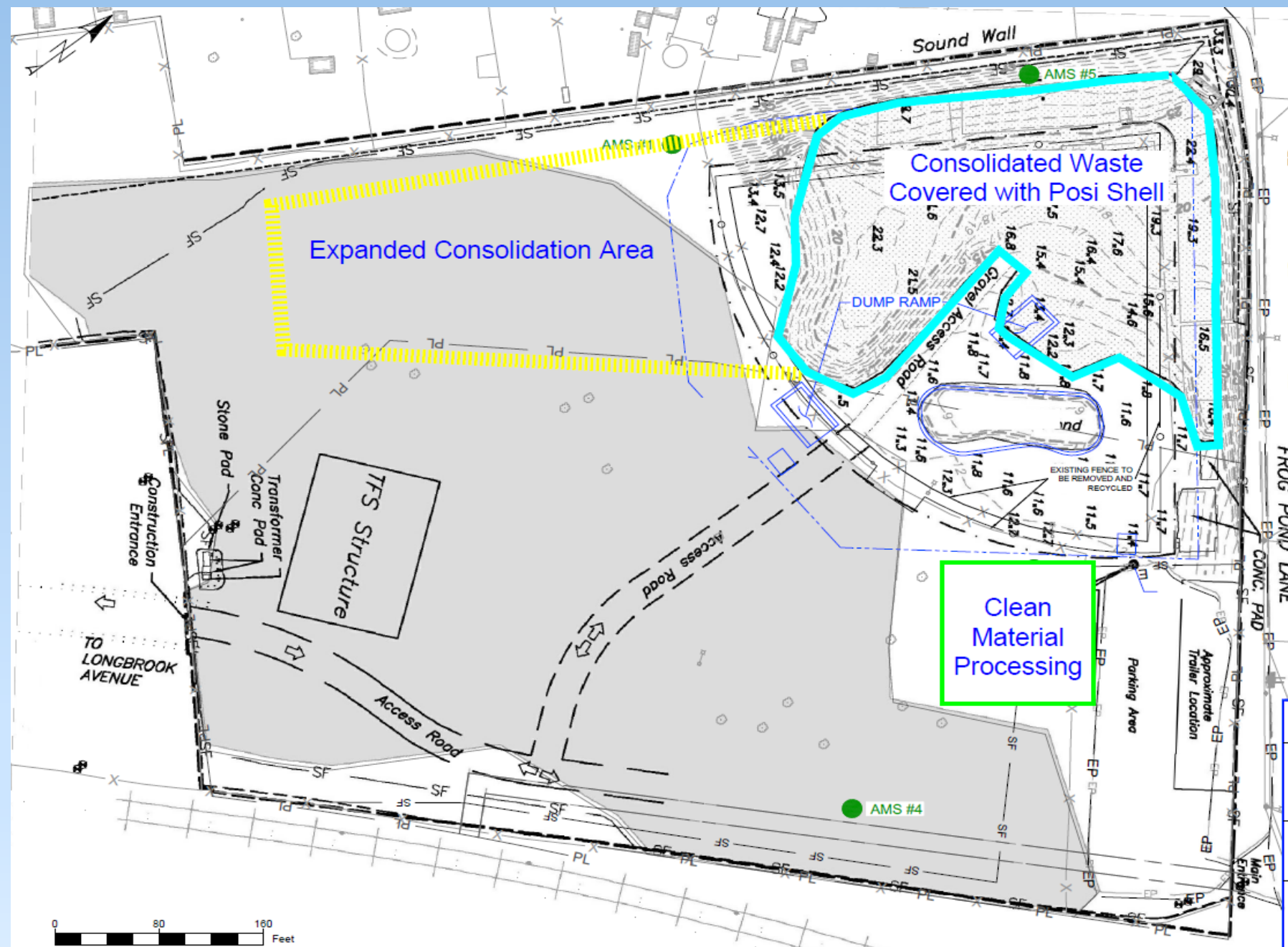
# OU4 Updates

# OU4 Ballfield Work Completed or Ongoing Since July



- Approximately 34,000 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 conveyance line construction underway, open channel work is complete
- Pumpstation contract has been awarded and preparatory work has begun
- Former Ballfield / OU4 site and cap design is complete
- 5 perimeter air monitors at OU4 are operating daily
- Second live stream camera view available

