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# **Project: Former SHW Soil Remediation**

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Former SHW/Pandel Property  
Ansonia, Connecticut

Prepared by:

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Rocky Hill, Connecticut, 06067

Prepared for:

**City of Ansonia**

253 Main Street  
Ansonia, Connecticut, 06401

April 2025



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**INSTRUCTIONS TO BIDDERS**  
**Soil Remediation**  
**Former SHW/Pandel Property**  
**Ansonia, Connecticut**

The City of Ansonia is seeking a contractor to perform soil excavation, backfilling, compaction, grading, facilitate off-site transportation and disposal, and site restoration activities at a former industrial property located at 35 North Main Street, Ansonia, Connecticut (the former SHW site).

**1. Statement of Work.**

See Specification Section 01 11 00 for a complete summary of the Work.

Each prospective bidder shall attend the mandatory initial site walk. Subsequent follow-up visits may be permitted on an as-needed basis upon request.

The project is funded by the State of Connecticut and prevailing wages apply. Invoicing must demonstrate adherence to certified payroll completion.

**2. Minimum Qualifications Required**

The successful bidder shall meet all requirements set forth including, but not limited to, those for bonding, insurance, safety, and schedule.

- a. Safety ratings and qualifications indicating an experience modification rate (EMR) below industry average in the current year and each of the prior 3 years.
- b. Minimum of 7 years providing similar project specific experience.
- c. Ability to prepare for and start physical work within 4 weeks of the notice to proceed and obtain substantial completion by October 1, 2025 based on current project conditions.
- d. Ability to bond and insure project work.

**3. Notices**

**A. Commission on Human Rights and Opportunities (CHRO)**

The contractor who is selected to perform this State project must comply with Sections 4a-60,

4-60a, 4a-60g, 46a-56, 46a-68b, 46a-68c, 46a-68d, 46a-68e and 46a-68f of the Connecticut General Statutes (C.G.S.) and Sections 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies.

State law requires a minimum of twenty-five (25%) percent of the state-funded portion of the contract for award to subcontractors holding current certification from the Connecticut Department of Administrative Services ("DAS") under the provisions of CONN. GEN. STAT. § 4a-60g. (25% of the work with DAS certified Small and Minority owned businesses and 25% of that work with DAS certified Minority, Women and/or Disabled owned businesses.) **The contractor must demonstrate good faith effort to meet the 25% set-aside goals.**

For municipal public works contracts and quasi-public agency projects, the contractor must file a written or electronic non-discrimination certification with the Commission on Human Rights and Opportunities. Forms can be found at:

<http://www.ct.gov/chro/lib/chro/pdf/notificationtobidders.pdf>



All bidders must complete, sign and return the: "CHRO Contract Compliance Regulations Notification to Bidders" form to the grantee at the time of bid opening. Bids not including this form may be considered incomplete and rejected.

**B. Department of Administrative Services (DAS)**

The firm must demonstrate compliance with the State of Connecticut DAS qualification requirements.

**C. Project Schedule and Timing**

It is anticipated that this Project will have a duration of 180 days.

**4. Affirmative Action Plan**

The Affirmative Action plan must be filed with CHRO within 10 days following the intent to award notice and must be approved prior to the award of the construction contract.

**5. Bid Bond**

Each bidder submitting a price proposal must deliver with the proposal a bid bond in the amount of **5%** of the estimated project cost. Note that the selected contractor will be required to submit a Performance Bond and Labor & Material Bond.

**6. Evaluation Criteria**

The City, as part of its selection process, will review the adequacy of the pricing schedule, proposal technical approach, proposed schedule, health and safety metrics, and ability to meet State requirements.

DAS pre-qualification is a prerequisite for selecting the Lowest Responsible and Qualified Bidder.

- 7.** Each bidder must review this entire RFP package for completeness. There are references to other information included in this bid package. Each bidder must also be familiar with site conditions.

**8. Liquidated Damages**

The selected Contractor will provide an anticipated construction duration period in days within the project manual that will be used in the bid package (180 days). If the Contractor neglects, fails or refuses to achieve substantial completion of work by the substantial completion date in the executed contract, and such delay is not otherwise excused under this contract, then the Contractor shall agree to pay the Owner a liquidated damage for breach of contract for each and every calendar day that the Contractor shall be in default of the project work. See the DECD Bidding, Contracting and Construction Guidelines (DECD Guidelines), Section 16 for more details. For this project, liquidated damages have been calculated at \$500 per day.

**9. Insurance**

The selected Contractor shall provide a Certificate of Insurance. The "Hold Harmless" indemnification endorsement of the insurance shall include the interest of the City and the State of Connecticut. See the Attachment 5 and the DECD Guidelines, Section 17 for more detail.

**10. RESPONSE DUE DATE**

Responses must be returned by:

Date: May 13, 2025

Time: 3:00 PM



Location: Emailed with delivery receipt

Submissions can be made via email to:

[SOMalley@ansoniac.org](mailto:SOMalley@ansoniac.org)

Each response must include the required completed forms (see checklist) along with the pricing schedule. Any alternatives to approach may be included but must be in addition to the base bid and clearly marked. Scanned, signed documents may be submitted via email. A return receipt is required to demonstrate delivery by time and date required.

A virtual public bid opening will be performed shortly following final submittal of bids. Note that each bid will be evaluated for completeness prior to any award.

**11. Questions**

Questions for this RFP must be submitted by May 7, 2025. Questions must be submitted to Sheila O'Malley ([SOMalley@ansoniac.org](mailto:SOMalley@ansoniac.org)) and Neil Thurber of AECOM ([neil.thurber@aecom.com](mailto:neil.thurber@aecom.com)).

**12. Refer to bid package requirements and attachments that follow.**

The mandatory bid walk will be held on May 5, 2025 at 11:00 AM. Each bidder must email the City to inform them of their planned attendance and must sign the sign-in sheet at the bid walk. Contractors must attend the site walk in order to bid.

**13. An Affirmative Action/Equal Opportunity Employer.**

The City is an affirmative action/equal opportunity employer. Minority/Women Business Enterprises are encouraged to apply. Note that this contract is subject to set-aside and contract compliance requirements.



# Contractor Bid Submittal Signature Page

## Former SHW Soil Remediation, Ansonia, Connecticut

Contractors Name

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Address

---

Telephone and

E-mail

---

Typed Name

---

Title

---

Date of Submittal

---

Signature

---

*Your signature on this proposal indicates that your Company has accepted responsibility for the contents and correctness of all information contained within. Additionally, by signing this document bidder certifies that the bid provided is genuine and not collusive. Please verify that all proposal documents are attached and have been completely and properly filled out.*



In addition to the bid items (see excel), bidder must provide all requested information below.

This bid is for disposal of project waste at the following disposal facilities:

***Disposal Facility for Impacted Soils***

FACILITY NAME: \_\_\_\_\_

FACILITY ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

FACILITY PHONE: \_\_\_\_\_

FACILITY CONTACT PERSON: \_\_\_\_\_

***Disposal Facility for Buried Building Materials***

FACILITY NAME: \_\_\_\_\_

FACILITY ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

FACILITY PHONE: \_\_\_\_\_

FACILITY CONTACT PERSON: \_\_\_\_\_



***Disposal Facility for PCB Remediation Wastes***

WASTE STREAM:

\_\_\_\_\_

FACILITY NAME:

\_\_\_\_\_

FACILITY ADDRESS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

FACILITY PHONE:

\_\_\_\_\_

FACILITY CONTACT PERSON:

\_\_\_\_\_

***Other (as needed)***

WASTE STREAM:

\_\_\_\_\_

FACILITY NAME:

\_\_\_\_\_

FACILITY ADDRESS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

FACILITY PHONE:

\_\_\_\_\_

FACILITY CONTACT PERSON:

\_\_\_\_\_



**LIST OF SUBCONTRACTORS AND VENDORS**

**Soil Remediation**

**Former SHW/Pandel Property**

**Ansonia, Connecticut**

Provide the name of each Subcontractor and Vendor including material suppliers proposed for the Work, together with the amount payable to each Subcontractor. Work that will be carried out partly or entirely by Bidder's own forces shall be indicated by "Own Forces." Should Bidder wish to separate the Work into two parts or more to be awarded to two or more Subcontractors, without conflicting with the requirements of the Specifications, such separation shall be indicated below.

<b><u>TYPE OF WORK</u></b>	<b><u>NAME AND ADDRESS</u></b>	<b><u>APPROXIMATE VALUE</u></b>	<b><u>APPROXIMATE PERCENT</u></b>
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## **TECHNICAL EXECUTION PLAN**

Contractor shall submit, as part of this bid, a brief draft Technical Execution Plan (TEP) (3 page maximum). The draft TEP shall be comprehensive enough to demonstrate the Contractor's means and methods to adequately complete the Scope of Work. The selected Contractor shall revise the draft TEP, as requested by the City of Ansonia and Engineer, and submit a final TEP.

### **1. Section A: Project Coordination.**

- a. Identification of key personnel, roles and responsibilities.
- b. Detailed list of proposed subcontractors, including landscaping contractor, trucking companies for soil disposal as well as imported materials, disposal facilities and laboratories.

### **2. Section B: Progress Schedule.**

- a. Contractor's narrative description of the means by which the Contractor will meet the schedule milestones and complete the work.

### **3. Section C: Construction Facilities and Temporary Controls.**

- a. Layout of Support Zone and other Work Zones, including Decontamination Zone.
- b. Decontamination methods and equipment.
- c. Procedures to prevent cross-contamination of clean areas.

### **4. Section E: Soil Removal.**

- a. Describe the procedure for site preparation and the demolition of concrete slabs and other concrete anticipated to be encountered during excavation activities.
- b. Describe excavation methods, proposed equipment, and proposed production rates.

### **5. Section F: Environmental Controls.**

- a. Describe methods for installation, inspection and maintenance of erosion and sediment controls.
- b. Describe methods and facilities for managing stormwater run-on.
- c. Describe methods to minimize dust, odors and air emissions during excavation and stockpiling.
- d. Describe methods to prevent tracking of dirt from the hot zone to the support zone and from the support zone off-site.

### **6. Section G: Soil Handling for Offsite Disposal.**

- a. List proposed soil disposal facilities and describe methods to characterize and profile soil for disposal facility acceptance including requirements any additional testing required.



**7. Section H: Transportation for Offsite Disposal.**

- a. Names and qualifications of proposed transporters including the required permits and certifications for each, with the anticipated number of vehicles dedicated to the project.
- b. Daily estimate for the expected types and quantities of material to be shipped from the site.



## **CONSTRUCTION MILESTONES**

Bidder shall prepare an initial Progress Schedule showing all activities and dependent operations such as equipment mobilization and taking into account the Milestones listed below. The Bidder's initial Progress Schedule shall be provided with the Bid proposal. Contractor to identify milestones in schedule based on Contract Documents. The selected Contractor's schedule may need to be modified based on owner limitations or activities.

1. Submittal of Technical Execution Plan, Site-Specific Health and Safety Plan, and other pre-mobilization submittals
2. Pre-mobilization Meetings and Submittals
3. Mobilization
4. Site Preparation
5. Concrete Slab Demolition
6. Off-Site Disposal of Previously Excavated Soils
7. Excavation of Areas 2B, 2C, 2D, 4, and 7
8. Post-Excavation Sampling
9. Off-Site Disposal
10. Supply and Placement of Backfill
11. Backfilling and Compaction
12. Site Restoration
13. Demobilization



## Instructions to Contractor Completing the Contractor Safety Criteria Questionnaire

1. Complete the administrative information related to your organization (*Company name, address, etc.*)
2. List the Experience Modification Rate (EMR) for your organization (entire company, not a local office, division, subsidiary, for joint venture) from the past three years. The information can be obtained from your organization's Worker's Compensation Insurance Carrier. If your organization's EMR is greater than 1.10, an explanation must be provided in the appropriate space provided. **NOTE:** *EMR is separate from the Experience Modification Factor (EMF) also provided by your Worker's Compensation Insurance Carrier. EMR is a whole number, while EMF is a percentage.*
3. Provide the applicable injury and illness date for your organization from the past three years in the table provided. Using the formulas included in the table, calculate the requested Recordable Case Frequency Rate (e.g., Recordable Incident Rate or RIR). If your company has less than 10 employees, you are not required to maintain this information according to Title 29 of the Code of Federal Regulations (CFR) Part 1904, Section 1, Subsection (a) (1) [29 CFR 1904.1(a)(1)]; however, if your organization does have less than 10 employees, please provide the information for rows d) Total Recordable Cases and e) Total Corporate Hours Worked.
4. List any fatalities your organization has incurred during the past three years and for each occurrence please provide the following information (*Supplemental material may be attached to this questionnaire*):
  - a. Location where the fatality occurred
  - b. Case of the fatality
  - c. What corrective action(s) your organization has taken as a result of the fatality
5. List and describe any REPEAT, WILLFUL, or CRIMINAL citations issued to your organization by the U.S. Occupational Safety and Health Administration (OSHA), a State with a federally-approved OSHA Plan, any federal or State environmental citations, and any federal or State Department of Transportation citations (Supplemental information related the specific citations(s) may be attached to the questionnaire). The list of States with federally-approved OSHA Plan is available at <http://www.osha.gov/fso/osp/index.html>.
6. After reading the Compliance Statement on page 3, list the name and phone number of the representative from your organization who completed the questionnaire, sign the questionnaire, and write in the date the questionnaire was completed. By signing the questionnaire, the representative states that they have truthfully answered all questions, that all of the information provided is accurate, and that if selected by the City of Ansonia, your organization shall adhere to the requirements identified in the Compliance Statement.



Company Name:	Date:
Address:	
City:	State:
List Service(s) to be provided:	

1. Experience Modification Rates

a) List your firm's Experience Modification Rate (EMR) for the three (3) most recent years. *(Information is available from your Workers' Compensation Insurance Carrier)*

Year	EMR

b) If your organization does not have an EMR or your EMR is greater than 1.00, please explain why.

\_\_\_\_\_

\_\_\_\_\_

2. Please consolidate your firm's OSHA Form 300 injury and illness data for the last three (3) years and complete the following:

	Data	Year	Year	Year
a)	Number of Lost Workday Cases (not days lost)			
b)	Number of Restricted Workday Cases (not restricted days)			
c)	Number of Medical Treatment Cases* (not including first aid)			
d)	Total Recordable Cases (a + b + c)			
e)	Total Corporate Hours Worked (hourly and salaried employees)			
f)	Recordable Case Frequency Rate (RCFR) $[(d \times 200,000)/e]$			

**Medical Treatment Case** is a case in which an on-the-job injury requires *other* than first aid treatment (and is not considered a restricted or lost workday) as defined by the U.S. Bureau of Labor Statistic recordability criteria (i.e., prescribed medication, physical therapy – more than one visit, fractures, imbedded foreign body, etc.). First aid injury treatment cases are *not* required to be added to the OSHA Form 300 log.

a) Does your organization have fewer than 10 employees?   ☐ Yes   ☐ No

**Note:** If you check Yes, you are required to only complete rows d) and e) in the above table.



3. List any fatalities your firm has had in the last three (3) years. Include location, cause, and corrective actions. *(Attach supplemental information as required)*

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4. List any OSHA REPEAT, WILLFUL, or CRIMINAL citations your firm has had in the last three (3) years. Please describe. *(Attach supplemental information as required)*

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**Compliance Statement:**

As a Subcontractor to the City of Ansonia it is understood that your organization understand and maintains the highest standards possible for compliance with all local, state, federal, and other regulatory agency/client requirements, as they apply to your organization. Additionally, it is also understood that any subcontractors that your organization may employ, acquire, obtain, or use during the course of your contractual agreement(s) with the City of Ansonia are selected using the same methods and policies which you enforce upon your own organization, employees, and other affiliated organizations and subcontractors.

I certify that my organization, its personnel, and subcontractors will not compromise the integrity of safety systems or devices at any time without proper authorization from the City of Ansonia. At no time will employees or subcontractor personnel willfully violate any state or federally mandated regulatory requirements.

Completed by (Print):

Completed by (Signature):

Phone Number:

Date Completed:



## REFERENCES

Contractor shall provide a list of previous projects highlighting expertise in soil excavation and disposal.

<u>PROJECT NAME</u>	<u>PROJECT LOCATION</u>	<u>END CLIENT</u> <u>(Contact Name,</u> <u>Title, Company,</u> <u>Phone Number,</u> <u>Email Address)</u>	<u>CONTRACT VALUE</u>
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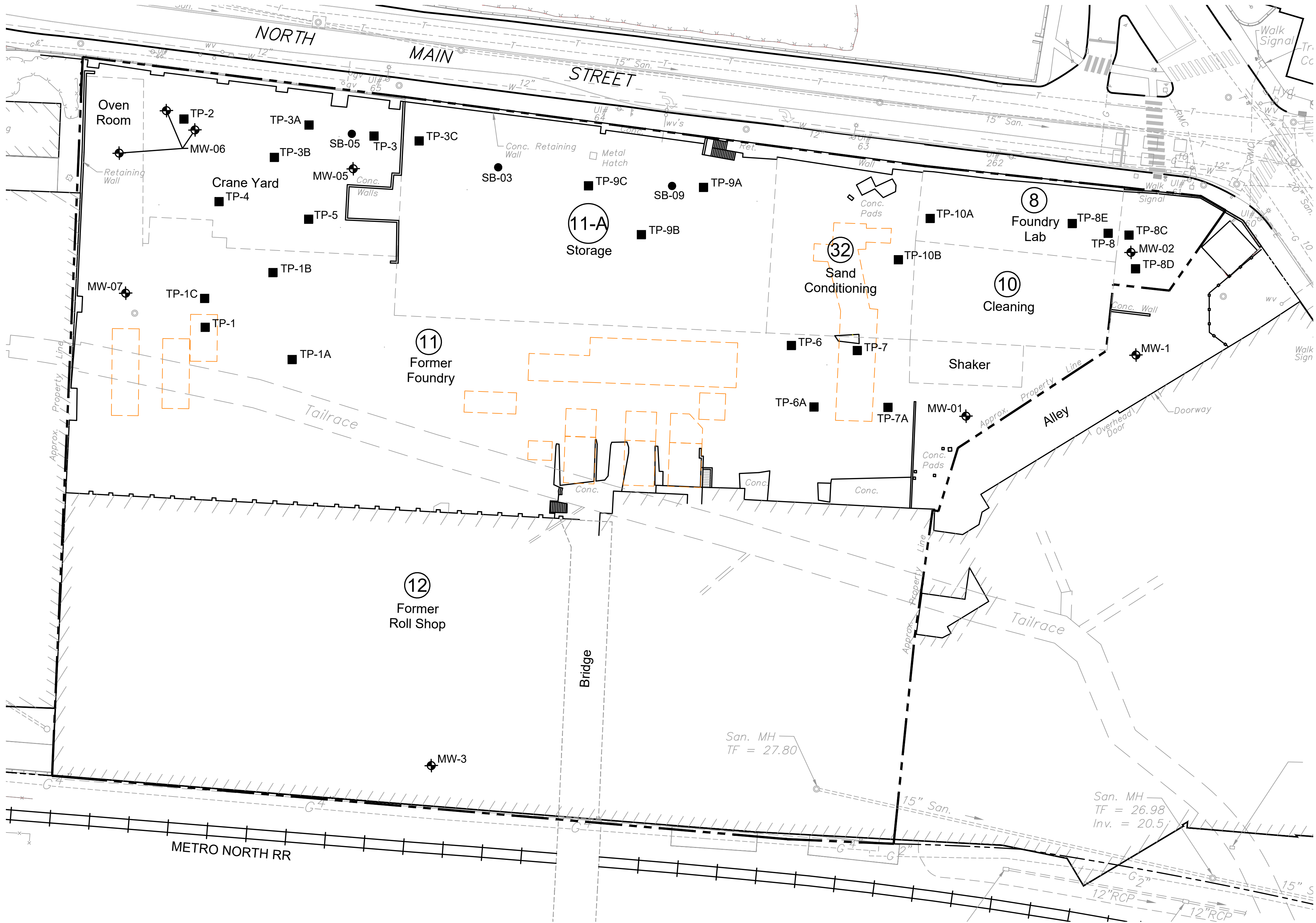
**ATTACHMENT 1**

**SOIL BORING LOCATION FIGURE  
AND SUMMARY OF SOIL ANALYTICAL DATA TABLES**



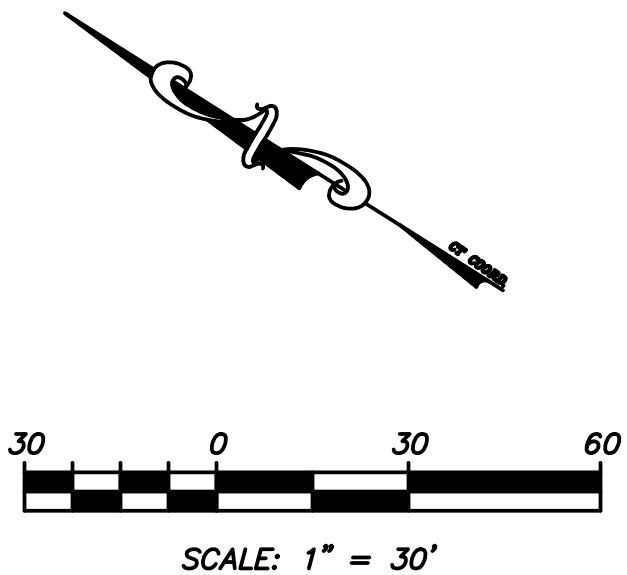
ANSI D 22' x 34' Approved: \_\_\_\_\_ Checked: \_\_\_\_\_ Designer: \_\_\_\_\_ Project Management Initials: \_\_\_\_\_

File name: C:\Users\BARRYK\OneDrive - AECOM\WORKING JOBS\ANSONIA, CT\PHASE II\SITE PLAN - PHASE II.DWG  
Last saved by: BARRYK(2025-01-23) Last Plotted: 2025-01-23



LEGEND

- PROPERTY LINE
- STORM SEWER
- SANITARY SEWER
- UNDERGROUND TELEPHONE
- UNDERGROUND ELECTRIC
- GAS MAIN
- WATER MAIN
- CATCH BASIN
- WATER VALVE
- WATER VALVE
- MANHOLE
- UTILITY POLE
- UTILITY POLE W/LIGHT
- DEMOLISHED BUILDINGS
- EXISTING BUILDING/FEATURES
- FORMER PITS (APPROX. LOCATION)
- MONITORING WELL
- SOIL BORING
- TEST PIT



PROJECT

CITY OF ANSONIA  
FORMER SHW

CLIENT

CITY OF ANSONIA  
35 North Main Street  
Ansonia, CT

CONSULTANT

AECOM  
500 Enterprise Drive, Suite 1A  
Rocky Hill, CT 06067  
www.aecom.com

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	2025-01-23	

KEY PLAN

PROJECT NUMBER

60733602

SHEET TITLE

SAMPLE LOCATIONS

SHEET NUMBER

FIGURE 1



Table 1. Test Pit Soil Analytical Results  
Former SHW  
35 North Main Street, Ansonia, CT

Sample Location					TP-1		TP-1A	TP-1B	TP-1C	TP-2		TP-3		TP-3A	TP-3B		TP-3C
Sample Depth (feet)					1' - 2'	5' - 6'	2'	2'	2'	1' - 2.5'	3' - 5'	2' - 3'	4' - 6'	5' - 6'	5' - 6'	7' - 8'	4'
Sample ID					TP-1 1`-2`	TP-1 5`-6`	TP-1A 2`	TP-1B 2`	TP-1C 2`	TP-2 1`-2.5`	TP-2 3`-5`	TP-3 2`-3`	TP-3 4`-6`	TP-3A 5`-6`	TP-3B 5`-6`	TP-3B 7`-8`	TP-3C 4`
Collection Date					4/15/2024	4/15/2024	7/22/2024	7/22/2024	7/22/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	7/22/2024	7/22/2024	7/22/2024	7/23/2024
Laboratory ID					CQ51827	CQ51826	CR24125	CR24126	CR24127	CQ51819	CQ51818	CQ51822	CQ51823	CR24122	CR24123	CR24124	CR25277
	DEC RES	DEC I/C	GB PMC	GWPC X 10													
Total Metals, mg/Kg																	
Antimony	27	8,200	NE	NR	< 3.6	< 3.4	NA	NA	NA	5.7	< 3.5	6.8	< 3.8	NA	NA	NA	NA
Arsenic	10	10	NE	NR	2.89	16.2	NA	NA	NA	10.7	10.7	18.9	13.6	NA	NA	NA	NA
Barium	4,700	140,000	NE	NR	24.9	47.5	NA	NA	NA	57.1	28.6	81.7	103	NA	NA	NA	NA
Beryllium	2	2	NE	NR	< 0.29	0.38	NA	NA	NA	0.43	0.29	0.35	0.69	NA	NA	NA	NA
Cadmium	34	1,000	NE	NR	< 0.36	< 0.34	NA	NA	NA	1.22	< 0.35	3.19	1.67	NA	NA	NA	NA
Chromium	NE	NE	NE	NR	16.5	14.6	NA	NA	NA	263	4.85	66.8	18.6	NA	NA	NA	NA
Copper	2,500	76,000	NE	NR	51.9	57.4	NA	NA	NA	986	15.5	474	74.6	NA	NA	NA	NA
Lead	400	1,000	NE	NR	23.8	21.3	NA	NA	NA	328	11.9	306	34.5	NA	NA	NA	NA
Mercury	20	610	NE	NR	< 0.03	0.05	NA	NA	NA	1.15	< 0.03	0.23	0.17	NA	NA	NA	NA
Nickel	1,400	7,500	NE	NR	35.1	14.8	NA	NA	NA	28.3	4.44	46	23.3	NA	NA	NA	NA
Silver	340	10,000	NE	NR	< 0.36	< 0.34	NA	NA	NA	0.71	< 0.35	< 0.39	< 0.38	NA	NA	NA	NA
Vanadium	470	14,000	NE	NR	13.4	22.6	NA	NA	NA	28.6	16.2	37.9	49.6	NA	NA	NA	NA
Zinc	20,000	610,000	NE	NR	31.9	49.2	NA	NA	NA	329	41.9	477	255	NA	NA	NA	NA
SPLP Metals, mg/L																	
SPLP Arsenic	NE	NE	0.5	NR	< 0.004	NA	NA	NA	NA	< 0.004	NA	NA	0.007	NA	NA	NA	NA
SPLP Barium	NE	NE	10	NR	0.013	NA	NA	NA	NA	< 0.010	NA	NA	< 0.010	NA	NA	NA	NA
SPLP Chromium	NE	NE	0.5	NR	< 0.010	NA	NA	NA	NA	0.013	NA	NA	< 0.010	NA	NA	NA	NA
SPLP Copper	NE	NE	13	NR	< 0.010	NA	NA	NA	NA	0.038	NA	NA	< 0.010	NA	NA	NA	NA
SPLP Lead	NE	NE	0.15	NR	< 0.010	NA	NA	NA	NA	0.024	NA	NA	< 0.010	NA	NA	NA	NA
SPLP Mercury	NE	NE	0.02	NR	< 0.0005	NA	NA	NA	NA	< 0.0005	NA	NA	< 0.0005	NA	NA	NA	NA
SPLP Zinc	NE	NE	50	NR	< 0.010	NA	NA	NA	NA	0.018	NA	NA	0.017	NA	NA	NA	NA
ETPH, mg/Kg																	
Ext. Petroleum H.C. (C9-C36)	500	2,500	2,500	NR	1,600	180	140	170	260	< 300	< 52	< 290	2,000	150	8,400	220	< 52
SPLP ETPH, mg/L																	
Ext. Petroleum H.C.	NE	NE	NE	5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.86	NA	NA
PCBs, ug/Kg																	
PCB-1260	1,000	10,000	NE	NR	NA	NA	NA	NA	NA	NA	NA	< 380	< 400	NA	NA	NA	NA
VOCs, ug/Kg																	
1,2,4-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 420	< 6.0	NA	NA	NA	< 8.4	< 9.9	< 12	< 380	NA	NA	NA	NA
1,3,5-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 420	< 6.0	NA	NA	NA	< 8.4	< 9.9	< 12	< 380	NA	NA	NA	NA
2-Isopropyltoluene	NE	NE	NE	NR	< 420	< 6.0	NA	NA	NA	< 8.4	< 9.9	< 12	< 380	NA	NA	NA	NA
Naphthalene	1,000,000	2,500,000	56,000	NR	< 420	< 6.0	NA	NA	NA	< 8.4	< 9.9	< 12	< 380	NA	NA	NA	NA
n-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 420	< 6.0	NA	NA	NA	< 8.4	< 9.9	< 12	< 380	NA	NA	NA	NA
n-Propylbenzene	500,000*	1,000,000*	10,000*	NR	< 420	< 6.0	NA	NA	NA	< 8.4	< 9.9	< 12	< 380	NA	NA	NA	NA
p-Isopropyltoluene	500,000*	1,000,000*	5,000*	NR	< 420	< 6.0	NA	NA	NA	< 8.4	< 9.9	< 12	< 380	NA	NA	NA	NA
sec-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 420	< 6.0	NA	NA	NA	< 8.4	< 9.9	< 12	< 380	NA	NA	NA	NA
SVOC, ug/Kg																	
2-Methylnaphthalene	270,000*	1,000,000*	5,600*	NR	290	< 250	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Acenaphthene	1,000,000*	2,500,000*	84,000*	NR	1,300	< 250	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Acenaphthylene	1,000,000	2,500,000	84,000	NR	< 250	< 250	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Anthracene	1,000,000	2,500,000	400,000	NR	1,200	< 250	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Benz(a)anthracene	1,000	7,800	1,000	NR	35,000	4,300	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Benzo(a)pyrene	1,000	1,000	1,000	NR	68,000	8,300	NA	NA	NA	NA	NA	NA	320	NA	NA	NA	NA
Benzo(b)fluoranthene	1,000	7,800	1,000	NR	80,000	12,000	NA	NA	NA	NA	NA	NA	380	NA	NA	NA	NA
Benzo(ghi)perylene	8,400*	78,000*	1,000*	NR	39,000	4500	NA	NA	NA	NA	NA	NA	310	NA	NA	NA	NA
Benzo(k)fluoranthene	8,400	78,000	1,000	NR	25,000	3800	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	44,000	410,000	11,000	NR	< 360	< 360	NA	NA	NA	NA	NA	NA	< 400	NA	NA	NA	NA



Table 1. Test Pit Soil Analytical Results  
Former SHW  
35 North Main Street, Ansonia, CT

