

Former Aerovox Facility Cleanup

21E/MCP RTN 4-601





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PURPOSE AND AGENDA

To provide a basic overview of the remedial construction activities for 2021 and brief community leadership on site safety, emergency planning and communications

1. Safety Minute
2. Aerovox 2021 Project Overview
 - a) Planned Scope of Work
 - b) Anticipated Schedule
3. Community Health and Safety
 - a) Health and Safety Plan
 - b) Community Air Monitoring Plan
 - c) Emergency Response
4. Site Security, Control and Traffic
5. Communications
6. Questions

Safety Minute

Heavy and Mobile Equipment – Safety and Awareness

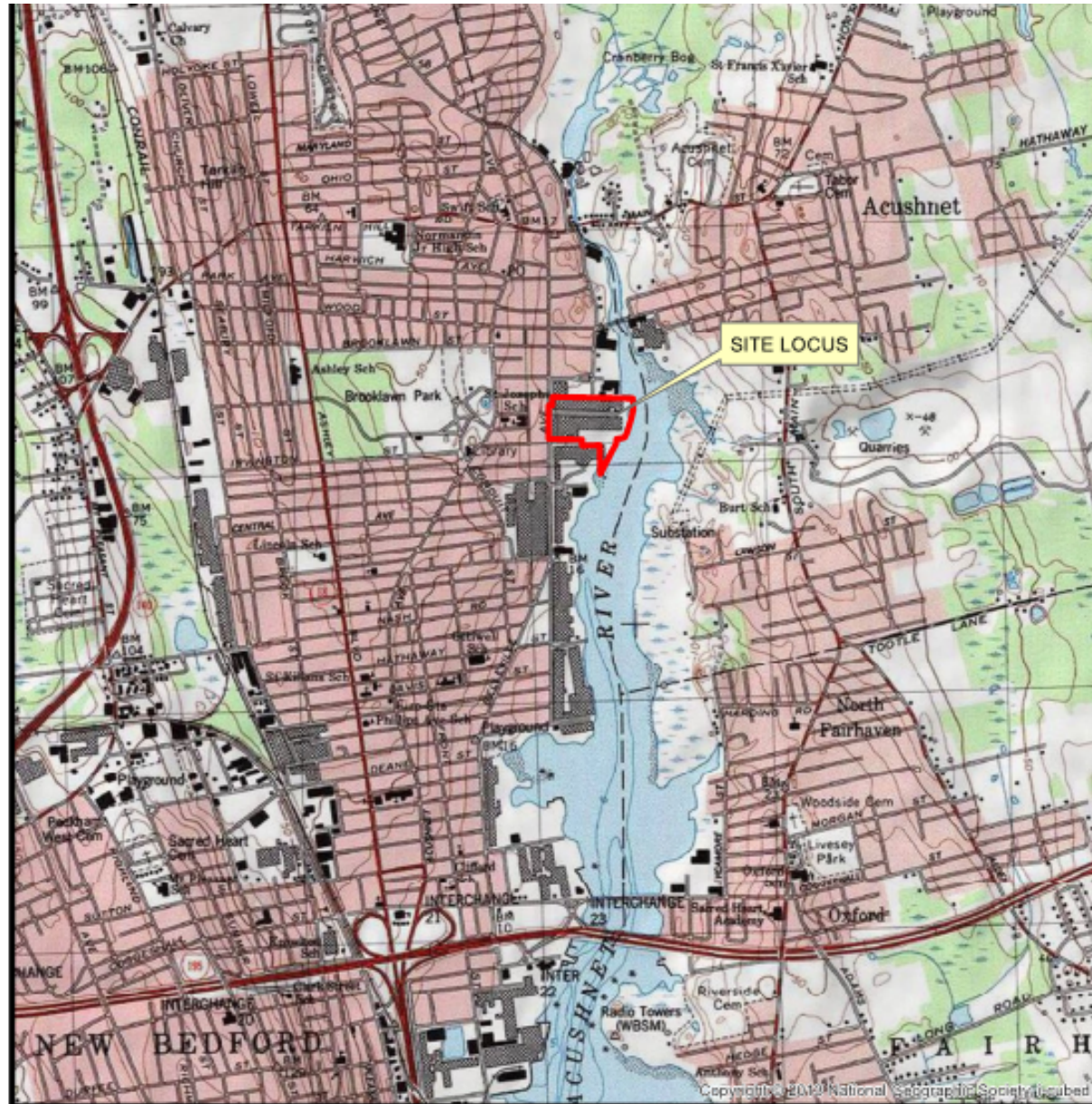
- Know the Equipment
 - Understand each machine's use and capabilities
 - Be aware of equipment movements and swing radii
- Pay Attention
 - Be cognizant of proximity to all equipment
 - Listen for back-up and warning signals
 - Watch for overhead loads and obstructions
- Be Seen
 - Wear PPE including brightly colored safety vest
 - Make eye contact with the operator
 - Do not approach unless equipment is de-energized
 - Stay clear of equipment blind spots



Project Overview

Setting, Background and Planned Scope of Work

Site Locus





Site Background & History

- **Urban setting, 10-acre site, mill buildings to north and south, residential to the west, Acushnet River to the east**
- **Formerly included 450,000 SF building**
- **Aerovox used for electrical component manufacturing starting in 1938 (liquid filled capacitors)**
- **Process used PCBs and chlorinated solvents (mainly TCE) until late 1970's**
- **Specific releases not documented, but evidence of spills, direct river discharges, drum storage area**
- **Aerovox declared bankruptcy in 2001 and abandoned the property**
- **Property now owned by the City of New Bedford**