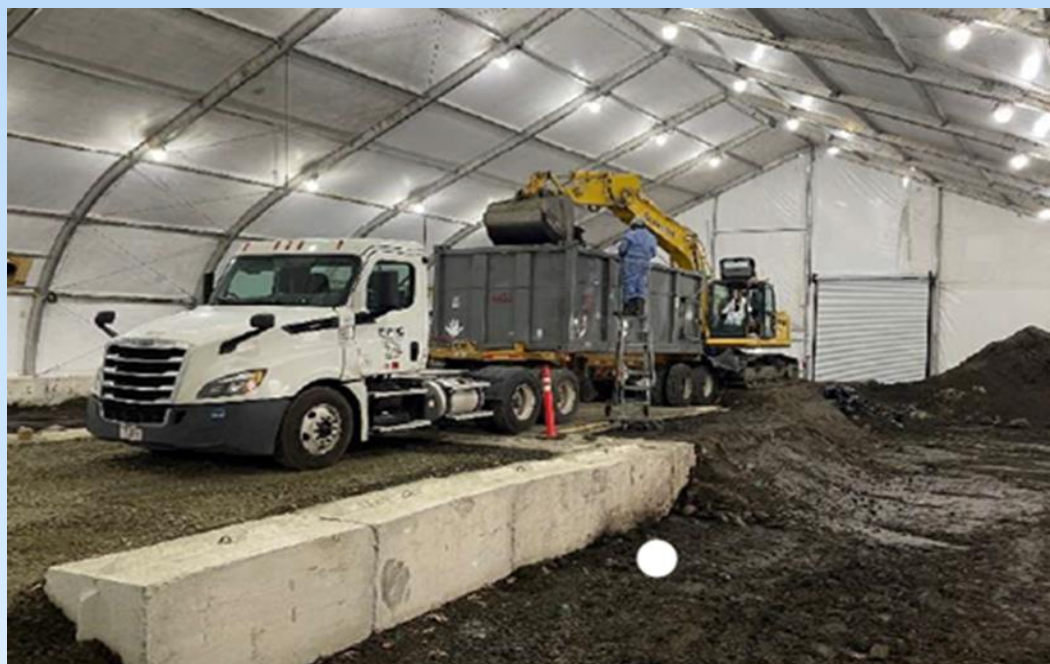
# OU4 Consolidation Area



- Approximately 34,000 CY of material has been consolidated, compacted and covered
- Active consolidation area accepting material from 250 Ferry Blvd. (Wiz Auto)
- Clean material processing area located off active consolidation zone
- Posi-shell or approved cover placed over waste at end of each day
- Elevation markers added



OU4  
Consolidation  
Area



# OU4 Stormwater System

# Stormwater System Upgrades



# Conveyance Line – Open Channel



## Open Channel Excavation

- Remove unsuitable soft and organic material
- Backfill with crushed stone and geotextile