Sample Location					TP-1		TP-1A	TP-1B	TP-1C	TP-2		TP-3		TP-3A	TP-3B		TP-3C
Sample Depth (feet)					1' - 2'	5' - 6'	2'	2'	2'	1' - 2.5'	3' - 5'	2' - 3'	4' - 6'	5' - 6'	5' - 6'	7' - 8'	4'
Sample ID					TP-1 1`-2`	TP-1 5`-6`	TP-1A 2`	TP-1B 2`	TP-1C 2`	TP-2 1`-2.5`	TP-2 3`-5`	TP-3 2`-3`	TP-3 4`-6`	TP-3A 5`-6`	TP-3B 5`-6`	TP-3B 7`-8`	TP-3C 4`
Collection Date					4/15/2024	4/15/2024	7/22/2024	7/22/2024	7/22/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	7/22/2024	7/22/2024	7/22/2024	7/23/2024
Laboratory ID					CQ51827	CQ51826	CR24125	CR24126	CR24127	CQ51819	CQ51818	CQ51822	CQ51823	CR24122	CR24123	CR24124	CR25277
	DEC RES	DEC I/C	GB PMC	GWPC X 10													
Carbazole	31,000*	290,000*	1,000*	NR	1100	< 360	NA	NA	NA	NA	NA	NA	< 400	NA	NA	NA	NA
Chrysene	84,000*	780,000*	1,000*	NR	43000	5700	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Dibenz(a,h)anthracene	1,000*	1,000*	1,000*	NR	9,100	1,100	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Dibenzofuran	68,000*	1,000,000*	1,400*	NR	< 250	< 250	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Fluoranthene	1,000,000	2,500,000	56,000	NR	33,000	3,600	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Fluorene	1,000,000	2,500,000	56,000	NR	350	< 250	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1,000*	7,800*	1,000*	NR	42,000	4,900	NA	NA	NA	NA	NA	NA	300	NA	NA	NA	NA
Naphthalene	1,000,000	2,500,000	56,000	NR	280	< 250	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Phenanthrene	1,000,000	2,500,000	40,000	NR	4,900	690	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
Pyrene	1,000,000	2500000	40,000	NR	36,000	3,900	NA	NA	NA	NA	NA	NA	< 280	NA	NA	NA	NA
PAHs, ug/Kg																	
2-Methylnaphthalene	270,000*	1,000,000*	5,600*	NR	NA	NA	< 250	< 260	< 250	< 280	< 240	< 260	NA	< 250	< 280	< 280	< 240
Acenaphthene	1,000,000*	2,500,000*	84,000*	NR	NA	NA	< 250	< 260	< 250	< 280	< 240	< 260	NA	< 250	< 280	< 280	< 240
Acenaphthylene	1,000,000	2,500,000	84,000	NR	NA	NA	< 250	< 260	< 250	1,300	< 240	< 260	NA	< 250	< 280	< 280	< 240
Anthracene	1,000,000	2,500,000	400,000	NR	NA	NA	< 250	< 260	< 250	660	< 240	< 260	NA	< 250	< 280	< 280	< 240
Benz(a)anthracene	1,000	7,800	1,000	NR	NA	NA	930	410	1,400	3,100	< 240	710	NA	< 250	< 280	< 280	< 240
Benzo(a)pyrene	1,000	1,000	1,000	NR	NA	NA	1,400	550	2,100	4,100	< 240	1,000	NA	420	< 280	< 280	< 240
Benzo(b)fluoranthene	1,000	7,800	1,000	NR	NA	NA	2,000	750	3,000	5,300	< 240	1,800	NA	580	< 280	< 280	< 240
Benzo(ghi)perylene	8,400*	78,000*	1,000*	NR	NA	NA	1,300	530	1,900	2700	< 240	780	NA	470	< 280	< 280	< 240
Benzo(k)fluoranthene	8,400	78,000	1,000	NR	NA	NA	620	< 260	970	1800	< 240	620	NA	< 250	< 280	< 280	< 240
Chrysene	84,000*	780,000*	1,000*	NR	NA	NA	1,100	510	1,700	3100	< 240	920	NA	260	< 280	< 280	< 240
Dibenz(a,h)anthracene	1,000*	1,000*	1,000*	NR	NA	NA	290	< 260	460	590	< 240	< 260	NA	< 250	< 280	< 280	< 240
Fluoranthene	1,000,000	2,500,000	56,000	NR	NA	NA	760	400	1,400	7,100	< 240	700	NA	270	< 280	< 280	< 240
Fluorene	1,000,000	2,500,000	56,000	NR	NA	NA	< 250	< 260	< 250	< 280	< 240	< 260	NA	< 250	760	< 280	< 240
Indeno(1,2,3-cd)pyrene	1,000*	7,800*	1,000*	NR	NA	NA	1,100	450	1,700	2,700	< 240	780	NA	440	< 280	< 280	< 240
Naphthalene	1,000,000	2,500,000	56,000	NR	NA	NA	< 250	< 260	< 250	310	< 240	< 260	NA	< 250	< 280	< 280	< 240
Phenanthrene	1,000,000	2,500,000	40,000	NR	NA	NA	550	< 260	740	2,300	< 240	330	NA	< 250	2,400	< 280	< 240
Pyrene	1,000,000	2,500,000	40,000	NR	NA	NA	800	370	1,200	6,500	< 240	650	NA	270	< 280	< 280	< 240
SPLP PAH, ug/L																	
Benz(a)anthracene	NE	NE	NE	0.6	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	NE	NE	2	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	NE	NE	0.8	0.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	NE	NE	5	0.54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NE	NE	NE	48	0.49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	NE	NE	NE	1	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NE	NE	NE	1	0.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	NE	NE	2,000	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	NE	NE	2,000	0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygenates & Dioxane, ug/Kg	None detected in soil samples																

Notes:

Table shows detected analytes only. For full results, please see lab reports

Bold = Detected above reporting limit

Orange highlighted cells exceed I/C DEC (RSR or APS)

Yellow highlighted cells exceed RDEC but not I/C DEC (RSR or APS)

Purple highlighted cells exceed GB PMC, but do not exceed either DEC.

RSR = Remediation Standard Regulations; RCSA 22a-133k-1 through 22a-133k-3

DEC = RSR Direct Exposure Criteria

RDEC = Residential DEC

I/C DEC = Industrial/Commercial DEC

APS = Additional Polluting Substances

\* Value from Technical Support Document: Recommended Numeric Criteria for Common  
Additional Polluting Substances and Certain Alternative Criteria (CT DEEP, 2018)

mg/kg = milligram per kilogram

ug/kg = microgram per kilogram

NE = Criteria Not Established

NA = Not analyzed for this parameter

NR = Not Referenced for this matrix/analysis



Table 1. Test Pit Soil Analytical Results  
Former SHW  
35 North Main Street, Ansonia, CT

Sample Location					TP-4		TP-5		TP-6		TP-6A	TP-7	TP-7A		TP-8A	
Sample Depth (feet)					1' - 2'	3' - 5'	1' - 2'	5' - 6'	1' - 2'	6' - 8'	6'	4' - 6'	2.5'		7' - 9'	
Sample ID					TP-4 1'-2'	TP-4 3'-5'	TP-5 1'-2'	TP-5 5'-6'	TP-6 1'-2'	TP-6 6'-8'	TP-6A 6'	TP-7 4'-6'	TP-7A 2.5'	TP-7A2 2.5'	TP-8A 7'-9'	TP-8D 7'-9'
Collection Date					4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	7/22/2024	4/15/2024	7/23/2024	7/23/2024	4/15/2024	4/15/2024
Laboratory ID					CQ51821	CQ51820	CQ51824	CQ51825	CQ51830	CQ51829	CR24132	CQ51828	CR25272	CR25273	CQ51831	CQ51833
	DEC RES	DEC I/C	GB PMC	GWPC X 10												
Total Metals, mg/Kg																
Antimony	27	8,200	NE	NR	< 3.7	< 3.3	< 3.5	< 3.8	< 3.8	< 4.4	NA	< 3.9	NA	NA	5.6	5.8
Arsenic	10	10	NE	NR	7.9	13	8.36	22.7	6.3	7.35	NA	5.6	NA	NA	7.87	8.33
Barium	4,700	140,000	NE	NR	43.2	28.7	81.7	87.3	31	92.4	NA	154	NA	NA	88.4	71.4
Beryllium	2	2	NE	NR	0.48	0.28	0.39	0.48	0.44	0.42	NA	0.34	NA	NA	0.44	0.42
Cadmium	34	1,000	NE	NR	1.68	0.36	2.22	1.41	< 0.38	< 0.44	NA	1.93	NA	NA	1.37	2.36
Chromium	NE	NE	NE	NR	14	3.69	22.1	13.4	15.5	11	NA	56.1	NA	NA	138	96.9
Copper	2,500	76,000	NE	NR	95.3	10.5	161	81	16.4	218	NA	138	NA	NA	430	601
Lead	400	1,000	NE	NR	47.4	5.74	308	73.6	20.9	43.8	NA	253	NA	NA	148	213
Mercury	20	610	NE	NR	0.07	< 0.03	0.14	0.1	< 0.03	0.23	NA	0.11	NA	NA	1.09	1.34
Nickel	1,400	7,500	NE	NR	15.1	3.78	35.4	9.67	11.7	19.9	NA	91.2	NA	NA	23.9	28.9
Silver	340	10,000	NE	NR	< 0.37	< 0.33	< 0.35	< 0.38	< 0.38	< 0.44	NA	< 0.39	NA	NA	0.36	< 0.34
Vanadium	470	14,000	NE	NR	27.7	18.4	28.4	40.8	23.7	25.4	NA	31.8	NA	NA	43.5	57.9
Zinc	20,000	610,000	NE	NR	169	38.7	200	278	27.9	63	NA	219	NA	NA	306	481
SPLP Metals, mg/L																
SPLP Arsenic	NE	NE	0.5	NR	< 0.004	NA	NA	0.006	< 0.004	NA	NA	< 0.004	NA	NA	< 0.004	NA
SPLP Barium	NE	NE	10	NR	< 0.010	NA	NA	< 0.010	< 0.010	NA	NA	0.015	NA	NA	0.029	NA
SPLP Chromium	NE	NE	0.5	NR	< 0.010	NA	NA	< 0.010	< 0.010	NA	NA	< 0.010	NA	NA	0.045	NA
SPLP Copper	NE	NE	13	NR	< 0.010	NA	NA	< 0.010	< 0.010	NA	NA	< 0.010	NA	NA	0.161	NA
SPLP Lead	NE	NE	0.15	NR	< 0.010	NA	NA	< 0.010	< 0.010	NA	NA	< 0.010	NA	NA	0.101	NA
SPLP Mercury	NE	NE	0.02	NR	< 0.0005	NA	NA	< 0.0005	< 0.0005	NA	NA	< 0.0005	NA	NA	0.0006	NA
SPLP Zinc	NE	NE	50	NR	< 0.010	NA	NA	0.015	< 0.010	NA	NA	0.011	NA	NA	0.104	NA
ETPH, mg/Kg																
Ext. Petroleum H.C. (C9-C36)	500	2,500	2,500	NR	< 58	< 52	< 270	< 58	80	< 62	< 55	360	NA	NA	< 280	640
SPLP ETPH, mg/L																
Ext. Petroleum H.C.	NE	NE	NE	5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs, ug/Kg																
PCB-1260	1,000	10,000	NE	NR	NA	NA	NA	NA	< 380	< 420	< 370	2,600	< 360	< 360	< 370	< 370
VOCs, ug/Kg																
1,2,4-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 7.4	< 7.4	< 5.3	< 9.9	NA	NA	NA	NA	NA	NA	< 5.6	< 6.5
1,3,5-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 7.4	< 7.4	< 5.3	< 9.9	NA	NA	NA	NA	NA	NA	< 5.6	< 6.5
2-Isopropyltoluene	NE	NE	NE	NR	< 7.4	< 7.4	< 5.3	< 9.9	NA	NA	NA	NA	NA	NA	< 5.6	< 6.5
Naphthalene	1,000,000	2,500,000	56,000	NR	< 7.4	< 7.4	< 5.3	< 9.9	NA	NA	NA	NA	NA	NA	< 5.6	< 6.5
n-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 7.4	< 7.4	< 5.3	< 9.9	NA	NA	NA	NA	NA	NA	< 5.6	< 6.5
n-Propylbenzene	500,000*	1,000,000*	10,000*	NR	< 7.4	< 7.4	< 5.3	< 9.9	NA	NA	NA	NA	NA	NA	< 5.6	< 6.5
p-Isopropyltoluene	500,000*	1,000,000*	5,000*	NR	< 7.4	< 7.4	< 5.3	< 9.9	NA	NA	NA	NA	NA	NA	< 5.6	< 6.5
sec-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 7.4	< 7.4	< 5.3	< 9.9	NA	NA	NA	NA	NA	NA	< 5.6	< 6.5
SVOC, ug/Kg																
2-Methylnaphthalene	270,000*	1,000,000*	5,600*	NR	NA	NA	NA	NA	NA	NA	NA	< 260	NA	NA	4,100	NA
Acenaphthene	1,000,000*	2,500,000*	84,000*	NR	NA	NA	NA	NA	NA	NA	NA	< 260	NA	NA	< 260	NA
Acenaphthylene	1,000,000	2,500,000	84,000	NR	NA	NA	NA	NA	NA	NA	NA	< 260	NA	NA	980	NA
Anthracene	1,000,000	2,500,000	400,000	NR	NA	NA	NA	NA	NA	NA	NA	< 260	NA	NA	570	NA
Benz(a)anthracene	1,000	7,800	1,000	NR	NA	NA	NA	NA	NA	NA	NA	900	NA	NA	550	NA
Benzo(a)pyrene	1,000	1,000	1,000	NR	NA	NA	NA	NA	NA	NA	NA	4,000	NA	NA	1,200	NA
Benzo(b)fluoranthene	1,000	7,800	1,000	NR	NA	NA	NA	NA	NA	NA	NA	4,300	NA	NA	1,400	NA
Benzo(ghi)perylene	8,400*	78,000*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	3,200	NA	NA	2500	NA
Benzo(k)fluoranthene	8,400	78,000	1,000	NR	NA	NA	NA	NA	NA	NA	NA	1,100	NA	NA	450	NA
Bis(2-ethylhexyl)phthalate	44,000	410,000	11,000	NR	NA	NA	NA	NA	NA	NA	NA	590	NA	NA	< 380	NA



Table 1. Test Pit Soil Analytical Results  
Former SHW  
35 North Main Street, Ansonia, CT

Sample Location					TP-4		TP-5		TP-6		TP-6A	TP-7	TP-7A		TP-8A	
Sample Depth (feet)					1' - 2'	3' - 5'	1' - 2'	5' - 6'	1' - 2'	6' - 8'	6'	4' - 6'	2.5'		7' - 9'	
Sample ID					TP-4 1'-2'	TP-4 3'-5'	TP-5 1'-2'	TP-5 5'-6'	TP-6 1'-2'	TP-6 6'-8'	TP-6A 6'	TP-7 4'-6'	TP-7A 2.5'	TP-7A2 2.5'	TP-8A 7'-9'	TP-8D 7'-9'
Collection Date					4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	7/22/2024	4/15/2024	7/23/2024	7/23/2024	4/15/2024	4/15/2024
Laboratory ID					CQ51821	CQ51820	CQ51824	CQ51825	CQ51830	CQ51829	CR24132	CQ51828	CR25272	CR25273	CQ51831	CQ51833
	DEC RES	DEC I/C	GB PMC	GWPC X 10												
Carbazole	31,000*	290,000*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	< 380	NA	NA	< 380	NA
Chrysene	84,000*	780,000*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	1100	NA	NA	520	NA
Dibenz(a,h)anthracene	1,000*	1,000*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	710	NA	NA	410	NA
Dibenzofuran	68,000*	1,000,000*	1,400*	NR	NA	NA	NA	NA	NA	NA	NA	< 260	NA	NA	390	NA
Fluoranthene	1,000,000	2,500,000	56,000	NR	NA	NA	NA	NA	NA	NA	NA	1,700	NA	NA	690	NA
Fluorene	1,000,000	2,500,000	56,000	NR	NA	NA	NA	NA	NA	NA	NA	< 260	NA	NA	< 260	NA
Indeno(1,2,3-cd)pyrene	1,000*	7,800*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	3,600	NA	NA	2,600	NA
Naphthalene	1,000,000	2,500,000	56,000	NR	NA	NA	NA	NA	NA	NA	NA	< 260	NA	NA	1,400	NA
Phenanthrene	1,000,000	2,500,000	40,000	NR	NA	NA	NA	NA	NA	NA	NA	710	NA	NA	790	NA
Pyrene	1,000,000	2500000	40,000	NR	NA	NA	NA	NA	NA	NA	NA	1,500	NA	NA	700	NA
PAHs, ug/Kg																
2-Methylnaphthalene	270,000*	1,000,000*	5,600*	NR	< 270	< 240	< 260	< 270	690	< 290	NA	NA	< 260	< 260	NA	770
Acenaphthene	1,000,000*	2,500,000*	84,000*	NR	< 270	< 240	< 260	< 270	< 260	< 290	NA	NA	< 260	< 260	NA	< 260
Acenaphthylene	1,000,000	2,500,000	84,000	NR	< 270	< 240	< 260	< 270	< 260	< 290	NA	NA	< 260	< 260	NA	270
Anthracene	1,000,000	2,500,000	400,000	NR	< 270	< 240	< 260	< 270	< 260	< 290	NA	NA	< 260	< 260	NA	< 260
Benz(a)anthracene	1,000	7,800	1,000	NR	< 270	< 240	< 260	< 270	960	< 290	NA	NA	< 260	< 260	NA	< 260
Benzo(a)pyrene	1,000	1,000	1,000	NR	< 270	< 240	270	< 270	1,300	< 290	NA	NA	< 260	< 260	NA	< 260
Benzo(b)fluoranthene	1,000	7,800	1,000	NR	< 270	< 240	470	< 270	3,000	350	NA	NA	< 260	< 260	NA	330
Benzo(ghi)perylene	8,400*	78,000*	1,000*	NR	< 270	< 240	380	< 270	1,200	< 290	NA	NA	< 260	< 260	NA	550
Benzo(k)fluoranthene	8,400	78,000	1,000	NR	< 270	< 240	< 260	< 270	770	< 290	NA	NA	< 260	< 260	NA	< 260
Chrysene	84,000*	780,000*	1,000*	NR	< 270	< 240	290	< 270	1,900	< 290	NA	NA	< 260	< 260	NA	< 260
Dibenz(a,h)anthracene	1,000*	1,000*	1,000*	NR	< 270	< 240	< 260	< 270	390	< 290	NA	NA	< 260	< 260	NA	< 260
Fluoranthene	1,000,000	2,500,000	56,000	NR	< 270	< 240	< 260	< 270	1,000	310	NA	NA	< 260	< 260	NA	< 260
Fluorene	1,000,000	2,500,000	56,000	NR	< 270	< 240	< 260	< 270	< 260	< 290	NA	NA	< 260	< 260	NA	< 260
Indeno(1,2,3-cd)pyrene	1,000*	7,800*	1,000*	NR	< 270	< 240	350	< 270	1,200	< 290	NA	NA	< 260	< 260	NA	470
Naphthalene	1,000,000	2,500,000	56,000	NR	< 270	< 240	< 260	< 270	570	< 290	NA	NA	< 260	< 260	NA	390
Phenanthrene	1,000,000	2,500,000	40,000	NR	< 270	< 240	270	< 270	900	< 290	NA	NA	< 260	< 260	NA	< 260
Pyrene	1,000,000	2,500,000	40,000	NR	< 270	< 240	< 260	< 270	810	< 290	NA	NA	< 260	< 260	NA	< 260
SPLP PAH, ug/L																
Benz(a)anthracene	NE	NE	NE	0.6	NA	NA	NA	NA	0.06	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	NE	NE	2	NA	NA	NA	NA	< 0.19	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	NE	NE	0.8	NA	NA	NA	NA	0.17	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	NE	NE	5	NA	NA	NA	NA	< 0.29	NA	NA	NA	NA	NA	NA	NA
Chrysene	NE	NE	NE	48	NA	NA	NA	NA	< 0.49	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	NE	NE	NE	1	NA	NA	NA	NA	< 0.10	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NE	NE	NE	1	NA	NA	NA	NA	0.12	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	NE	NE	2,000	NA	NA	NA	NA	0.11	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	NE	NE	2,000	NA	NA	NA	NA	< 0.49	NA	NA	NA	NA	NA	NA	NA
Oxygenates & Dioxane, ug/Kg	None detected in soil samples															

Notes:

Table shows detected analytes only. For full results, please see lab reports

Bold = Detected above reporting limit

Orange highlighted cells exceed I/C DEC (RSR or APS)

Yellow highlighted cells exceed RDEC but not I/C DEC (RSR or APS)

Purple highlighted cells exceed GB PMC, but do not exceed either DEC.

RSR = Remediation Standard Regulations; RCSA 22a-133k-1 through 22a-133k-3

DEC = RSR Direct Exposure Criteria

RDEC = Residential DEC

I/C DEC = Industrial/Commercial DEC

APS = Additional Polluting Substances

\* Value from Technical Support Document: Recommended Numeric Criteria for Common

Additional Polluting Substances and Certain Alternative Criteria (CT DEEP, 2018)

mg/kg = miligram per kilogram

ug/kg = microgram per kilogram

NE = Criteria Not Established

NA = Not analyzed for this parameter

NR = Not Referenced for this matrix/analysis



Table 1. Test Pit Soil Analytical Results  
Former SHW  
35 North Main Street, Ansonia, CT

Sample Location					TP-8B	TP-8C		TP-8D	TP-8E	TP-9A	TP-9B	TP-9C	TP-10A	TP-10B
Sample Depth (feet)					7' - 9'	7'		7'	9'	3.5' - 4'	3.5'	3.5'	5'	4'
Sample ID					TP-8B 7'-9'	TP-8C 7'	TP-8C2 7'	TP-8D 7'	TP-8E 9'	TP-9A 3.5'-4'	TP-9B 3.5'	TP-9C 3.5'	TP-10A 5'	TP-10B 4'
Collection Date					4/15/2024	7/22/2024	7/22/2024	7/22/2024	7/22/2024	7/23/2024	7/23/2024	7/23/2024	7/23/2024	7/23/2024
Laboratory ID					CQ51832	CR24128	CR24129	CR24130	CR24131	CR25274	CR25275	CR25276	CR25278	CR25271
	DEC RES	DEC I/C	GB PMC	GWPC X 10										
Total Metals, mg/Kg														
Antimony	27	8,200	NE	NR	< 3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	10	NE	NR	9.34	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	4,700	140,000	NE	NR	42.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	2	2	NE	NR	0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	34	1,000	NE	NR	< 0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NE	NE	NE	NR	7.06	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	2,500	76,000	NE	NR	16.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	400	1,000	NE	NR	5.81	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	20	610	NE	NR	< 0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	1,400	7,500	NE	NR	9.39	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	340	10,000	NE	NR	< 0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	470	14,000	NE	NR	21.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	20,000	610,000	NE	NR	68.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Metals, mg/L														
SPLP Arsenic	NE	NE	0.5	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Barium	NE	NE	10	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Chromium	NE	NE	0.5	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Copper	NE	NE	13	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Lead	NE	NE	0.15	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Mercury	NE	NE	0.02	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Zinc	NE	NE	50	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH, mg/Kg														
Ext. Petroleum H.C. (C9-C36)	500	2,500	2,500	NR	70	3,200	2,900	< 54	79	NA	NA	NA	< 51	< 53
SPLP ETPH, mg/L														
Ext. Petroleum H.C.	NE	NE	NE	5000	NA	1.2	NA	NA	NA	NA	NA	NA	NA	NA
PCBs, ug/Kg														
PCB-1260	1,000	10,000	NE	NR	< 350	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOCs, ug/Kg														
1,2,4-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 7.3	760	1,300	< 3.5	< 5.6	NA	NA	NA	< 5.6	NA
1,3,5-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 7.3	360	650	< 3.5	< 5.6	NA	NA	NA	< 5.6	NA
2-Isopropyltoluene	NE	NE	NE	NR	< 7.3	140	< 610	< 3.5	< 5.6	NA	NA	NA	< 5.6	NA
Naphthalene	1,000,000	2,500,000	56,000	NR	< 7.3	680	1,000	< 3.5	< 5.6	NA	NA	NA	< 5.6	NA
n-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 7.3	460	640	< 3.5	< 5.6	NA	NA	NA	< 5.6	NA
n-Propylbenzene	500,000*	1,000,000*	10,000*	NR	< 7.3	190	310	< 3.5	< 5.6	NA	NA	NA	< 5.6	NA
p-Isopropyltoluene	500,000*	1,000,000*	5,000*	NR	< 7.3	310	550	< 3.5	< 5.6	NA	NA	NA	< 5.6	NA
sec-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 7.3	540	790	< 3.5	< 5.6	NA	NA	NA	< 5.6	NA
SVOC, ug/Kg														
2-Methylnaphthalene	270,000*	1,000,000*	5,600*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1,000,000*	2,500,000*	84,000*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	1,000,000	2,500,000	84,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1,000,000	2,500,000	400,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benz(a)anthracene	1,000	7,800	1,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1,000	1,000	1,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1,000	7,800	1,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(ghi)perylene	8,400*	78,000*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	8,400	78,000	1,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	44,000	410,000	11,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA



Table 1. Test Pit Soil Analytical Results  
Former SHW  
35 North Main Street, Ansonia, CT

Sample Location					TP-8B	TP-8C		TP-8D	TP-8E	TP-9A	TP-9B	TP-9C	TP-10A	TP-10B
Sample Depth (feet)					7' - 9'	7'		7'	9'	3.5' - 4'	3.5'	3.5'	5'	4'
Sample ID					TP-8B 7`-9`	TP-8C 7`	TP-8C2 7`	TP-8D 7`	TP-8E 9`	TP-9A 3.5`-4`	TP-9B 3.5`	TP-9C 3.5`	TP-10A 5`	TP-10B 4`
Collection Date					4/15/2024	7/22/2024	7/22/2024	7/22/2024	7/22/2024	7/23/2024	7/23/2024	7/23/2024	7/23/2024	7/23/2024
Laboratory ID					CQ51832	CR24128	CR24129	CR24130	CR24131	CR25274	CR25275	CR25276	CR25278	CR25271
	DEC RES	DEC I/C	GB PMC	GWPC X 10										
Carbazole	31,000*	290,000*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	84,000*	780,000*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	1,000*	1,000*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	68,000*	1,000,000*	1,400*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	1,000,000	2,500,000	56,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1,000,000	2,500,000	56,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1,000*	7,800*	1,000*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	1,000,000	2,500,000	56,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	1,000,000	2,500,000	40,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1,000,000	2500000	40,000	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs, ug/Kg														
2-Methylnaphthalene	270,000*	1,000,000*	5,600*	NR	< 240	1,200	1,500	< 250	< 260	< 240	< 250	< 240	< 240	< 260
Acenaphthene	1,000,000*	2,500,000*	84,000*	NR	< 240	410	450	< 250	< 260	< 240	< 250	< 240	< 240	< 260
Acenaphthylene	1,000,000	2,500,000	84,000	NR	< 240	< 260	< 260	< 250	< 260	< 240	< 250	< 240	< 240	< 260
Anthracene	1,000,000	2,500,000	400,000	NR	< 240	290	< 260	< 250	< 260	< 240	< 250	< 240	< 240	< 260
Benz(a)anthracene	1,000	7,800	1,000	NR	< 240	1,300	1,300	< 250	590	< 240	< 250	< 240	< 240	< 260
Benzo(a)pyrene	1,000	1,000	1,000	NR	< 240	1,400	1,500	< 250	670	< 240	< 250	< 240	< 240	< 260
Benzo(b)fluoranthene	1,000	7,800	1,000	NR	< 240	2,400	2,900	< 250	840	< 240	< 250	< 240	< 240	< 260
Benzo(ghi)perylene	8,400*	78,000*	1,000*	NR	< 240	1,300	1,400	< 250	460	< 240	< 250	< 240	< 240	< 260
Benzo(k)fluoranthene	8,400	78,000	1,000	NR	< 240	710	640	< 250	300	< 240	< 250	< 240	< 240	< 260
Chrysene	84,000*	780,000*	1,000*	NR	< 240	1,500	1,500	< 250	520	< 240	< 250	< 240	< 240	< 260
Dibenz(a,h)anthracene	1,000*	1,000*	1,000*	NR	< 240	320	380	< 250	< 260	< 240	< 250	< 240	< 240	< 260
Fluoranthene	1,000,000	2,500,000	56,000	NR	< 240	1,500	1,300	< 250	1,200	< 240	< 250	< 240	< 240	< 260
Fluorene	1,000,000	2,500,000	56,000	NR	< 240	800	880	< 250	< 260	< 240	< 250	< 240	< 240	< 260
Indeno(1,2,3-cd)pyrene	1,000*	7,800*	1,000*	NR	< 240	1,200	1,400	< 250	470	< 240	< 250	< 240	< 240	< 260
Naphthalene	1,000,000	2,500,000	56,000	NR	< 240	510	630	< 250	< 260	< 240	< 250	< 240	< 240	< 260
Phenanthrene	1,000,000	2,500,000	40,000	NR	< 240	1,900	1,900	< 250	430	< 240	< 250	< 240	< 240	< 260
Pyrene	1,000,000	2,500,000	40,000	NR	< 240	1,500	1,400	< 250	1,000	< 240	< 250	< 240	< 240	< 260
SPLP PAH, ug/L														
Benz(a)anthracene	NE	NE	NE	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	NE	NE	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	NE	NE	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	NE	NE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NE	NE	NE	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	NE	NE	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NE	NE	NE	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	NE	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NE	NE	NE	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygenates & Dioxane, ug/Kg	None detected in soil samples													

Notes:

Table shows detected analytes only. For full results, please see lab reports

Bold = Detected above reporting limit

Orange highlighted cells exceed I/C DEC (RSR or APS)

Yellow highlighted cells exceed RDEC but not I/C DEC (RSR or APS)

Purple highlighted cells exceed GB PMC, but do not exceed either DEC.

