



Electronic Transmittal Form for DEEP Remediation, LUST, and PCB Secure File Transfer (SFT)

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
REMEDICATION DIVISION, PCB PROGRAM, AND
LEAKING UNDERGROUND STORAGE TANK COORDINATION PROGRAM

www.ct.gov/deep

This Electronic Transmittal Form must be completed and included as the cover sheet of your electronic document when uploading a document to the Connecticut SFT website. Requirements for Transmittals through the SFT website:

- Documents submitted through the SFT website must include all applicable figures, tables and laboratory data.
 - Files must be formatted as PDF/A and use the appropriate naming convention:
 - For Remediation Filings: **REM_REMID #_SiteAddress_Town_DocumentType_DateofDocument**
 - For LUST Filings: **LUST_SiteAddress_Town_AbbreviationForDocumentType_DateofDocument**
 - For PCB Filings: **PCB_SiteAddress_Town_AbbreviationForDocumentType_DateofDocument**
- Example:** LUST_1MainStreet_Hartford_ESA_01-01-2001
Note: For "AbbreviationForDocumentType" use appropriate abbreviation at [Transmittal of Documents](#)
- **If no Rem ID assigned (new filing) or REM ID is unknown leave field blank**

Part I: Primary Recipient*: Remediation Program (* required)

For Remediation documents: Primary Program*: Other Remediation Program Rem ID*: 15092	For PCB/LUST documents: UST Facility ID: 105-1820 (if applicable) Spill Case Number: 202203368 (if known)
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Part II: Site Information

Site Name*: 49 Lyme Street		
Site Address*:		
City/Town*: Old Lyme	State: CT	Zip Code: 06371
Secondary Programs (complete as many as applicable for this document):		
Program: Significant Environmental Hazard	Project ID: 1230	
Program: Other Remediation Program	Project ID: 23-001	
Program: Select Secondary Program	Project ID:	
Program: Select Secondary Program	Project ID:	
Provide Project ID for each secondary program if it is known. Each program has a unique ID (i.e. Rem ID, Spill Case #, UST Facility ID, etc.)		

Part III: Document Information (document type required for appropriate program[s] only)

Remediation*: Correspondence
LUST/PCB*: LUST/PCB Document Type
Date of Document*: 11/30/2023 Version: Final

Part IV: Submitter Information

Name*: Turner Environmental, LLC
E-mail*: turnerenviro@att.net
Name of company/business this document is being submitted on behalf of: *
Region 18 Schools

TURNER ENVIRONMENTAL, LLC

P.O. Box 581

East Lyme, CT 06333

(860) 705-8704

November 30, 2023

Moises Torrent
Department of Energy and Environmental Protection
Emergency Response and Spill Prevention Division
79 Elm Street
Hartford, Connecticut 06106-5127

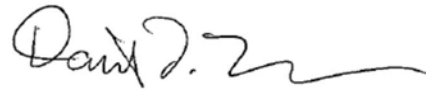
Re: Regional School Board District 18
Consent Order Number COWSERU 23-001
Monthly Progress Report November

Dear Mr. Torrent:

Turner Environmental, LLC has been working on the oil spill response for Region 18 in Old Lyme. Pursuant to Section B.2. of Consent Order Number COWSERU 23-001 please find our Progress Report and the required certification page for this submittal. Please feel free to contact me at (860) 705-8704 if you have any questions.

Sincerely,

Turner Environmental, LLC



David T. Turner, L.E.P.

Attachments – Certification Page COWSERU 23-001
November 2023 Update

cc: Ian Neviasher
Ronald Turner
Ann Catino

CERTIFICATION REQUIRED BY CONSENT ORDER COWSERU 23-001

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in the submitted information is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law."