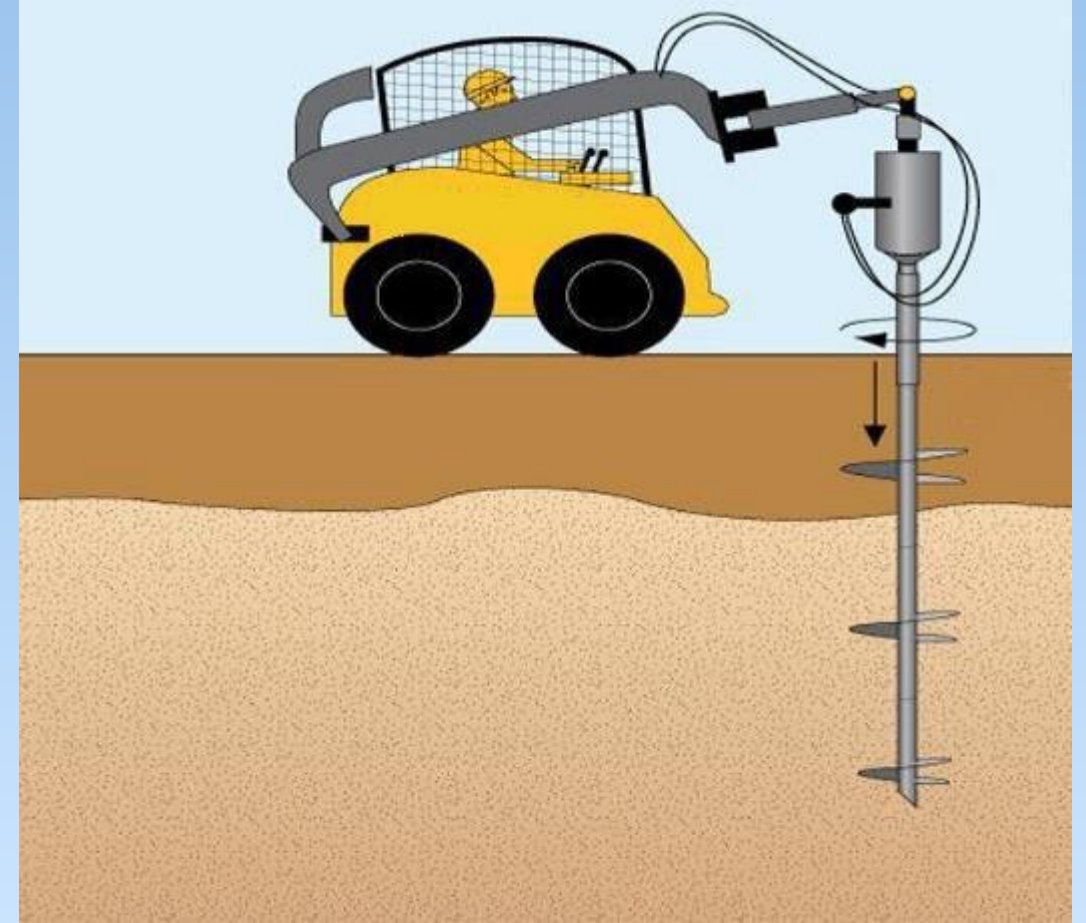
## Channel Armoring and Restoration

- Place Articulating Concrete Block (ACB)
- Restore native plants and shrubs along bank