RSR = Remediation Standard Regulations; RCSA 22a-133k-1 through 22a-133k-3

DEC = RSR Direct Exposure Criteria

RDEC = Residential DEC

I/C DEC = Industrial/Commercial DEC

APS = Additional Polluting Substances

\* Value from Technical Support Document: Recommended Numeric Criteria for Common

Additional Polluting Substances and Certain Alternative Criteria (CT DEEP, 2018)

mg/kg = miligram per kilogram

ug/kg = microgram per kilogram

NE = Criteria Not Established

NA = Not analyzed for this parameter

NR = Not Referenced for this matrix/analysis



Table 2. Phase II Soil Boring Analytical Results  
Former SHW  
35 North Main Street  
Ansonia, Connecticut

Sample Location					MW-01			MW-02		MW-05				MW-06	
Sample Depth, feet					2' - 2.5'	21' - 22'	28' - 29'	5' - 6.5'	20' - 22'	3.0' - 3.5'	14' - 15'	24' - 25'		3.0' - 3.5'	16' - 16.5'
Sample ID					MW-01 2'-2.5'	MW-01 21-22	MW-01 28-29	MW-02 5-6.5	MW-02 20-22	MW-05 3.0'-3.5'	MW-05 14-15	MW-05 24-25	MW-05D 24-25	MW-06 3.0'-3.5'	MW-06 16-16.5
Collection Date					4/30/2024	5/3/2024	5/3/2024	5/6/2024	5/7/2024	4/30/2024	5/3/2024	5/3/2024	5/3/2024	4/30/2024	5/2/2024
Laboratory ID	DEC RES	DEC I/C	GB PMC	GWPC x 10	CQ63724	CQ66755	CQ66756	CQ68968	CQ68969	CQ63727	CQ66752	CQ66753	CQ66754	CQ63728	CQ66750
Total Metals (mg/kg)															
Antimony	27	8,200	NE	NR	< 3.8	7.4	< 3.6	5.9	< 3.5	< 3.2	< 3.7	< 3.6	< 3.9	< 3.6	< 3.7
Arsenic	10	10	NE	NR	7.27	13.5	4.56	5.57	17.2	5.09	14.5	13.6	13.9	13.9	8.31
Barium	4,700	140,000	NE	NR	66.1	34.3	19.4	92.2	95.3	55.8	121	35	51.9	49.5	41.7
Beryllium	2	2	NE	NR	0.37	< 0.28	< 0.29	0.41	0.5	0.41	0.62	0.29	0.42	< 0.28	0.3
Cadmium	34	1,000	NE	NR	0.5	3.02	< 0.36	0.76	0.5	0.65	0.39	< 0.36	< 0.39	1.01	< 0.37
Chromium	NE	NE	NE	NR	19.7	52	6.52	17.8	8.28	17.7	9.63	6.25	6.16	10.2	5.81
Copper	2,500	76,000	NE	NR	105	283	8.7	216	7.7	218	12.2	18.7	10.1	20.9	6.5
Lead	400	1,000	NE	NR	53.5	34.6	3.34	200	8.5	48.4	6.6	4.12	4.54	6.85	3.47
Mercury	20	610	NE	NR	0.07	0.03	< 0.03	0.15	< 0.03	0.1	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Nickel	1,400	7,500	NE	NR	19.8	45.1	9.25	24.7	7.01	15.8	6.91	5.87	5.51	8.68	5.23
Selenium	340	10,000	NE	NR	< 1.5	< 1.4	< 1.4	< 1.6	< 1.4	< 1.3	< 1.5	< 1.5	< 1.6	< 1.4	< 1.5
Vanadium	470	14,000	NE	NR	32.6	56.2	16.1	61	65.1	40	52	22	28.8	20	23.2
Zinc	20,000	610,000	NE	NR	56.6	228	55.1	128	82.9	124	62.3	29	37.6	145	35.9
Metals, SPLP (mg/L)															
SPLP Arsenic	NE	NE	0.5	NR	NA	NA	NA	NA	0.008	NA	0.014	NA	NA	NA	NA
SPLP Barium	NE	NE	10	NR	NA	NA	NA	NA	0.023	NA	0.026	NA	NA	NA	NA
SPLP Chromium	NE	NE	0.5	NR	NA	NA	NA	NA	< 0.010	NA	< 0.010	NA	NA	NA	NA
SPLP Copper	NE	NE	13	NR	NA	NA	NA	NA	< 0.010	NA	< 0.010	NA	NA	NA	NA
SPLP Lead	NE	NE	0.15	NR	NA	NA	NA	NA	< 0.010	NA	< 0.010	NA	NA	NA	NA
SPLP Vanadium	NE	NE	0.5	NR	NA	NA	NA	NA	< 0.010	NA	0.011	NA	NA	NA	NA
SPLP Zinc	NE	NE	50	NR	NA	NA	NA	NA	0.011	NA	< 0.010	NA	NA	NA	NA
ETPH (mg/kg)															
Ext. Petroleum H.C. (C9-C36)	500	2,500	2,500	NR	< 54	< 55	< 52	2,600	3,300	< 260	< 54	< 56	< 57	< 52	< 56
PCBs (ug/kg)					No PCBs detected in soil boring samples										
VOCs (ug/kg)															
1,2,4-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 7.3	< 9.0	< 6.4	< 7.1	< 330	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
1,3,5-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 7.3	< 9.0	< 6.4	< 7.1	< 330	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
2-Isopropyltoluene	NE	NE	NE	NR	< 7.3	< 9.0	< 6.4	< 7.1	450	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
Isopropylbenzene	500,000*	1,000,000*	5,000*	NR	< 7.3	< 9.0	< 6.4	< 7.1	680	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
Naphthalene	1,000,000	2,500,000	56,000	NR	< 7.3	< 9.0	< 6.4	< 7.1	3,200	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
n-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 7.3	< 9.0	< 6.4	< 7.1	2,200	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
n-Propylbenzene	500,000*	1,000,000*	10,000*	NR	< 7.3	< 9.0	< 6.4	< 7.1	1,300	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
p-Isopropyltoluene	500,000*	1,000,000*	5,000*	NR	< 7.3	< 9.0	< 6.4	< 7.1	< 330	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
sec-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 7.3	< 9.0	< 6.4	< 7.1	2,500	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
tert-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 7.3	< 9.0	< 6.4	< 7.1	< 330	< 8.6	< 7.3	< 6.8	< 8.3	< 7.7	< 6.1
PAHs (ug/kg)															
2-Methylnaphthalene	270,000*	1,000,000*	5,600*	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Acenaphthene	1,000,000*	2,500,000*	84,000*	NR	< 250	< 260	< 240	< 270	530	< 240	< 260	< 260	< 260	< 240	< 260
Acenaphthylene	1,000,000	2,500,000	84,000	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Anthracene	1,000,000	2,500,000	400,000	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Benz(a)anthracene	1,000	7,800	1,000	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Benzo(a)pyrene	1,000	1,000	1,000	NR	< 250	< 260	< 240	< 270	< 260	250	< 260	< 260	< 260	< 240	< 260
Benzo(b)fluoranthene	1,000	7,800	1,000	NR	< 250	< 260	< 240	< 270	< 260	330	< 260	< 260	< 260	< 240	< 260
Benzo(ghi)perylene	8,400*	78,000*	1,000*	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Benzo(k)fluoranthene	8,400	78,000	1,000	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Chrysene	84,000*	780,000*	1,000*	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Dibenz(a,h)anthracene	1,000*	1,000*	1,000*	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Fluoranthene	1,000,000	2,500,000	56,000	NR	< 250	< 260	< 240	280	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Fluorene	1,000,000	2,500,000	56,000	NR	< 250	< 260	< 240	< 270	1,100	< 240	< 260	< 260	< 260	< 240	< 260
Indeno(1,2,3-cd)pyrene	1,000*	7,800*	1,000*	NR	< 250	< 260	< 240	< 270	< 260	< 240	< 260	< 260	< 260	< 240	< 260
Naphthalene	1,000,000	2,500,000	56,000	NR	< 250	< 260	< 240	< 270	450	< 240	< 260	< 260	< 260	< 240	< 260
Phenanthrene	1,000,000	2,500,000	40,000	NR	< 250	< 260	< 240	< 270	2,800	< 240	< 260	< 260	< 260	< 240	< 260
Pyrene	1,000,000	2,500,000	40,000	NR	< 250	< 260	< 240	< 270	390	< 240	< 260	< 260	< 260	< 240	< 260



Table 2. Phase II Soil Boring Analytical Results  
Former SHW  
35 North Main Street  
Ansonia, Connecticut

Sample Location					MW-01			MW-02		MW-05				MW-06	
Sample Depth, feet					2' - 2.5'	21' - 22'	28' - 29'	5' - 6.5'	20' - 22'	3.0' - 3.5'	14' - 15'	24' - 25'		3.0' - 3.5'	16' - 16.5'
Sample ID					MW-01 2'-2.5'	MW-01 21-22	MW-01 28-29	MW-02 5-6.5	MW-02 20-22	MW-05 3.0'-3.5'	MW-05 14-15	MW-05 24-25	MW-05D 24-25	MW-06 3.0'-3.5'	MW-06 16-16.5
Collection Date					4/30/2024	5/3/2024	5/3/2024	5/6/2024	5/7/2024	4/30/2024	5/3/2024	5/3/2024	5/3/2024	4/30/2024	5/2/2024
Laboratory ID	DEC RES	DEC I/C	GB PMC	GWPC x 10	CQ63724	CQ66755	CQ66756	CQ68968	CQ68969	CQ63727	CQ66752	CQ66753	CQ66754	CQ63728	CQ66750
SPLP PAHs (ug/L)															
2-Methylnaphthalene	NE	NE	NE	50*	NA	NA	NA	NA	0.58	NA	NA	NA	NA	NA	NA
Acenaphthene	NE	NE	NE	4,200*	NA	NA	NA	NA	2.4	NA	NA	NA	NA	NA	NA
Acenaphthylene	NE	NE	NE	4,200	NA	NA	NA	NA	0.46	NA	NA	NA	NA	NA	NA
Anthracene	NE	NE	NE	20,000	NA	NA	NA	NA	< 0.49	NA	NA	NA	NA	NA	NA
Benz(a)anthracene	NE	NE	NE	0.60	NA	NA	NA	NA	< 0.05	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NE	NE	NE	2.00	NA	NA	NA	NA	< 0.19	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NE	NE	NE	0.80	NA	NA	NA	NA	< 0.07	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NE	NE	NE	5.0	NA	NA	NA	NA	< 0.29	NA	NA	NA	NA	NA	NA
Chrysene	NE	NE	NE	48.0	NA	NA	NA	NA	< 0.49	NA	NA	NA	NA	NA	NA
Fluoranthene	NE	NE	NE	2,800	NA	NA	NA	NA	< 0.49	NA	NA	NA	NA	NA	NA
Fluorene	NE	NE	NE	2,800	NA	NA	NA	NA	3.8	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NE	NE	NE	1.00	NA	NA	NA	NA	< 0.10	NA	NA	NA	NA	NA	NA
Naphthalene	NE	NE	NE	2,800	NA	NA	NA	NA	11	NA	NA	NA	NA	NA	NA
Phenanthrene	NE	NE	NE	2,000	NA	NA	NA	NA	4	NA	NA	NA	NA	NA	NA
Pyrene	NE	NE	NE	2,000	NA	NA	NA	NA	< 0.49	NA	NA	NA	NA	NA	NA
Oxygenates & Dioxane (ug/kg)	None detected in soil boring samples														

Notes:  
Only detected analytes are shown. For complete results, please see the lab reports.  
Bold = Detected above reporting limit  
Orange highlighted cells exceed I/C DEC (RSR or APS)  
Yellow highlighted cells exceed RDEC but not I/C DEC (RSR or APS)  
Purple highlighted cells exceed GB PMC, but do not exceed either DEC.  
RSR = Remediation Standard Regulations; RCSA 22a-133k-1 through 22a-133k-3  
DEC = RSR Direct Exposure Criteria  
RDEC = Residential DEC  
I/C DEC = Industrial/Commercial DEC  
APS = Additional Polluting Substances

\* Value from Technical Support Document: Recommended Numeric Criteria for Common  
Additional Polluting Substances and Certain Alternative Criteria (CT DEEP, 2018)  
mg/kg = miligram per kilogram  
ug/kg = microgram per kilogram  
NE = Criteria Not Established  
NA = Not analyzed for this parameter  
NR = Not Referenced for this matrix/analysis



Table 2. Phase II Soil Boring Analytical Results  
Former SHW  
35 North Main Street  
Ansonia, Connecticut

Sample Location					MW-06	MW-07	SB-03	SB-05					SB-09	
Sample Depth, feet					26' - 26.5'	20' - 22'	3' - 3.5'	3.0' - 3.5'	5' - 6.5'		7' - 9'	20' - 25'	2.5' - 3.0'	10' - 11'
Sample ID					MW-06 26-26.5	MW-07 20-22	SB-03 3'-3.5'	SB-05 3.0'-3.5'	SB-05 5-6.5	SB-05D 5-6.5	SB-05 7-9	SB-05 20-25	SB-09 2.5'-3.0'	SB-09 10-11
Collection Date					5/3/2024	5/2/2024	4/30/2024	4/30/2024	5/7/2024	5/7/2024	5/7/2024	5/7/2024	4/30/2024	5/7/2024
Laboratory ID	DEC RES	DEC I/C	GB PMC	GWPC x 10	CQ66751	CQ66749	CQ63725	CQ63729	CQ68971	CQ68972	CQ68973	CQ68974	CQ63726	CQ68970
Total Metals (mg/kg)														
Antimony	27	8,200	NE	NR	< 3.4	< 3.6	< 3.2	6.6	< 3.8	< 4.3	< 3.3	< 4.4	< 3.8	< 3.5
Arsenic	10	10	NE	NR	25.2	4.69	29.4	11.2	31.8	17	14.3	15.1	11.4	6.44
Barium	4,700	140,000	NE	NR	25	31.4	36	87.4	87	124	45.9	70	68.1	40.9
Beryllium	2	2	NE	NR	0.27	0.3	0.42	0.3	0.54	0.92	0.46	0.43	0.45	0.39
Cadmium	34	1,000	NE	NR	< 0.34	0.36	0.89	2.52	0.72	< 0.43	< 0.33	< 0.44	2.51	< 0.35
Chromium	NE	NE	NE	NR	5.5	24.4	40.1	116	18.4	19.2	8.48	10	96.6	11.3
Copper	2,500	76,000	NE	NR	9.4	128	208	1,030	112	21.3	11.1	12.1	567	44.2
Lead	400	1,000	NE	NR	5.97	35.1	51.3	340	40.6	11.6	7.97	5.57	126	17.5
Mercury	20	610	NE	NR	< 0.03	0.04	0.19	0.5	0.06	< 0.04	< 0.05	< 0.03	0.58	0.1
Nickel	1,400	7,500	NE	NR	6.06	14.8	14.9	39.8	16.4	13.9	9.27	7.76	45.7	8.39
Selenium	340	10,000	NE	NR	< 1.3	< 1.5	< 1.3	< 1.3	1.9	2	< 1.3	< 1.8	< 1.5	< 1.4
Vanadium	470	14,000	NE	NR	16.4	169	21.9	25	41	62	25.7	36.7	26.5	23.5
Zinc	20,000	610,000	NE	NR	42.3	118	176	567	129	101	47.7	51.3	618	79.6
Metals, SPLP (mg/L)														
SPLP Arsenic	NE	NE	0.5	NR	0.016	NA	0.004	< 0.004	0.012	NA	NA	NA	NA	NA
SPLP Barium	NE	NE	10	NR	0.024	NA	< 0.010	0.011	< 0.010	NA	NA	NA	NA	NA
SPLP Chromium	NE	NE	0.5	NR	< 0.010	NA	< 0.010	0.026	< 0.010	NA	NA	NA	NA	NA
SPLP Copper	NE	NE	13	NR	< 0.010	NA	0.037	0.127	0.018	NA	NA	NA	NA	NA
SPLP Lead	NE	NE	0.15	NR	< 0.010	NA	0.011	0.047	< 0.010	NA	NA	NA	NA	NA
SPLP Vanadium	NE	NE	0.5	NR	< 0.010	NA	< 0.010	< 0.010	0.015	NA	NA	NA	NA	NA
SPLP Zinc	NE	NE	50	NR	0.026	NA	0.025	0.046	0.014	NA	NA	NA	NA	NA
ETPH (mg/kg)														
Ext. Petroleum H.C. (C9-C36)	500	2,500	2,500	NR	< 51	590	64	700	3,200	1,200	< 50	< 65	< 200	85
PCBs (ug/kg)														
No PCBs detected in soil boring samples														
VOCs (ug/kg)														
1,2,4-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 4.7	NA	< 5.4	< 6.0	9,000	620	< 6.1	< 6.3	< 10	< 7.3
1,3,5-Trimethylbenzene	500,000*	1,000,000*	28,000*	NR	< 4.7	NA	< 5.4	< 6.0	2,300	< 570	< 6.1	< 6.3	< 10	< 7.3
2-Isopropyltoluene	NE	NE	NE	NR	< 4.7	NA	< 5.4	< 6.0	1,000	< 570	< 6.1	< 6.3	< 10	< 7.3
Isopropylbenzene	500,000*	1,000,000*	5,000*	NR	< 4.7	NA	< 5.4	< 6.0	500	< 570	< 6.1	< 6.3	< 10	< 7.3
Naphthalene	1,000,000	2,500,000	56,000	NR	< 4.7	NA	< 5.4	< 6.0	970	< 570	< 6.1	< 6.3	< 10	< 7.3
n-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 4.7	NA	< 5.4	< 6.0	1,200	< 570	< 6.1	< 6.3	< 10	< 7.3
n-Propylbenzene	500,000*	1,000,000*	10,000*	NR	< 4.7	NA	< 5.4	< 6.0	1,300	< 570	< 6.1	< 6.3	< 10	< 7.3
p-Isopropyltoluene	500,000*	1,000,000*	5,000*	NR	< 4.7	NA	< 5.4	< 6.0	3,400	370	< 6.1	< 6.3	< 10	< 7.3
sec-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 4.7	NA	< 5.4	< 6.0	3,500	400	< 6.1	< 6.3	< 10	< 7.3
tert-Butylbenzene	500,000*	1,000,000*	70,000*	NR	< 4.7	NA	< 5.4	< 6.0	230	< 570	< 6.1	< 6.3	< 10	< 7.3
PAHs (ug/kg)														
2-Methylnaphthalene	270,000*	1,000,000*	5,600*	NR	< 240	35,000	< 250	310	< 270	< 320	< 230	< 300	< 260	< 250
Acenaphthene	1,000,000*	2,500,000*	84,000*	NR	< 240	73,000	< 250	< 260	350	< 320	< 230	< 300	< 260	< 250
Acenaphthylene	1,000,000	2,500,000	84,000	NR	< 240	< 2600	290	2,100	< 270	< 320	< 230	< 300	800	< 250
Anthracene	1,000,000	2,500,000	400,000	NR	< 240	120,000	< 250	960	< 270	< 320	< 230	< 300	710	< 250
Benz(a)anthracene	1,000	7,800	1,000	NR	< 240	170,000	< 250	2,100	< 270	< 320	< 230	< 300	2,500	< 250
Benzo(a)pyrene	1,000	1,000	1,000	NR	< 240	140,000	300	3,100	370	< 320	< 230	< 300	2,700	300
Benzo(b)fluoranthene	1,000	7,800	1,000	NR	< 240	160,000	530	4,100	600	< 320	< 230	< 300	3,400	340
Benzo(ghi)perylene	8,400*	78,000*	1,000*	NR	< 240	73,000	340	2,900	450	< 320	< 230	< 300	1,600	< 250
Benzo(k)fluoranthene	8,400	78,000	1,000	NR	< 240	50,000	< 250	1,300	< 270	< 320	< 230	< 300	1,200	< 250
Chrysene	84,000*	780,000*	1,000*	NR	< 240	140,000	310	2,000	320	< 320	< 230	< 300	2,400	< 250
Dibenz(a,h)anthracene	1,000*	1,000*	1,000*	NR	< 240	20,000	< 250	520	< 270	< 320	< 230	< 300	340	< 250
Fluoranthene	1,000,000	2,500,000	56,000	NR	< 240	360,000	260	3,800	450	< 320	< 230	< 300	4,600	320
Fluorene	1,000,000	2,500,000	56,000	NR	< 240	57,000	< 250	< 260	1,100	< 320	< 230	< 300	< 260	< 250
Indeno(1,2,3-cd)pyrene	1,000*	7,800*	1,000*	NR	< 240	67,000	330	2,800	440	< 320	< 230	< 300	1,800	< 250
Naphthalene	1,000,000	2,500,000	56,000	NR	< 240	58,000	< 250	340	< 270	< 320	< 230	< 300	< 260	< 250
Phenanthrene	1,000,000	2,500,000	40,000	NR	< 240	510,000	< 250	1,600	2,200	430	< 230	< 300	2,800	< 250
Pyrene	1,000,000	2,500,000	40,000	NR	< 240	300,000	250	3,300	590	< 320	< 230	< 300	3,800	290



Table 2. Phase II Soil Boring Analytical Results  
Former SHW  
35 North Main Street  
Ansonia, Connecticut

Sample Location					MW-06	MW-07	SB-03	SB-05				SB-09		
Sample Depth, feet					26' - 26.5'	20' - 22'	3' - 3.5'	3.0' - 3.5'	5' - 6.5'		7' - 9'	20' - 25'	2.5' - 3.0'	10' - 11'
Sample ID					MW-06 26-26.5	MW-07 20-22	SB-03 3'-3.5'	SB-05 3.0'-3.5'	SB-05 5-6.5	SB-05D 5-6.5	SB-05 7-9	SB-05 20-25	SB-09 2.5'-3.0'	SB-09 10-11
Collection Date					5/3/2024	5/2/2024	4/30/2024	4/30/2024	5/7/2024	5/7/2024	5/7/2024	5/7/2024	4/30/2024	5/7/2024
Laboratory ID	DEC RES	DEC I/C	GB PMC	GWPC x 10	CQ66751	CQ66749	CQ63725	CQ63729	CQ68971	CQ68972	CQ68973	CQ68974	CQ63726	CQ68970
SPLP PAHs (ug/L)														
2-Methylnaphthalene	NE	NE	NE	50*	NA	0.88	NA	< 0.48	< 0.47	NA	NA	NA	< 0.77	NA
Acenaphthene	NE	NE	NE	4,200*	NA	2.5	NA	< 0.48	< 0.47	NA	NA	NA	< 0.77	NA
Acenaphthylene	NE	NE	NE	4,200	NA	< 0.28	NA	< 0.29	< 0.28	NA	NA	NA	< 0.46	NA
Anthracene	NE	NE	NE	20,000	NA	0.72	NA	< 0.48	< 0.47	NA	NA	NA	< 0.77	NA
Benz(a)anthracene	NE	NE	NE	0.60	NA	0.13	NA	0.06	< 0.05	NA	NA	NA	0.75	NA
Benzo(a)pyrene	NE	NE	NE	2.00	NA	< 0.19	NA	< 0.19	< 0.19	NA	NA	NA	0.82	NA
Benzo(b)fluoranthene	NE	NE	NE	0.80	NA	< 0.07	NA	< 0.07	< 0.07	NA	NA	NA	0.71	NA
Benzo(k)fluoranthene	NE	NE	NE	5.0	NA	< 0.28	NA	< 0.29	< 0.28	NA	NA	NA	0.88	NA
Chrysene	NE	NE	NE	48.0	NA	< 0.47	NA	< 0.48	< 0.47	NA	NA	NA	0.79	NA
Fluoranthene	NE	NE	NE	2,800	NA	0.81	NA	< 0.48	< 0.47	NA	NA	NA	1.6	NA
Fluorene	NE	NE	NE	2,800	NA	1.2	NA	< 0.48	< 0.47	NA	NA	NA	< 0.77	NA
Indeno(1,2,3-cd)pyrene	NE	NE	NE	1.00	NA	< 0.09	NA	< 0.10	< 0.09	NA	NA	NA	0.78	NA
Naphthalene	NE	NE	NE	2,800	NA	4.6	NA	< 0.48	< 0.47	NA	NA	NA	< 0.77	NA
Phenanthrene	NE	NE	NE	2,000	NA	2.9	NA	0.29	0.07	NA	NA	NA	0.74	NA
Pyrene	NE	NE	NE	2,000	NA	0.61	NA	< 0.48	< 0.47	NA	NA	NA	1.3	NA
Oxygenates & Dioxane (ug/kg)	None detected in soil boring samples													

Notes:  
Only detected analytes are shown. For complete results, please see the lab reports.  
Bold = Detected above reporting limit  
Orange highlighted cells exceed I/C DEC (RSR or APS)  
Yellow highlighted cells exceed RDEC but not I/C DEC (RSR or APS)  
Purple highlighted cells exceed GB PMC, but do not exceed either DEC.  
RSR = Remediation Standard Regulations; RCSA 22a-133k-1 through 22a-133k-3  
DEC = RSR Direct Exposure Criteria  
RDEC = Residential DEC  
I/C DEC = Industrial/Commercial DEC  
APS = Additional Polluting Substances

\* Value from Technical Support Document: Recommended Numeric Criteria for Common  
Additional Polluting Substances and Certain Alternative Criteria (CT DEEP, 2018)  
mg/kg = milligram per kilogram  
ug/kg = microgram per kilogram  
NE = Criteria Not Established  
NA = Not analyzed for this parameter  
NR = Not Referenced for this matrix/analysis



## **ATTACHMENT 2**

### **PROPOSAL CHECKLIST**

By submission of the cover letter signed by an officer of the firm, the following information has been included as part of the firm's submission for consideration of its qualifications:

- ☐ Cover letter signed by an officer of the firm, with statement of availability, experience to complete the project (2 pages maximum for experience section), ability to meet project requirements including affirmative action plans.
- ☐ A description of the firm's approach to the project (i.e., preliminary technical execution plan), including proposed subcontractors and vendors, proposed disposal facilities by waste stream, and proposed schedule based on actual remediation work anticipated (3 page maximum).
- ☐ Project price bid form (signed) (Attachment 3)
- ☐ Commission on Human Rights and Opportunities, Contract Compliance Regulations, Notification To Bidders (Attachment 4)
- ☐ Bonding capacity information (Attachment 5)
- ☐ Insurance types and limits – note that the State of Connecticut must be listed as additionally insured prior to project implementation (Attachment 6)
- ☐ Demonstration of pre-qualification with State of Connecticut DAS, or the ability to meet this requirement prior to the date of bid submission.



**Attachment 3  
Bid Form  
SHW Soil Remediation Project  
City of Ansonia**

The undersigned, \_\_\_\_\_, doing business in the City/Town of \_\_\_\_\_, in the State of \_\_\_\_\_, herewith, after reading thoroughly the Specifications and other Bid documents (including if any addendum or addenda) submit the following proposal:

Bid prices listed in this Schedule are based on performance of the Work as specified in these Specifications and shall include all overhead, profit, handling, taxes and all other related charges. The estimated quantities in this Bid Form are based on best judgment of the Engineer and may vary from actual site conditions. No adjustment of unit prices will be allowed for any Bid Item due to any change in quantities. The Owner reserves the right to rewards none, all, or portions of the work to a single or multiple bidders.

The Owner reserves the right to withhold the fair market value for work not completed in addition to the retainage on work completed. Unbalanced bid items will specifically be subject to review and to this potential withholding from periodic payment applications.

<u>No.</u>	<u>Item and Estimated Quantity</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total</u>
1	Mobilization of Equipment, Personnel, and Temporary Facilities	LS	1	\$	\$
2	Health and Safety Planning and Reporting	LS	1	\$	\$
3	Site Cleanup and Demobilization	LS	1	\$	\$
4	Area 2B: Excavation of Impacted Soil and Buried Building Materials (± 20%)	CY	1,300	\$	\$
5	Area 2C: Excavation of Impacted Soil (± 20%)	CY	250	\$	\$
6	Area 2D: Excavation of PCB Remediation Waste Impacted Soil (± 20%)	CY	100	\$	\$
7	Area 4: Excavation of Impacted Soil (± 20%)	CY	150	\$	\$
8	Area 7: Excavation of Impacted Soil (± 20%)	CY	1,300	\$	\$
9	Backfill, Compaction, and Demarcation Barrier Installation of Excavation Areas With Clean Fill (± 20%)	CY	8,600	\$	\$
10	Transportation and Disposal of Impacted Soil with ACM Debris at Area 1 (± 20%)	Ton	1,050	\$	\$
11	Transportation and Disposal of Impacted Non-Hazardous Soil (± 20%)	Ton	9,650	\$	\$
12	Transportation and Disposal of Buried ACM Building Materials at Area 2B (± 20%)	Ton	2,000	\$	\$
13	Transportation and Disposal of PCB-Impacted Soil/Remediation Waste at Area 2D (± 20%)	Ton	150	\$	\$
<b>Base Bid Total</b>					<b>\$ -</b>

The undersigned agrees to accept compensation at the prices herein stated as full payment for work done under these items.

The quantities shown are estimated and subject to change. Should the quantities of certain types of work be increased or decreased by written change order or approval of the Engineer from the quantities for payment items specified herein, the undersigned agrees that the unit prices specified herein shall be the basis of payment for such increases or decreases in the Work.

**Definitions:**

LS Denotes Lump Sum

CY Denotes Cubic Yard

Ton Denotes Short Ton (2,000 pounds)

SF Denotes Square Foot



**ATTACHMENT 4**

**CHRO FORM  
BIDDER CONTRACT COMPLIANCE MONITORING REPORT**



**COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES**  
**CONTRACT COMPLIANCE REGULATIONS**  
**NOTIFICATION TO BIDDERS**

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by [Sections 4a-60](#) and [4a-60a](#) of the Connecticut General Statutes; and, when the awarding agency is the State, [Sections 46a-71\(d\)](#) and [46a-81i\(d\)](#) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at [Section 46a-68j-21 through 43](#) of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by [Sections 4a-60](#) and [46a-71\(d\)](#) of the Connecticut General Statutes.

According to [Section 46a-68j-30\(9\)](#) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” “Minority business enterprise” is defined in [Section 4a-60](#) of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: “(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of [Section 32-9n](#).” “Minority” groups are defined in [Section 32-9n](#) of the Connecticut General Statutes as “(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . .” An individual with a disability is also a minority business enterprise as provided by [Section 4a-60g](#) of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of [Section 46a-68j-21\(11\)](#) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder’s qualifications under the contract compliance requirements:

- (a) the bidder’s success in implementing an affirmative action plan;
- (b) the bidder’s success in developing an apprenticeship program complying with [Sections 46a-68-1 to 46a-68-17](#) of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder’s promise to develop and implement a successful affirmative action plan;
- (d) the bidder’s submission of employment statistics contained in the “Employment Information Form”, indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder’s promise to set aside a portion of the contract for legitimate minority business enterprises. [See Section 46a-68j-30\(10\)\(E\)](#) of the Contract Compliance Regulations.

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**INSTRUCTIONS AND OTHER INFORMATION**

The following **BIDDER CONTRACT COMPLIANCE MONITORING REPORT** must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to [Sections 4a-60](#) and [4a-60a](#) CONN. GEN. STAT., and [Sections 46a-68j-23](#) of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

**1) Definition of Small Contractor**

[Section 4a-60g](#) CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision [4a-60g](#) CONN. GEN. STAT.