Turner Environmental LLC

David T. Turner

Signature

Name (Print)/Title: David Turner, LEP

Date: November 30, 2023

Regional School District No. 18

Jan Neviasser

Signature

Name (Print): Jan Neviasser

Date: 11/30/23

November 30, 2023 Update

Summary of Tasks Completed Pursuant to Consent Order COWSERU 23-001

Region 18, Lyme-Old Lyme Middle School

Turner Environmental has continued to work on the investigation and clean-up of the oil spill at the Lyme-Old Lyme Middle school. In November, the primary tasks involved: operation of the *Pump and Treat* groundwater remediation system and additional off-site drinking water sampling. A proposed Additional Scope of Study for the installation of additional off-site monitoring wells to further evaluate the extent of the groundwater plume was submitted to the Connecticut Department of Energy and Environmental Protection (CT DEEP) on November 10, 2023 and the CT DEEP Corrective Action Unit (CAU) provided comments on November 16, 2023. We have prepared revisions to the Tables based upon the comments and we are providing a response to the DEEP's comments in this monthly progress report. Negotiating access to the private properties to install the proposed wells is underway.

The site location is shown in Figure 1 including the location of the existing and the proposed monitoring wells. Groundwater elevations and flow directions from the September groundwater sampling event are shown in Figure 2. A summary table of the groundwater monitoring results for September 2023 and previous sampling events is provided in Table 1, which has been updated with the value for the GWPC for ETPH.

Off-site Drinking Water Wells

Drinking water wells at [REDACTED] were resampled on November 21, 2023. Access to the well at [REDACTED] was not available at that time and that well was not resampled. The samples were analyzed for VOCs and ETPH. No VOCs or ETPH was detected in either of these drinking water wells. A copy of the laboratory report is provided as Attachment A.

In DEEP's November 16, 2023, comments, DEEP asks whether additional measures are planned to protect the potable water well location at [REDACTED]. At this time, this well has not been impacted based upon the sampling results nor does Turner expect it will be. This is due to suspected mounding of groundwater caused by discharges to the intervening septic system, which is between MW-18 and [REDACTED] drinking water well.

Figure 3 shows the nearby drinking water wells, the monitoring well network and location of the plume based on the information collected and sample results received to date.

Groundwater Pump and Treat System

As previously reported the pump and treat system was installed during the second week of September and started operation on September 18, 2023. The general location of treatment system components is shown on Figure 4. The compressor and pump skid are in the boiler room. The treatment system itself, including the oil/water separator, transfer pump, controls, bag filters and carbon vessels are located in the "conex box" located just outside the eastern wall of the boiler room.

Since start-up in mid September over 134,000 gallons of water have been collected and treated. Sampling and analyses for the General Permit was completed and results show the discharge to be in compliance with General Permit limits.

The treatment system is currently pumping from wells RW-11, RW-10 and RW-7 which includes the former holding tank area and boiler room where free product has been observed and where ETPH concentrations are the highest. Samples from the recovery wells (RW) were also previously reported in Turner's September 2023 Monthly Progress Report submitted to CTDEEP on September 29, 2023. The location of the active recovery wells are shown in Figure 4. Previous results of analyses of initial samples from the recovery wells indicate ETPH concentrations from approximately 0.5 to approximately 3 mg/L and benzene concentrations from not detected to 16.7 ug/L. Results of the September 18 sampling of the recovery wells are provided in Table 2.

The treatment system is set up with three air operated pneumatic pumps. These pumps are currently set-up in RW-11 (former holding tanks area), RW-10 (southern portion of the boiler room) and RW-7 (northernmost portion of the boiler room).

The intakes of these wells are currently set to extract water from 2 to 3 feet below the standing water table.

In October small amounts of free product were observed in some of these wells. Oil absorbent "pigs" continue to be used to recover "free product" (FP) from the recovery wells. Oil is collected by wringing out these pigs approximately twice per week and measuring the amounts of oil recovered. In October approximately 2.5 L of FP was recovered from the wells from the oil absorbent pigs. In November approximately 3.7 L of additional FP were recovered. We also estimate an additional 0.75 L of "dissolved" ETPH was removed from impacted groundwater pumped through the treatment system.

During the operational cycle recovery well drawdowns are approximately 1.5 feet. Water table rebound occurs relatively quickly in these wells in the range of several minutes. Overall, the water table in the general vicinity of the pumping wells is lowered approximately 0.5 feet below ambient levels. Turner is now adjusting its operation to have more constant pumping from the wells to increase drawdown and the radius of influence around these wells. Water tables continue to be highly influenced by precipitation events.