Non-Time Critical Removal Action, 2011



- Building removed as a NTCRA completed in 2011 under an EPA administrative order on consent (AOC) with AVX
- NTCRA demolition included asbestos abatement, removal of all liquids, sludges, solvents, etc. (hazardous and universal wastes), demolition of building & offsite disposal at TSCA licensed facility
- NTCRA post-demolition included replacement of existing shoreline cap, new asphalt cap over remainder of site, maintenance and monitoring under TSCA
- Site moved into State (21E/MCP) cleanup program under an Administrative Consent Order (ACO) with MassDEP, to address remaining subsurface conditions
- Work also governed by a Cooperation and Settlement Agreement between AVX and the City of New Bedford

Current Site Conditions



Current Site Conditions



Aerovox property, facing west: Titleist to left, Precix to right

21E/MCP Waste Site Cleanup

2013 to Present

Primary Phase II Site Assessment Findings:

- PCBs and chlorinated volatile organic chemicals (CVOCs, primarily trichloroethene or TCE) are contaminants of concern
- Soil PCB impacts present throughout Aerovox property, both shallow and deep, except for western (Belleville Ave) end
- Surface soil on adjoining property to the south (Titleist) is also impacted with PCBs
- Subslab soil gas CVOC impacts beneath adjacent mill to the north (Precix), but no current indoor air risk
- Dense Non-aqueous Phase Liquid (DNAPL) present in shallow soil along Aerovox waterfront and in deeper soil in NE corner of the former Aerovox property
- GW contamination found in shallow and deep overburden groundwater and in shallow and deep bedrock fractures

Selected Remedy – Scope of Work

21E/MCP Waste Site Cleanup Comprehensive Response Actions

OU3/OU4 – Aerovox Property (YEAR 1) – MassDEP Approved Scope

- Excavate and remove highly impacted/DNAPL soils, transport and dispose off site
- Excavate and remove impacted soil within 25' of shoreline and consolidate with similar soil
- Backfill and replace paved shoreline with living/riparian shoreline
- Install permeable reactive barrier (ZVI/GAC) parallel to shore and N and S hydraulic barriers to funnel and treat overburden groundwater
- In situ chemical oxidation to treat overburden and bedrock groundwater hot spots
- Install asphalt cap/engineered barrier over consolidated soil, upgrade existing cap, upgrade existing stormwater facilities
- Activity and Use Limitation (Institutional Controls)

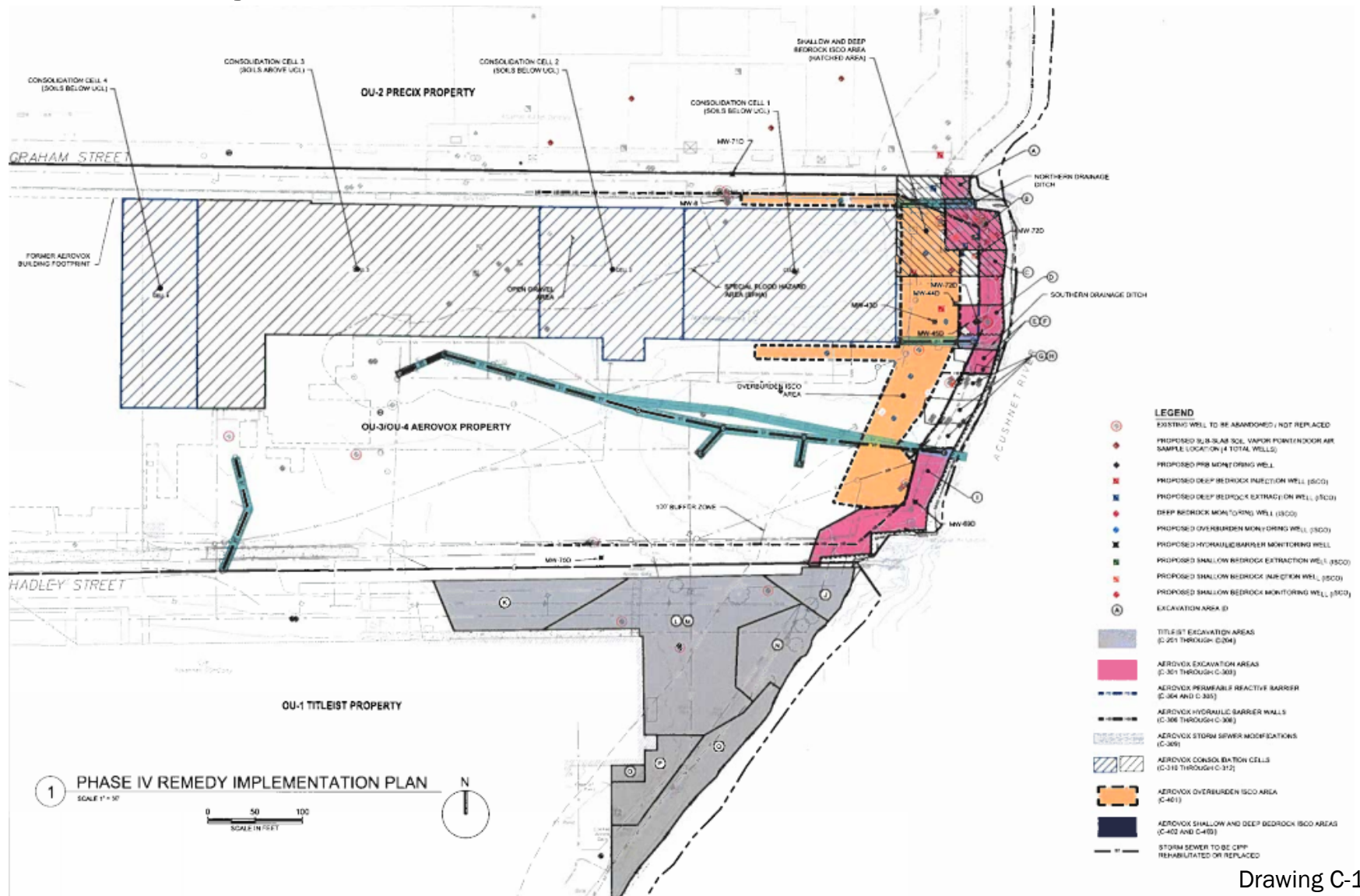
OU1 – Titleist Property (YEAR 2)