## 2) Description of Job Categories (as used in Part IV Bidder Employment Information) (Page 2)

**MANAGEMENT:** Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

**BUSINESS AND FINANCIAL OPERATIONS:** These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

**MARKETING AND SALES:** Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

**LEGAL OCCUPATIONS:** In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

**COMPUTER SPECIALISTS:** Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

**ARCHITECTURE AND ENGINEERING:** Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

**OFFICE AND ADMINISTRATIVE SUPPORT:** All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

**BUILDING AND GROUNDS CLEANING AND MAINTENANCE:** This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

**CONSTRUCTION AND EXTRACTION:** This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category.

**INSTALLATION, MAINTENANCE AND REPAIR:** Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

**MATERIAL MOVING WORKERS:** The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

**PRODUCTION WORKERS:** The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.



### 3) Definition of Racial and Ethnic Terms (as used in Part IV Bidder Employment Information) (Page 3)

<p><u>White</u> (not of Hispanic Origin)-All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.</p> <p><u>Black</u> (not of Hispanic Origin)-All persons having origins in any of the Black racial groups of Africa.</p> <p><u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p>	<p><u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.</p> <p><u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.</p>
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## BIDDER CONTRACT COMPLIANCE MONITORING REPORT

### PART 1 – Bidder Information

Company Name: Street Address: City & State: Chief Executive:	Bidder Federal Employer Identification Number: Or Social Security Number:
Major Business Activity: (brief description)	Bidder Identification (response optional/definitions on page 1)  -Bidder is a small contractor? Yes No -Bidder is a minority business enterprise? Yes No (If yes, check ownership category) Black Hispanic Asian American American Indian/Alaskan Native Iberian Peninsula Individual(s) with a Physical Disability Female -Bidder is certified as above by State of CT? Yes No
Bidder Parent Company: (If any)	
Other Locations in CT: (If any)	

### PART II - Bidder Nondiscrimination Policies and Procedures

1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes No	7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes No
2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes No	8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes No
3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes No	9. Does your company have a mandatory retirement age for all employees? Yes No
4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes No	10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes No N/A
5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes No	11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes No N/A
6. Does your company have a collective bargaining agreement with workers? Yes No 6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes No	12. Does your company have a written affirmative action Plan? Yes No If no, please explain.
6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of CT? Yes No	13. Is there a person in your company who is responsible for equal employment opportunity? Yes No If yes, give name and phone number:



1. Will the work of this contract include subcontractors or suppliers? Yes No

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above? Yes No

#### PART IV - Bidder Employment Information

Date:

JOB CATEGORY*	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

\*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)



1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification  (X)		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source			
State Employment Service					Work Experience	
Private Employment Agencies					Ability to Speak or Write English	
Schools and Colleges					Written Tests	
Newspaper Advertisement					High School Diploma	
Walk Ins					College Degree	
Present Employees					Union Membership	
Labor Organizations					Personal Recommendation	
Minority/Community Organizations					Height or Weight	
Others (please identify)					Car Ownership	
					Arrest Record	
					Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
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**ATTACHMENT 5**  
**BONDING CAPACITY**



## **Attachment 5 Bonding Capacity**

Please indicate your firm's ability to provide bonding for your firm's estimated value for this project.

A Bid Bond in the amount of 5% will be required for this Work. A Performance Bond and a Labor & Materials Bond will also be required.

By submitting a response to this RFP, the firm acknowledges that it can provide the bonds listed above for the project if deemed qualified and selected for award after the price proposal phase of the process.

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### **Bonding reference**

Agent Name:

Surety Name:

Contact:

Phone Number:

Address:

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### **Capacity**

Single limit:

Total program bonding limit:

Net Capacity available:



**ATTACHMENT 6**  
**INSURANCE REQUIREMENTS**



## Attachment 6 Insurance Requirement Sheet

Insurance Requirements: Before starting and until final completion and acceptance of the work called for in the Contract, the Contractor and its subcontractors, if any, shall procure and maintain insurance of the types and amounts checked in paragraphs A through F below for all Contract operations.

- ☒ A. General Liability, with minimum coverage for combined bodily injury and property damage liability of \$2,000,000 general aggregate, \$1,000,000 per occurrence including:
  - ☒ 1. Commercial General Liability.
  - ☒ 2. City as additional insured.
  - ☒ 3. **State of Connecticut as additional insured.**
- ☒ B. Comprehensive Automobile Liability, with minimum coverage of \$1,000,000 combined single limit for bodily injury and property damage, including, where applicable, coverage for any vehicle, all owned vehicles, scheduled vehicles, hired vehicles, non-owned vehicles and garage liability.
- ☒ C. Excess Liability, with minimum coverage of \$5,000,000 in umbrella form, or such other form as approved by the City.
- ☒ D. Workers' Compensation and Employer's Liability, with minimum coverage as provided by Connecticut State Statutes.
- ☐ E. Professional Liability (for design and other professionals for Errors and Omissions), with minimum coverage of \$1,000,000. If the policy is on a claims-made basis, coverage shall be continually renewed or extended for three (3) years after work is completed under the Contract.
- ☒ F. Pollution Liability Insurance.
- ☒ G. CERTIFICATE HOLDER: City of Ansonia; State of Connecticut

The Acord certificate of insurance form must be executed by your insurance agent/broker and returned to this office. Company name and address must conform on all documents including insurance documentation. It is required that agent/broker note the individual insurance companies providing coverage, rather than the insurance group, on the Acord form. The Contract number (provided to the awarded vendor), project name and a brief description must be inserted in the "Description of Operations" field. It must be confirmed on the Acord Form that the City of Ansonia is endorsed as an additional insured by having the appropriate box checked off and stating such in the "Description of Operations" field. A letter from the awarded vendor's agent/broker certifying that the City of Ansonia and the State of Connecticut have been endorsed onto the general liability policy as additional insureds is also mandatory. This letter must follow exactly the format provided by the Purchasing Department and must be signed by the same individual authorized representative who signed the Acord form. If the insurance coverage required is provided on more than one Acord certificate of insurance, then additional endorsement letters are also required. Contract development will begin upon receipt of complete, correct insurance documentation.

The Contractor shall be responsible for maintaining the above insurance coverage in force to secure all of the Contractor's obligations under the Contract with an insurance company or companies with an AM Best Rating of B+:VII or better, licensed to write such insurance in Connecticut and acceptable to the City of Ansonia. For excess liability only, non-admitted insurers are acceptable, provided they are permitted to do business through Connecticut excess line brokers per listing on the current list of Licensed Insurance Companies, Approved Reinsurers, Surplus Lines Insurers and Risk Retention Groups issued by the State of Connecticut Insurance Department.

Note additional requirements for subcontractors and disposal facilities in the Supplemental Terms and Conditions of the agreement.



**APPENDIX A**  
**SUPPLEMENTAL TERMS AND CONDITIONS**



## **CONTRACTOR RESPONSIBILITY**

1. Contractor represents that it has and commits the expertise, experience, personnel and resources to properly perform the Contracted Services and that all personnel engaged in the Contracted Services shall be fully qualified, authorized, licensed, trained and permitted as required by applicable Law or the requirements of this Agreement to perform the Contracted Services. Contractor shall remove any employee or lower-tier subconsultant or subcontractor ("subcontractor"), from performance of the Contracted Services if so directed in writing by the City.
2. By executing this Agreement, Contractor warrants that for the duration of this Agreement, Contractor meets and will continue to meet all disclosure obligations and certifications ("Certifications") required for proper performance of the Contracted Services. Contractor shall immediately provide notice to the City of any changes to such Certifications. If equipment and materials are provided under this Agreement, Contractor further warrants to the City and its Client that all materials and equipment furnished shall be new unless otherwise specified, and that such equipment and materials shall be of good quality, free from faults and defects, in conformance with this Agreement and that any related warranties shall pass to the City's Client.
3. Contractor shall perform the Contracted Services in accordance with the degree of care and skill ordinarily exercised by members of the same profession currently performing the same or similar services under the same or similar circumstances or required by applicable Law, in which case that higher standard shall apply. Contractor shall be solely responsible for the professional quality, technical accuracy and the coordination of all designs, drawings, specifications, calculations, reports, documents or other Data to be provided under this Agreement, and shall, without additional compensation, correct any errors or deficiencies promptly upon notice or discovery thereof. Review, inspection, approval, acceptance or payment by the City of or for the Contracted Services does not release or otherwise waive Contractor's sole responsibility for the proper performance of the Contracted Services.
4. All communications with the Client and/or applicable governmental regulatory agencies will be exclusively through or pursuant to the express written direction of the City. Contractor shall direct inquiries from Client and/or governmental regulatory agencies to the City for appropriate response. Should the Client and/or the governmental regulatory agency insist on communications directly with Contractor, Contractor shall promptly advise the City of the nature, extent and substance of such communications.
5. Contractor shall attend periodic meetings or events as may reasonably be required by the City for the proper coordination of the Contracted Services. Contractor shall be prepared to accurately report on the current and projected status of the Contracted Services at those meetings or events and at such other times as requested by the City.
6. For purposes of this Agreement, CONTRACTOR shall work under the direction of the the City-assigned Project Manager or his/her designee(s). Any conflict in the scheduling of work for the CONTRACTOR shall be settled by the Project Manager.
7. CONTRACTOR shall not submit any proposal, bid for the Work separately or with others, take any action or make any agreement or representation inconsistent with this Agreement, or applicable Purchase Order or CONTRACTOR performing the services as set out in herein. CONTRACTOR hereby agrees that for a period continuing of four (4) years after the termination date of this Agreement it shall not perform any advisory or consulting services for, or enter into any agreement relating to the City's Clients.

## **TERMINATION**

8. The City shall have the right to terminate this Agreement pursuant to the provisions of this Article.
9. The City shall have the right to terminate this Agreement in whole or in part for its convenience at any time by written notice to Contractor. Upon receipt of such notice, Contractor shall immediately discontinue performance of the Contracted Services on the date and to the extent specified in writing by the City.
10. This Agreement may be immediately terminated by the City in whole or in part in the event of a default consisting of substantial failure by the CONTRACTOR to fulfill its obligations under this Agreement through no fault of the City,



provided, that no such termination may be effected unless the CONTRACTOR is given written notice of default and, except for any failure to expeditiously cure defaults involving safety compliance, five (5) days to cure the default.

11. If termination is effected under Article 7(a) above, in whole or in part, for the City's convenience, and CONTRACTOR is not in default, the City will pay CONTRACTOR all reimbursable costs which are due as of the effective date of termination, and in addition, those reimbursable costs incurred in good faith by CONTRACTOR after the effective date of termination in connection with demobilization of equipment and personnel. the City shall not be liable for unabsorbed overhead or anticipatory profit on unperformed services and in no event shall the amount total payable to CONTRACTOR exceed the approved amount of the Purchase Order.
12. Upon receipt of termination notice pursuant to Paragraphs 7(a) or 7(b) above, CONTRACTOR shall (1) promptly discontinue all Work affected (unless the notice directs otherwise), and (2) deliver to the City all data, drawings, specifications, reports, summaries, and such other information and materials as may have been accumulated by CONTRACTOR in performing the Work, whether completed or in process, with the exception of one record copy of such information which shall be kept by CONTRACTOR.
13. If the City terminates this Agreement for cause and it is subsequently determined that Contractor was not in default, then the termination shall be deemed to have been issued for the convenience of the City as set forth above.
14. The rights and remedies of the City and CONTRACTOR provided in this Article are in addition to any other rights and remedies provided by law or under this Agreement.

## INSURANCE

15. CONTRACTOR agrees to provide and maintain at its own expense, the following types and amounts of insurance covering the Work and all liabilities assumed under this Agreement and to furnish certificates of insurance.

(a) Required insurance for all scopes of work:

(i) Worker's Compensation, including coverage under United States Longshoremen's and Harbor Worker's Act where applicable, at the statutory limits for the state or states in which the Work is to be performed. Employer's Liability insurance in the amount of \$1,000,000 each accident/employee.

(ii) Commercial General Liability (CGL) insurance in the amount of \$1,000,000 per occurrence and \$2,000,000 in the aggregate for bodily injury, property damage, including product liability, independent contractors, contractual liability, personal injury and advertisement injury and, where applicable, coverage for damage caused by blasting, collapse or structural injury and/or damage to underground utilities, with additional insured endorsements for on-going and completed operations,

(iii) Automobile Liability insurance for any vehicle used in conjunction with the WORK, with limits of liability not less than \$1,000,000 coverage each accident combined single limit for both bodily injury and property damage.

(iv) An Umbrella or Excess Policy may be used to meet the Commercial General Liability and Automobile Liability insurance requirements.

(v) CONTRACTOR shall also carry **Asbestos, Lead and/or Mold** Liability Insurance in an amount not less than \$1,000,000 per occurrence/annual aggregate. The policy should be written on an "Occurrence Basis" with no sunset clause. Such insurance shall name the City and the City's Client specified in the Agreement and their subsidiaries and affiliates as Additional Insureds. The Certificates of Insurance must provide clear evidence that CONTRACTOR's Insurance Policies contain the minimum limits of coverage and the special provisions prescribed in this clause. Upon request, contractors must also provide a certified copy of their insurance policy which provides specific coverage(s) for working with asbestos, lead and/or mold.

(vi) For **transporting hazardous substances**, CONTRACTOR shall also carry, or require from its SUBCONTRACTOR, Business Automobile Insurance covering liability arising out of the transportation of hazardous materials in an amount not less than \$1,000,000 per occurrence. Such policy shall include Motor Carrier Endorsement MCS-90.

(vii) For **treatment, storage or disposal of hazardous wastes**, CONTRACTOR shall furnish an insurance certificate from the designated disposal facility establishing that the facility operator maintains current Pollution Legal Liability Insurance in the amount of not less than \$5,000,000 per occurrence/annual aggregate.



(viii) Should any of the Work involve **investigation, removal or remedial** action concerning the actual or threatened escape of hazardous substances, CONTRACTOR shall also carry Contractors Pollution Liability Insurance in an amount not less than \$2,000,000 per occurrence/annual aggregate. Such insurance shall be written on an occurrence basis with no sunset clause and provide coverage for both sudden and gradual occurrences arising from the Work performed under this Agreement. If Completed Operations is limited in the policy, such Completed Operation Coverage shall be for a period of not less than three (3) years. Such insurance shall name the City and the City's Client, specified in each Purchase Order, and their subsidiaries and affiliates as Additional Insureds.

(ix) For the Work involve professional services, CONTRACTOR shall also carry or require from its SUBCONTRACTOR Professional Liability Insurance in an amount not less than \$2,000,000 per claim and in the annual aggregate). Such insurance shall be written on a claims made basis with no sunset clause and provide coverage for CONTRACTOR's acts, errors and omissions arising from the Work performed under this Agreement. Coverage must be maintained uninterrupted period of at least five (5) years following completion of the Work.

16. All insurance, other than Professional Liability, Workers' Compensation and Employer Liability insurance(s), shall be primary, waive subrogation, and name the City and the State of Connecticut Department of Economic and Community Development as additional insureds.
17. CONTRACTOR shall require its lower-tier Contractor, if any, to maintain the insurance specified above, naming the City and the Client as additional insureds.
18. Prior to commencing the Contracted Services and upon any renewal of CONTRACTOR's insurance policies, CONTRACTOR shall promptly provide the City with updated certificates of insurance evidencing continued compliance with the foregoing requirements, accompanied by copies of the applicable endorsements. Acceptance of an incomplete or improper certificate when requested, or failure to identify a deficiency in coverage, shall not be construed as a waiver of CONTRACTOR's obligation to maintain in effect the coverages required by this Article. Certificates of insurance shall reference the applicable the City Project Name and Number and be mailed to the City.
19. CONTRACTOR shall provide the City with 30 days' advance written notice, 10 days for non-payment of premium, prior to cancellation or material change in policy coverage(s).
20. The insurance coverage limits required herein are minimum limits and shall not be construed as limits on CONTRACTOR's liability, limits on CONTRACTOR's indemnity obligations, or as adequate insurance coverage for CONTRACTOR's obligations under this Contract. Any failure by CONTRACTOR to comply with the insurance coverage requirements set forth above shall constitute a material breach of this Agreement and the City may withhold payment to CONTRACTOR pending cure of such breach.

## **HEALTH AND SAFETY**

21. Work performed under this Agreement shall comply with all applicable federal, state and local safety and occupational health laws and regulations. This includes, but is not limited to Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response.
22. The environmental, health and safety of any CONTRACTOR's employees and activities are solely the responsibility of that CONTRACTOR, who shall evaluate the hazards and/or potential hazards to their employees and activities and shall adhere to the CONTRACTOR'S own Plan. All CONTRACTOR'S Plans will, at a minimum conform to the requirements of the City's Plan. the City's Plan does not, nor is it intended to, address procedures of CONTRACTORS, or their SUBCONTRACTORS throughout the execution of this Agreement.
23. Before CONTRACTOR'S personnel are allowed on the job, CONTRACTOR must furnish proper documentation to the City representative a copy of the CONTRACTOR's Plan (to document completion, not approval), any required OSHA Training, identification of all Competent Persons, Drug Testing, Medical Surveillance and Respirator Fit-Testing for all CONTRACTOR personnel on the job.



## **BONDS**

24. CONTRACTOR shall furnish performance and payment bonds, whenever required as part of the Work, each in an amount equal to the price for the Work as security for the faithful performance and payment of all CONTRACTOR's obligations under the Agreement. These bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by laws or regulations, whichever time period is greater. CONTRACTOR shall also furnish such other bonds as are required by the City. All bonds shall be in the form prescribed by the City except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
25. If the surety on any bond furnished by CONTRACTOR is declared bankrupt or becomes solvent or its right to do business is terminated in any state where any part of the project is located, CONTRACTOR shall not later than thirty (30) days thereafter substitute another bond and surety, meeting the requirements of this Article.

## **COMPLIANCE WITH LAWS**

26. CONTRACTOR shall comply with all applicable federal, state, and local laws, ordinances, rules, regulations, and orders in effect throughout the term of and pertaining to the Contracted Services under this Agreement, including, but not limited to Executive Order No. 11246 of September 24, 1965, as amended (regarding Equal Employment Opportunity), and the orders of the Secretary of Labor pursuant thereto.
27. No party to this Agreement shall, directly or indirectly, undertake nor cause nor permit to be undertaken any activity which is 1) illegal under any applicable laws or regulations, or 2) would have the effect of causing the City or its subsidiaries or affiliates to be in violation of the U.S. Foreign Corrupt Practices Act.
28. In connection with this Agreement, no party shall give, offer, promise, or authorize, directly or indirectly, anything of value to 1) an official or employee of any government, state-owned enterprise, international organization or any subdivisions, agents or advisors thereto, whether paid or unpaid (any such person referred to collectively as "Official"), including the government(s) of the territories in which work will be performed hereunder; or 2) any person(s) or party(s) while knowing or having reason to know that such thing of value is to be given, offered or promised to an Official in order to:
  - i. influence any official act or decision, or;
  - ii. induce an Official to use his or her influence to affect a decision of any government or international organization, or;
  - iii. assist the parties hereto in obtaining or retaining business, or in directing business to any person, or;
  - iv. to obtain an unfair advantage for the parties in any respect.
29. In connection with this Agreement, no party shall make a contribution to any political party or candidate for office on behalf of or associated with the parties or in connection with the purpose of this Agreement.
30. CONTRACTOR shall not retain or engage a third party to carry out sales or marketing obligations in connection with the scope of this Agreement without obtaining the City's prior written consent. The City reserves the right in its sole discretion to reject a request to engage or retain any such third party.
31. CONTRACTOR hereby covenants that no officer, director, owners, principal shareholder, family members thereof, agent, representative or employee of CONTRACTOR is an Official and that CONTRACTOR shall not employ any Official during the term of this Agreement. CONTRACTOR further covenants that no Official is deriving any benefit, directly or indirectly, from this Agreement.
32. In no case shall the City be obligated to take any action or make any payment to CONTRACTOR that would cause the City to suffer a penalty or contravene applicable laws or regulations, including but not limited to the laws of the territories in which work will be performed and those of the United States.
33. If CONTRACTOR breaches any of the covenants contained in this section, the City shall have the right to immediately terminate this Agreement without penalty or further payment of any sums due and owing or claimed by CONTRACTOR hereunder. In such instance, CONTRACTOR shall indemnify the City for any penalties, losses and expenses resulting from such breach of the provisions of this section.



**APPENDIX B**  
**PREVAILING WAGES**

Refer to the link provided below:

[Link to Prevailing Wage Rates](https://portal.ct.gov/dol/-/media/dol/2022-new-design-system/divisions/wage-and-workplace-standards/heavyrates_7-1-2024_0.pdf?rev=f4cfc5f09b0148c98644b17538baee1e)

[https://portal.ct.gov/dol/-/media/dol/2022-new-design-system/divisions/wage-and-workplace-standards/heavyrates\\_7-1-2024\\_0.pdf?rev=f4cfc5f09b0148c98644b17538baee1e](https://portal.ct.gov/dol/-/media/dol/2022-new-design-system/divisions/wage-and-workplace-standards/heavyrates_7-1-2024_0.pdf?rev=f4cfc5f09b0148c98644b17538baee1e)

Source – CT Department of Labor



## **APPENDIX C**

### **PROJECT CLOSE-OUT REQUIREMENTS**

Per the state of Connecticut Department of Economic and Community Development, the following documents shall be submitted to the engineer at the completion of the project:

1. ~~Certificate of occupancy (where applicable)~~
2. Certificate of Substantial Completion (AIA form G704)
3. Contractor's Affidavit of Payment of Debts and Claims (AIA form G706)
4. Contractor's Affidavit of Release of Liens (AIA form G706A)
5. Subcontractors and Suppliers Release or Waiver of Liens.
6. Consent of Surety Company to Final Payment (AIA G707)
7. All of the Contractor's Application and Certificate for Payments (AIA form G702, and continuation sheet G703).
8. All waste disposal facility receipts / weight slips and completed manifests/bills of lading.





## **Division 1 Specifications**

### **General Requirements**



**SECTION 01 11 00**  
**SUMMARY OF WORK**

**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- A. Defined Terms
- B. Existing Conditions
- C. Project Summary
- D. Work by Others
- E. Work Sequence

**1.02. DEFINED TERMS:**

- A. **ACM:** Asbestos-Containing Materials.
- B. **Contractor:** The person, firm, or corporation who is proposing to conduct the Work specified herein.
- C. **Daily Construction Report:** The Contractor's Daily Construction Report used to document progress and issues on a daily basis for the Engineer and Owner.
- D. **Decontamination Zone:** Transition area between the Exclusion Zone(s) and the Support Zone(s) or other non-exclusion areas of the Secured Zone(s) where impacted soil, sediment and other undesirable materials can be cleaned from personnel and equipment.
- E. **Disturbed Areas:** Areas that have been disrupted or otherwise changed from their pre-construction conditions by the Contractor's activities that have not been restored as required by the Contract Documents.
- F. **Drawings:** The Drawings that show the scope, extent, and character of the Work to be furnished and performed by Contractor and which have been prepared or approved by the Engineer and are included within or referred to in the Contract Documents. Shop Drawings are not Drawings as so defined.
- G. **Engineer:** AECOM or its designated agent authorized to monitor conformance of the Contractor's Work with the Specifications and Drawings. The term Engineer and AECOM may be used interchangeably in this Specification.
- H. **Exclusion Zone:** An area within the Secured Zone with controlled access due to the presence of Impacted Materials and other potential threats to human health or safety.
- I. **Field Order:** A written notice prepared by Engineer responding to RFI, clarifying contract documents or directing Contractor to comply with the Work as detailed in the Contract Documents.
- J. **HASP:** The Site-Specific Health and Safety Plan prepared by the Contractor described in Specifications Section 01 41 50.
- K. **HBM:** Hazardous Building Materials, including materials containing asbestos and PCB.
- L. **Laws and Regulations; Laws or Regulations:** Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.



**SECTION 01 11 00**  
**SUMMARY OF WORK**

- M. Non-Conforming:** An adjective, which when modifying the word Work, refers to Work that is unsatisfactory, faulty, or deficient, in that it does not meet the requirements of a specified inspection, reference standard, test, approval, or performance requirement referred to in the Specifications or Drawings, or has been damaged prior to the Engineer's recommendation and the Owner's approval of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion).
- N. Normal Work Hours:** The hours during which the Contractor may perform the Work as defined in the Specifications.
- O. Owner:** City of Ansonia. The terms City of Ansonia and Owner may be used interchangeably in the Specifications.
- P. PCB:** Polychlorinated biphenyls.
- Q. PPE:** Personal Protective Equipment.
- R. Project:** The project consists of the soil excavation, backfill, compaction, installation of a demarcation barrier, transportation and off-site disposal of excavated materials as described in the Specifications and Drawings for 35 North Main Street, Ansonia, Connecticut.
- S. Project Engineer:** The individual who may be assigned to the Project by the Engineer to provide on-site Engineering support during construction.
- T. Project Site:** The property located at 35 North Main Street.
- U. Project Superintendent:** The Contractor's Project Superintendent responsible for daily site activities.
- V. Record Documents:** The Record Documents and reports.
- W. Request for Information (RFI):** A written notice prepared by Contractor to receive clarification, direction, or explanation from the Owner or Engineer regarding the Work.
- X. Samples:** Portions of building materials collected for testing by a State-licensed laboratory.
- Y. Secured Zone:** The area(s) within which Contractor shall perform the Work and where Contractor has primary responsibility for operation, security, and safety of materials, equipment, and personnel.
- Z. Site Construction Manager:** The authorized representative of the Engineer who may be assigned to the Project Site or any part thereof.
- AA. Specifications:** Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, standards, workmanship, measurement, and payment as applied to the Work and certain administrative details, applicable thereto.
- BB. SSHO:** The Contractor's Site Safety and Health Officer described in Specifications Section 01 41 50 - Health and Safety
- CC. Subcontractor:** An individual, firm, or corporation having a direct contract with the Contractor or with any other Subcontractor for performance of a part of the Work.



**SECTION 01 11 00**  
**SUMMARY OF WORK**

- DD. Submittals:** The Submittals described in the Specifications that must be provided for review prior to specific job tasks.
- EE. Successful Bidder:** The Bidder to whom the Owner awards the Contract for the Work.
- FF. Supplier:** A manufacturer, fabricator, distributor, or vendor having a direct Contract with Contractor or with any Sub-Contractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Sub-Contractor.
- GG. Support Zone:** Designated area within the Secured Zone that contains no Impacted Materials or construction hazards.
- HH. T&M:** Time and materials.
- II. Technical Execution Plan:** A written Work Plan, submitted by Bidder in accordance with the requirements of the Bidding Documents, and subsequently modified by Contractor in accordance with the Contract Documents, that describes methods, materials, and sequences of specific Work items.
- JJ. Underground Facilities:** All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities that have been installed underground.
- KK. Weekly Progress Meetings:** The Weekly Progress Meeting used to update project team on work achieved and work planned.
- LL. Work:** The entire completed construction and the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, performing or furnishing services or transportation, performing treatment, and furnishing documents, all as required by the Contract Documents.
- MM. Work Areas:** Portions of the Project Site where the Work is to be conducted, as shown on the Drawings that are included with the Contract Documents.
- NN. Work Zones:** Subdivisions of the Work Areas used for specific purposes. Work zones include, but are not limited to, the Decontamination Zone, Exclusion Zone, Secured Zone, and Support Zone.

**1.03. EXISTING CONDITIONS:**

- A.** The location of the Project Site is shown on the Drawings.
- B.** The existing surface layout of the Project Site is shown on the Drawings. Concrete slabs on the surface and subsurface concrete structures will be encountered within the excavation areas. Contractor shall provide necessary equipment to break up concrete. Clean concrete, as determined by the Engineer, may be permitted for use as backfill.
- C.** The project consists of excavation and off-site transportation and disposal of impacted soils, compaction, backfilling, and installation of demarcation barriers at 35 North Main Street. See **Attachment 1** for applicable analytical data.



**SECTION 01 11 00**  
**SUMMARY OF WORK**

**D.** Utilities and Facilities shown or indicated:

1. The information and data shown or indicated on the Drawings with respect to existing utilities and facilities at or contiguous to the Project Site are based on information and data furnished to the Owner or the Engineer by the Owners of such utilities or facilities or by others.
2. The Owner and the Engineer shall not be responsible for the accuracy or completeness of any such information or data relating to utilities or facilities. Contractor is required to verify all locations prior to subsurface Work.
3. The cost of all of the following shall be included in the Contract Price and the Contractor shall have full responsibility for:
  - a. Reviewing and checking all information and data regarding existing conditions.
  - b. Locating all existing utilities and facilities.
  - c. Coordination of the Work with the Owners of existing utilities and facilities during construction.
  - d. The safety and protection of all existing utilities and facilities designated to be protected on the Drawings and repairing any damage resulting from the Work.

**E.** Site Background

1. The 3.58-acre site (former SHW site) is located at 35 North Main Street, Ansonia, New Haven County, Connecticut (Figure 1). The site is designated on the City of Ansonia's tax assessors map No. 43 as Lot 01-01. The site is located at the intersection of North Main Street and Main Street in downtown Ansonia.
2. The abutting property to the south is a currently vacant collection of connected industrial buildings, formerly part of the Farrel Corporation (Farrel) complex. To the north of the site, and sharing a common wall, is the former Extrusion Mill, part of the former Ansonia Copper and Brass Company (ACB) industrial complex. To the west is the Metro North railroad track, followed by additional industrial properties that were formerly owned and operated by either ACB or Farrel. The west sides of these buildings are currently separated from the abutting Naugatuck River by a high masonry wall built for flood control. A municipal road (North Main Street) is located to the east of the site.
3. The site has been primarily occupied by former industrial buildings, consisting of a former Roll Shop, a former iron foundry and smaller additions, since the late 1800s. The foundry area (former Building 11 and associated structures) has been demolished to slab on grade. Concrete slabs remain at the surface within the proposed excavation areas.
4. In 2023 and 2024, buildings on the eastern side of the site were demolished to the floor slabs. The Roll Shop portion (Building 12) of the building remains standing as of March 2025. A 2004 site assessment identified the presence of polluted soil in need of removal and capping due to the planned site development activities. This



**SECTION 01 11 00**  
**SUMMARY OF WORK**

investigation identified the presence of petroleum, polyaromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), Polychlorinated Biphenyls (PCBs) and metals in soil and/or groundwater at the site. Existing site soil analytical data and a figure of soil sample locations are provided as **Attachment 1**.