# Conveyance Line – Open Channel



# Conveyance Line – Box Culvert



## Box Culvert

- 3' x 5' at OU4 to 3' x 10' at Open Channel
- Carry clean stormwater from OU4

## Helical Pile installation

- Helical piles installed to support culvert
- Piles will be rotated into place

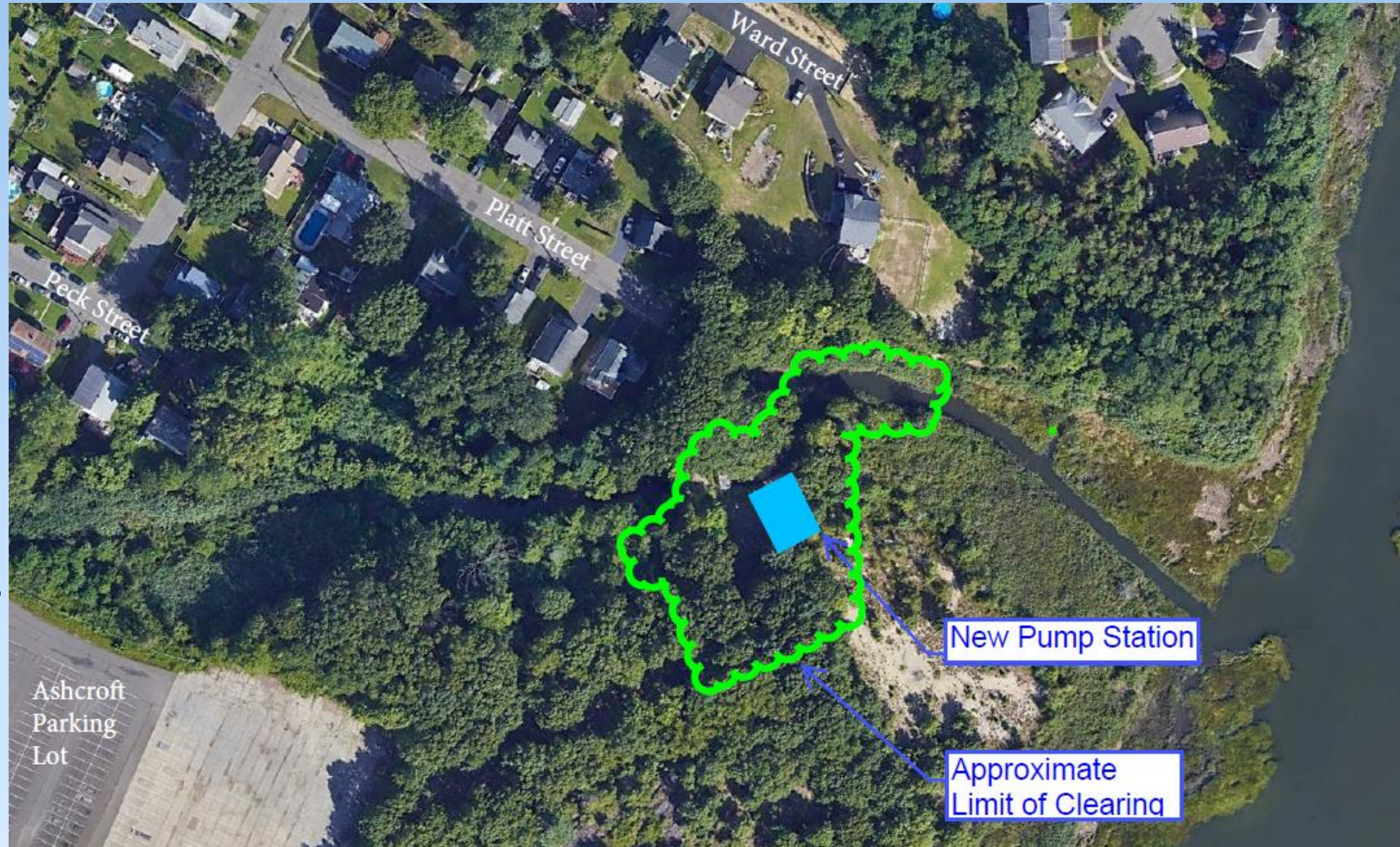
# New Pump Station

- Contract Awarded to P&S Construction
- Site preparation underway
- Construction duration approximately 24 mo.
- 4 Axial Flow Pumps
- 200 CFS Capacity
- Operates during significant storm and high-water events
- Masonry Pumphouse