- Excavate and remove impacted surface soil
- Consolidate excavated soil with similar soil on Aerovox property
- Backfill with clean fill
- Restore shoreline/disturbed area to existing condition

OU2 – Precix Property

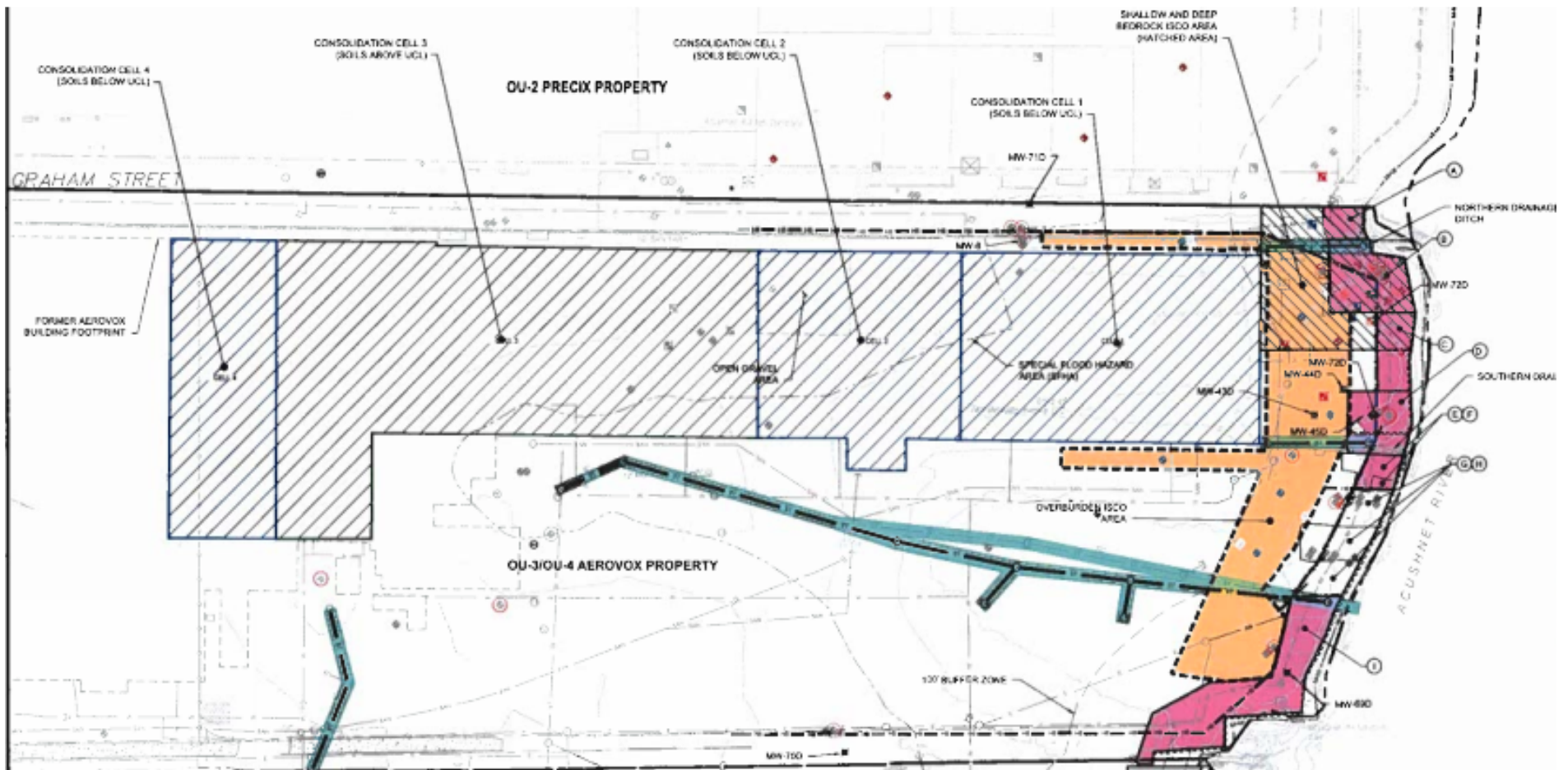
- Monitored natural attenuation of CVOCs in groundwater and soil gas
- Activity and Use Limitation (Institutional Controls)