**1.04. PROJECT SUMMARY:**

- A.** The Project includes work required for the following general activities required to complete the work by October 1, 2025, but not limited to:
- 1.** Mobilization including plans, equipment and personnel, and Call Before You Dig notifications.
  - 2.** Verify utility disconnections and utility shutoffs prior to excavation work.
  - 3.** Protection of surrounding utilities, including storm drains and monitoring wells.
  - 4.** Excavation Activities
    - a.** Excavation Area 4 – Excavation of soils impacted by the former UST in the southeast section of the site (UST Area 2). Anticipated depth of excavation in this area is 8 to 10 feet below grade.
    - b.** Excavation Areas 2B, 2C, and 2D – Excavation of fill and debris in various pits used for manufacturing processes as shown on plans. Stockpile debris for characterization and off-site disposal. Excavation Area 2A, discussed above, is located within or adjacent to Area 5 and should be excavated at the same time as Area 5.
    - c.** Excavation Area 7 – Excavation of soils below the proposed access road as shown on the plans. Stockpile for off-site disposal.
  - 5.** Additional Tasks
    - a.** Demolition of concrete slab and subsurface structures encountered within the excavation areas, prior to soil excavation activities.
    - b.** Backfill and grading of excavated areas with general fill (common fill) and potentially clean concrete as shown.
    - c.** Transportation and disposal of previously excavated stockpiled soils.
    - d.** Transportation and disposal off-site of impacted excavated soils.
    - e.** Transportation and disposal of solid wastes and debris from test pits.
    - f.** Final restoration and clean-up of the work areas.
- B.** Work should not disturb the eastern retaining wall or its footings along North Main Street.



**SECTION 01 11 00**  
**SUMMARY OF WORK**

**1.05. WORK BY OTHERS:**

- A. Demolition activities at the adjacent area (western area known as Building 12) may take place during site work. Coordination of activities may be necessary.
- B. Soil sampling and groundwater monitoring will take place by the Engineer during work activities.

**1.06. WORK SEQUENCE:**

- A. Refer to notes on the attached plans.

**PART 2 – PRODUCTS**

Not used.

**PART 3 – EXECUTION**

Not used.

**END OF SECTION**



**SECTION 01 27 00**  
**MEASUREMENT AND PAYMENT**

**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- C. Quantity Estimates
- D. Payment
- E. Measurement of Quantities
- F. Assessment of Non-Conforming Work
- G. Eliminated Items
- H. Retainage
- I. Measurement and Payment of Bid Items

**1.02. QUANTITY ESTIMATES:**

- A. For all Unit Price Work, the Contract Price will include an amount equal to the sum of the unit price for each pay item times the estimated quantity of each item as indicated in the Bid Form. The estimated quantities shown on the Bid Form Schedule of Quantities and Prices (herein referred to as Bid Form) are not guaranteed and are solely for the purpose of comparison of bids and determining an initial Contract Price. Quantities and measurements supplied or placed in the Work in accordance with the Specifications and Drawings and verified by the Engineer, which will determine payment.
- B. The Engineer will determine the actual quantities and classifications of Unit Price Work performed by the Contractor. The Engineer will review with the Contractor the Engineer's preliminary determinations before rendering a written decision on an Application for Payment.
- C. If the actual Work requires more or fewer units than the estimated units indicated on the Bid Form, Contractor shall provide the required units at the unit prices contracted. Under no circumstances may Contractor exceed stated quantities without prior written approval from the Engineer.

**1.03. PAYMENT:**

- A. Payment includes: Full compensation for all required labor, products, tools, equipment, transportation, services, and incidentals; erection, application, or installation of an item of the Work, including overhead and profit. No additional compensation will be allowed for overhead and profit adjustments due to differences between the actual bid item quantities and the estimated quantities.
- B. Payment will not be made for any of the following:
  - 1. Products wasted or disposed of in a manner that is not acceptable.
  - 2. Products remaining on hand after completion of work.
  - 3. Additional work undertaken to expedite Contractor's operations.



**SECTION 01 27 00**  
**MEASUREMENT AND PAYMENT**

- 4. Payment will not be made if Owner/Engineer is not in receipt of certified payrolls.
- 5. Repair or replacement of utilities, or any other facilities property located within or adjacent to the Work Area.
- C. Payment will be made by the Owner for all Work actually performed during a particular payment period. Payments for lump sum items will be made based on the percent completion of the pay item. Upon approval by the Engineer, judgments of percent completion of lump sum items will be made in reference to the Bid Form.

**1.04. MEASUREMENT OF QUANTITIES:**

**A. Measurement by Weight:**

- 1. Weight Scales: Scales shall be certified in accordance with applicable laws and regulations for the state and county in which the scales are located. Certification shall have been made within a period of not more than one year prior to date of use for weighing commodity.
- 2. The term "ton" will mean the short ton consisting of 2,000 pounds.
- 3. For shipments to offsite waste management facilities and locations, trucks will be weighed at the receiving facility for the purpose of measuring the quantity of Work for payment.

**B. Measurement by Volume:**

- 1. Volumes measured as in-place volumes were determined by previous surveys and CADD calculations. The Engineer reserves the right to retain their own surveyor to verify quantities and resolve disputes. In the case of a dispute, the Engineer's survey shall be authoritative and final for the purpose of measurement for payment. To compute in-place volumes of excavation and/or backfill, the average end area method will be used.

**C. Measurement by Area:** Measured by square dimension using length and width, area or radius and verified by the Engineer.

**D. Linear Measurement:** Measured by linear dimension, at the item centerline or mean chord, and verified by the Engineer.

**E. Measurement by Time:** Measure by the actual time rounded to the nearest quarter hour and verified by the Engineer.

**1.05. ASSESSMENT OF NON-CONFORMING WORK:**

**A.** Contractor shall replace Work, or portions of the Work, that do not conform to the requirements of the Specifications and Drawings, as assessed by the Engineer.

**B.** If, in the opinion of the Engineer, it is not practical to remove and replace the non-conforming Work, the Engineer will direct one of the following remedies:

- 1. The non-conforming Work may remain, but the unit price will be adjusted to a new price at the discretion of the Engineer.



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**MEASUREMENT AND PAYMENT**

- 2. The non-conforming Work shall be partially repaired to the instructions of the Engineer, and the unit price will be adjusted to a new price at the discretion of the Engineer.
- C. The individual Specification sections may modify these options or may identify a specific formula or percentage price reduction.
- D. The authority of the Engineer to assess non-conforming work and identify payment adjustment is final.

**1.06. ELIMINATED ITEMS:**

- A. Should any items contained in the Drawings or Specifications be found unnecessary for the proper completion of the Work, the Engineer may, upon written order to the Contractor, eliminate such items from the Work, and such action shall in no way invalidate the Agreement.
- B. Contractor will be paid for actual Work done and all documented costs incurred, including mobilization of materials prior to elimination of such items.

**1.07. MEASUREMENT AND PAYMENT OF BID ITEMS:**

- A. The Schedule of Quantities and Prices lists the Bid Items and Unit Price Items for the Work. Measurement and payment of the Work covered by the Contract Documents is specified herein below.
- B. Payment shall be made on a Time & Materials (T&M), Unit Rate, or Lump Sum basis. The Schedule of Values shall be the basis for measurement and payment of equipment and labor for T&M Work. Hourly prices for equipment and labor listed shall include Contractor's overhead and profit and all other related costs for such T&M Work. The Bid Sheet shall be the basis for measurement and payment of items for Unit Rate and Lump Sum Work.
- C. The following paragraphs specify measurement and payment of the **Bid Items** listed on Bid Form Schedule:

**1. Bid Item 1: Mobilization of Equipment, Personnel, and Temporary Facilities**

- a. Work required to complete Mobilization includes, but is not limited to:
  - i. Preparation, submittal, and revision of all required submittals as described within individual specification sections.
  - ii. Project meetings: 1) a pre-construction meeting with the Engineer and the Owner, 2) weekly construction progress meetings where the contractor will provide update on the Work, raise and discuss concerns, provide a two-week lookahead and overall schedule updates and 3) daily health and safety tailgate meetings. These meetings will be held at the Site.
  - iii. Obtain and pay for all required state and local permits, as necessary, to complete the Work.
  - iv. Mobilization of all necessary equipment, personnel, materials and supplies, installation of all required site access and staging area



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**MEASUREMENT AND PAYMENT**

infrastructure, and any other site preparation necessary to begin Work.

- v.** Provide and install material stockpile and Laydown areas If necessary to complete the Work.
  - vi.** Install and maintain appropriate erosion and sedimentation controls in accordance with the Drawings and Specifications Section 31 25 00 – Erosion and Sediment Control.
  - vii.** Maintain and repair all temporary facilities and controls including those provided by others during the period when Work is taking place at the site.
  - viii.** Install any temporary facilities and controls necessary to complete the work or as shown on the Drawings not specifically listed above.
- b.** Payment for Mobilization of Equipment, Personnel, and Temporary Facilities will be made on a percent complete basis of the lump sum price for the Bid Item listed on the Bid Form. Payment shall constitute full compensation for all labor, tools, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.

**2. Bid Item 2: Health and Safety Planning and Reporting**

- a.** Work required to complete health and safety planning, reporting and QC reporting includes, but is not limited to:
  - i.** Implement and follow health and safety requirements and reporting specified in Specifications Section 01 41 50 – Health and Safety.
  - ii.** Provide maintenance and protection of pedestrian and vehicular traffic throughout the project duration.
  - iii.** Perform upwind and downwind perimeter air monitoring during the duration of the project.
  - iv.** Provide and install decontamination facilities as specified in Specifications Section 02 51 00 – Equipment Decontamination and management and disposal of any liquids or residues generated during decontamination.
- b.** Payment for Health and Safety Planning, Reporting, and QC Reporting will be made on a percent complete basis of the lump sum price for the Bid Item listed on the Bid Form. Payment shall constitute full compensation for all labor, tools, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.

**3. Bid Item 3: Site Cleanup and Demobilization**



**SECTION 01 27 00**  
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- a. Work required to complete Site cleanup and demobilization includes, but is not limited to:
  - i. Following completion of restoration activities, removal of temporary facilities and controls, all personnel, equipment, and materials, staging and access materials, and removal of erosion and sedimentation controls, environmental protections, and decontamination facilities.
  - ii. Completion of project closeout procedures.
- b. Payment for Site Cleanup and Demobilization will be made on a percent complete basis of the lump sum price provided on the Bid Form. Payment shall constitute full compensation for all labor, tools, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.

**4. Bid Item 4: Excavation of Impacted Soil and Buried Building Materials Area 2B**

- a. Work required to complete the Site excavation includes, but is not limited to:
  - i. Provide all necessary equipment, personnel, materials and supplies to excavate the estimated 1,300 CY of impacted soil and buried building materials including concrete slabs and subsurface concrete structures, if encountered. Excavation locations and depths are depicted on the Contract Drawings and are subject to change with respect to field conditions.
  - i. Provide all necessary equipment, personnel, materials and supplies to stockpile and/or manage the estimated 1,300 CY of impacted soil once excavated and prior to removal from the site.
  - i. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
- b. Payment for Excavation of Impacted Soil Buried Building Materials Area 2B Work will be made on a CY/unit rate basis as presented on the Bid Form. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes, and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.

**5. Bid Item 5: Excavation of Impacted Soil Area 2C**

- a. Work required to complete the Site excavation includes, but is not limited to:
  - i. Provide all necessary equipment, personnel, materials and supplies to excavate the estimated 250 CY of impacted soil including concrete slabs and subsurface concrete structures, if encountered. Excavation locations and depths are depicted on the Contract Drawings and are subject to change with respect to field conditions.



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**MEASUREMENT AND PAYMENT**

- ii. Provide all necessary equipment, personnel, materials and supplies to stockpile and/or manage the estimated 250 CY of impacted soil once excavated and prior to removal from the site.
    - iii. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
  - b. Payment for Excavation of Impacted Soil Area 2C Work will be made on a CY/unit rate basis as presented on the Bid Form. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes, and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.
- 6. **Bid Item 6: Excavation of PCB Remediation Waste Impacted Soil Area 2D**
  - a. Work required to complete the Site excavation includes, but is not limited to:
    - i. Provide all necessary equipment, personnel, materials and supplies to excavate the estimated 100 CY of PCB Remediation Waste impacted soil including concrete slabs and subsurface concrete structures, if encountered. Excavation locations and depths are depicted on the Contract Drawings and are subject to change with respect to field conditions.
    - ii. Provide all necessary equipment, personnel, materials and supplies to stockpile and/or manage the estimated 100 CY of impacted soil once excavated and prior to removal from the site.
    - iii. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
  - b. Payment for Excavation of PCB Remediation Waste Impacted Soil Area 2D Work will be made on a CY/unit rate basis as presented on the Bid Form. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes, and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.
- 7. **Bid Item 7: Excavation of Impacted Material Area 4**
  - a. Work required to complete the Site excavation includes, but is not limited to:
    - i. Provide all necessary equipment, personnel, materials and supplies to excavate the estimated 150 CY of impacted materials including concrete slabs and subsurface concrete structures, if encountered. Excavation locations and depths are depicted on the Contract Drawings and are subject to change with respect to field conditions.
    - ii. Provide all necessary equipment, personnel, materials and supplies to stockpile and/or manage the estimated 150 CY of impacted materials once excavated and prior to removal from the site.



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- iii. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
  - b. Payment for Excavation of Impacted Materials Area 4 Work will be made on a CY/unit rate basis as presented on the Bid Form. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes, and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.
- 8. **Bid Item 8: Excavation of Impacted Material Area 7**
  - a. Work required to complete the Site excavation includes, but is not limited to:
    - i. Provide all necessary equipment, personnel, materials and supplies to excavate the estimated 1,300 CY of impacted materials including concrete slabs and subsurface concrete structures, if encountered. Excavation locations and depths are depicted on the Contract Drawings and are subject to change with respect to field conditions.
    - ii. Provide all necessary equipment, personnel, materials and supplies to stockpile and/or manage the estimated 1,300 CY of impacted materials once excavated and prior to removal from the site.
    - iii. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
  - b. Payment for Excavation of Impacted Materials Area 7 Work will be made on a CY/unit rate basis as presented on the Bid Form. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes, and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.
- 6. **Bid Item 9: Backfill, Compaction, and Demarcation Barrier Installation of Excavated Areas with Clean Fill**
  - a. Work required to complete backfill, compaction, and demarcation barrier installation of excavated areas with clean fill includes, but is not limited to:
    - i. Provide necessary equipment, personnel, materials and supplies required to obtain, import, place, compact, and grade 8,600 CY (uncompacted volume) of clean fill material from off-site borrow sources in accordance with the Drawings and Specifications Section 31 20 00 – Earth Excavation, Backfill, and Grading. Clean concrete, as determined by the Engineer, may be permitted for use as backfill. The quantities in this bid item assume that no concrete will be reused. The reuse of concrete will be determined during excavation activities.
    - ii. Provide necessary equipment, personnel, materials and supplies required to install high visibility demarcation barrier (e.g., orange snow fence) overlaying existing subgrade soils prior to backfilling in



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accordance with the Drawings and Specifications Section 31 20 00 – Earth Excavation, Backfill, and Grading.

- iii. Contractor's unit price provided on the bid form shall remain valid for clean fill quantities within 20% of the estimated quantity.
- b. Perform surveying activities of excavation locations, extents, and depths, and backfill as-built conditions, including spot elevations. Surveying shall be performed in accordance with the Contract Drawings, Specification Section 01 72 00 – Surveying, and as directed by the Engineer.
- c. Payment for Installation and Compaction of Clean Fill Work will be made on a CY/unit rate basis as presented on the Bid Form. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.

**10. Bid Item 10: Transportation and Off-Site Disposal of Impacted Soil with ACM Debris at Area 1**

- a. Work required to complete transportation and off-site disposal includes, but is not limited to:
  - i. Coordinate the handling, staging, transportation, and disposal of the estimated 1,050 tons of impacted soil containing non-hazardous soil comingled with ACM debris. Payment for disposal shall be on a per ton basis, as documented by approved disposal facility weigh tickets. Payment shall constitute full compensation for all labor, supervision, materials, equipment, disposal facility coordination, disposal documentation, tipping fees, and incidentals and all other costs necessary to complete transportation and disposal of impacted materials including all transportation fees and disposal facility fees, to the approved disposal facility approved by the Owner and as specified in Section 02 81 00 – Transportation and Disposal. The Contractor's disposal facilities shall be proposed by the Bidder in the Technical Execution Plan.
  - ii. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
  - iii. Engineer and Owner reserve the right to require disposal trucks to be weighed at a CT Department of Motor Vehicles (DMV) certified weigh station at any time during the Work.
- b. Payment for Transportation and Off-Site Disposal of Impacted Soil with ACM Debris Work will be made on a US short ton/unit rate basis as presented on the Bid Form. Final tonnage will be based on weigh tickets from the accepting final disposal facility. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.



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**11. Bid Item 11: Transportation and Off-Site Disposal of Impacted Non-Hazardous Soil**

- a. Work required to complete transportation and off-site disposal includes, but is not limited to:
  - i. Coordinate the handling, staging, transportation, and disposal of the estimated 9,650 tons of impacted soil including concrete unsuitable for potential backfill use, if encountered, and soils previously excavated and stockpiled by others. Soils are anticipated to be nonhazardous with impacts from PAHs, ETPH, and metals above CT RSRs based on existing Site soil data provided as an attachment to this Bid Package. Payment for disposal shall be on a per ton basis, as documented by approved disposal facility weigh tickets. Payment shall constitute full compensation for all labor, supervision, materials, equipment, disposal facility coordination, disposal documentation, tipping fees, and incidentals and all other costs necessary to complete transportation and disposal of impacted materials including all transportation fees and disposal facility fees, to the approved disposal facility approved by the Owner and as specified in Section 02 81 00 – Transportation and Disposal. The Contractor's disposal facilities shall be proposed by the Bidder in the Technical Execution Plan.
  - ii. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
  - iii. Engineer and Owner reserve the right to require disposal trucks to be weighed at a CT Department of Motor Vehicles (DMV) certified weigh station at any time during the Work.
- b. Payment for Transportation and Off-Site Disposal of Impacted Non-Hazardous Soil Work will be made on a US short ton/unit rate basis as presented on the Bid Form. Final tonnage will be based on weigh tickets from the accepting final disposal facility. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.

**11. Bid Item 12: Transportation and Off-Site Disposal of Buried ACM Building Materials at Area 2B**

- a. Work required to complete transportation and off-site disposal of buried ACM Building Materials includes, but is not limited to:
  - i. Coordinate the handling, staging, transportation, and disposal of the estimated 2,000 tons of buried ACM building materials from various pits located at the site. Payment for disposal shall be on a per ton basis, as documented by approved disposal facility weigh tickets. Payment shall constitute full compensation for all labor, supervision, materials, equipment, disposal facility coordination, disposal documentation, tipping fees, and incidentals and all other costs necessary to complete transportation and disposal of impacted materials including all transportation fees and disposal facility fees, to the approved disposal



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facility approved by the Owner and as specified in Section 02 81 00 – Transportation and Disposal. The Contractor's disposal facilities shall be proposed by the Bidder in the Technical Execution Plan.

- ii. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
  - iii. Engineer and Owner reserve the right to require disposal trucks to be weighed at a CT Department of Motor Vehicles (DMV) certified weigh station at any time during the Work.
- b. Payment for Transportation and Off-Site Disposal of Buried ACM Building Materials Work will be made on a US short ton/unit rate basis as presented on the Bid Form. Final tonnage will be based on weigh tickets from the accepting final disposal facility. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.

**12. Bid Item 13: Transportation and Off-Site Disposal of PCB-Impacted Soil/Remediation Waste at Area 2D**

- a. Work required to complete transportation and off-site disposal of PCB-Impacted Soil/Remediation Waste includes, but is not limited to:
- i. Coordinate the handling, staging, transportation, and disposal of the estimated 150 tons of PCB-impacted soil (above 1 mg/kg and less than 50 mg/kg) presumed to be considered PCB Remediation Waste for disposal purposes. Payment for disposal shall be on a per ton basis, as documented by approved disposal facility weigh tickets. Payment shall constitute full compensation for all labor, supervision, materials, equipment, disposal facility coordination, disposal documentation, tipping fees, and incidentals and all other costs necessary to complete transportation and disposal of impacted materials including all transportation fees and disposal facility fees, to the approved disposal facility approved by the Owner and as specified in Section 02 81 00 – Transportation and Disposal. The Contractor's disposal facilities shall be proposed by the Bidder in the Technical Execution Plan.
  - ii. Contractor's unit price provided on the bid form shall remain valid for soil quantities within 20% of the estimated quantity.
  - iii. Engineer and Owner reserve the right to require disposal trucks to be weighed at a CT Department of Motor Vehicles (DMV) certified weigh station at any time during the Work.
- b. Payment for Transportation and Off-Site Disposal of PCB-Impacted Soil/Remediation Waste Work will be made on a US short ton/unit rate basis as presented on the Bid Form. Final tonnage will be based on weigh tickets from the accepting final disposal facility. Payment shall constitute full compensation for all labor, equipment, overhead, profit, project management, supervision, materials, incidentals, applicable taxes and all other cost required to complete the scope of work for this Bid Item as described in the Specifications.



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**PART 2 – PRODUCTS**

Not used.

**PART 3 – EXECUTION**

Not Used.

**END OF SECTION**



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**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- A. Summary
- B. References
- C. Contractor's Responsibility for Health and Safety
- D. Submittals
- E. Notifications
- F. Daily Pre-Work Health and Safety Tailgate Meetings
- G. Equipment and Facilities
- H. Personal Protective Equipment
- I. Other Health and Safety Equipment
- J. Worker Qualification
- K. Work Planning and Meetings
- L. Engineering Controls
- M. Heat/Cold Stress Monitoring
- N. Standard Operating Procedures (SOPs)
- O. Site Control Measures
- P. Decontamination Procedures
- Q. Emergency Equipment and First Aid Requirements
- R. Emergency Response and Contingency Procedures
- S. Logs, Reports, and Recordkeeping
- T. Safety Inspections
- U. Spill Containment
- V. Monitoring
- W. Evaluation of Performance

**1.02. SUMMARY:**

- A. This Section includes requirements for Health and Safety during performance of Work, including identification of applicable Laws and Regulations, Submittals, notification requirements, and Health and Safety execution Specifications.

**1.03. REFERENCES:**

- A. Applicable regulations and publications include, but are not limited to, the following:
  - 1. AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH):
    - a. ACGIH: Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
  - 2. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI):
    - a. ANSI Z358.1: Emergency Eyewash and Shower Equipment
  - 3. CODE OF FEDERAL REGULATIONS:
    - a. 29 CFR 1904: Recording and Reporting Occupational Safety and Health Standards and Regulations



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- b. 29 CFR 1910: Occupational Safety and Health Standards
  - c. 29 CFR 1926: Safety and Health Regulations for Construction
  - d. 29 CFR 1926.65: Hazardous Waste Operations and Emergency Response
  - e. 40 CFR 260-270: Environmental Protection Agency (USEPA) Hazardous Waste Requirements
  - f. 40 CFR 761: Toxic Substances Control Act (TSCA) Requirements
  - g. 49 CFR 172: Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
- A. Where two or more regulations/documents conflict, the one(s) offering the greatest degree of protection shall apply.

#### **1.04. CONTRACTOR'S RESPONSIBILITY FOR HEALTH AND SAFETY:**

- A. Contractor shall comply with any and all state, federal, and local ordinances, laws and regulations.
- B. Contractor shall be responsible for the Health and Safety of Contractor's employees, its Subcontractors, Suppliers, agents, inspectors, visitors, the general public, and any others associated with or interacting with Contractor who provides labor, goods, or other services on the Project Site.
- C. Contractor shall be responsible for emergency response planning and notification, and for actual response to any and all emergencies that may occur during the course of the Work, including emergencies that may occur when Contractor is not present at the Project Site.
- D. Contractor is responsible for communicating daily with the Owner (or Owner's representative) regarding Health and Safety issues for the Owner's safe conduct of the Owner's duties, but such communication shall not imply any duty or responsibility on the part of the Owner with regard to Health and Safety of Contractor's employees, its Subcontractors, Suppliers, the general public, or others. The Owner's responsibility and duty with regard to Health and Safety shall be limited to the Owner's employees. Contractor shall have responsibility and duty to the Owner to communicate Health and Safety issues accurately and in a timely manner to allow the Owner to take appropriate actions to protect the Owner's employees and the Owner's employees.
- E. Contractor shall designate a Site Safety & Health Officer (SSHO) on the Project Site during the Work. The SSHO duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs associated with the Contractor's activities at the Project site. The designated SSHO shall be certified in applicable OSHA Construction Safety training. At a minimum, the designated SSHO shall have at least 1 year of experience as a SSHO on construction sites. Contractor's SSHO shall be dedicated to Health and Safety issues from the start of the Work through completion.



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- F.** The SSHO shall enforce the requirements of safety for all Contractor personnel onsite at all times. The SSHO shall ensure that all Contractor personnel, Subcontractor personnel, and Contractor visitors follow the Contractor's site HASP, including wearing the designated level of PPE.
- G.** Prior to mobilization and continually through the duration of the Work, the SSHO shall inspect the Project Site and document area-specific and worker-specific protection requirements.
- H.** After mobilization, the SSHO shall monitor activities and shall document the need for additional worker protection as required, based on activities performed and Action Levels specified in the HASP.
- I.** The SSHO shall verify that all activities are performed in accordance with the HASP and all federal, state, local, and Health and Safety standards, laws and regulations, and guidelines.
- J.** In the event of a health or safety risk, as determined by the SSHO or by other Contractor personnel or by the Owner, Contractor shall not proceed with the Work until a method for handling the risk has been determined in consultation with the Owner and implemented. Any health or safety risk resulting in a stoppage of Work shall be reported immediately to the Owner.
- K.** Contractor shall be responsible for implementing a behavior-based safety process and providing site training, observation, and feedback for Contractor personnel employed at the Project Site.
- L.** Contractor shall be responsible for stability of excavations and embankments caused by the Contractor's Work. Contractor shall designate one competent person as defined in 29 CFR Part 1926, Subpart P, Excavations, to inspect and document excavation safety conditions daily, and to ensure excavation safety prior to any personnel entering an excavation.
- M.** Contractor shall be responsible for erecting barriers around excavations with vertical drops greater than two feet that are left in place when the site is not occupied (i.e., nights and weekends). Barriers may consist of temporary fence panels.

**1.05. SUBMITTALS:**

- A.** Contractor shall prepare and submit a HASP to the Engineer for review prior to initiating work. The Contractor shall follow all applicable local, state, and federal Health and Safety standards, Laws and Regulations, and guidelines implemented through, but not limited to, the OSHA and USEPA. Where these are in conflict, the most stringent requirement shall be followed. The following points shall be addressed in the Contractor's HASP:

  - 1.** Names of key personnel and alternates responsible for Health and Safety, including the SSHO and any other Health and Safety representative appointed by the Contractor. The Owner must approve the SSHO.
  - 2.** A Health and Safety risk or Task Hazard Analysis (THA) associated with each portion of the Work (i.e., list potential hazards), including THAs for excavation, backfilling, construction of retaining structures (if necessary), material handling,



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loading and transportation of impacted debris and materials, decontamination, truck traffic, and restoration.

3. A requirement that Contractor locate Underground Facilities by using "Safe Dig" procedures prior to the start of the Work.
4. PPE to be used for each of the site tasks and operations being conducted, as required by the PPE program in 29 CFR Subpart I, and 29 CFR 1926.
5. Frequency and types of dust monitoring and instrumentation to be used by the Contractor, including methods of maintenance and calibration of monitoring and sampling equipment.
6. Corrective actions and upgrading of PPE based on monitoring of dust, with specific Action Levels identified.
7. Site control measures in accordance with the control program required in 29 CFR 1926.
8. Decontamination procedures in accordance with Specifications Section 02 06 00 – Decontamination.
9. An emergency response plan with procedures for meeting federal, state, and local requirements for safe and effective responses to emergencies, including listing of emergency contacts, necessary PPE and other equipment. Explanation of potential emergencies, including spills, medical emergencies, etc. and contingency plan of action, including description of the route to the nearest appropriate hospital, hospital route map, and posting of emergency telephone numbers at the Project Site.
10. If confined space entry is required, include confined space entry procedures in accordance with 29 CFR 1910.146, and a list of all anticipated confined space entries required by Contractor in the course of the Work.
11. A spill containment program meeting the requirements of all applicable local, state, and federal Health and Safety standards.
12. A list of Health and Safety and emergency equipment available on the Site.
13. A description of engineering controls used to reduce the hazards of equipment operation.
14. Open trench excavation procedures in accordance with applicable OSHA Regulations.
15. Procedures for earthwork near buried utilities, where hand digging should be performed within 24 inches of known utility lines unless more stringent requirements are specified by Laws or Regulations, or the affected utility.
16. Training for emergency response procedures.
17. Heat stress program.



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- 18. Cold stress program.
- 19. Lockout/Tagout where the operation of machinery and/or equipment in which the unexpected energization on start up or the release of stored energy could cause injury to personnel
- 20. Dust monitoring procedures.
- B. Contractor's Daily Construction Report shall include a summary of daily safety issues and a summary of Contractor's Daily Safety Meeting.
- C. Contractor shall submit weekly safety reports that include:
  - 1. The names of all Contractor and Subcontractor personnel employed at the Site at any time during the week, and the names and duties of key personnel including Contractor's Project Manager, Project Superintendent, SSHO, and all competent personnel.
  - 2. A summary of all Health and Safety incidents describing any medical treatment that was provided during the week, the current Work status of any individuals affected the names of individuals who may have observed the incident, and actions taken by Contractor to address the unsafe act or unsafe condition.
  - 3. A summary of all Health and Safety near-misses or observations providing an opportunity for shared learning and future hazard avoidance. For any Health or Safety incident or near-miss, list the date, the nature of the incident or near-miss, and the names of individuals involved.
  - 4. The total number of labor hours worked at the Site during that week.
  - 5. Internal Health and Safety audits performed by the Contractor as part of the Contractor's HASP.
- D. Contractor shall submit documentation of training and experience for the designated competent persons.
- E. Contractor shall maintain all required and applicable training records on-site including, but not limited to those specified in Part 3.01 (A) of this Section.
- F. Contractor shall submit a Hot Work Permit for any welding, torch cutting, or activities that generate sparks.
- G. Contractor shall conduct a THA for significant activities and submit the documentation to the Owner for review prior to the start of the activities.
- H. Contractor shall submit copies of all periodic equipment inspections completed.

**1.06. NOTIFICATIONS:**

- A. Contractor shall immediately (within 30 minutes) verbally report to the Owner and Engineer the occurrence of any and all Health and Safety incidents. A Supervisor's Accident/ Incident Report (SAIR), which may be requested from the Owner, shall be submitted within 24 hours of occurrence of the incident or issue.



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- B.** Contractor shall immediately and fully investigate any such incident or near-miss and conduct a root cause analysis, and shall submit to the Owner and Engineer, the Contractor's written corrective action plan for such incident within one day after the incident.
- C.** Contractor shall notify the Owner and Engineer in writing at least 3 days prior to bringing any hazardous material, equipment, or process to the Project Site, or using the same on the Project Site. Contractor shall provide the Owner with an SDS for all chemicals brought onto the Project Site.
- D.** Contractor shall immediately notify the Owner and Engineer in writing of any hazard that Contractor discovers or observes on the site and corrective measures planned or taken to eliminate or minimize such hazard. Hazard reporting will be completed as a Near Miss Report as described in 1.05(C)(3) of this Section.