# Pumpstation – upcoming site work

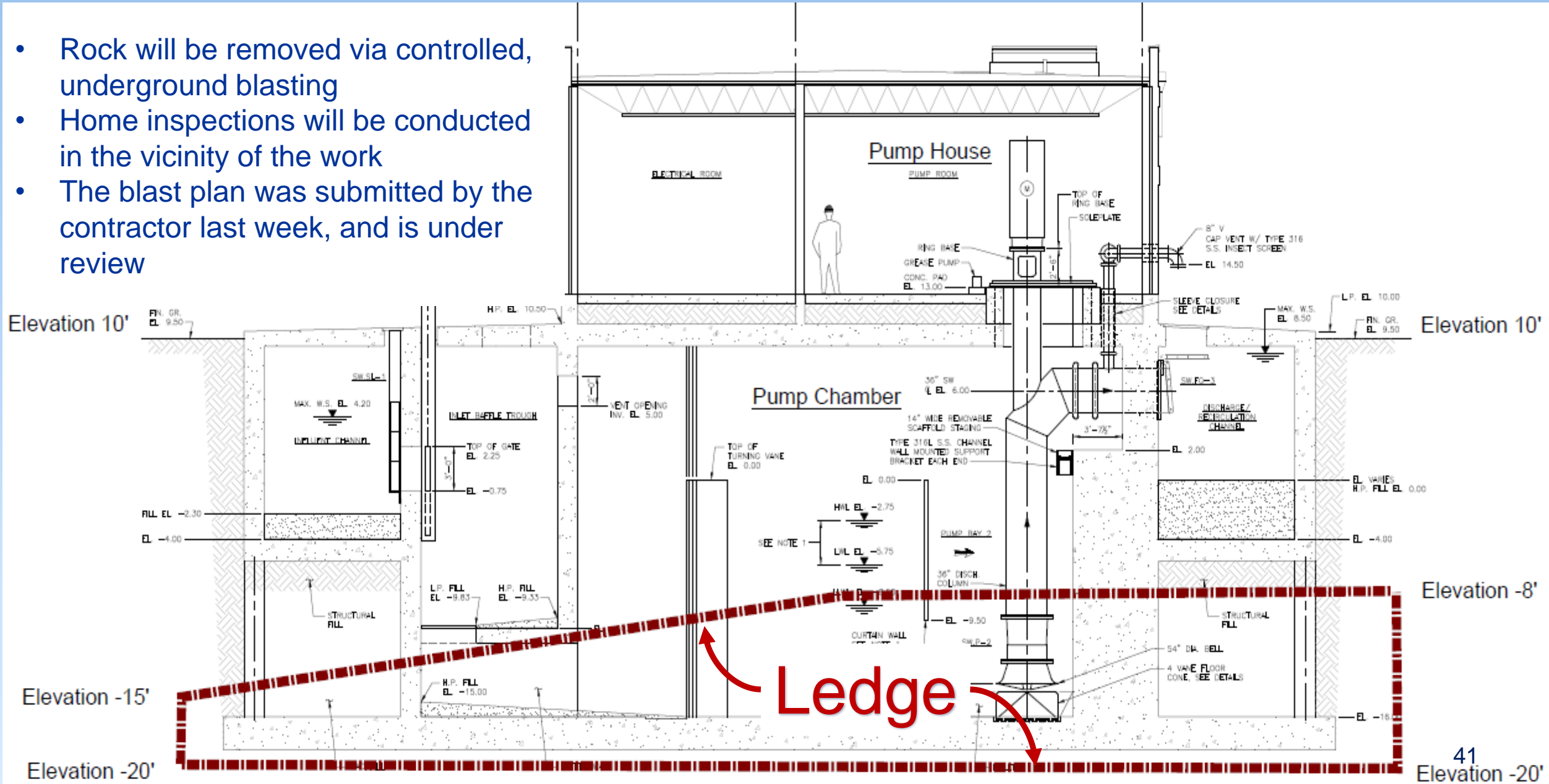
- Site tree and brush clearing is starting now, approximately 2 weeks to complete
- Blasting will be required to remove approximately 5-12' of underground ledge (rock) within the pumpstation footprint.





# Pumpstation – Ledge Removal

- Rock will be removed via controlled, underground blasting
- Home inspections will be conducted in the vicinity of the work
- The blast plan was submitted by the contractor last week, and is under review



# Pumpstation – Ledge Removal

- Maine Drilling and Blasting
- Approach is to minimize ground vibrations as much as possible
- Home inspections will be conducted in the vicinity of the work
- The blast plan was submitted by the contractor and is under review
- EPA and USACE will coordinate with homeowners for home inspections
- Vibration monitors will be deployed
- Each blast event will generally occur between 10:00 AM and 11:00 AM
- It is estimated that there will be approximately 10 blast events over a period of 3 weeks
- Work is expected late Fall/early Winter pending plan review
- Site access will be secured
- Multiple 6000 lb blasting mats will be utilized