Summary of MCP Phase IV Remedy Implementation Plan



OU3/OU4 Aerovox Property – Impacted Soil and Groundwater

Soil Excavation, Off-site Disposal & Consolidation, Dewatering/Water Treatment, Capping, Stormwater Facility Upgrades, PRB and Hydraulic Barriers, In Situ Groundwater Treatment, AUL



Drawing C-102



Summary of Project Approvals/Permits

- **MassDEP BWSC Phase IV Design Review/Approval – Submitted 7/10/2020, YEAR 1 (2021 Construction) Approved 2/18/2021**
- **Notice of Intent (Also serves as MassDEP 401 Water Quality Certification 314 CMR 9.00) – New Bedford Conservation Commission Issued Order of Conditions on 3/8/2021**
- **MEPA Environmental Notification Form – Complete, Response 1/22/21**
- **MassDEP Chapter 91 Permit Application – Minor Modification to Existing Licenses approved 2/15/2021 (for YEAR 1 Work); YEAR 2 (Titleist Property) pending**
- **Industrial Pretreatment Permit/Industrial Discharge Permit – Received 4/1/21**
- **NPDES Construction General Permit Notice of Intent – Submitted 4/8/2021**
- **US Army COE General Permit (#17, Cleanup of Hazardous and Toxic Waste) – Submitted and in process – Applies to YEAR 2 Titleist property only.**

Current Project Schedule

Aerovox- Master Schedule (Shore/Non-Sh	10-Jul-20	16-Sep-22
Pre-Construction and Regulatory Approvals	10-Jul-20	03-May-21
On-Site Activities - YEAR 1	26-Apr-21	30-Nov-21
Pre-Mob Activities	26-Apr-21	09-Jun-21
Mobilization / Site-Prep	26-Apr-21	12-May-21
AEROVOX SITE - Excavation/Consolidation	05-May-21	09-Aug-21
Hydraulic Barrier Walls	14-Jun-21	14-Jul-21
PRB Installation	28-Jun-21	04-Aug-21
Site Restoration / Temp Demobilize - YEAR 1	17-Aug-21	24-Nov-21
Storm Sewer Work	10-Aug-21	02-Sep-21
Aerovox Drilling	05-Aug-21	30-Nov-21
Year 1 & 2 Remedial Construction - Groundwater	10-Sep-21	13-Sep-22
Flute Completions	28-Oct-21	03-Feb-22
Baseline Groundwater Monitoring	10-Sep-21	07-Feb-22
Aerovox In Situ Groundwater Treatment	17-Nov-21	13-Sep-22
On-Site Activities - YEAR 2	17-Jan-22	16-Sep-22
Re-mobilization / Site-Prep	07-Mar-22	06-Jun-22
TITLEIST SITE - Excavation/Consolidation	11-Apr-22	29-Jun-22
AREA O/P/Q	11-Apr-22	21-Apr-22
AREA N	11-Apr-22	04-May-22
AREA J/K/L/M	02-May-22	27-May-22
Site Restoration	07-Jun-22	29-Jun-22
AEROVOX SITE	14-Mar-22	08-Jun-22
Consolidation Cells	14-Mar-22	08-Jun-22
Demobilization - YEAR 2	30-Jun-22	20-Jul-22
PRECIX- OU2	17-Jan-22	16-Sep-22

Community, Health and Safety

Health and Safety Plan

➤ BC's Site-Specific Health and Safety Plan

- HAZWOPER site – OSHA required training
- Full time Site Safety Officer
- Site orientation for all workers and visitors
- Outlines potential physical, chemical, biological hazards
- Required PPE, Personal Air Monitoring
- Maps to Hospital/Local Clinic
- Copy available on-site at all times



Community Air Monitoring Plan

➤ Objectives

- Protect the public from exposure to site related contaminants
- Establish baseline background ambient air concentrations of dust, VOC's, and odors
- Provide Action Levels so that appropriate response actions can be initiated
- Specify equipment, locations, and calibration requirements
- Develop a permanent record that includes a database of perimeter air monitoring results, equipment maintenance, calibration records, and response actions





Community Air Monitoring Plan

➤ Instrumentation

- VOCs – Photoionization Detector (PID) equipped with 10.6 electroVolt lamp
 - Dust – Dust Trak II or equivalent
 - Odor – olfactory observation (nose)
-
- Instrument readings will be collected continuously throughout the day from **1** upwind and **3** downwind locations; locations adjusted for weather conditions
 - PID and Dust Trak will have audible alarms to warn of action level exceedances
 - Action levels and associated corrective measures require specific and immediate response