The additional proposed monitoring wells will be installed once access agreements are finalized. We currently believe this will occur in December. A comprehensive groundwater monitoring event is scheduled for December 2023. Shallow drinking water wells at [REDACTED] will be resampled in December.

The approval of the Additional Scope of Study identified some minor issues.

- The wrong value for the ground water protection criteria for ETPH is listed in Table 2. Response: A revised Table showing the correct GWPC for ETPH is attached here.
- Table 2 lists some detected constituents of concern (COCs) that do not have listed regulatory criteria. DEEP requests that an application be submitted for approval for Additional Polluting Substances (APS) criteria to use for those COCs and, once approval is granted, the criteria is to be included in future versions of the table. Response: Turner will prepare and submit an application for APS to CT DEEP for compounds that do not have published criteria and amend the Tables with the appropriate corresponding criteria at the appropriate time.

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Respectfully submitted,

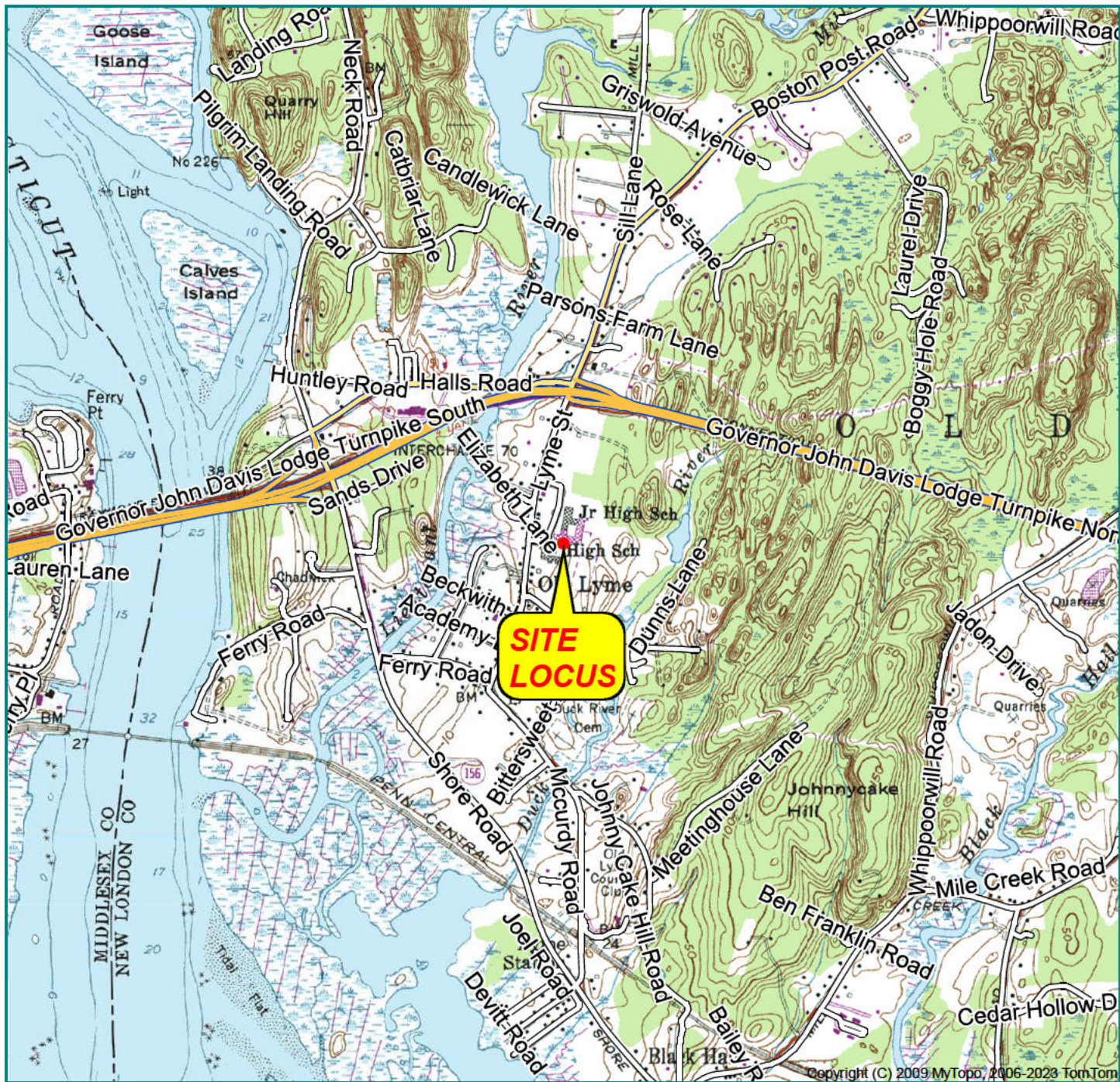
TURNER ENVIRONMENTAL, LLC



David T. Turner, LEP

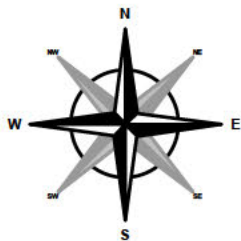
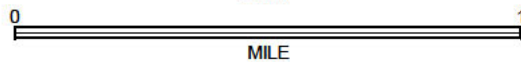
Attachments

Figures



OLD LYME Topographic 1958 41072-C3-TF-024 National Geodetic Vertical Datum 1929

SCALE 1:24000



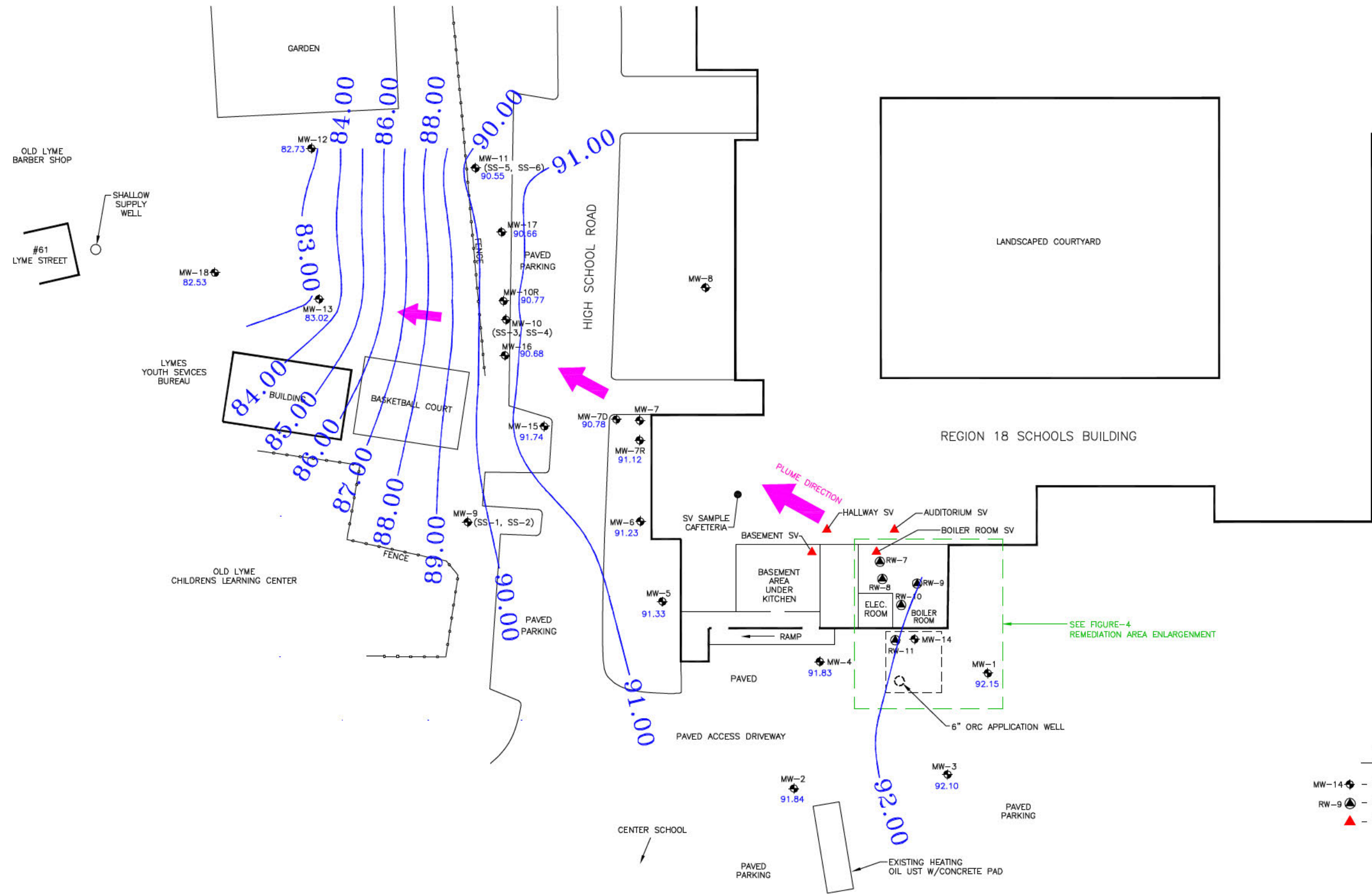
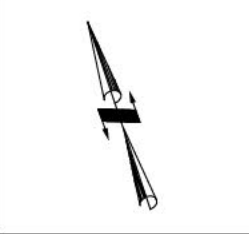
Site Coordinates:
041° 19' 04.35" N, 072° 19' 42.04" W