## Underground blasting – Gas Station



# Underground blasting – New College Science Center



# 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> (OU6) when Raymark Waste handled.
  - 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
- Weekly Air Monitoring, Chemical Data and Vibration Monitoring Reports posted on Town Raymark website



Chemical Sampling Port

Dust Monitoring Station



Personnel Monitoring

# Monitored Tasks – OU4 and Stormwater Conveyance System (SWC)

- OU4 - 5 Dust Meters, 2 Chemical Sample Collection Systems (during handling of PHC Waste Only), 5 Vibration Stations
  - Loading PHC Soil for Offsite Disposal, Spreading SWC material and Applying Posi-shell
- SWC (No Intrusive Work in RW) - 1 Vibration Station, No Dust Monitoring
  - Installing Helical Piles, Soil Excavation, SWC Restoration

SWC Helical Piles



OU4 TFS



SWC Restoration

# Monitored Tasks – OU6

- 300 Ferry Blvd Sewer Line Repair - 1 Dust Meter
- 250/280 Ferry Blvd Vegetation Clearing (No Intrusive Work in Raymark Waste) - 1 Vibration Station, No Dust Monitoring
- 230 Ferry Blvd Restoration - 3 Dust Meters and 1 Vibration Station

300 Ferry Blvd



280 Ferry Blvd

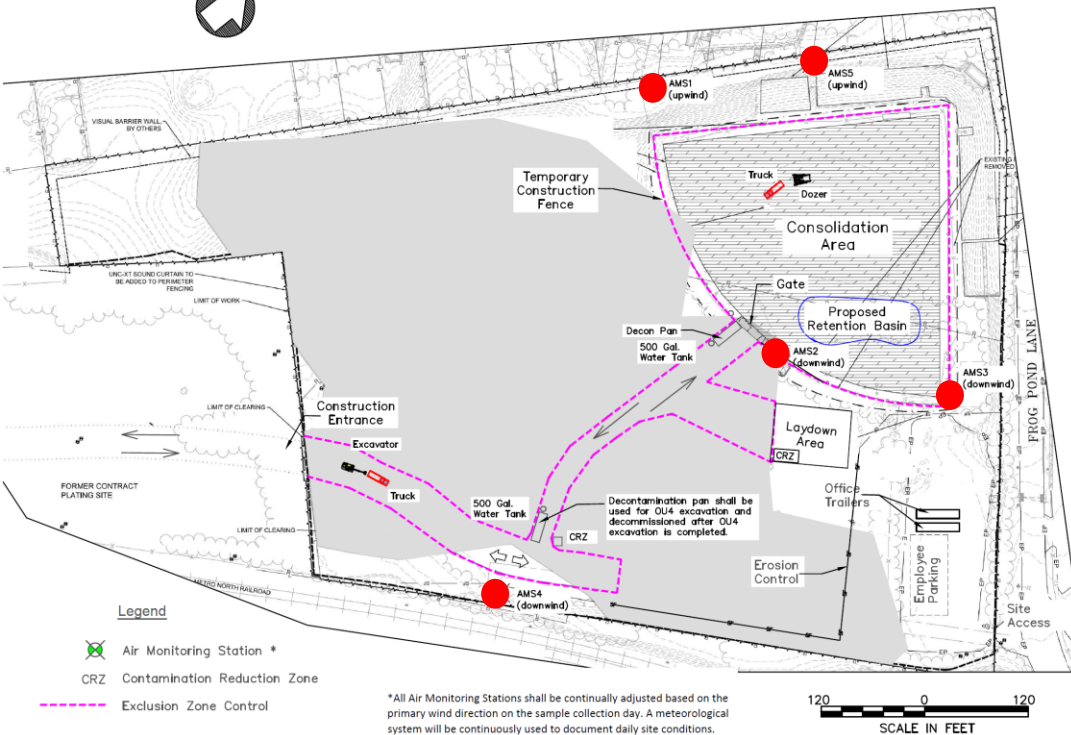
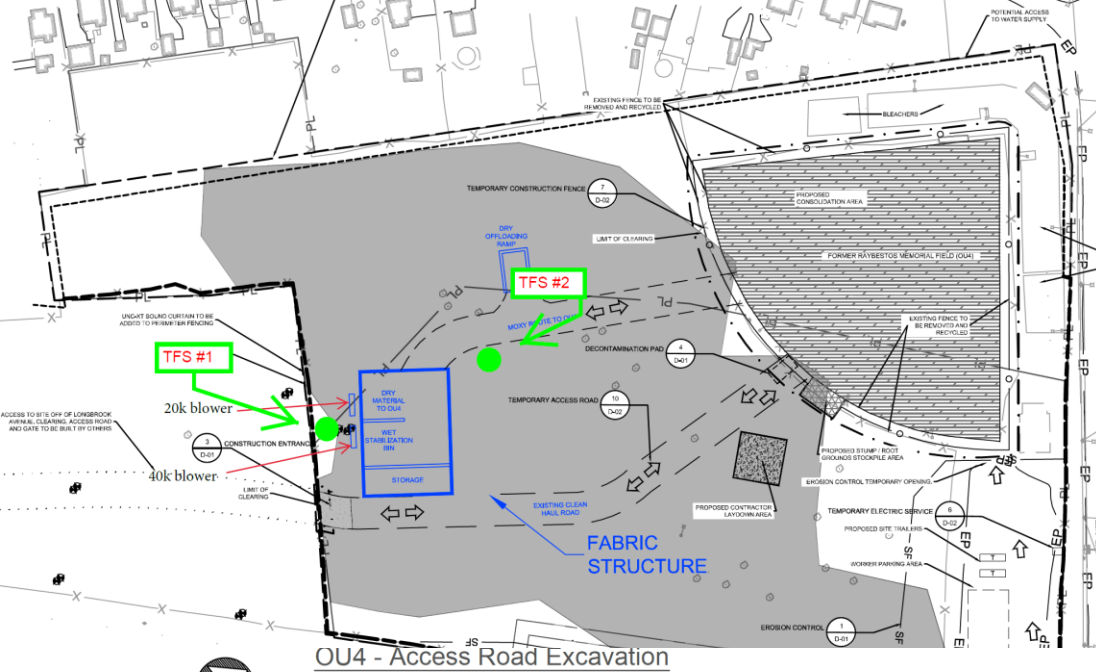


