

EXPANDED SITE CHARACTERIZATION WORK PLAN

for the

ALPHA PORTLAND (OTISCA INDUSTRIES) SITE
[DEC SITE NO. 734006]

**Ogle Road [Tax Map No. 083.-01-07.0]
Town of Dewitt, Onondaga County, New York**

Prepared for:

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TDK Project No. 2021063

February 5, 2025
Revised July 15, 2025
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1.0 INTRODUCTION

In the fall of 2023 and winter of 2023-2024, TDK Engineering Associates, P.C. (TDK), conducted a Site Characterization (SC) Investigation program at the former Alpha Portland (Otisca Industries) cement plant facility (Site). The investigation was summarized in a SC report which was submitted to the New York State Department of Environmental Conservation (DEC) on July 30, 2024¹. The report included a recommendation that a focused sampling and analysis program of sediment within an on-site pond be performed, based on the detections of regulated constituents (e.g., PCB's) during the initial (December 2023) sampling effort and the pond's extension on to a neighboring school property.

In their August 23, 2024 response letter, the DEC requested that a field sampling plan be submitted with regard to an expanded sampling program. Accordingly, a focused sampling plan for the pond was submitted to the DEC on December 5, 2024². In response³, the DEC requested the investigation be further expanded to include collection of co-located surface water samples at approximately half of the sediment sample points, the installation of bedrock groundwater monitoring wells and conducting a round of sampling and analysis of the bedrock and two existing overburden monitoring wells.

The proposed bedrock well installation, pond sediment / surface water and groundwater monitoring well sampling and analysis programs are described below. Refer to the above-referenced SC Report and/or work plans for additional information concerning the Site environmental history and previous investigation, if desired.

2.0 SCOPE OF WORK

2.1 Bedrock Monitoring Well Installations

The proposed bedrock monitoring well locations are positioned in a triangular configuration, to facilitate determination of the groundwater flow direction as indicated on the *Site Characterization Plan* [Sheet SC-1]. The bedrock monitoring well identifiers end with a "B" (i.e., MW-1B, MW-2B, etc.). The maximum depth of the upland bedrock wells will be 80 feet, or approximately 40 feet below the pond water surface. The lower well (i.e., adjacent to pond) will similarly be installed to a maximum depth of 30 feet below the pond water level.

Drilling considerations associated with advancement of the borings vertically into bedrock and construction of monitoring wells within the bedrock formation are summarized below.

¹ *Site Characterization Report for the Alpha Portland (Otisca Industries) Site* [DEC Site No. 734006], prepared by TDK, dated July, 20, 2024.

² *Pond Sediment Sampling and Analysis Work Plan for the Alpha Portland (Otisca Industries) Site* [DEC Site No. 734006], prepared by TDK, dated December 3, 2024.

³ DEC letter issued to Richard Riccelli, dated January 15, 2025.

2.1.1 Methodology

Construction of the bedrock wells will include the following elements:

- The borings will be advanced through the overburden to the top of bedrock utilizing 6¼-inch inside diameter hollow-stem augers.
- An approximately 2-foot deep “socket” will be advanced into the bedrock utilizing either a 6-inch diameter roller bit or an air hammer. A 4-inch diameter steel isolation casing will be set into the borehole socket.
- Concrete and/or bentonite grout will be applied to the annular space between the outside of the casing and borehole limits, utilizing a tremie pipe in conjunction with removal of the augers. The grout will be allowed to set for a minimum of 24 hours before resuming drilling operations.
- The boring will be advanced further into bedrock, through the 4-inch isolation casing utilizing a roller bit and compressed air as the drilling/cooling fluid.
- Rock and soil fragments will be recovered into a containment tub and subsequently transferred to 55-gallon drums for management in accordance with *the Investigation-Derived Waste (IDW) Management Program* [Section 5.0].
- A 2-inch diameter PVC monitoring will be installed through the isolation casing, with the bottom of the screen set approximately five (5) feet below the groundwater surface. The primary purpose of the screen is to guard against intrusion of rock fragments, which can potentially limit the depth of the borehole and interfere with the collection of water samples.
- A sand pack filter will be installed around the screen as practicable, however it is anticipated that the disturbed shale bedrock fragments may collapse around the screen in lieu of some or all of the sand filter pack.
- Refer to the *Bedrock Monitoring Well Construction Detail* in Appendix 3 for additional information.