Turner Environmental LLC
P.O. Box 581, East Lyme, CT 06333
(860) 705-8704 turnerenviro@att.net

Site Location:
47 Lyme Street
New London County,
Old Lyme, CT

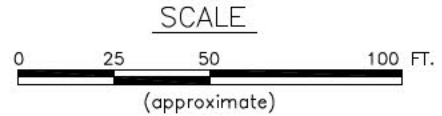
Figure-1
Site Locus Map

Project: TE 23-007 Date: 3/9/23

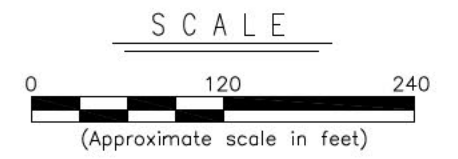
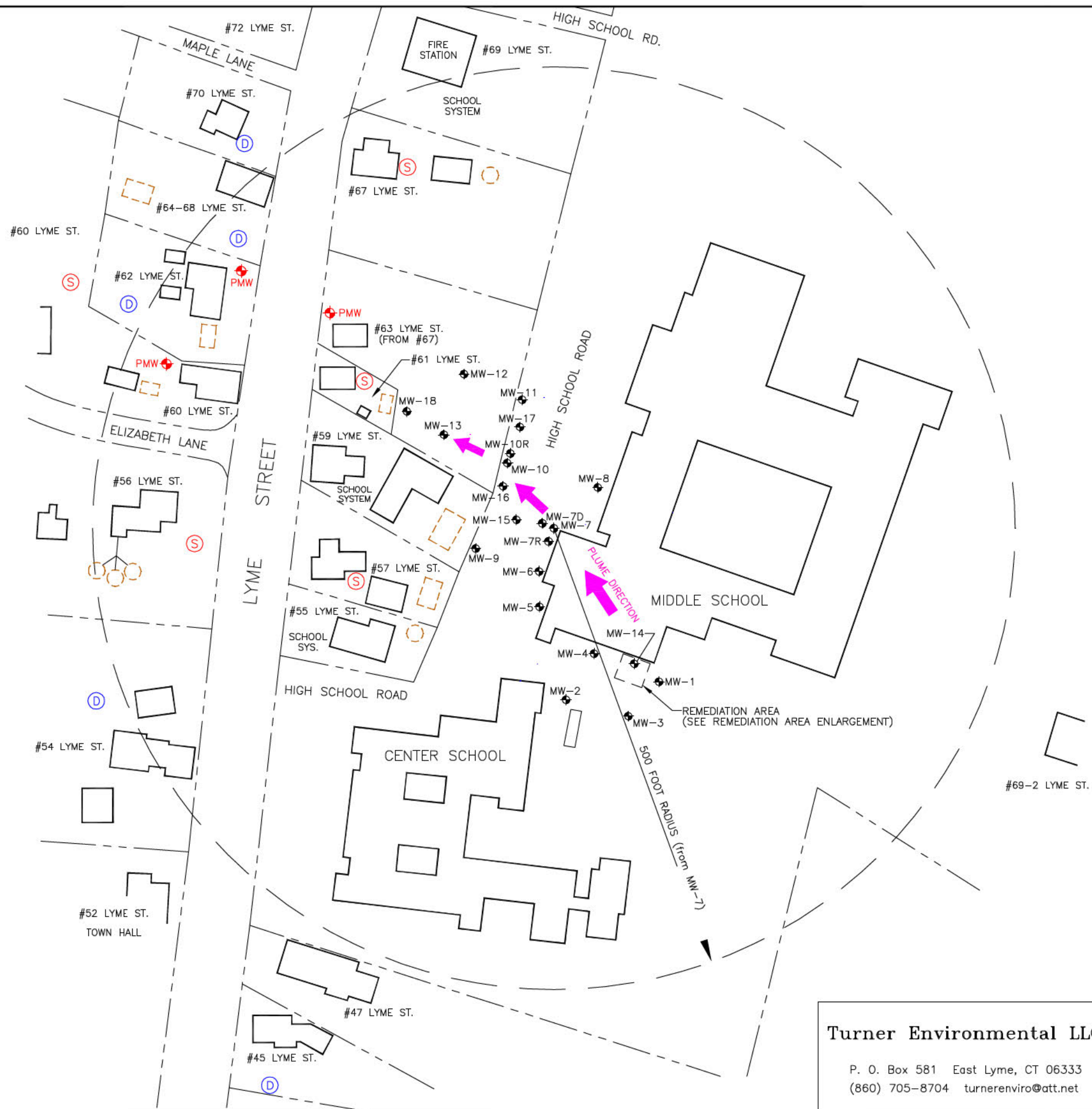