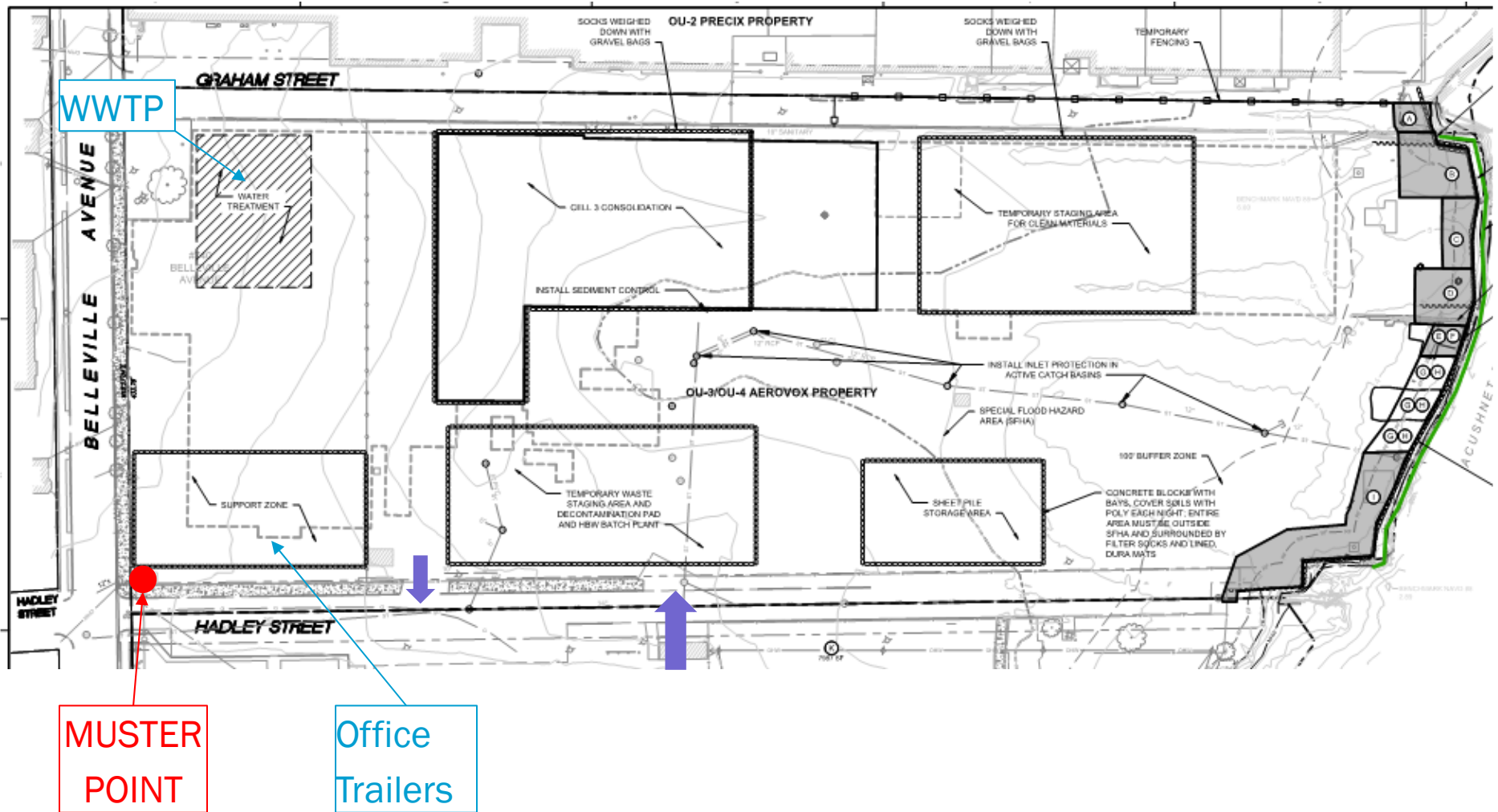
Emergency Response Contingency Plan

- **ALL Site emergencies which require public safety response will be initiated by utilizing the 911 system**
- **ALL site activities will be suspended and the exclusion zone secured so that responders have unobstructed access**
- **Individual will be assigned to meet responders at gate and direct or escort them**

➤ **Evacuation Procedures**

- All site personnel receive and reinforce training
- Parking configured for unobstructed access; back-in parking to be implemented
- On-site muster at corner of Belleville Ave and Hadley Street (adjustable based on wind direction as needed)
- Designated off site shelter for area-wide evacuation is NB High School
- SSOs will conduct/coordinate accountability review of on-site personnel in case of evacuation

Year 1 Site Set-Up



Summary of Planned Contingencies

EVENT	RESPONSE SUMMARY	EVENT	RESPONSE SUMMARY
Fire/Explosion	Trained fire extinguisher use for minor incident CALL 911 Evacuate area	Water Entry	Staging of ring buoys and rescue skiff Stop work to support rescue efforts Use Buoys and skiff as needed and rescue individual from water Support/treat for hypothermia Utilize 911 as appropriate
Chemical Spill or Release of Contaminated Material	Contain spill Isolate the area Don PPE and initiate cleanup Complete regulatory notifications as needed Stabilize/restore area and dispose waste	Severe Weather Events - Lightning	Suspend work if lightning detected Lower high profile parts and park all equipment Evacuate all personnel to shelter 30 Minute Lightning free period before resuming work Call 911 if personnel struck
Confined Space Rescue	Self extricate if possible Trained on site non-entry rescue CALL 911 - Fire Dept. Rescue	Severe Weather Events - Hurricanes, Tornadoes, Nor'easters	Activate dedicated weather monitor at watch stage Secure site, equipment and materials at warning stage and stop work Evacuate all personnel to shelter Suspend work until front passes Assess and clean up, repair/replace controls
Utility Strike - Electric	Stop work - remain in vehicle Secure area and contact power company Utilize 911 as appropriate.	Flooding	Monitor tide and flood stage daily Suspend all activities when flooding is imminent Close or secure open excavations Secure site and materials, move equipment out of flood zone Evacuate all personnel to shelter Assess and clean up, repair/replace controls
Utility Strike - Gas Line	Stop work and de-energize equipment Evacuate to muster point Secure area and notify gas company (NSTAR) Utilize 911 as appropriate.	Active Shooter	Immediately suspend all site operations CALL 911 Run to escape unsafe area if possible Hide/shelter out of site Fight only as last resort if run or hide is not possible

Contingency planning will include practice drills for site personnel within first month of mobilization and periodically thereafter.