230 Ferry Blvd



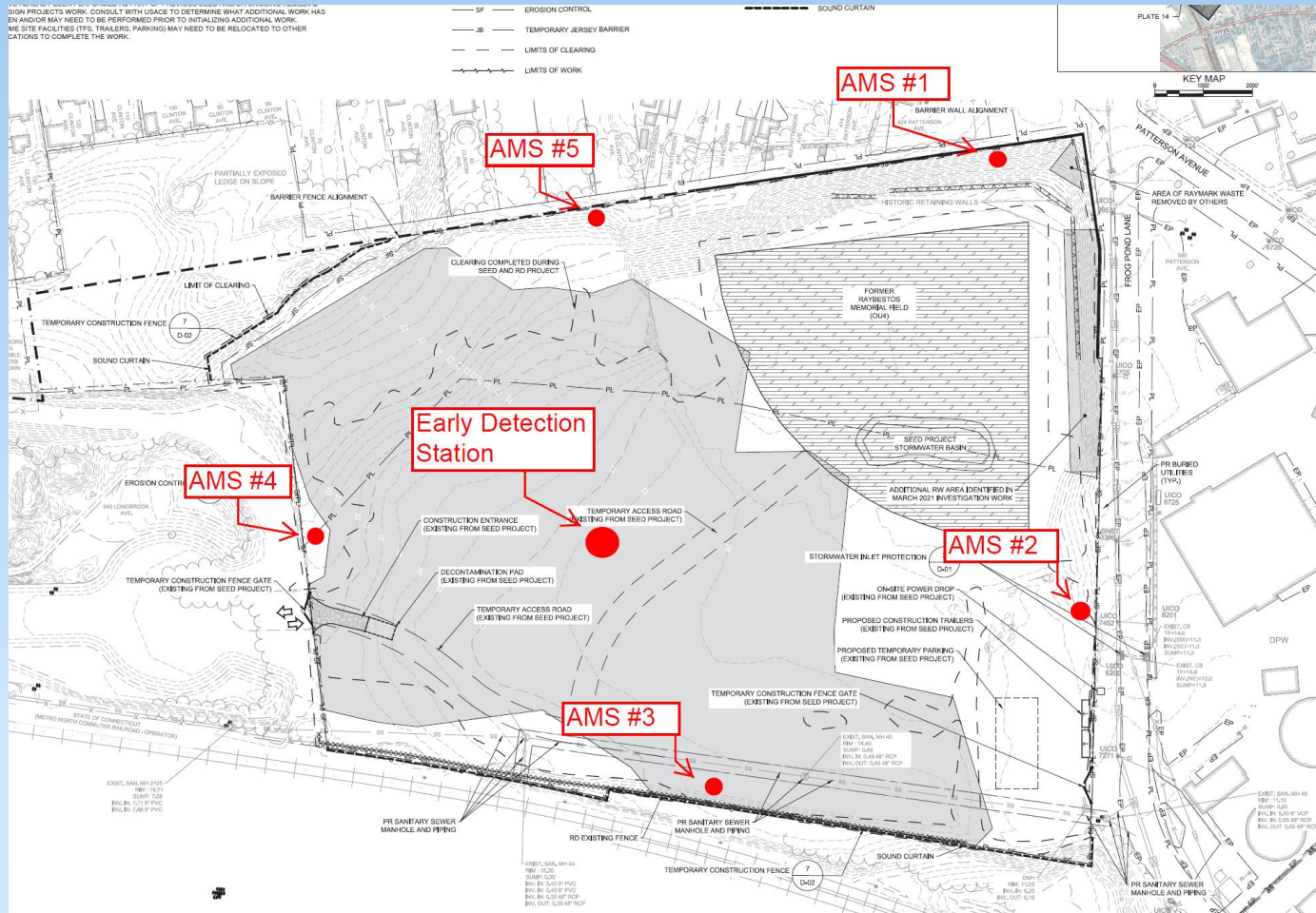


# Air Monitoring Results



- Since 07/27/22 Public Meeting - No Exceedances of OU4 or OU6 Dust Action Level Criteria
- No Chemical Action Levels Exceeded
- No Health and Safety Risks to Workers or Residents
- Exceedance of vibration criteria were identified on 7/25, 8/7, 8/8, 8/9, and 9/13. This was caused by thunder/weather and not site activities

# Upcoming Changes



- Adding additional meter at OU4 (monitor worker exposure)
- Representative of perimeter and interior work area

# Project Schedule

# Consolidation Remedy Schedule



- **OU6**
  - 2022 Fall - Wiz Auto Dealership
  - 2023 Winter/Spring - Beacon Point
  - 2023 Summer – Lockwood Ave
  - 2023 Fall – Blasius Dealership
  - 2023 Fall/last: EPA Office/Former Ski Shop
  - TO BE SCHEDULED: 3<sup>rd</sup> Ave ROW and 635 East Broadway
- **OU3**
  - 2023: Ferry Creek (East Broadway to Broad St bridge)
- **OU4**
  - 2024: Construct cap

Construct Stormwater And Pump Station

Morgan Francis Design and Start Remedial Action

OU5, OU7, OU8 and OU9

# Next CAG Meeting November 30 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)

# Thank you for joining!

- Visit [stratfordct.gov/Raymark](http://stratfordct.gov/Raymark) for updates, contact information, air monitoring results, meeting dates, meeting recordings and Powerpoint slides
- Email Alivia at: [acoleman@townofstratford.com](mailto:acoleman@townofstratford.com) with further questions, concerns, feedback or to sign up for email distribution list.

# Help Update Stratford's POCD!

- The Plan of Conservation and Development (POCD) is the Town's land use guide for managing growth and conserving resources.
- Learn more and provide your input at [www.planstratford.com](http://www.planstratford.com)