LEGEND

- MW-14 - EXISTING MONITORING WELL
- RW-9 - EXISTING RECOVERY WELL
- ▲ - SOIL VAPOR SAMPLE



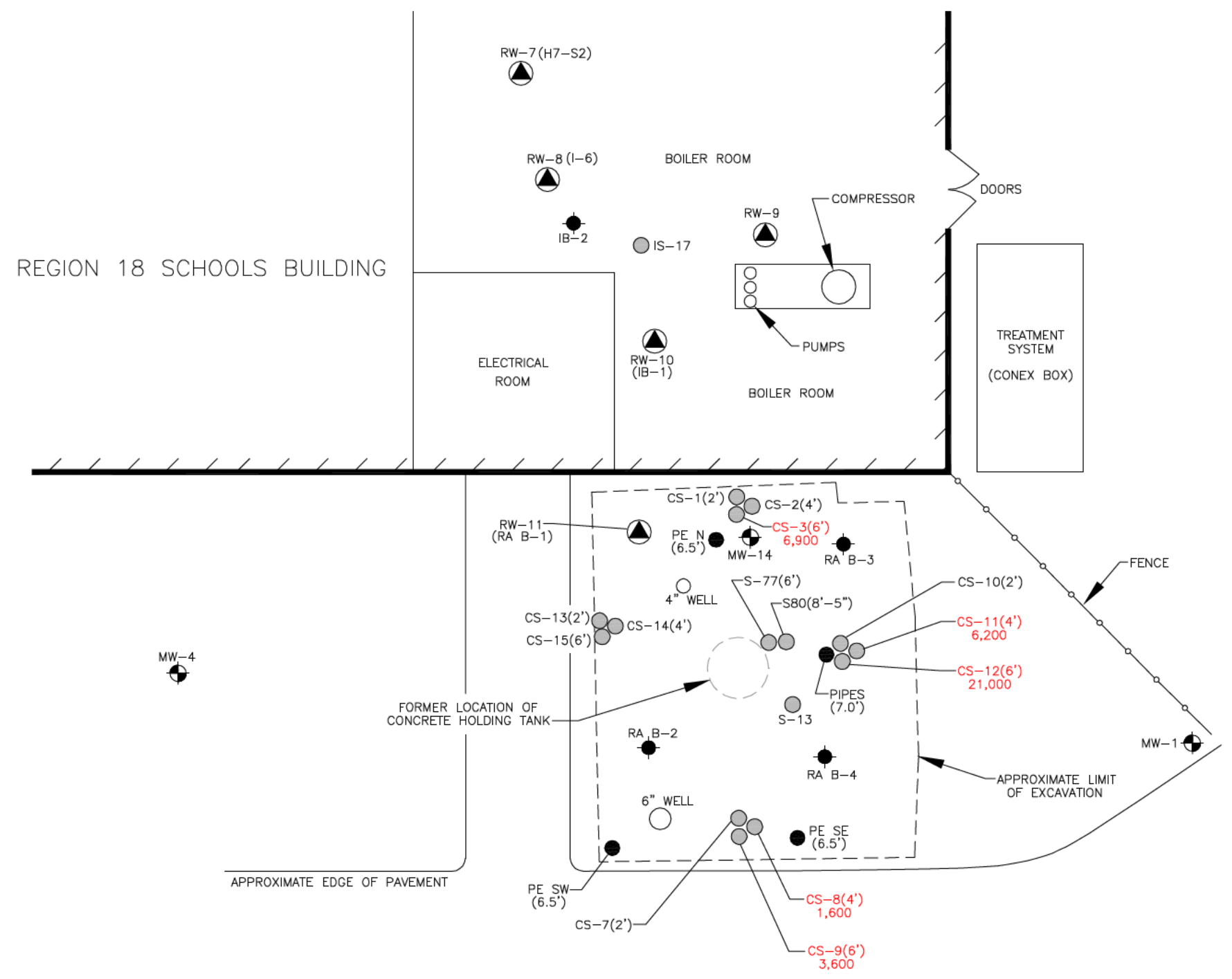
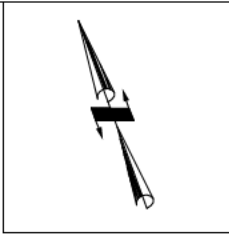
Turner Environmental LLC P. O. Box 581 East Lyme, CT 06333 (860) 705-8704 turnerenviro@att.net	Figure 2 - Groundwater Contours (9/11-9/15/23 gauging data)	Drawn: K. Hazel Date: 9/28/23 Scale: AS SHOWN
	Client: REGION 18 SCHOOLS 47 Lyme Street Old Lyme, Connecticut	Project: TE23-007 Figure: FIGURE 2