Site Security, Control and Traffic

Site Security and Control

- **Support Zone at west end of site along Belleville Ave**
 - Will include construction offices, portable restrooms, wash stations, designated employee and visitor parking.
 - Support zone is only location where PPE is not mandatory
 - COVID protocols in effect for entry
- **Site Visitors must register and receive mandatory site safety orientation before entering site**
- **Equipment will be staged in an orderly manner and locked at the end of each work day**
- **Normal work hours will be 7 AM to 5 PM, Monday through Friday; weekend work only with advance notice and approval**
- **Site perimeter will be secured with chain link fence.**
 - Gates will remain closed unless deliveries or soil transport is ongoing.
 - All gates will be secured and locked during non-working hours

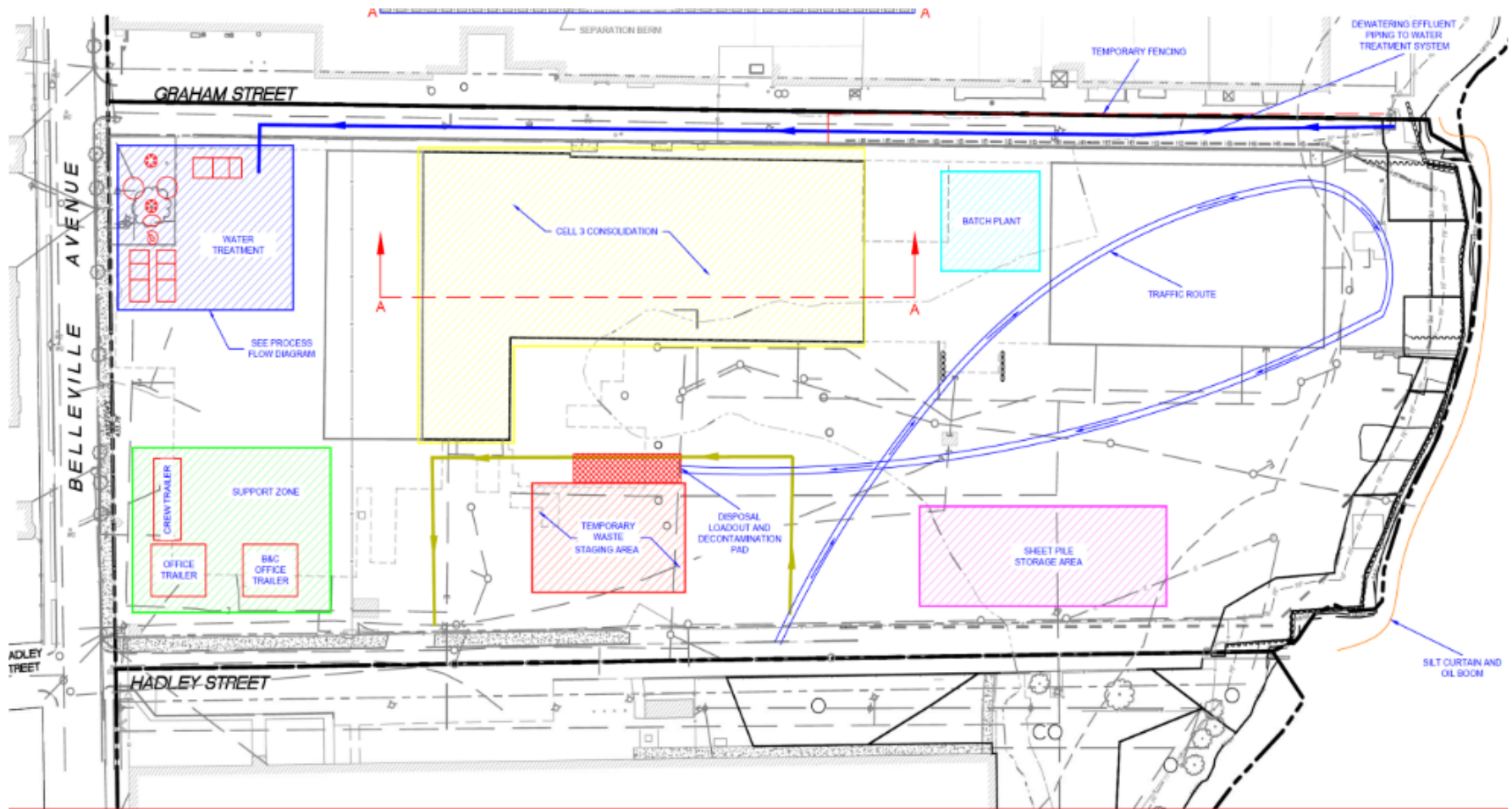


Traffic Control Plan

➤ Safe Onsite Traffic

- All truck drivers must check in with BC or Forgen
- One-way traffic via entry gate and exit gate
- Decontamination pads near excavation areas and prior to exit
- Spill kits stored around the site
- Signage onsite dictating traffic route
- High-viz barriers delineating work zones
- Flaggers to be used when necessary