Well Head Protection

- It is anticipated that the monitoring wells will be provided with minimum 4-inch diameter steel “stick-up” protective casings with locked covers. Disturbed ground, pavement or concrete surrounding the wells heads will be restored using minimum 18-inch diameter by 4-inch thick concrete collars.
- Compression caps with locks are to be provided for the tops of the monitoring well riser pipes.
- Refer to the *Bedrock Monitoring Well Construction Detail* [Appendix 3] for additional information.

Well Development

- Each well will be developed using an HDPE bailer or a peristaltic pump. Each monitoring well will be pumped/bailed until the discharge is “clear” (visible fines are minimized) or maximum of one hour, whichever is less.
- Well development water will be contained in 55-gallon drums and managed in accordance with the *IDW Management Program* [Section 5.0].

Surveying Program

- Upon completion of the monitoring well installations, the horizontal and vertical (PVC rim) positionings of the wells will be surveyed to minimum accuracies of 0.1 feet (ft) and 0.01 ft, respectively, for inclusion on the *Site Characterization Plan* [Sheet SC-1, Appendix 1] and generation of a groundwater contour map (i.e., flow direction) based on “static” water levels in the wells.
- Refer to the *Groundwater Sampling Program* [Section 2.2] for additional information.

2.2 Groundwater Sampling Program

Groundwater samples will be obtained from the monitoring wells in accordance with the following procedures.

2.2.1 Static Water Levels

- The flush-mount casing shall be accessed and the compression cap removed.
- The depth to groundwater (DGW) shall be measured to the nearest 0.01-foot from the PVC well rim. The measurements shall be obtained using an electronic water level indicator (i.e. Solonist, or equal) and recorded on a field sampling log.
- The total depth of the monitoring well (DTOT) shall be measured to the nearest 0.1-foot from the PVC well rim.
- The water level meter probe and tape shall be decontaminated following use at each well in accordance with the *Decontamination Program* [Section 4.0].

2.2.2 Free Product Checks

- Prior to evacuation/purging, a check for the presence of non-aqueous phase liquid (NAPL - i.e., free product) shall be performed in each well using an oil-water interface probe.
- If free product is detected, a sample of the liquid shall be obtained for analysis per DOH Method 310-13 to determine the type of petroleum product that is present (e.g., gasoline or fuel oil). A PCB analysis shall also be conducted to determine the presence and concentrations of individual aroclors, if any.

- Free product observations, including thickness, if any shall be reported on the field sampling log.
- The monitoring well water will also be visually inspected during purging operations (below) for the presence of an obvious discoloration (i.e., “sheen”) or NAPL.

2.2.3 Well Evacuation/Purging and Field Measurements

The wells shall be evacuated/purged according to the procedure below:

- Sampling activities should progress from the least suspected contaminated area to the most contaminated area, unless dedicated sampling devices are used.
- The wells shall be developed using low-flow purging techniques (0.1 to 0.5 liters per minute [L/min])⁴. It is anticipated that peristaltic pumps shall be utilized to develop wells up to a maximum suction lift of approximately 33 feet (actual lift capacity may vary). HDPE bailers shall be used where the depths to water exceed the pump lift capacity.
- Measurements of following parameters will be made at approximately five-minute intervals during the purging effort and recorded on the field sampling log:
 - pH
 - Temperature
 - Specific Conductivity
 - Turbidity
 - Dissolved oxygen
- Three (3) well water volumes shall be evacuated in order to remove standing water and facilitate sampling of groundwater that is representative of surrounding conditions. Development shall continue until stabilization of the following water quality parameters occurs, or a maximum of two hours has elapsed:
 - pH (+/- 0.5 units)
 - Temperature (+/- 0.5 deg-F)
 - Specific Conductivity (+/- 10%)
 - Turbidity (<50 Nephelometric Turbidity Units [NTU]). Refer to Section 2.2.4 for additional information.