**1.07. DAILY PRE-WORK HEALTH AND SAFETY TAILGATE MEETINGS:**

- A.** Prior to the start of each workday that the Contractor is on site, Contractor shall hold a daily pre-work health and safety tailgate meeting to discuss the scope of Work for the day, identify associated hazards, and other topics relevant to the safety of the workers at the Site. Contractor shall maintain logs documenting each daily meeting with sign in sheets and include such logs in the Contractor's daily report.
- B.** Engineer reserves the right to require that the Contractor attend health and safety briefings lead by the Engineer or the Owner, in addition to the Contractor daily pre-work health and safety tailgate meeting. Engineer also reserves the right to call to reconvene if conditions change during the workday.

**PART 2 – PRODUCTS**

**2.01 EQUIPMENT AND FACILITIES:**

- A.** Contractor shall provide all equipment, temporary facilities, and personnel required to perform activities onsite safely in accordance with all laws, regulations, standards, and the Contractor's HASP.

**2.02 PERSONAL PROTECTIVE EQUIPMENT:**

- A.** The appropriate level of PPE shall be determined by the Contractor for specific tasks as described in the Contractor's HASP. If hazards are identified that require a level of protection greater than Level D (defined in paragraph C below), Work shall be suspended and the Owner and Engineer notified. The Contractor's SSHO, in consultation with the Owner, shall determine what actions are required prior to restarting Work. Contractor shall determine and document the appropriateness of suggested minimum PPE requirements for Contractor's employees and others at the Project site.
- B.** Contractor shall furnish and maintain materials and equipment for the Health and Safety of Contractor employees, its Subcontractors, Suppliers, and visitor personnel. Contractor shall provide all required Health and Safety equipment, first aid equipment, tools, monitoring equipment, PPE, and ancillary equipment and methods required to ensure workers' Health and Safety and to comply with the Contractor's HASP.



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- C.** Level D protection will be required at all times while on the Project Site by all personnel and visitors. Level D PPE consists of:
1. Hard hat
  2. Steel-toed boots
  3. Safety glasses with permanent side shields
  4. Work clothes (long pants, shirts with sleeves)
  5. Work gloves
  6. High visibility reflective safety vests
  7. Hearing protection (as needed to prevent exposure exceeding 85 dB level)
- D.** In most cases, Level D will be the maximum allowed level of PPE. Level C may be allowed provided that personnel are properly trained and certified. Contractor shall notify Engineer immediately when upgrades to Level C are employed by the Contractor.
- E.** In cases where the Owner requires additional PPE, the Owner will notify the Contractor of these additional requirements in advance of mobilization so that Contractor may obtain the necessary equipment.

**2.03 OTHER HEALTH AND SAFETY EQUIPMENT:**

- A.** Contractor is required to have the following equipment available on the Site for the Health and Safety of Contractor, Subcontractors, Suppliers, and visitors:
1. First aid kits
  2. Fire suppression equipment (appropriate to location and type of flammable materials present). Equipment will be certified ready for use within the previous twelve months and will also have been inspected each month; documentation supporting certification and inspections will be available for review.
  3. Emergency eyewash facilities meeting OSHA specifications
  4. Other equipment or supplies as determined to be necessary or prudent by Contractor or the Owner
  5. Flammable liquids storage cabinet(s), if necessary
  6. Fall protection equipment appropriate for the hazards on the project

**PART 3 – EXECUTION**

**3.01 WORKER QUALIFICATION:**

- A.** Contractor shall provide the following training to each worker, unless otherwise specified:



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1. 40-hour OSHA HAZWOPER training.
  2. For one who is assigned the role of a “competent person,” documentation of sufficient and relevant training and experience to perform the assigned duties and responsibilities of that role. As defined in 29 CFR 1926.31, the competent person shall be “one who is capable of identifying existing and predictable hazards, and who has authority to take prompt corrective measures to eliminate them.” Relevant training and experience shall be in the same type of Project activities included in the Work under this Contract.
- B.** Contractor shall designate one “competent person” as defined by 29 CFR Part 1926.

**3.02 WORK PLANNING AND MEETINGS**

- A.** Contractor shall conduct a daily Health and Safety meeting, prior to beginning Work for that day, to address Health and Safety issues, changing site conditions, activities and personnel. All Contractor and Subcontractor employees working on the Site on that day shall attend the meeting. All meetings shall be documented and attendees shall sign acknowledgement of their presence at the meeting. Daily meetings shall include an evaluation of the Work to be conducted, the hazards associated with the work, and control measures being used to reduce exposure.
- B.** Contractor personnel who are not in attendance for the daily Health and Safety meeting shall be briefed on the meeting notes upon arrival at the Site and prior to commencing their Work activities. Employees shall sign acknowledgement of briefings prior to commencing Work.
- C.** Contractor shall hold and document additional safety meetings at the start of each major task and whenever site conditions affecting personnel safety change. Any major task undertaken shall require the completion, or modification, of a THA as described in this Section.

**3.03 ENGINEERING CONTROLS**

- A.** Contractor shall, at a minimum, provide the following engineering controls to reduce the hazards of equipment operation and exposure during work activities:
1. Roll-over cages for bulldozers, back hoes, loaders, and tractors
  2. Back-up alarms for all trucks and moving equipment
  3. Wetting of soil and other media or other means to control dust as necessary during the Work in accordance with Section 01 58 00.
  4. Decontamination of equipment in accordance with Specifications Section 02 06 00 – Decontamination.
  5. Barricades for open trenches and excavations.
  6. Sloping, benching, shoring, drainage systems, or other controls as necessary to ensure stability of excavations and embankments.



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7. Others as determined to be necessary or prudent by Contractor or as directed by the Owner.

**3.04 HEAT/COLD STRESS MONITORING:**

- A. The Contractor's Safety and Health Manager shall establish heat/cold stress monitoring program for on-Site activities. Details of the monitoring program, including work/rest schedules and physiological monitoring requirements, shall be described in the HASP. All personnel shall be trained to recognize the symptoms of heat and cold stress and related ailments. The Contractor shall designate, in writing, the SSHO and alternate persons to be responsible for the Heat/Cold stress monitoring program.
1. Cold Stress: To guard against cold injuries the Contractor shall provide appropriate clothing and warm shelter for rest periods. As a minimum, monitoring of personnel for cold stress shall commence when the ambient temperature falls below 50°F. Procedures to monitor and avoid cold stress shall be followed in accordance with the current TLVs for Cold Stress as recommended by the ACGIH.
  2. Heat Stress: Monitoring of personnel for heat stress shall commence when the ambient temperature is above 70°F. Procedures to monitor and avoid heat stress shall be followed in accordance with the current TLVs for heat stress as recommended by the ACGIH.

**3.05 STANDARD OPERATING PROCEDURES (SOPs):**

- A. The Contractor shall outline SOPs for preventing accidents and protecting personnel from injury and occupational illness for all operations having a significant accident potential. Approved SOPs will be made available to the engineer and subcontractor personnel.

**3.06 SITE CONTROL MEASURES:**

- A. The HASP shall include a Site map depicting work zones, which consist of exclusion zones, contamination reduction zones, and support zones. Support Zones are presumed to be contaminant free zones where the Contractor shall stage equipment, offices and personnel. Such Support Zones shall be maintained free of impacted debris or materials.
1. The "Support Zone" is the area where clean equipment is stored, personnel take rest breaks, and all other activities occur. The support zone is to be located where there is no potential for contact with contaminants.
  2. Communications: Written procedures for routine and emergency communications procedures shall be included in the Contractor's HASP. Visual and voice or radio communications must be maintained at all times while working onsite. At a minimum, the following communications shall be available:
    - a. Hard line or cellular telephone
    - b. Two-way portable radio
    - c. Compressed air horn (emergency evacuation signal)
    - d. Hand signals



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3. Signs: The Contractor shall post all OSHA required safety signs onsite. At a minimum, this will include:
  - a. Visitor Signs: Signs shall be posted directing all visitors to the field office or security check-in point.
  - b. No Smoking Signs: No smoking signs shall be posted in appropriate areas.

**3.07 DECONTAMINATION PROCEDURES:**

- A. Decontamination facilities and procedures for personnel protective equipment, sampling equipment, and heavy equipment shall be discussed in detail in the HASP.
  1. Personal Hygiene and Decontamination: The Contractor's HASP shall provide a written description of procedures to maintain personal hygiene and to provide decontamination for personnel and equipment. Personal hygiene and decontamination procedures shall be established by the Contractor's Health and Safety Manager.
  2. Equipment Decontamination: All equipment which comes into direct contact with potentially impacted materials or debris shall be properly decontaminated prior to leaving the contamination reduction zone. The Health and Safety Manager shall develop procedures for ensuring that the equipment decontamination procedures are effective.
  3. Equipment Decontamination Tracking: All equipment used in the exclusion zone shall be decontaminated and verified as "clean" by the SSHO prior to it departing the Site. The sign in/sign out record should have a category to reflect that all equipment used in the exclusion zone has been properly decontaminated.

**3.08 EMERGENCY EQUIPMENT AND FIRST AID REQUIREMENTS:**

- A. The Contractor shall provide appropriate emergency first aid kits and equipment suitable for treatment of exposure to identified hazards, including chemical agents. At least two persons with certified first aid/CPR training are to be on-site at all times during Site operations.
- B. The Contractor shall provide at a minimum, the following, an approved emergency eye wash/shower unit in accordance with ANSI Z358.1, a first aid kit, and dry chemical fire extinguishers with a minimum rating of 2A.10 B: C in the Contamination Reduction Zone and in each active work area of the Exclusion Zone. One (1) "industrial" first aid kit appropriate for the number of employees on-site and stretcher shall be provided and maintained fully stocked at a designated location. First aid equipment locations shall be clearly marked and provided with adequate water and other supplies necessary to cleanse and decontaminate burns, wounds, or lesions. Dry chemical fire extinguishers of the 2A-10 B: C type shall also be supplied to each flammable storage area on the Site. The Emergency Response Plans shall include equipment types, training frequency, and preventive maintenance procedures and shall be submitted as part of the HASP. The locations of equipment shall be identified in the Contractors HASP. At a minimum, this equipment shall include the following:
  1. Eye wash/shower unit;
  2. First aid kits;



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3. Fire extinguishers (10 lb. 2A:10B:10C);
  4. Air horns;
  5. Spill response kit; and,
  6. Site telephone.
- C. The Contractor shall also ensure that the SSHO and at least one other contractor employee have current certification training in first aid and cardiopulmonary resuscitation (CPR) from the American Red Cross or equipment.

**3.09 EMERGENCY RESPONSE AND CONTINGENCY PROCEDURES:**

- A. The Contractor shall establish procedures to take emergency action in the event of immediate hazards (i.e., a chemical agent leak or spill, fire, or personal injury). The Contractor's designated SSHO shall serve as the emergency coordinator. Personnel and facilities providing support in emergency procedures shall be identified. The emergency equipment to be present on-site and the Emergency Response Plan procedures, as required by 29 CFR 1926.65, paragraph (L) shall be specified in the Emergency Response Plan. The Emergency Response Plan shall be included as part of the HASP.
1. Pre-Emergency Planning: The Contractor shall identify emergency response resources for fire, spills, and injuries. Methods of communications with these resources shall be a component of the Emergency Response Contingency Plan. Communications systems, evacuation routes, locations of emergency equipment, and the emergency "chain of command" shall also be identified in advance. Prior to site operations and at daily Site briefings, all employees shall be informed of the Emergency Response Contingency Plan. The plan will be reviewed and revised if necessary, on a regular basis by the SSHO.
  2. Personnel Roles and Authority: The Emergency Response Contingency Plan shall describe the emergency "chain of command" by personnel, their role, and their authority.
  3. Emergency Recognition and Prevention: The Contractor shall ensure that their on-site employees are familiar with the appropriate techniques of hazard recognition from pre-assignment training and daily Site briefings. The SSHO is responsible for ensuring that prevention devices, equipment, and proper training are made available to personnel.
  4. Evacuation Procedures: The Contractor shall prepare written evacuation procedures as part of the Emergency Response Contingency Plan. This shall include, but not be limited to, alarm procedures, evacuation routes, evacuation assembly areas, and "head count" procedures to ensure all have evacuated.
  5. Emergency Contact/Notification System: The Contractor shall identify emergency response resources in the Emergency Response Contingency Plan. These resources shall include fire response, spill response, medical response, and security. It shall also include regulatory agencies and the National Response Center (NRC). This information shall be presented in tabular form by organization, contact, and telephone number. All identified emergency response resources shall be contacted in advance of Site operations and it shall be confirmed by the Contractor that these resources are prepared to provide emergency assistance.



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6. Emergency SOP: The Contractor shall prepare written emergency standard operating procedures (SOP) as part of the Emergency Response Contingency Plan. These procedures shall describe how personnel will respond to fires, injuries, spills, and leaks.

**3.07 LOGS, REPORTS, AND RECORDKEEPING:**

- A. The Contractor shall maintain daily health and safety tailgate meeting logs, task hazard analyses, safety inspection logs and reports, accident/incident reports, medical certifications, training logs, monitoring results, etc. The Contractor shall maintain all exposure and medical monitoring records according to 29 CFR 1910 and 29 CFR 1926.
- B. The Contractor shall immediately notify the Owner of any accident/incident. Within two working days of any reportable accident the Contractor shall complete and submit to the Owner an Accident Report.

**3.08 SAFETY INSPECTIONS:**

- A. The Contractor shall devise a systematic method of conducting daily safety inspections to evaluate operating areas and personnel performance with the goal of eliminating hazards. Copies of all safety inspections shall be maintained on-site for inspection. These reports shall be made available to the Owner and/or the Engineer. The Contractor's SSHO shall accompany any federal or state regulatory official performing onsite evaluations of Contractor operation.

**3.09 SPILL CONTAINMENT:**

- A. A spill containment program in accordance with 29 CFR 1926.65(j) shall be incorporated as part of the HASP.

**3.10 MONITORING:**

- A. Contractor shall perform heat exposure and cold exposure monitoring activities as required by weather conditions.
- B. Contractor shall perform all dust monitoring activities described in the Contractor's HASP required to provide Health and Safety protection to the Contractor's and Subcontractor's personnel and monitor for emissions of nuisance dust to areas of the Owner's facility outside the Work limits. Results to be submitted to the Owner within 48 hours.

**3.11 EVALUATION OF PERFORMANCE:**

- A. Contractor shall routinely conduct internal safety audits on Subcontract and Sub-subcontract Work sites in accordance with the Contractor's HASP. The focus of these routine audits will be in compliance with OSHA and local occupational safety regulations. Submit weekly summary of auditing to Owner.
- B. Contractor shall conduct routine behavioral observations and provide immediate feedback during Work activities to promote safe behavior of Contractor employees and Subcontractor employees.

**END OF SECTION**



**SECTION 01 41 50**  
**HEALTH AND SAFETY REQUIREMENTS**

**HEALTH AND SAFETY FORMS FOLLOW**



**SECTION 01 41 50**  
**HEALTH AND SAFETY REQUIREMENTS**

**EHS Opportunity or Near Miss Report**

Reported by: \_\_\_\_\_ Incident Date/Time: \_\_\_\_\_

Date Reported: \_\_\_\_\_ Site Location: \_\_\_\_\_

**Report Type (please check one):**

- ☐ EHS Opportunity (suggestion for improvement, good EHS idea to share, or EHS observation)  
☐ EHS Near-Miss (event that could have resulted in an incident under different circumstances)

**Description:**

*Describe key aspects such as the operation in progress, worker experience, potential outcome of event, and any contributing conditions. Use additional sheets as necessary.*

**Possible Outcome (check all that apply):**

- ☐ Injury/illness   ☐ Property damage   ☐ Environmental release   ☐ Regulatory Violation

**Hazard Category (check all that apply):**

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Body mechanics/ergonomics | <input type="checkbox"/> Hand safety    | <input type="checkbox"/> Road/vehicle        |
| <input type="checkbox"/> Chemical exposure/release | <input type="checkbox"/> Mechanical     | <input type="checkbox"/> Security lapse      |
| <input type="checkbox"/> Drowning/engulfment       | <input type="checkbox"/> Noise          | <input type="checkbox"/> Sharp/broken object |
| <input type="checkbox"/> Electrical                | <input type="checkbox"/> Pinch point    | <input type="checkbox"/> Slip/trip/fall      |
| <input type="checkbox"/> Equipment/tools           | <input type="checkbox"/> Plants/animals | <input type="checkbox"/> Weather             |
| <input type="checkbox"/> Fire/explosion            | <input type="checkbox"/> Pressure/heat  | <input type="checkbox"/> Other:              |

**Possible Causal Factors (as identified by employee):**

**1. Immediate Cause**

- ☐ Engineering design – inadequate  
☐ Inattentiveness/awareness – inadequate  
☐ Protective systems/equip. – inadequate  
☐ Pre-planning – inadequate  
☐ Procedure – not followed  
☐ Tool/Equipment– wrong for the job  
☐ Tool/Equipment – inadequate insp./maint.  
☐ Worksite layout or control – inadequate  
☐ Other:

**DUE  
TO:**



**2. Root Cause**

- ☐ Behavior – rushing or frustration  
☐ Behavior – fatigue or complacency  
☐ Change in condition/scope of work  
☐ Procedure – inadequate or not present  
☐ Staffing – insufficient number of staff  
☐ Staffing – inadequate physical state  
☐ Staffing – inadequate supervision  
☐ Training – inadequate  
☐ Other:

**Corrective Action Taken and Lesson Learned:**

- Submit to:** ☐ Your supervisor or PM (review for quality then send to:)  
☐ EHS Coordinator (review, enter in monthly report, then send to:)  
☐ Corporate EHS



**SECTION 01 41 50**  
**HEALTH AND SAFETY REQUIREMENTS**

**First Report of Occupational  
Injury, Illness, or Exposure**

**Reported by:** \_\_\_\_\_ **Incident Date/Time:** \_\_\_\_\_  
**Date/Time Reported** \_\_\_\_\_ **Client Name/Site:** \_\_\_\_\_  
**Supervisor:** \_\_\_\_\_ **AECOM Office:** \_\_\_\_\_  
**Description:** \_\_\_\_\_

*Describe the operation in progress, body part affected, witness names, client notifications made, potential non-work related causes, and any contributing conditions. Use additional sheets as necessary.*

**Response and Care Provided:**

- ☐ Taken to medical facility (provide facility name and phone):  
☐ First aid provided(describe):

**Incident Resulted from (check all that apply):**

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Body mechanics/ergonomics | <input type="checkbox"/> Hand safety    | <input type="checkbox"/> Road/vehicle        |
| <input type="checkbox"/> Chemical exposure/release | <input type="checkbox"/> Mechanical     | <input type="checkbox"/> Security Lapse      |
| <input type="checkbox"/> Drowning/engulfment       | <input type="checkbox"/> Noise          | <input type="checkbox"/> Sharp/broken object |
| <input type="checkbox"/> Electrical                | <input type="checkbox"/> Pinch point    | <input type="checkbox"/> Slip/trip/fall      |
| <input type="checkbox"/> Equipment/tools           | <input type="checkbox"/> Plants/animals | <input type="checkbox"/> Weather             |
| <input type="checkbox"/> Fire/explosion            | <input type="checkbox"/> Pressure/heat  | <input type="checkbox"/> Other:              |

**Possible Causal Factors (as identified by employee):**

**1. Immediate Cause**

- ☐ Engineering design – inadequate  
☐ Inattentiveness/awareness – inadequate  
☐ Protective Systems/Equip. – inadequate  
☐ Pre-planning – inadequate  
☐ Procedure – not followed  
☐ Tool/Equipment– wrong for the job  
☐ Tool/Equipment – inadequate insp./maint.  
☐ Worksite layout or control – inadequate  
☐ Other:

**DUE  
TO:**



**2. Root Cause**

- ☐ Behavior – rushing or frustration  
☐ Behavior – fatigue or complacency  
☐ Change in condition/scope of work  
☐ Procedure – inadequate or not present  
☐ Staffing – insufficient number of staff  
☐ Staffing – inadequate physical state  
☐ Staffing – inadequate supervision  
☐ Training – inadequate  
☐ Other:

**Corrective Action Taken and Lesson Learned:**

**Submit immediately to all of the following:**

- ☐ Your supervisor ☐ Project Manager (if applicable) ☐ EHS Coordinator ☐ Corporate EHS



**SECTION 01 41 50**  
**HEALTH AND SAFETY REQUIREMENTS**

**Hot Work Permit**

**Permit Valid**

**For 1 Work Day**

**Site Name:** \_\_\_\_\_

**Project Number:** \_\_\_\_\_

**EHS Officer:** \_\_\_\_\_

**Client:** \_\_\_\_\_

**Hot Work Description:** \_\_\_\_\_

\_\_\_\_\_

**Workers/Welders Conducting Hot Work:** \_\_\_\_\_

**Permits MUST be completed in its Entirety Before Hot Work Begins**

	Yes	No
Has Project supervisor been notified of intended Hot Work?		
Does client representative need to be notified of the intended Hot Work?		
Will Hot Work impact the general public, clients, or operation employees?		
Will the intended Hot Work need to be coordinated with other contractors who may be working on the site to make them aware of any hazards and the scope of work to be performed?		
Have hazardous energy sources been identified, isolated, and locked out/tagged out before the start of the Project?		
Will Hot Work be conducted within a confined space?		
All testing equipment (i.e., CGI, oxygen meter, etc.) and firefighting equipment (i.e., extinguisher, etc.) have been checked to ensure proper operation and calibration before the start of this Project?		
Has a fire watch been designated and on station?		
Have coatings on metal surfaces been tested for ignitability and flame spread?		
Has the area been cleared of all flammable materials?		
Have all fuel sources been identified and protected?		
Has the area been restricted with proper barriers and signs?		
Has the area been tested to be certain that atmosphere is 0% LEL before starting Hot Work?		
Have flame sensitive areas and equipment (including cylinders and gas delivery lines) exposed to slag and sparks been protected by flame resistant blankets or removed from the area?		
Have all equipment and hoses been protected from falling metal structures and debris?		
Have escape routes been identified before starting work?		
Is ventilation equipment needed? Type needed:		



**SECTION 01 41 50**  
**HEALTH AND SAFETY REQUIREMENTS**

**The Following Protective Equipment Will be Required:**

	Yes	No		Yes	No
Welding Goggles/Shield Tint			Supplied Air Respirator		
Safety Boots			Head Protection		
Leather gloves			Safety Harness		
Hearing Protection			Welding Leathers – Top		
APR Cartridge			Welding Leathers - Bottom		

**Permit Valid for 1 Work Day**

The following procedures will be applicable prior to Hot Work on tanks or other types of enclosed structures. (Check all that apply and fill in appropriate information.)

☐ Ventilate to 0% LEL

☐ Confined Space Entry Permit

☐ Mechanical Ventilation Required

☐ Cold Cut Only                      Method Allowed: \_\_\_\_\_

☐ Hot Cutting Permitted              Method Allowed: \_\_\_\_\_

Inert to <\_\_\_% Oxygen

---

**Approvals:**

\_\_\_\_\_

Date

\_\_\_\_\_

Client Representative

\_\_\_\_\_

AECOM Site Safety Officer

\_\_\_\_\_

Fire Watch

\_\_\_\_\_

Performed Hot Work Employee

File Permit in Project Work File and Health and Safety Department



**SECTION 01 41 50**  
**HEALTH AND SAFETY REQUIREMENTS**

## Task Hazard Analysis

<b>THA Type:</b> <input type="checkbox"/> Investigation <input type="checkbox"/> O&M <input type="checkbox"/> Office <input type="checkbox"/> Construction		<input type="checkbox"/> New <input type="checkbox"/> Revised		<b>Date:</b>
<b>Work Activity:</b>				
<b>Personal Protective Equipment (PPE):</b>				
<b>Development Team</b>	<b>Position/Title</b>	<b>Reviewed By</b>	<b>Position/Title</b>	<b>Date</b>
<b>○ Job Steps<sup>1</sup></b>	<b>○ Potential Hazards<sup>2</sup></b>	<b>○ Critical Actions<sup>3</sup></b>		

**Notes**

1 – Target number of job steps: six to ten

2 – Codes for Potential Hazards:

Caught Between (CBT)	Contacted By (CB)	Caught On (CO)	Fall To Below (FB)	Overexertion (O)	Struck Against (SA)
Caught In (CI)	Contact With (CW)	Exposure (E)	Fall - Same Level (FS)	Release To (R)	Struck By (SB)

3 – Types of Critical Actions: Administrative Controls, Engineering Controls, PPE, and/or Safe Work Practice / SOP

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**SECTION 01 41 50**  
**HEALTH AND SAFETY REQUIREMENTS**

**Safety Task Analysis Review (STAR)**

**Task Description:**

**List Tasks:**

List Additional Hazards (Hazards Not Shown  
with Check Box)

Signatures of Personnel on Task Analysis  
Review/Tailgate Meeting:

Company: \_\_\_\_\_

Completed By: \_\_\_\_\_

Date: \_\_\_\_\_

Job Location: \_\_\_\_\_

List Additional Controls (Controls Not Shown  
with Check Box)

Tailgate Meeting Topic

Mentor Assigned to Work

Lessons Learned (Based on changes in  
conditions, EHS Near- Incidents/ Observations,  
Potential Emergencies)

Is there a better/safer way to perform the  
work/task?

**Supervisor Review (date/Time):** \_\_\_\_\_

**EHS Review (date/time):** \_\_\_\_\_

Comments: \_\_\_\_\_



## SECTION 01 41 50

### HEALTH AND SAFETY REQUIREMENTS

#### Identify Potential Hazards

- ☐ Abrasions
- ☐ Biological Hazards (Plants, Animals, Insects)
- ☐ Cave-in (Trench/Excavation Work)
- ☐ Chemical/Thermal Burn
- ☐ Cuts
- ☐ Dermatitis
- ☐ Dropping Materials/Tools to Lower Level
- ☐ Drowning/Flowing Water
- ☐ Dust
- ☐ Electrical Shock
- ☐ Elevated/Overhead Work
- ☐ Energized Equipment
- ☐ Fire
- ☐ Flammability
- ☐ Foreign Body in Eye
- ☐ Hazardous Materials (Exposure or Release)
- ☐ Heat or Cold Stress
- ☐ Heavy Equipment Operation
- ☐ Heavy Lifting
- ☐ High Noise Levels
- ☐ Impact Noise
- ☐ Inability to Maintain Communication
- ☐ Inclement Weather
- ☐ Overhead Work
- ☐ Overhead Utilities
- ☐ Underground Utilities
- ☐ Pinch Points
- ☐ Pressurized Lines
- ☐ Slips, Trips, Falls
- ☐ Sprains/Strains
- ☐ Traffic
- ☐ Underground Utilities
- ☐ Confined Space
- ☐ New or Rental Equipment
- ☐ Surface Water Run-On/Run-Off
- ☐ Odor/VOC Emissions
- ☐ Compressed Gas Cylinders
- ☐ Generated Wastes (Solids/Liquids)
- ☐ Known/Unknown Visitors
- ☐ Visibility
- ☐ New Personnel
- ☐ Hoists/Rigging/Slings/Wire Rope
- ☐ Special Operations/Instructions (Attach)
- ☐ Ergonomics

#### Identify Controls

- ☐ Air Monitoring
- ☐ Barricades/Fencing/Silt Fencing
- ☐ Buddy System
- ☐ Appropriate Clothing/Monitoring of Weather
- ☐ Confined Space Procedures
- ☐ Decontamination
- ☐ Drinking Water/Fluids
- ☐ Dust abatement Measures
- ☐ Equipment Inspection
- ☐ Exclusion Zones
- ☐ Exhaust Ventilation
- ☐ Fall Protection
- ☐ Fire Extinguisher/Fire Watch
- ☐ Flotation Devices/Lifelines
- ☐ Grounds on Equipment/Tanks
- ☐ Ground Fault Interrupter
- ☐ Ground Hydraulic Attachments
- ☐ Hand Signal Communication
- ☐ Hazardous/Flammable Material Storage
- ☐ Hazardous Plant/Animal Training
- ☐ Hearing Protection (Specify)
- ☐ Hoses, Access to Water
- ☐ Hot Work Procedures
- ☐ Insect Repellent or Precautions
- ☐ Isolation of Equipment or Process (LO/TO)
- ☐ Stormwater Control Procedures/Methods
- ☐ Machine/Equipment Guarding
- ☐ Manual Lifting Equipment (Chain Falls)
- ☐ Protective Equipment (Specify)
- ☐ Proper Lifting Techniques
- ☐ Proper Tool for Job
- ☐ Radio Communication
- ☐ Respirator, (Specify Type)
- ☐ Safety Harness/Lanyard/Scaffold
- ☐ Sloping, Shoring, Trench Box
- ☐ Vehicle Inspection
- ☐ Spill Prevention Measures/Spill Kits
- ☐ Equipment Manuals/Training
- ☐ Emergency Procedures/Incident Management Plan
- ☐ Appropriate Labels/Signage
- ☐ Derived Waste Management Plan
- ☐ Visitor Escort/Orientation/Security
- ☐ Window Cleaning/Defrost
- ☐ Proper Work Position/Tools

#### Pre-Task Review (Yes/No/NA)

1. Has Job Hazard Analysis been completed and reviewed? \_\_\_\_\_
2. Is Job Scope understood by all Personnel? \_\_\_\_\_
3. Proper Safety Equipment on job site? \_\_\_\_\_
4. Permit Issued? \_\_\_\_\_  
What type?  
☐ Hot Work      ☐ Confined Space  
☐ Excavation    ☐ Other: \_\_\_\_\_
5. Proper Tools for Job on site? \_\_\_\_\_
6. Oxygen/Flammability checked? \_\_\_\_\_
7. Reviewed MSDSs for any hazardous substance that might be present? \_\_\_\_\_
8. Proper training for all personnel? \_\_\_\_\_
9. Are there any planned deviations from set procedures for equipment modifications? \_\_\_\_ If so, contact supervisor to check applicability of MOC procedures.
10. Is there any work planned that could cause activation of emergency procedures? \_\_\_\_\_  
If so, have these procedures been discussed and communicated?

#### Post-Task Review

1. Work area cleaned up? \_\_\_\_\_
2. All locks and tags removed and signed off by individuals? \_\_\_\_\_
3. Have Permits been turned in? \_\_\_\_\_
4. STAR submitted to EHS Department? \_\_\_\_\_
5. Were there any unplanned deviations from set procedures or equipment modifications? \_\_\_\_\_  
If so, contact supervisor to check applicability of MOC procedures.