Traffic Control Plan - Onsite Traffic



City of New Bedford Traffic Routes

- All truck drivers will be given written copies of approved City truck routes
- Route closures or obstructions will be communicated, and temporary alternative routes identified
- Traffic speeds on Hadley Street will be controlled at < 10 mph
- City assistance with cars parked at the Hadley Street & Belleville Ave intersection may be needed

Aerovox Truck Route

To the site from the West

Route I-195 East
Exit 16 for Washburn Street
Right on to Washburn Street
Right on to Belleville Avenue

To the site from the East

Route I-195 West
Exit 17 for Coggeshall Street
Cross Coggeshall Street on to Veterans' Memorial Way
Left on to Sawyer Street
Right on to Belleville Avenue

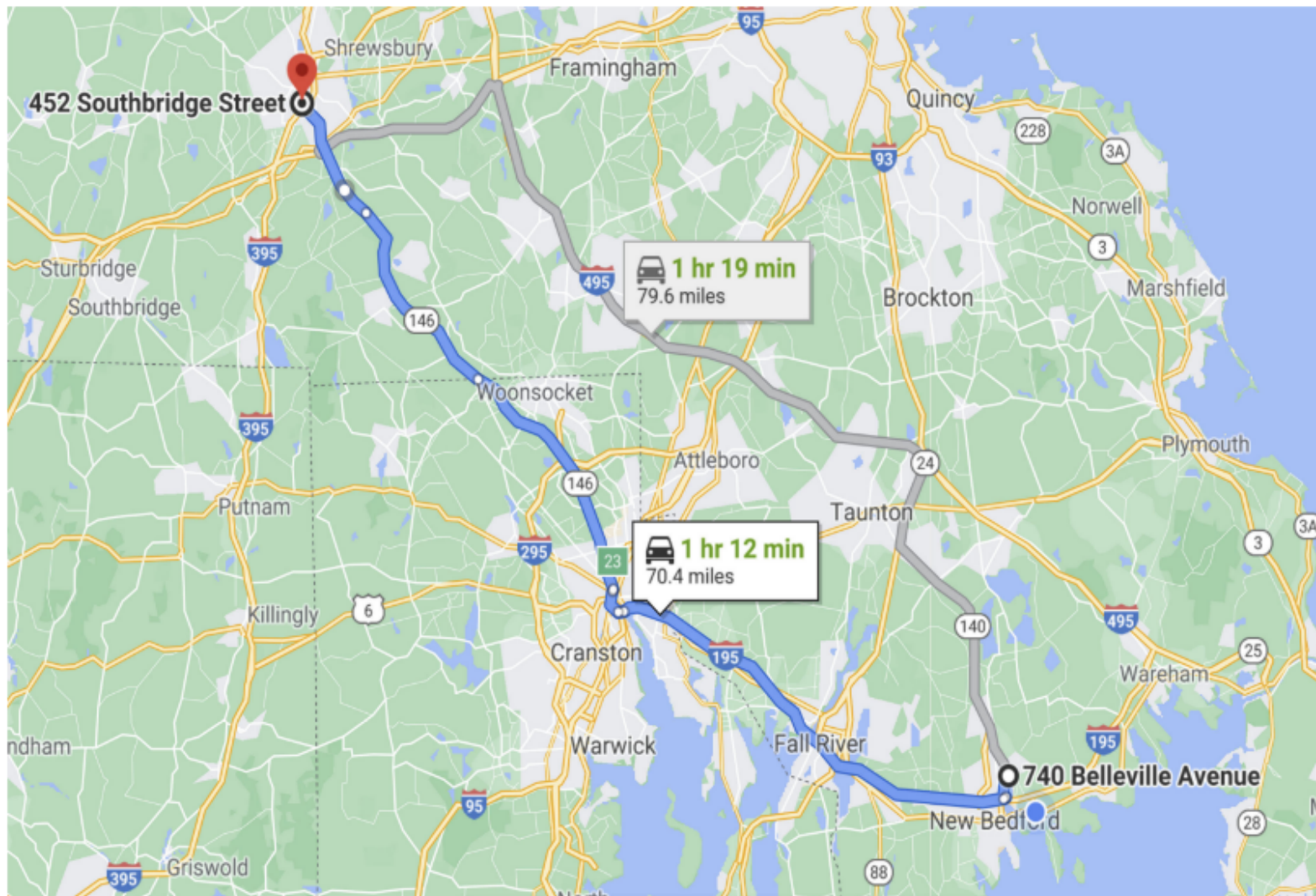
From the site going West

Left onto Belleville Avenue
Left on to Sawyer Street
Right on to Veterans' Memorial Way
Cross Coggeshall to Route I-195 West