⁴ EPA *Ground Water Issue: Low-Flow (Minimal Drawdown) Ground-water Sampling Procedures*, dated April 1996.

- The DEC will be notified if water quality parameters do not stabilize after five well water volumes are removed and/or a turbidity of less than 50 NTU is not obtained.
- If the well recharges slowly (i.e., well is pumped dry), purging shall be discontinued and recovery allowed until the water level recharges to within 95% of the pre-purge level, or a maximum of two hours, whichever occurs first. If the water level does not reach the pre-purge level within two hours, samples can be obtained as soon as a sufficient quantity of water recharges into the well.
- Quality control (QC) checks will be performed on the field measurement equipment, prior to and following the groundwater sampling event. QC checks that are not within 0.1 standard units for pH and 10% for the other parameters will be documented (including the lot number and expiration date of the calibration standard) in the report. Field measurements (e.g., pH, dissolved oxygen or oxidation reduction potential) recorded with an instrument(s) that does not pass QC checks will be qualified with a “J” data qualifier in the report to reflect an estimated measurement.
- The removed water shall be temporarily contained in a 5-gallon bucket (during purging) and subsequently managed in accordance with the procedures specified within the *IDW Management Program* [Section 5.0].
- Any observations of odor or visible turbidity shall be recorded on the field sampling log, along with any indications of well damage or tampering. The color of the purge water shall also be recorded.

2.2.4 Sample Collection

- Groundwater samples shall be collected using peristaltic pumps and/or disposable, dedicated HDPE bailers. Peristaltic pumps and/or HDPE bailers pumps shall be used for wells with initial depths to water of less than approximately 33 feet (i.e., maximum suction lift capacity)⁵. HDPE bailers shall be used where the depths to water exceed the pump’s suction lift capacity. The method(s) of groundwater extraction will be noted on the field log.
- Low-flow sampling techniques shall be used for sample collection. Proper low-flow techniques and minimizing turbidity sampling conditions are critical for determination of metal concentrations in the groundwater. The maximum pumping rate shall be 0.5 L/min and readings of water quality parameters shall be obtained approximately every 5 minutes.

⁵ Actual suction lift capability of pump may vary.

- Volatile Organic Compound (VOC) samples shall be collected first, followed by semi-volatile organic compounds (SVOCs), Metals, PCBs, PFAS and 1,4-Dioxane.
- The VOC vials shall be slowly filled until a convex meniscus is formed, capped, inverted and visually inspected for air pockets / bubbles.
- If the target turbidity level of 50 Nephelometric Turbidity Units (NTU) is exceeded, unpreserved samples of groundwater will also be collected and submitted to the laboratory for filtration and addition of preservative, consistent with evaluation for the presence of dissolved metal constituents.

Refer to the Quality Assurance Project Plan (QAPP) included within Appendix 6 of our September 16, 2022 Work Plan for additional field and laboratory QA/QC procedures.

2.3 Pond Sediment Sampling & Analysis Program

In order to provide analytical data that is representative of various locations throughout the pond, an array of seven (7) sampling points is proposed. The sampling locations are shown on the attached *Partial Site Plan* [Sheet SC-2, Exhibit 1]. Note that the proposed locations are approximate and may be field-modified, depending on bathymetric characteristics and/or anomalies or obstructions within the pond, if any.

2.3.1 Methodology

- Based on the pond depths, it is anticipated that the interior sampling locations will be accessed using a rowboat, raft or similar watercraft. The samples will be obtained from depths of approximately 0 to 6 inches below the sediment surface using a steel “ponar” sampler or equivalent device.
- A portion of the recovered sediment will be placed into a baggie and screened for the presence of VOCs using a PID meter. The remainder will be placed in a stainless-steel pan, water drained to the extent practicable and samples transferred to appropriate containers for the analyses being performed.
- The sampling equipment will be decontaminated between sampling points and the resulting wastes managed in accordance with the *Decontamination* and *Investigation-Derived Wastes (IDW) Management* Programs [Sections 4.0 & 5.0, respectively].