**SECTION 01 58 00**  
**ENVIRONMENTAL MONITORING AND CONTROLS**

**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- A.** Dust Control
- B.** Noise Control

**1.02. DUST CONTROL:**

- A.** Dust Control: Dust particles, aerosols and gaseous by-products from work activities shall be controlled at all times including weekends, holidays, and hours when the Work is not in progress. Contractor shall maintain construction areas, excavations, staging and storage areas, and other work areas within or outside the Work area free from particulates that would cause relevant air pollution standards to be exceeded or that would cause a hazard or nuisance. Contractor must have sufficient equipment and personnel available to accomplish these tasks.
- B.** Contractor shall provide all labor, materials, and equipment, including water trucks and dust suppressant, needed to limit visible dust generation during on-site construction activities, on-site transportation, and other work activities.
- C.** Contractor shall provide dust control measures with the following minimal activities:
  - 1.** Perform perimeter air monitoring to confirm airborne particulates are not transported beyond the limits of the Site.
  - 2.** Wetting agents shall be used as needed.
  - 3.** Trucks carrying materials for placement or disposal, including impacted soil and debris, shall be covered.
  - 4.** Regular and continual cleaning of sidewalk and adjacent facility parking areas and roadways shall be provided.
  - 5.** A vehicle and equipment decontamination facility that includes a wheel wash station shall be provided in accordance with Section 02 06 00 – Decontamination and Section 31 25 00 Erosion and Sediment Control.
  - 6.** Cover stockpiles of impacted soil/materials to eliminate runoff and dust from the stockpiled materials. The roads used by the Contractor's vehicles must be maintained in clean condition at the end of each day by either prevention of tracking soils and dirt (required if contacting impacted soils) and/or by power sweeping. If there is suspected asbestos on the ground, sweeping is not allowed and other methods that do not generate dust must be used.

**1.03. NOISE CONTROL:**

- A.** Contractor shall conduct the Work in accordance with the applicable noise ordinance concerning noise levels and hours of construction activity.
- B.** Contractor shall control the Work at all times, such that sound levels measured at the Project site boundary comply with local ordinances and Owner requirements for the facility.



## **SECTION 01 58 00**

### **ENVIRONMENTAL MONITORING AND CONTROLS**

- C.** The Engineer or Owner will have authority to direct Contractor to stop Work or modify Work methods or activities as necessary.
- D.** Contractor equipment shall be outfitted with mufflers and other sound attenuating equipment so that sound levels do not exceed the above limits when measured at a property line or a distance of 50 feet from any vehicle or equipment. Equipment engines shall not be started prior to 7:00 AM, Monday through Friday, unless otherwise approved by the Owner.

#### **PART 2 – PRODUCTS**

Not Used.

#### **PART 3 – EXECUTION**

Not Used.

**END OF SECTION**



**SECTION 01 72 00**  
**SURVEYING**

**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- A.** Submittals
- B.** Examination
- C.** Survey Reference Points
- D.** Survey Requirements

**1.02. SUBMITTALS:**

- A.** Contractor will retain the services of an independent Connecticut Licensed land surveyor, licensed in the State of Connecticut. Contractor shall submit surveyor qualifications to the Engineer for review.
- B.** Contractor may conduct an independent survey to confirm measurement and payment quantities.
- C.** Contractor's surveyor shall perform surveying to record location and elevations during the course of excavation and backfill work, document the locations and elevations of installed facilities (if any), and provide an as-built survey of the final limits of excavations and all final surfaces and structures.
- D.** Contractor will submit all field notes, computations, data logger information, and other survey records for the purposes of progress surveys, confirmation of payment quantity estimation, and/or for final documentation of the Work.
- E.** Survey documentation shall be signed and sealed by Contractor's Professional Land Surveyor. Contractor shall also provide survey data electronically in AutoCAD and tabulated. Survey documentation shall conform to the following standards:
  - 1.** Measurements shall be provided in units of feet.
  - 2.** Elevations shall be provided to the nearest 0.01 feet.
  - 3.** Electronic submittal shall be saved as AutoCAD release 2024 or later.
  - 4.** Drawing items in "Model" space shall be drawn to full scale or "World" scale.
  - 5.** All data points shall have horizontal and vertical data and reference point name, if appropriate; Owner will provide data formatting requirements.
  - 6.** Graphical location of referenced benchmarks shall be included.
  - 7.** Blocks with attributes and polylines shall be used as applicable.
  - 8.** Proxy entities shall not be used.
  - 9.** Field data code list used to develop survey points shall be included.
- F.** Contractor will maintain and submit all survey data and survey Drawings as Record Documents.



## **SECTION 01 72 00**

### **SURVEYING**

#### **1.03. EXAMINATION:**

- A.** Contractor shall verify locations of survey benchmarks shown on the Drawings prior to starting Work.
- B.** Contractor shall promptly notify the Owner of any discrepancies discovered.

#### **1.04. SURVEY REFERENCE POINTS:**

- A.** Contractor's surveyor will establish temporary benchmark(s) and horizontal control for the Work.
- B.** Contractor shall locate and protect survey control and reference points during construction.

## **PART 2 – PRODUCTS**

Not Used.

## **PART 3 – EXECUTION**

#### **3.01 SURVEY REQUIREMENTS:**

- A.** All site survey data must be provided in the coordinate systems utilized in the existing conditions survey.
- B.** Contractor's surveyor shall perform surveying to record elevations during the course of the Work and will provide a survey of the final limits of site restoration. Contractor shall conduct additional layout survey during the Work as needed to ensure that the Work performed is to the limits shown on the Drawings.
- C.** Contractor's surveyor shall perform the following surveys:
  - 1.** Shoot initial elevations shown on the Drawings to establish any differences between current conditions and conditions documented in the design survey.
  - 2.** Horizontal and vertical limits of all excavations.
  - 3.** Locations and elevations of previously unidentified utilities that may be identified during the Work.
  - 4.** Horizontal and vertical limits of backfill material placement.
  - 5.** Other site final grades and elevations.
  - 6.** All other significant site features changed during construction.
- D.** Contractor shall preserve the survey stakes, including replacement by the Registered Land Surveyor, at Contractor's expense, if destroyed or moved.



## **SECTION 01 72 00**

### **SURVEYING**

- E.** Contractor shall promptly report to the Owner the loss or destruction of any reference point or relocation required because of changes in grades or other reasons. Contractor shall make no changes without prior written notice to the Owner.
- F.** The Work shall be executed in conformance with the lines and grades shown on the Drawings, unless otherwise reviewed and approved by the Owner.
- G.** At the end of construction, Contractor's surveyor shall prepare Record Drawings showing horizontal and vertical limits of excavations; final locations and elevations of installed or modified utilities and other significant site features changed during construction.
  - 1.** Record Drawings shall include Work plans, cross-sections, and profiles as necessary to accurately represent conditions.
  - 2.** Statements that design features were built "to plan" will not be an acceptable substitute for final as-built survey information.
- H.** If Contractor's Record Drawings vary from interim survey data provided during progress of the Work, Contractor shall perform any rework required at no additional cost to the Owner.

**END OF SECTION**





## **Division 2 Specifications**

### **Site Work**



**SECTION 02 06 00**  
**DECONTAMINATION**

**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- A. Summary
- B. Submittals
- C. Decontamination Facilities
- D. Vehicle/Equipment Decontamination
- E. Personnel Decontamination
- F. Decontamination Methods
- G. Management of Decontamination Residuals

**1.02. SUMMARY:**

- A. This section covers the decontamination procedures for personnel and equipment.

**1.03. SUBMITTALS:**

- A. Prior to mobilization, Contractor shall submit personnel decontamination procedures as part of the Contractor's HASP specified in Specifications Section 01 41 50. Contractor shall provide the following information:
  - 1. Procedures for the decontamination of equipment.
  - 2. Method to prevent cross contamination from personnel and vehicles.
  - 3. Procedures to prevent cross-contamination of clean areas during remedial activities.
  - 4. Methods and procedures to minimize worker contact with contaminants during removal of personal protective equipment (PPE).
  - 5. Procedures for inspection and decontamination of vehicles leaving the Project Site.
  - 6. Procedures for disposal of personal PPE.
  - 7. Procedures for the collection of all decontamination water and residuals.
  - 8. Procedures for minimizing generation of wastewater.

**1.04. DECONTAMINATION FACILITIES:**

- A. Contractor shall construct and maintain decontamination facilities for equipment and trucks as described in the Contract Documents and Plans. If not described in Contract Documents, Contractor shall prepare facilities using standard practices.
- B. Contractor shall construct and maintain decontamination facilities for personnel.

**PART 2 – PRODUCTS**

Not used.



**SECTION 02 06 00**  
**DECONTAMINATION**

**PART 3 – EXECUTION**

**3.01 VEHICLE/ EQUIPMENT DECONTAMINATION:**

- A.** Work zones shall be established as specified in the Contractor's HASP.
- B.** Contractor shall inspect and decontaminate all vehicles and equipment that have entered the Exclusion Zone. All decontamination shall take place in Decontamination Zones.
- C.** Decontamination of vehicles and equipment shall include removal of soil and residues from the chassis (which includes undercarriage, suspension, wheel wells, tires, and wheels) and other parts of the vehicle known to have been contaminated or visually appearing to be contaminated.
- D.** Contractor shall take care while decontaminating vehicles to avoid contaminating personnel, other parts of the vehicle or equipment, or the surroundings. Personnel involved in vehicle and equipment decontamination shall be dressed in the appropriate level of PPE as determined by the Contractor's HASP. All personnel shall follow all applicable safety procedures described in Specifications Section 01 41 50.
- E.** Contractor shall decontaminate haul trucks after loading and before the haul trucks exit onto public streets if inspection indicates the presence of contaminants. Contractor shall ensure that haul trucks exit through the Decontamination Zone and receive proper decontamination and inspection.
- F.** Dirt and soil shall not be allowed on the public street or adjacent property. Street must be swept clean if dirt from the Project Site is tracked onto it. Tracking must be avoided.

**3.02 PERSONNEL DECONTAMINATION:**

- A.** Contractor shall ensure that personnel who have entered the Exclusion Zone perform decontamination as required in the HASP as specified in Specifications Section 01 41 50 prior to exiting the Decontamination Zone, as applicable.

**3.03 DECONTAMINATION METHODS:**

- A.** Physical decontamination techniques used during truck and equipment decontamination may include, but are not limited to, brushing and spraying with a water pressure washer until all visible contamination and debris is removed.
- B.** Brushing shall consist of removal of loose materials with the use of a broom and/or brushes.
- C.** A heated water pressure washer shall be used to provide application of water of sufficient temperature, pressure, residence time, and agitation to remove soil and contaminated residuals from surfaces.
- D.** Surfactants and detergents must be approved by the Engineer prior to use in decontamination operations. Materials which may be detrimental to water treatment, handling, or disposal shall not be allowed.



**SECTION 02 06 00**  
**DECONTAMINATION**

- E.** All equipment decontamination procedures shall be performed in a decontamination facility or area.
- F.** Overspray barriers shall be provided, if necessary or as directed by the Owner, on each side of the decontamination area to prevent contamination of adjacent areas.
- G.** Contractor shall manage decontamination residuals, including water, soil, residues, used PPE, and other materials removed during decontamination as specified in paragraph 3.04.

**3.04 MANAGEMENT OF DECONTAMINATION RESIDUALS**

- A.** Contractor shall collect and properly dispose of decontamination liquids and solids as needed.
- B.** Contractor shall manage contaminated PPE as Impacted Material to be sent to an Owner-approved disposal facility.

**END OF SECTION**



**SECTION 02 81 00**  
**TRANSPORTATION AND DISPOSAL**

**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- A. Summary
- B. Submittals
- C. Coordination with Designated Waste Management Facilities
- D. Designated Haul Routes
- E. Preparation for Transport
- F. Hauling of Impacted Materials and Debris
- G. Manifests
- H. Transportation
- I. Permits

**1.02. SUMMARY:**

- A. Section includes transportation and disposal of impacted soils, commingled debris and buried building materials to specified waste management facilities.
- B. Contractor shall comply with applicable requirements of this Section even if the Transportation and Disposal are provided by others.
- C. Contractor shall be solely responsible for proper loading of and abiding by the load limits and weight limits for all vehicles leaving the Project site, and for any fines, taxes, penalties or judgments resulting from overweight or improperly loaded vehicles.

**1.03. SUBMITTALS:**

- A. Contractor shall provide a list of proposed waste haulers for approval by Owner. Contractor shall submit copies of all necessary permits and certifications of listed waste haulers to Owner before commencing the Work.
- B. Contractor shall provide a list of proposed waste disposal facilities for approval by the Owner prior to transportation of materials to such disposal facilities. Contractor shall submit copies of the proposed disposal facility permits.
- C. The Contractor shall submit written certification of proper transport of impacted materials and debris to Owner within one working day after receipt of the documentation. A daily and weekly summary of disposal quantities and types shall be provided to the Owner. Contractor shall submit copies of all waste manifests, Weigh Tickets, and bills of lading to the Owner.

**1.04. COORDINATION WITH DESIGNATED WASTE MANAGEMENT FACILITIES:**

- A. The Contractor shall be responsible for coordinating waste shipments with the designated waste disposal facility.
- B. The Contractor shall only ship waste to an Owner-approved waste disposal facility. The Contractor shall obtain written approval from the Owner before sending any waste to an off-site disposal facility.



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**TRANSPORTATION AND DISPOSAL**

**1.05. DESIGNATED HAUL ROUTES:**

- A. The Contractor's submittals shall include the designated haul route(s) to the approved waste disposal facilities, subject to approval by the Owner.

**1.06. SHIPPING DOCUMENTATION:**

- A. Shipping documentation shall be performed consistent with federal, state, and local waste management and transportation requirements and the requirements of off-site disposal facilities.
- B. The Contractor shall prepare necessary paperwork for transportation and disposal of all materials to the appropriate waste management facilities. Contractor shall provide the Owner/Engineer with a draft of the manifest for review and approval prior to commencing transportation off the Project Site.
- C. A non-hazardous/hazardous waste manifest or other tracking document shall be provided by the Contractor for each individual load depending on material classification. Each manifest shall be signed by designated authorized agent of the Owner, the truck driver as a transporter, and by the disposal facility operator.
- D. The Contractor shall not be paid for shipments with unsigned shipping documentation.
- E. Daily Trucking Log:
  - 1. The Contractor shall provide a Daily Trucking Log to the Owner for approval providing information on each off-site shipment from the Project Site, including trucking company, truck and trailer registration number, date, pre-characterization source ID, destination facility, estimated quantity, verification of decontamination and Contractor personnel's initials.
  - 2. The Contractor shall fill in the Daily Trucking Log for each shipment at the time it leaves the Project Site.
  - 3. The Contractor shall not be paid for any shipment if there are discrepancies between Daily Trucking Logs and facility weigh tickets until the discrepancy is resolved, as determined by the Engineer.

**PART 2 – PRODUCTS**

Not Used.

**PART 3 – EXECUTION**

**3.01 PREPARATION FOR TRANSPORT:**

- A. Contractor shall coordinate Transportation Work activities to maintain production rates for completion of the Work in accordance with the Construction Milestones.
- B. Loading operations and hours shall be coordinated with the operating hours of landfills or other designated off-site facilities. Loading shall be limited to the hours of operations as specified. Any vehicle loaded after disposal hours shall remain parked at the Project Site in a designated area of the Secured Zone until such time as that truck may reasonably proceed to the designated waste management facility. Cover any impacted material in



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**TRANSPORTATION AND DISPOSAL**

truck beds to control odors. Contractor shall coordinate excavation, demolition, stockpiling, loading, and transportation, subject to the Engineer's approval, to efficiently utilize combined resources.

- C.** Contractor's operations shall be coordinated to minimize standby time and minimize truck-waiting time, and to maximize excavation production and hauling production. No vehicle waiting or parking will be allowed on Main Street or North Main Street. Vehicles awaiting loading may be staged on the Project Site, if needed and as space allows. Contractor is responsible for providing appropriate and legal traffic control as may be required by Local and State requirements.

**3.02 HAULING OF IMPACTED MATERIALS AND DEBRIS:**

- A.** Contractor shall furnish and operate all vehicles and containers for transportation of impacted materials from the Project Site. All equipment must be in operable condition, free from leaks of oils or other fluids, and updated inspections / registrations.
- B.** The Contractor shall load and transport all categories of impacted materials and debris.
- C.** Drivers shall drive directly to disposal facility and shall not stop except in the event of an emergency.
- D.** Transportation of impacted materials and debris shall be in compliance with all pertinent regulations.
- E.** Each truck bound for the off-site disposal facility shall be covered with a heavy duty tarpaulin secured to the top or sides of the container.
- F.** Trucks shall be loaded only with materials characterized and approved for off-site disposal or recycling.
- G.** Loading of trucks shall occur only within the Project Site boundaries. Loading shall not take place into trucks on Canal Street unless otherwise approved by the Engineer and means of containment and road protection are provided.
- H.** Contractor shall visually inspect each truck before it leaves the Project Site to ensure that the tailgate and tarp are secure.
- I.** Haul trucks shall be decontaminated on site prior to re-use for hauling anything other than material from the Project Site.
- J.** In the event that a loaded truck is involved in an incident that results in a release of the transported materials, the cleanup shall follow local and State Department of Transportation spill response procedures.
- K.** Contractor shall promptly clean up any spills on haul routes, if they occur, with suitable equipment at no cost to the Project.
- L.** Contractor shall keep all haul routes and public rights of way free of any site materials due to the Contractor's operations. To this end, all Contractor trucks shall be covered, and all vehicles shall be carefully loaded to prevent site materials from coming in contact with the exterior truck surfaces.



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- M.** The load weight shall be documented by the disposal facility scale Weigh Ticket. Contractor shall submit copies of all disposal facility scale Weigh Tickets to the Engineer. Unsigned scale Weigh Tickets will be rejected and the Contractor will not be paid based on these weights.
- N.** Contractor shall prevent the tracking of site materials onto public rights-of-way.
- O.** Loaded trucks shall not leave the Site unless they shall arrive at the designated waste management facility before it closes. Loaded trucks shall discharge their loads at the designated disposal facility the same day they are loaded.
- P.** Truck drivers shall be required to remain inside the truck cab with the windows and doors closed during loading and at all times when inside the Exclusion Zone. Drivers shall be instructed to proceed after loading through a decontamination area to a designated area outside the Exclusion Zone where they will be permitted to exit the truck cab to secure the tarpaulin over the load.
- Q.** The Contractor shall address vehicular accidents and the possible release of transported materials in the HASP.

**3.03 MANIFESTS:**

- A.** The Contractor will prepare manifests and prepare necessary paperwork for transportation and disposal of impacted materials and debris. The Owner or an Owner's agent will sign the manifests.
- B.** A non-hazardous waste manifest or other tracking document will be provided by the Contractor for each individual load. Each manifest shall be signed by designated authorized agent of the Owner, the truck driver as a transporter, and by the waste management facility operator.
- C.** The Contractor will not be paid for shipments with unsigned manifests.

**3.04 TRANSPORTATION:**

- A.** Contractor shall obtain all required transportation permits for shipment of impacted materials and debris.
- B.** Transportation of impacted materials and debris shall be in accordance with applicable state, RCRA, USDOT, and other applicable regulations including: 40 CFR 261, 262, 263 and 49 CFR 171 through 179.
- C.** Truck drivers using routes other than the routes submitted by the Contractor or found upon investigation to be at fault of causing an accident associated with this project will be barred from working on the Project Site.

**3.05 PERMITS:**

- A.** Contractor shall obtain all required transportation permits for shipment of impacted materials and debris.

**END OF SECTION**



**Division 3 Specifications**

**Earth Work Methods**



**SECTION 31 20 00**  
**EARTH EXCAVATION, BACKFILL, AND GRADING**

**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- A. Description
- B. References
- C. Definitions
- D. Submittals
- E. Job Conditions
- F. Quality Assurance and Control
- G. General
- H. Equipment
- I. Site Maintenance
- J. Excavation
- K. Excavation Near Existing Structures
- L. Excavation of Impacted Soils
- M. Unauthorized Excavation
- N. Backfilling - General
- O. Material Placement and Compaction Requirements
- P. Compaction Control of Backfill
- Q. Allowance for Shrinkage
- R. Property Line Establishment

**1.02. DESCRIPTION:**

- A. Perform earth excavation, backfill, fill, and grading as indicated or specified.
- B. Grade finished surfaces to grades as directed by the Engineer.
- C. Excavate soil from and backfill Areas 2B, 2C, 2D, 4 and 7 as illustrated on the Contract Drawings.

**1.03. REFERENCES:**

- A. ASTM Publications (latest versions):
  - 1** D421: Practice for Dry Preparation of Soil Samples for Particle Size Analysis and Determination of Soil Constants.
  - 2** D422: Test Method for Particle-Size Analysis of Soils.
  - 3** D1140: Test Method for Amount of Material in Soils Finer than the No. 200 (75 Fm) Sieve.
  - 4** D1556: Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
  - 5** D1557: Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)).
  - 6** D2167: Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.



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- 7** D2922: Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods. (Shallow Depth).
  - 8** D3017: Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
  - 9** D4318: Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
  - 10** D4718: Practice for Correction of Unit Weight and Water Content for Soils Containing Oversized Particles.
  - 11** D4944: Test Method for Field Determination of Water (Moisture) Content of Soil by the Calcium Carbide Pressure Tester Method.
  - 12** D4959: Test Method for Field Determination of Water (Moisture) Content of Soil by Direct Heating Method.
  - 13** D5080: Test Method for Rapid Determination of Percent Compaction.
- B.** OSHA Standards and Regulations contained in Title 29: Subpart P - Excavations, Trenching and Shoring.

**1.04. DEFINITIONS:**

- A.** Percentage of compaction is defined as the ratio of the field dry density, as determined by ASTM D1556 to the maximum dry density determined by ASTM D1557 Procedure C, multiplied by 100.
- B.** Proof Roll: Compaction with a minimum of four (4) passes of a vibratory steel drum or rubber tire roller. Vibratory plate compactors shall be used in small areas where vibratory steel drum or rubber tire roller cannot be used.
- C.** Unacceptable Materials: Materials that do not comply with the specifications for each material or which cannot be compacted to the specified or indicated density.

**1.05. SUBMITTALS:**

- A.** Submit the following in accordance with Section 01 33 00 - Submittals:
  - 1** Qualifications of the Contractor's Independent Testing Laboratory prior to the execution of any earth excavation, backfilling, filling, or compaction process
  - 2** Qualifications of the Contractor's Analytical Testing Laboratory prior to beginning the Work.
  - 3** Imported Backfill Materials: For each imported material type, laboratory testing results for chemical analysis, gradation, compaction, and moisture-density relationship. **Submittal shall include** specific location of the source, brief site history and the date when the sample was collected.
    - a.** Gradation, compaction, and moisture-density relationship test results from the soil testing laboratory, at least three (3) workdays prior to hauling material, for review and acceptance.



## EARTH EXCAVATION, BACKFILL, AND GRADING

- ## 1.06. JOB CONDITIONS

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- C. Existing Utilities: Subcontractor shall locate existing underground utilities in the areas of the Work. Provide adequate means of protection during all operations.
- 1 Contractor shall video inspect and test, if necessary, all utilities prior to the start of excavation in order to determine status.
  - 2 Contractor shall retain the services of a qualified utility location service to identify and mark out subsurface utilities and other obstructions using ground penetrating radar (GPR) and electromagnetic (EM) methods.
  - 3 Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult piping or utility owner and Engineer immediately for directions as to procedure. Cooperate with Engineer and utility owner in keeping services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
  - 4 Contractor shall contact Call Before You Dig (CBYD) prior to beginning intrusive activities and shall keep the CBYD report current for the Site throughout the course of the project.

**1.07 QUALITY ASSURANCE AND CONTROL:**

- A. Excavations shall be performed in the dry, and kept free from water, snow, and ice during construction. Bedding and backfill material shall not be placed in water. Water shall not be allowed to rise upon or flow over the bedding and backfill material.
- B. The Contractor shall be solely responsible for making all excavations in a safe manner. All excavation, trenching, and related sheeting, bracing, etc. shall comply with the requirements of OSHA excavation safety standards (29 CFR 1926 Subpart P) and State requirements. Where conflict between OSHA and State regulations exists, the more stringent requirements shall apply.
- C. Do not excavate or fill until all the required submittals have been reviewed and approved by the Engineer.
- D. Formulate excavation and backfilling schedule and procedures to eliminate possibility of undermining or disturbing foundations of existing structures, pipelines, and any other Site features designated to remain in place as indicated on the Contract Drawings.
- E. Contractor shall retain the services of an independent testing laboratory, approved by the Engineer, to document conformance of material type and compaction of backfill materials with the Specifications.
- F. Employ an independent testing laboratory to perform particle size and gradation analyses in accordance with ASTM D422, and to determine compactibility in accordance with ASTM D1557 for all the proposed backfill materials and monitoring field compaction operations.
- G. Field Testing and Inspections:
- 1 By Contractor's independent testing laboratory, acceptable to the Engineer and Owner at Contractor's expense.



**SECTION 31 20 00**  
**EARTH EXCAVATION, BACKFILL, AND GRADING**

- 2 Location of tests mutually acceptable to testing laboratory and the Engineer or as directed by the Engineer.
  - 3 In the event that compacted material does not meet specified in-place density, recompact material and retest this area until specified results are obtained at no additional cost to the Owner.
  - 4 Contractor shall perform inspection at least once daily to confirm lift thickness and compaction effort for all fill areas.
- H. Methods of Field Testing:
- 1 In-Place Density: ASTM D1556, ASTM D2167, or ASTM D2922.
  - 2 In-Place Moisture Content: ASTM D3017, ASTM D4944, or ASTM D4959.
- I. Material Testing Frequency: The following testing frequencies are the minimum required for all structural and non-structural fill and grading. Each type of material from each different source location must undergo chemical analytical testing.
- 1 Field In-Place Density and Moisture Content the minimum test frequency shall be no less than one (1) test per 3,500 SF per lift for open excavations.
  - 2 Moisture Density – One (1) per source, except for screened gravel and crushed stone. Repeat the moisture density test for every 5,000 CY of material used, and whenever visual inspection indicates a change in material gradation, as determined by the Engineer.
  - 3 Gradation Analysis – A minimum of one (1) per source and for each moisture density test and whenever visual inspection indicates a change in material gradation.
- J. Construction Tolerances:
- 1 Construct finished surfaces to  $\pm 0.1$  feet of the elevations indicated.
  - 2 Grade, cut, and fill areas to  $\pm 0.1$  feet of the grades indicated.
- K. Pipes, drains, and other utilities may exist in certain locations not indicated on Drawings. Completeness or accuracy of information given is not guaranteed.
- L. Carefully support and protect from damage, existing pipes, poles, wires, fences, curbs, property line markers, and other structures, which the Engineer determines must be preserved in place without being temporarily or permanently relocated. Should such items be damaged, restore without compensation therefore, to at least as good condition as that in which they were found immediately before the Work commenced.
- M. Do not remove excavation materials from the Site of the Work or dispose of except as directed or permitted by the Engineer.
- N. During progress of Work, conduct earth moving operations and maintain worksite so as to minimize the creation and dispersion of dust.

**PART 2 - PRODUCTS**



**SECTION 31 20 00**  
**EARTH EXCAVATION, BACKFILL, AND GRADING**

**2.01. GENERAL:**

- A. Procure, provide, and place imported backfill material as indicated.
- 1 Imported fill/general fill shall meet the definition of "Clean Fill" as defined in Section 22a-209-1 of the Regulations of Connecticut State Agencies (RCSA) and any naturally-occurring substance in the fill is present in concentrations not exceeding background concentration for soil of such substance at the area intended for use or from which such soil is removed and no other substance is detectable in such soil at a concentration greater than its analytical detection limit consistent with the description of "Natural Soil" in RCSA 22a-133k-2(h)(4) or as approved by the Engineer.
  - 2 All fill material brought to the project site shall be tested for contaminants per Section 1.05 of this Specification. Fill material shall not contain concentrations of contaminants, metal, or other substances above the CTDEEP RSRs R DEC or GA PMC.
  - 3 Imported fill shall be unfrozen and substantially free from vegetation, roots, loam and other organic matter, clay, snow, frozen particles, and other fine or harmful substances.
  - 4 General fill shall be free of rock and gravel larger than three (3) inches in any dimension, debris, waste, frozen materials, organic material, and other deleterious matter.
  - 5 Fill shall have a liquid limit not greater than 45, and a plasticity index not greater than 25.
  - 6 Gradation for general fill shall be as follows:

Sieve Size	Percent Finer by Weight
3-inch	100
¾-inch	70-95
No. 4	45-80
No. 40	5-50
No. 200	<15

- B. Provide erosion and sedimentation control devices as indicated in accordance with the Contractor's Erosion Control Plan.
- C. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940; with at least 95 percent passing the 1-1/2-inch sieve and not more than eight (8) percent passing the No. 200 sieve.

**2.02. EQUIPMENT:**

- A. The compaction equipment shall be selected by the Contractor and shall be capable of consistently achieving the specified compaction requirements. The selected compaction



**SECTION 31 20 00**  
**EARTH EXCAVATION, BACKFILL, AND GRADING**

equipment for general fill and subbase materials shall meet the following minimum requirements:

- 1** Manually operated vibratory plate compactors weighing no less than 200 pounds [90 kg] with vibration frequency no less than 1600 cycles per minute.
- 2** Vibratory steel drum or rubber tire roller weighing at least 12,000 pounds [5450 kg].

**PART 3 - EXECUTION**

**3.01. SITE MAINTENANCE:**

- A. Site Leveling: Establish final grades so as to maintain the Site in a level, unrutted condition so as to eliminate puddling of surface and subsurface water.

**3.02. EXCAVATION:**

- A. Execution of any earth excavation shall not commence until the related backfill materials submittals are reviewed by the Engineer and all Engineer's comments satisfactorily addressed.
- B. Carry out program of excavation and excavation support systems to eliminate possibility of undermining or disturbing foundations of existing structures or of Work previously completed under this Contract.
- C. Excavate to lines and grades indicated in an orderly and continuous program.
- D. Establish limits of excavation to allow adequate working space for installing forms and for safety of personnel.
- E. If bedrock is encountered at an elevation which is shallower than proposed excavation elevation, soil shall be removed from top of rock by method of hand-shoveling to the extent acceptable by the Engineer.
- F. Exercise care to preserve material below and beyond the lines of excavations.
- G. Contractor shall protect open excavations from stormwater runoff during the Work due to the presence of impacted soil. Stormwater management activities, including dewatering and the disposal of impacted stormwater as a result of insufficient protection of open excavations shall be handled by the Contractor at no additional cost to the Owner.
- H. Direct load excavated material into designated containers or haul trucks or place excavated material at the temporary stockpile locations approved by the Engineer. Temporary stockpile locations shall be located in no case closer than five (5) feet [90 cm] from edge of excavations to prevent cave-ins of bank sides. Temporary stockpiles shall not be placed on adjacent or other properties (except the Staging Area).