From the site going East

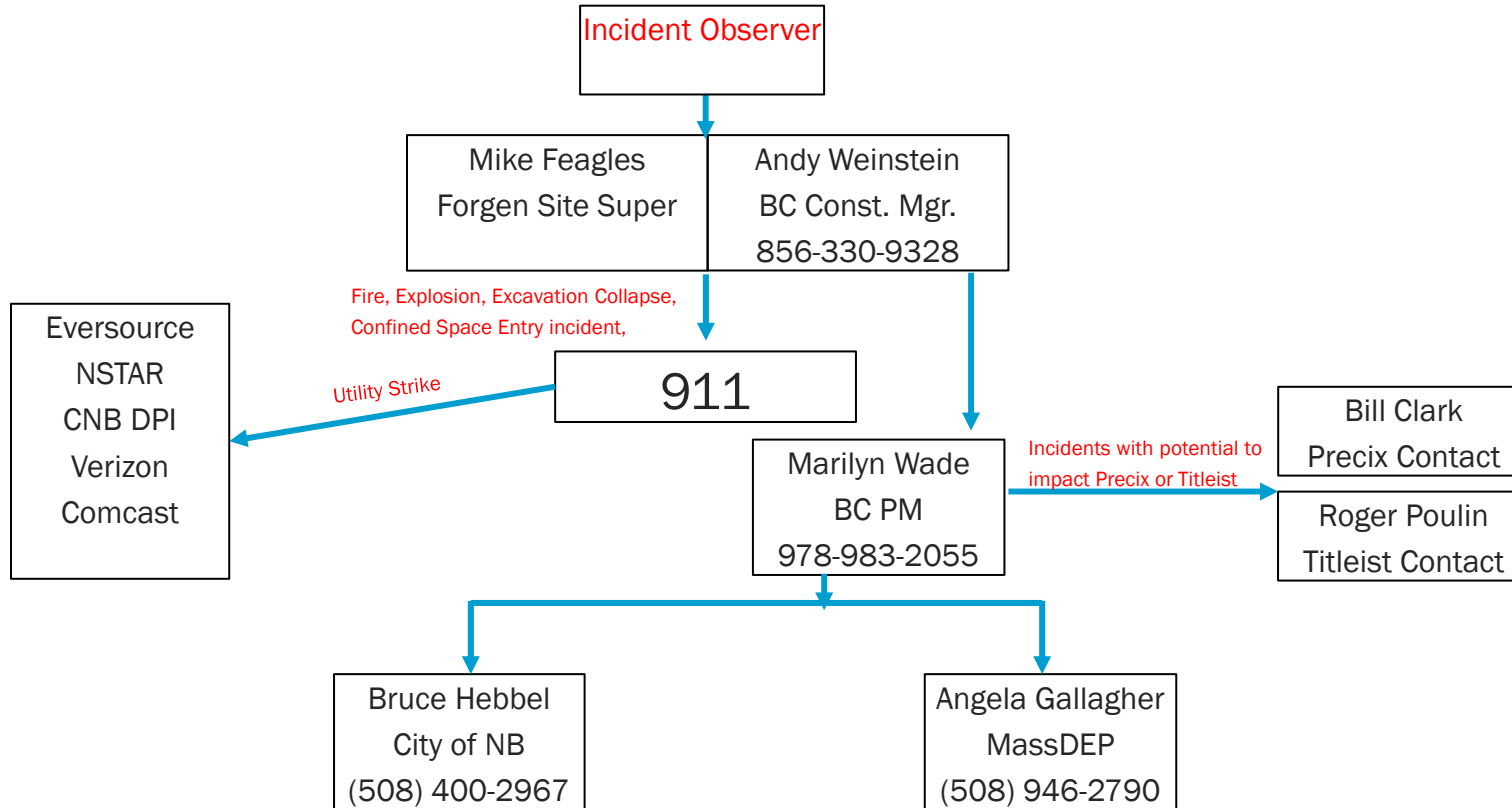
Left on to Belleville Avenue
Left on to Washburn Street
Left on to Route I-195

Traffic Control Plan – Offsite Traffic



Communications

General Emergency Response Notifications



Dial 9-1-1 POLICE-FIRE-MEDICAL EMERGENCIES Dial 9-1-1	
Police – New Bedford Police Department 871 Rockdale Ave New Bedford, MA 02740	(508) 991-6300
Fire/HazMat – New Bedford Fire Station 8 1599 Acushnet Ave New Bedford, MA 02746 New Bedford Fire Station 9 799 Ashley Blvd New Bedford, MA 02740	(508) 991-6124
Ambulance – New Bedford EMS 181 Hillman St New Bedford, MA 02740	(508) 991-6390
Hospital – St. Luke’s Hospital 101 Page St New Bedford, MA 02740	(508) 997-1515
Work Care Clinic – AFC Urgent Care 119 Coggeshall St New Bedford, MA 02746	(508) 990-1900
Work Care – Employee Case Management Hotline (Report Job Related Injuries)	(888) 449-7787
Environmental Protection Agency (EPA) – 24-Hour Emergencies	(800) 300-2193
US Coast Guard - 918 S Rodney French Blvd New Bedford, MA 02744	(508) 999-0072
Electrical Power Company (Eversource Electric)	(800) 592-2000
Natural Gas Company (NSTAR Gas)	(800) 592 2000
City of New Bedford Department of Public Infrastructure (Water & Sewer)	(508) 979-1550
Verizon (Phone/Fiber Optic)	(888) 512-3395
Comcast (Phone/Cable)	(800) 266-2278

Questions?