- LEGEND**
- MW-7 - GROUNDWATER MONITORING WELL
 - - - - - APPROXIMATE PROPERTY BOUNDARY
 - SHALLOW SUPPLY WELL (Approximate Location)
 - DEEP SUPPLY WELL (Approx. Location)
 - PMW - PROPOSED GROUNDWATER MONITORING WELL
 - SEPTIC LEACHFIELD (Approx. Location)
 - SEPTIC LEACHING PIT (Approx. Location)

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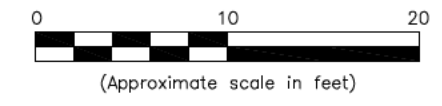
Figure 3 - Drinking Water Well Locations with Proposed Monitoring Wells	Drawn: K. Hazel
	Date: 11/10/23
	Scale: AS SHOWN
	Project: TE23-007
	Figure: FIGURE 3



LEGEND

- CS-12 (6.0) 21,000 - SOIL SAMPLE LOCATION OBTAINED BY KROPP ENVIRONMENTAL CONTRACTORS, INC. (August 2022)
- (6.0) - DEPTH OF SAMPLE
- 21,000 - SOIL SAMPLE DATA ABOVE RSR CRITERIA (IN PPM)
- PE PW (7.0') - SOIL SAMPLE LOCATION OBTAINED BY TURNER ENVIRONMENTAL LLC (March 17, 2023)
- (7.0') - DEPTH OF SAMPLE
- ⊕ - GROUNDWATER MONITORING WELL
- ⊕ - RECOVERY WELL
- - SOIL BORING

SCALE



Turner Environmental LLC P.O. Box 581 East Lyme, CT 06333 (860) 705-8704 turnerenviro@att.net	Figure 4 Remediation Area Enlargement	Drawn: K. HAZEL Date: 9/24/23 Scale: As Shown
	Address: 49 Lyme Street Town of Old Lyme, New London County, Connecticut	Project: TE 23-007 Figure: FIGURE-4

Tables