**3.03. EXCAVATION NEAR EXISTING STRUCTURES:**

- A. Discontinue machine excavating when excavation approaches building foundations, slabs, pipes, conduits, or other underground structures. Continue excavation by use of hand tools. Include such manual excavation in Work to be done when incidental to normal excavation and under items involving normal excavation.



**SECTION 31 20 00**  
**EARTH EXCAVATION, BACKFILL, AND GRADING**

- B. Excavate test pits when determination of exact location of pipe or other underground structure is necessary for proper execution of the Work.

**3.04. EXCAVATION OF IMPACTED SOILS:**

- A. The Contractor shall excavate impacted fill to the limits and depths shown on the Contract Drawings. See Contract Drawings for illustrations of Areas 2B, 2C, 2D, 4, and 7 scheduled for excavation.
- B. Contractor shall excavate material from the pits in Area 2B to depths ranging from 8-15 feet measuring approximately 1,300 CY.
- C. Contractor shall excavate material from the pits in Area 2C to a depth of 5 feet beneath the proposed access road measuring approximately 250 CY.
- D. Contractor shall excavate PCB-impacted/Remediation Waste material to a depth of approximately 12 feet (depending on in-situ analytical results) from the pits in Area 2D measuring approximately 100 CY.
- E. Contractor shall excavate soil from Area 4 to a depth of 8 feet below current grade measuring approximately 150 CY.
- F. Contractor shall excavate soil from Area 7 to a depth of 5 feet below the proposed finished grade measuring approximately 1,300 CY.
- G. The horizontal and vertical limits of excavation of impacted fill shall be located in the field by the Engineer. Payment for excavated material shall be based on the approved horizontal and vertical limits, in accordance with Section 01 27 00 – Measurement and Payment.

**3.05. UNAUTHORIZED EXCAVATION:**

- A. All excavation outside the lines and grades shown, and which is not approved by the Engineer, together with the removal and disposal of the associated material shall be at Contractor's expense. Unauthorized excavations shall be filled and compacted with backfill at Contractor expense.

**3.06. BACKFILLING - GENERAL:**

- A. Prior to backfilling activities, the Engineer may perform post-excavation confirmation sampling to evaluate removal of impacted soil. The Contractor shall not backfill without notice from the Engineer that the excavation has met remedial goals and can be backfilled or on a schedule approved by the Engineer. Contractor shall protect the excavation as necessary in the meantime until this notice is provided
- B. **Contractor shall be aware** that excavation of Areas 2C, 2D, and 4 will involve the collection of post-excavation samples to determine whether clean limits have been achieved. While the Contract Drawings depict likely excavation limits, these limits are preliminary and need to be confirmed by post-excavation sampling. The Contractor shall plan on ceasing excavation work while post-excavation samples are analyzed by the laboratory. Contractor shall plan on waiting for up to 7 days to obtain direction from the Engineer following sample collection.



**SECTION 31 20 00**  
**EARTH EXCAVATION, BACKFILL, AND GRADING**

- C. Prior to backfilling, Contractor shall place demarcation barrier at the bottom of the excavation. Material shall be a high visibility, tear resistant, plastic material (e.g., orange snow fence or similar geotextile designed for this purpose) and is subject to inspection and approval by the Engineer. Installation of the demarcation barrier shall be approved by the Engineer prior to backfilling activities.
- D. Backfilling shall be completed within two (2) working days of notice from the Engineer that the excavation has met remedial goals and can be backfilled or on a schedule approved by the Engineer.
- E. Do not place, spread, roll, or compact fill material during unfavorable weather conditions. If interrupted by heavy rain or other unfavorable conditions, do not resume until ascertaining that the moisture content and density of the previously placed soil are as specified.
- F. Do not use puddling, ponding, or flooding as a means of compaction.

**3.07. MATERIAL PLACEMENT AND COMPACTION REQUIREMENTS:**

- A. Contractor shall backfill excavations with recharacterized clean fill as detailed below and as depicted on the Contract Drawings.
- B. Place and spread fill in layers not to exceed 12-inch uncompacted thickness.
- C. Compact to no less than 90 percent unless otherwise indicated.
- D. Where placed beneath structures, pavement or utilities, dump and spread in layers not to exceed 8-in. uncompacted thickness and compact to no less than 95 percent.

**3.08. COMPACTION CONTROL OF BACKFILL:**

- A. Compact to density specified and indicated for various types of material. Control moisture content of material being placed as specified or if not specified, at a level slightly lower than optimum.
- B. The soil testing laboratory shall provide inspection during backfilling operations to ensure compaction of screened gravel or crushed stone and record compaction equipment in use.
- C. Moisture control may be required either at the stockpile area, pits, or backfill. Increase moisture content when material is too dry by sprinkling or other means of wetting uniformly. Reduce moisture content when material is too wet by using ditches, pumps, drainage wells, or other devices and by exposing the greatest possible area to sun and air in conjunction with harrowing, plowing, spreading of material, or any other effective methods.

**3.09. ALLOWANCE FOR SHRINKAGE:**

- A. Backfill to a height above finished grade which will, in the opinion of the Engineer, allow for the shrinkage or consolidation of material. Initially, provide at all points, an excess of at least one percent (1%) of total height of backfill measured from stripped surface to top of finished surface.



**SECTION 31 20 00**  
**EARTH EXCAVATION, BACKFILL, AND GRADING**

- B. Supply specified materials and build up low places as directed, without additional cost if backfilling settles so as to be below the indicated level for proposed finished surface at any time before final acceptance of the work.

**END OF SECTION**



**SECTION 31 25 00**  
**EROSION AND SEDIMENT CONTROL**

**PART 1 – GENERAL**

**1.01. SECTION INCLUDES:**

- A.** References
- B.** Performance Requirements
- C.** Filter Bag Inlet Protection
- D.** Surface Water Run-On/Run-Off Control
- E.** Sequence of Installation and Removal
- F.** Inspection and Maintenance

**1.02. REFERENCES:**

- A.** State of Connecticut Department of Energy & Environmental Protection, Connecticut Storm Water Quality Manual (dated 2004), as amended.
- B.** State of Connecticut Department of Energy & Environmental Protection, Connecticut Guidelines for Soil Erosion and Sediment Control (dated 2002), as amended.
- C.** Development Plans for 3900KW Fuel Cell Power Generating Plant, 35 N. Main Street, Ansonia, CT (revised January 7, 2025).

**1.03. PERFORMANCE REQUIREMENTS:**

- A.** Permits and Approvals: If required, the Contractor will obtain any necessary permits and approvals for erosion and sediment control.
- B.** Compliance: Contractor shall be responsible for compliance with requirements of any and all plans, regulations, permits and approvals pertaining to erosion and sediment controls, including but not limited to the following
  - 1.** Connecticut's Soil Erosion and Sediment Control Act (§§ 22a-325 through 22a-329 of the Connecticut General Statutes)
  - 2.** Connecticut Department of Energy and Environmental Protection (CT DEEP) Guidelines for Soil Erosion and Sediment Control
  - 3.** Any necessary permits and approvals obtained by the Contractor for the Work
- C.** Implementation: Contractor shall install and maintain the erosion and sediment controls and other procedures as required by all applicable regulations:
  - 1.** Run-on Controls: Contractor shall use berms, pumps, and other methods necessary to divert and drain surface water away from excavations and other Work areas.
  - 2.** Sediment Controls:
    - a.** The erosion and sediment control Best Management Practices (BMPs) shall be installed, or if existing and functional, maintained by the Contractor. The Contractor shall inspect and maintain these facilities daily in accordance with the Contract Documents.



**SECTION 31 25 00**  
**EROSION AND SEDIMENT CONTROL**

- b.** Contractor shall take necessary precautions and implement BMPs to prevent sediment from entering roadways, storm sewers, catch basins, or surface water.
- D.** Street Cleanliness:
  - 1.** Tracking dirt from the Project Site is prohibited. See Section 02 06 00.
  - 2.** Where construction vehicle access routes intersect public roads and facility roads and parking areas, Contractor shall make provisions to mitigate the transport of mud, soil, or dust onto the roadways and parking areas. If soil, mud, or dust is transported onto a road surface, Contractor shall clean the road thoroughly immediately. Contractor shall remove soil from the roads by shoveling or sweeping, then transporting to an on-site soil stockpile area. Street washing with water shall be allowed only after soil is removed to the extent practical by sweeping.
- E.** Control of Pollutants Other than Soil/Mud/Dust/Sediment:
  - 1.** All pollutants that become evident on the Project Site during construction shall be handled and disposed in a manner that does not impact stormwater runoff.
  - 2.** Impacted soils excavated and stockpiled for reuse or disposal must remain on poly sheeting and remain covered to prevent erosion and dust.
  - 3.** Fueling of Contractor's equipment shall be performed away from storm drain inlets, ditches and catch basins.
- F.** Contractor shall provide all materials and equipment needed to install the erosion and sediment control BMPs in accordance with the CT DEEP, Connecticut Guidelines for Soil Erosion and Sediment Control (dated 2002). The layout and locations of the erosion and sediment control BMPs shall follow the Plans.
- G.** Contractor is responsible for conducting all Work in accordance with all applicable laws and regulations.

## PART 2 – PRODUCTS

## 2.01 FILTER BAG INLET PROTECTION:

- A.** Filter bag inlet protection shall comply with Section 5.13 of the CT DEEP Guidelines for Soil Erosion and Sediment Control, as detailed in the Plans, or equivalent.

## PART 3 – EXECUTION

### 3.01 SURFACE WATER RUN-ON/RUN-OFF CONTROL:

- A.** Contractor shall intercept surface water and divert it away from excavations and Work areas through use of dikes, curb walls, pipes, sumps, or other Engineer-approved means. The requirement includes temporary measures as required to protect adjoining properties from surface drainage caused by construction operations.



**SECTION 31 25 00**  
**EROSION AND SEDIMENT CONTROL**

- B.** Contractor shall prevent surface water run-on/run-off from transporting sediment or other contaminants off site. Contractor shall minimize the amount of water requiring transport or treatment.
- C.** All control measures necessary for stormwater management are the Contractor's responsibility. Should, in the opinion of the Engineer, the Contractor fail to provide adequate run-on controls, all costs related to the collection, storage and disposal of the resulting impacted storm water shall be the responsibility of the Contractor.

**3.02 SEQUENCE OF INSTALLATION AND REMOVAL:**

- A.** Erosion and sediment control BMPs shall be installed prior to any earthwork or ground disturbance activities.
- B.** Removal of all erosion and sediment control BMPs, including but not limited to straw wattle, compost filter sock, and/or filter bag inlet protection shall occur following completion of the work, as approved by the Engineer.

**3.03 INSPECTION AND MAINTENANCE:**

- A.** Contractor shall inspect and repair or replace damaged components of temporary erosion and sediment controls. Inspection and repairs shall be conducted immediately after runoff or flooding events, and inspection and repairs shall be conducted at least once each day during prolonged rain events.
- B.** Contractor shall remove sediment deposits from the erosion and sediment control BMPs and place them in designated spoil areas. Sediment shall not be allowed to migrate off site. If sediment has been in contact with contaminated materials, it shall be incorporated into material to be disposed or further characterized to determine appropriate disposition.
- C.** Contractor's equipment and vehicles are prohibited from maneuvering on areas outside of dedicated rights-of-way and easements for construction.
- D.** Contractor shall maintain the erosion and sediment control BMPs throughout the duration of the Project. Damaged erosion and sediment control BMPs shall be replaced or repaired immediately.

**END OF SECTION**





## CONTRACT DRAWINGS







GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "CALL-BEFORE-YOU-DIG" AT 1-800-922-4455 OR 811 TO ARRANGE FOR MARKING OUT THE LOCATION OF EXISTING UNDERGROUND UTILITIES AT LEAST 72 HOURS IN ADVANCE OF THE WORK.
2. COMPLIANCE WITH ALL PROJECT PERMIT CONDITIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL FUEL, OIL OR OTHER HAZARDOUS MATERIALS SHALL BE STORED IN A SECONDARY CONTAINMENT AREA WITH AN IMPERVIOUS FLOOR AND SECURED IN A LOCKED AREA DURING NON-WORK HOURS.
4. A SUPPLY OF ABSORBENT SPILL RESPONSE MATERIAL SUCH AS BOOMS OR BLANKETS SHALL BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES TO CLEAN UP POTENTIAL SPILLS OF PETROLEUM AND/OR HAZARDOUS MATERIALS SUCH AS GASOLINE AND OIL.
5. SPILLS OF PETROLEUM AND/OR HAZARDOUS MATERIALS SHALL BE REPORTED IMMEDIATELY TO THE OWNER, ENGINEER AND THE FOLLOWING: CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, OIL AND CHEMICAL SPILLS UNIT AT 1-860-566-3338.
6. ALL ON-SITE CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS DRAWINGS AND TECHNICAL SPECIFICATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TRANSPORT AND DISPOSAL OF ALL WASTES GENERATED DURING THE PROJECT.
8. CONTRACTOR TO MAINTAIN SECURITY OF THE SITE AT ALL TIMES.
9. CONTRACTOR TO PROVIDE DUST CONTROL AND CONSTRUCTION WATER THROUGHOUT DURATION OF PROJECT ACTIVITIES.
10. CONTRACTOR TO RESTRICT CONSTRUCTION ACTIVITIES ON-SITE TO WITHIN CONTRACT LIMITS.
11. EXISTING FENCING, SIGNS, GUIDE RAILS, CURBING AND ANY OTHER OBJECTS DAMAGED OR TEMPORARILY REMOVED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION (UNLESS OTHERWISE SPECIFIED) AT NO COST TO THE OWNER.
12. EXISTING CONDITIONS, AS PRESENTED, REPRESENT THOSE CURRENT AS OF THE DATE OF THE AS-BUILT SURVEY DATED JANUARY 7, 2025. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF SITE CONDITIONS PRIOR TO THE START OF WORK.
13. EXCAVATIONS SHALL BE ACCOMPLISHED IN SUCH A MANNER THAT UNDERGROUND/OVERHEAD UTILITIES OR STRUCTURES ARE NOT DAMAGED. IT SHALL BE THE CONTRACTORS SOLE RESPONSIBILITY TO RESTORE DAMAGE INCURRED TO UTILITIES AS A RESULT OF CONTRACTOR AND CONTRACTOR'S SUBCONTRACTOR OPERATIONS. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY EXISTING PIPE OR UTILITY DAMAGED DURING REMEDIATION AT NO COST TO THE OWNER.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FEATURES LOCATED OUTSIDE OF THE WORK AREAS FROM DAMAGE CAUSED BY THE PROJECT WORK.
15. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING FINAL EXCAVATION LIMITS VIA SURVEY BY A STATE OF CONNECTICUT LICENSED PROFESSIONAL SURVEYOR AND CONFIRMING APPROVAL BY THE ENGINEER PRIOR TO BACKFILLING.
16. CONTRACTOR SHALL BE AWARE THAT SEVERAL OF THE PROPOSED EXCAVATION AREAS WILL INVOLVE THE COLLECTION AND ANALYSIS OF POST-EXCAVATION SAMPLES TO CONFIRM THE NECESSARY LIMITS HAVE BEEN ACHIEVED. THE TURNAROUND TIME BETWEEN SAMPLE COLLECTION AND RECEIPT OF ANALYTICAL DATA FOR POST-EXCAVATION SAMPLES MAY BE UP TO 7 BUSINESS DAYS.

SUGGESTED CONSTRUCTION WORK SEQUENCE

1. SUBMIT REQUIRED WORK SUBMITTALS, PERMIT PLANS FOR ENGINEER REVIEW IN ACCORDANCE WITH SUBMITTAL DEADLINES.
2. PROVIDE A TECHNICAL EXECUTION PLAN (TEP) PROVIDING A GENERAL SCHEDULE AND SEQUENCE FOR THE MAJOR PORTIONS OF THE WORK INCLUDING EACH EXCAVATION AREA.
3. MOBILIZE ALL PERSONNEL, EQUIPMENT, INCIDENTALS ONSITE.
4. PAY ALL REQUIRED PERMITS FEES NECESSARY TO PERFORM THE ABATEMENT AND DEMOLITION WORK.
5. INSTALL SEDIMENT AND EROSION CONTROL FEATURES.
6. PREPARE AND INSTALL TEMPORARY FACILITIES AND CONTROLS AS NECESSARY INCLUDING FENCING, DECONTAMINATION FACILITIES, AND STOCKPILE AREA.
7. COORDINATE APPROVAL OF PROPOSED DISPOSAL FACILITY(IES).
8. PERFORM SOIL EXCAVATION ACTIVITIES IN THE FOLLOWING SEQUENCE OR AS APPROVED BY THE ENGINEER.

- EXCAVATE SOIL IN AREA 2B-2C

- EXCAVATE SOIL IN AREA 2D

- EXCAVATE SOIL IN AREA 4

- EXCAVATE SOIL IN AREA 7
9. INSTALL DEMARCATION BARRIER IN ACCORDANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS.
10. SURVEY, BACKFILL, AND COMPACT EXCAVATIONS IN ACCORDANCE WITH CONTRACT DRAWINGS.
11. TRANSPORTATION AND DISPOSAL TO OWNER-APPROVED DISPOSAL FACILITIES.
12. FINAL RESTORATION AND DEMOBILIZATION ACTIVITIES.

SITE PREPARATION AND EROSION CONTROL NOTES

1. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL MONITORING WELLS, CATCH BASINS, AND MANHOLES DESIGNATED WITH INLET PROTECTION.
2. CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR ALL MANHOLES WITHIN THE BOUNDARY OF THE SITE AND SHALL PROTECT AND MAINTAIN MANHOLES DURING DEMOLITION AND REMEDIATION WORK.
3. LOCATION OF ALL UTILITIES, PUBLIC AND/OR PRIVATE, INDICATED AS EXISTING AS SHOWN ON THE DRAWINGS ARE APPROXIMATE. THEIR EXACT LOCATION SHALL BE DETERMINED IN THE FIELD. ADDITIONAL UTILITY LINES, WHETHER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OPERATIONS AND TAKE THE NECESSARY PRECAUTIONS TO PREVENT INTERFERENCE WITH, OR DAMAGE TO, THESE OR OTHER FACILITIES DURING THE COURSE OF THE PROJECT.
4. CONTRACTOR SHALL COORDINATE ALL WORK AFFECTING PUBLIC STREET RIGHT OF WAYS WITH THE CITY OF ANSONIA, INCLUDING OBTAINING ANY PERMITS AND/OR APPROVALS FOR SUCH WORK. CONTRACTOR SHALL EXERCISE CARE NOT TO DISTURB OR DAMAGE EXISTING STREETS, SIDEWALKS, OR CURBS AND SHALL REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO OWNER.



PROJECT

CITY OF ANSONIA  
FORMER SHW

CLIENT

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CONSULTANT

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www.aecom.com

REGISTRATION

ISSUE/REVISION

	2025-04-01	
I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

60729343

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

T-02





LEGEND

CONCRETE CURBING

EDGE OF PAVEMENT

CHAIN LINK FENCE

BUILDING

CATCH BASIN

WATER VALVE

WATER VALVE

MANHOLE

UTILITY POLE

UTILITY POLE W/LIGHT

STORM SEWER

SANITARY SEWER

UNDERGROUND TELEPHONE

UNDERGROUND ELECTRIC

GAS MAIN

WATER MAIN

NOTES:

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IT IS A "TOPOGRAPHIC SURVEY" CONFORMING TO THE REQUIREMENTS OF P.C.S. § 7-2. IT IS INTENDED TO DEPICT THE EXISTING CONDITIONS OF THE PARCELS SHOWN HEREON.
2. ELEVATIONS SHOWN ARE BASED UPON VERTICAL DATUM N.A.V.D. 1988.
3. THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND RAISED SEAL.



SCALE: 1" = 40'

**AECOM**

## PROJECT

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## REGISTRATION

ISSUE/REVISION		
	2025-02-19	
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## KEY PLAN

## PROJECT NUMBER

60729343

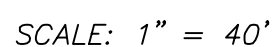
**SHEET TITLE**

EXISTING TOPOGRAPHIC  
SURVEY

**SHEET NUMBER**

C-01

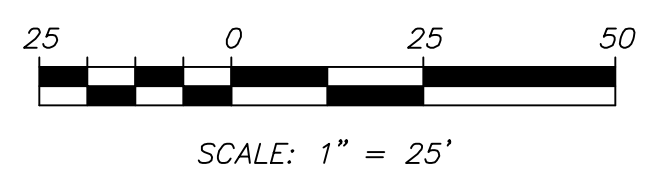












– LOCATIONS OF EROSION CONTROLS TO BE INSTALLED, INSPECTED, AND MAINTAINED BY CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING CATCH BASINS AT THE SITE.

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IT IS A "TOPOGRAPHIC SURVEY" CONFORMING TO THE "CLASS" T-2. IT IS INTENDED TO DEPICT THE EXISTING CONDITIONS OF THE PARCELS SHOWN HEREON.
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PROPOSED ELECTRICAL \_\_\_\_\_ E \_\_\_\_\_

PROPOSED SANITARY SEWER \_\_\_\_\_ S \_\_\_\_\_

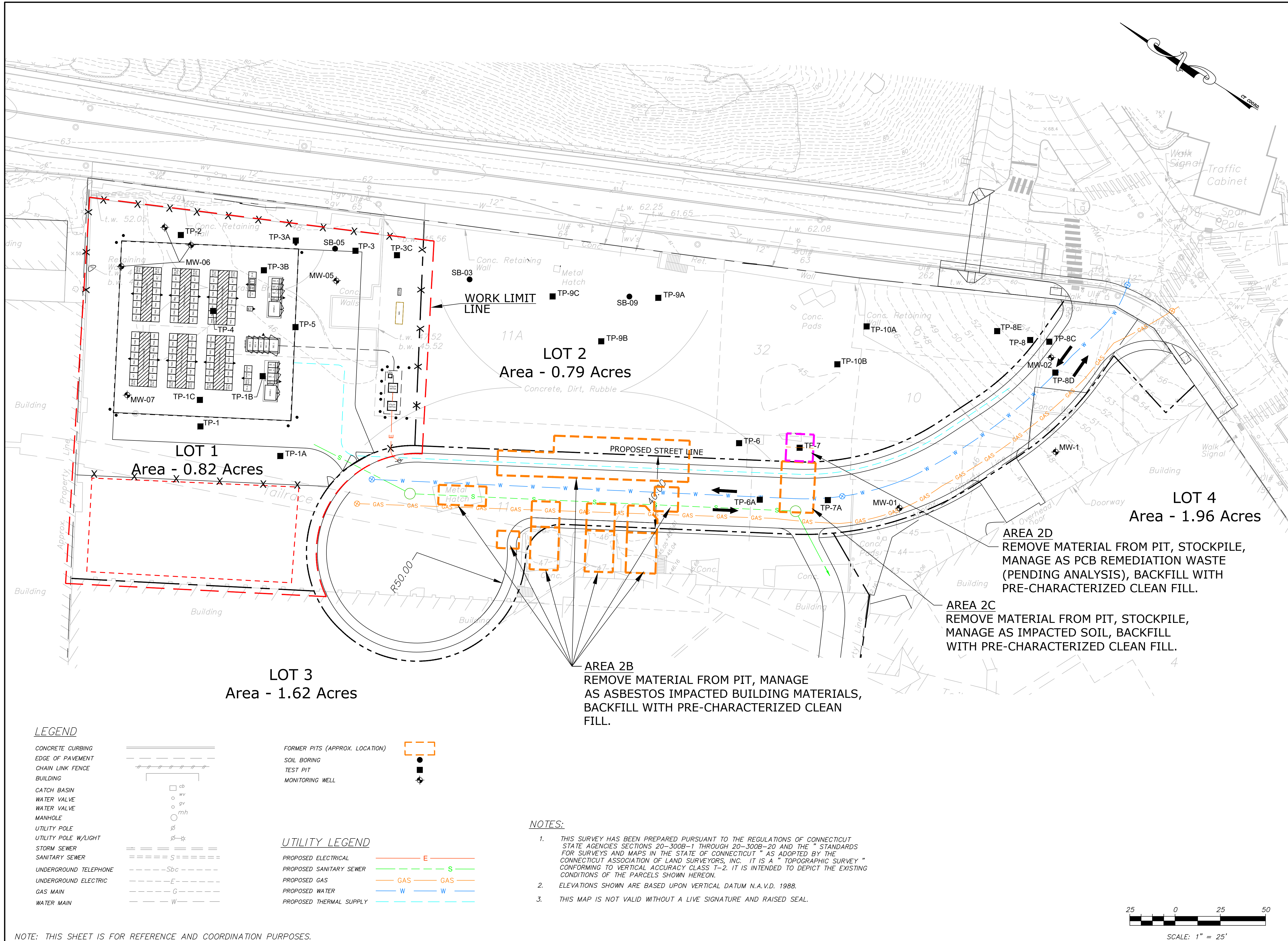
PROPOSED GAS \_\_\_\_\_ GAS \_\_\_\_\_

PROPOSED WATER \_\_\_\_\_ W \_\_\_\_\_

PROPOSED THERMAL SUPPLY \_\_\_\_\_

NOTE: THIS SHEET IS FOR REFERENCE AND COORDINATION PURPOSES.



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## REGISTRATION

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## PROJECT NUMBER

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**SHEET TITLE**

# SOIL REMEDIATION DETAILS SHEET A

**SHEET NUMBER**

C-05A



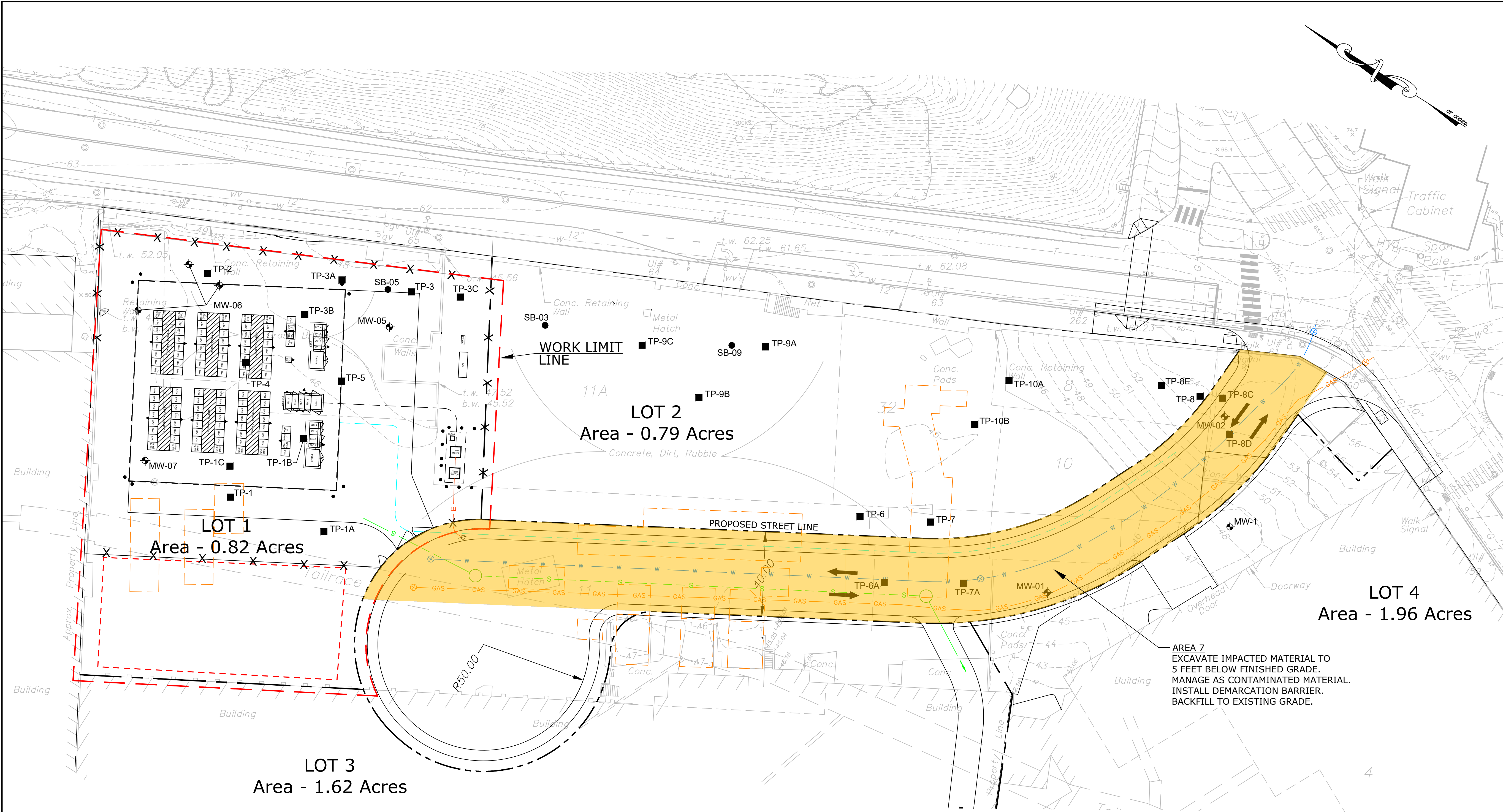
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ANSI D 22" x 34" Approved: \_\_\_\_\_ Checked: \_\_\_\_\_ Designer: \_\_\_\_\_ Project Management Initials: \_\_\_\_\_

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LEGEND

- CONCRETE CURBING  
EDGE OF PAVEMENT  
CHAIN LINK FENCE  
BUILDING  
CATCH BASIN  
WATER VALVE  
WATER VALVE  
MANHOLE  
UTILITY POLE  
UTILITY POLE W/LIGHT  
STORM SEWER  
SANITARY SEWER  
UNDERGROUND TELEPHONE  
UNDERGROUND ELECTRIC  
GAS MAIN  
WATER MAIN

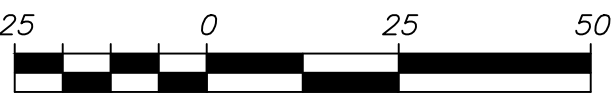
- FORMER PITS (APPROX. LOCATION)  
SOIL BORING  
TEST PIT  
MONITORING WELL

UTILITY LEGEND

- PROPOSED ELECTRICAL  
PROPOSED SANITARY SEWER  
PROPOSED GAS  
PROPOSED WATER  
PROPOSED THERMAL SUPPLY

NOTES:

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SHEET TITLE

SOIL REMEDIATION DETAILS  
SHEET C

SHEET NUMBER

C-05C