2.3.2 Surface Water Samples

- As requested by the DEC, co-located surface water samples will be obtained at approximately half of the sediment sample points. The surface water samples will be taken first to minimize the potential for intrusion of sediments into the surface water samples.

- The water samples will be obtained from a target depth of approximately 3 feet above the bottom of the pond, utilizing a Van Dorn Sampler or similar device and transferred to the appropriate containers for the analysis being performed.

2.4 Analytical Methods / Parameters

The analytical parameter lists are indicated below and consistent with the previous investigation effort:

Volatile Organic Compounds (VOC's), Semi-Volatile Organic Compounds (SVOC's) and PCB's :

- Target compound list (TCL) per Environmental Protection Agency (EPA) Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Multi-Media, Multi Concentration, in effect as of the date the analysis is performed.
- Thirty (30) highest concentration tentatively identified compounds (TICs), consisting of 10 VOCs and 20 SVOCs (Ref: DEC DER-10).

Metals:

- Target analytical list (TAL) per EPA CLP Statement of Work for Inorganic Analysis, Multi-Media, Multi Concentration, in effect as of the date the analysis is performed.

Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane:

- DEC *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Appendix G – PFAS Analyte List* [December 2024]. Analysis for PFAS must be analyzed using EPA Method 1633A.
- 1,4-Dioxane

2.5 Standards, Criteria and Guidance

The analytical results will be compared to the following standards, criteria and guidance (SCG) documents, as applicable:

- New York Codes, Rules and Regulations, Title 6 (6NYCRR), Chapter IV, Subpart 375-6: *Remedial Program Soil Cleanup Objectives*.
- DEC CP-51 / *Soil Cleanup Guidance*, Issued October 21, 2010.
- DEC *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)* [December 2024].
- DEC TOGS 1.1.1 – *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*.
- DEC CP-60 / *Screening and Assessment of Contaminated Sediment*, Issued December 8, 2014.

2.6 Analytical Data Reporting

Analytical results will be reported in accordance with the DEC's Analytical Services Protocol (ASP) Category B deliverables criteria.

3.0 EXPANDED SITE CHARACTERIZATION REPORT

The drilling, sampling and analytical programs will be compiled into a summary report which will include the following:

- Description of field and analytical procedures and observations.
- Discussion of the nature and rationale for variances from the scope of work described within the SC work plan, if any (e.g., modifying sampling locations).
- Comparison of analytical data to Standards, Criteria and Guidance (SCG), as applicable.
- Site geologic and hydrogeologic characteristics, with respect to contaminant fate and transport and including groundwater flow direction(s).
- Elevations of groundwater surface at monitoring wells, well construction features (e.g., top and bottom of screens) and contaminated zones relative to the Site survey datum.
- Supporting documentation such as an updated site plan(s), laboratory analytical report, including the Category B deliverables package and data summary tables.
- Conclusions and recommendations summarizing the residual contaminant levels and recommendations concerning additional investigation or remediation efforts, if warranted.

4.0 DECONTAMINATION PROGRAM

Descriptions of decontamination procedures to be utilized for heavy equipment, hand tools/small equipment, and personnel during the field work are summarized in the *Decontamination Program* that is included as Appendix 4 of the previously approved (September 2022) Site Characterization Work Plan (SCWP).

5.0 INVESTIGATION-DERIVED WASTES (IDW) MANAGEMENT PROGRAM

Investigation derived wastes (IDW) will consist of drill cuttings from the soil borings, equipment decontamination water, well development and purge water, spent disposable sampling equipment and personal protective equipment (PPE). These wastes will be managed in accordance with the procedures described in the *IDW Management Program* (Appendix 7 of September 2022 SCWP).

6.0 COMMUNITY AIR MONITORING PROGRAM

Monitoring of volatile organic compound (VOC) and dust levels will be performed during the drilling program, generally consistent with New York State Department of Health (NYSDOH) criteria per DER-10⁶, Appendix 1A.

7.0 HEALTH AND SAFETY PLAN

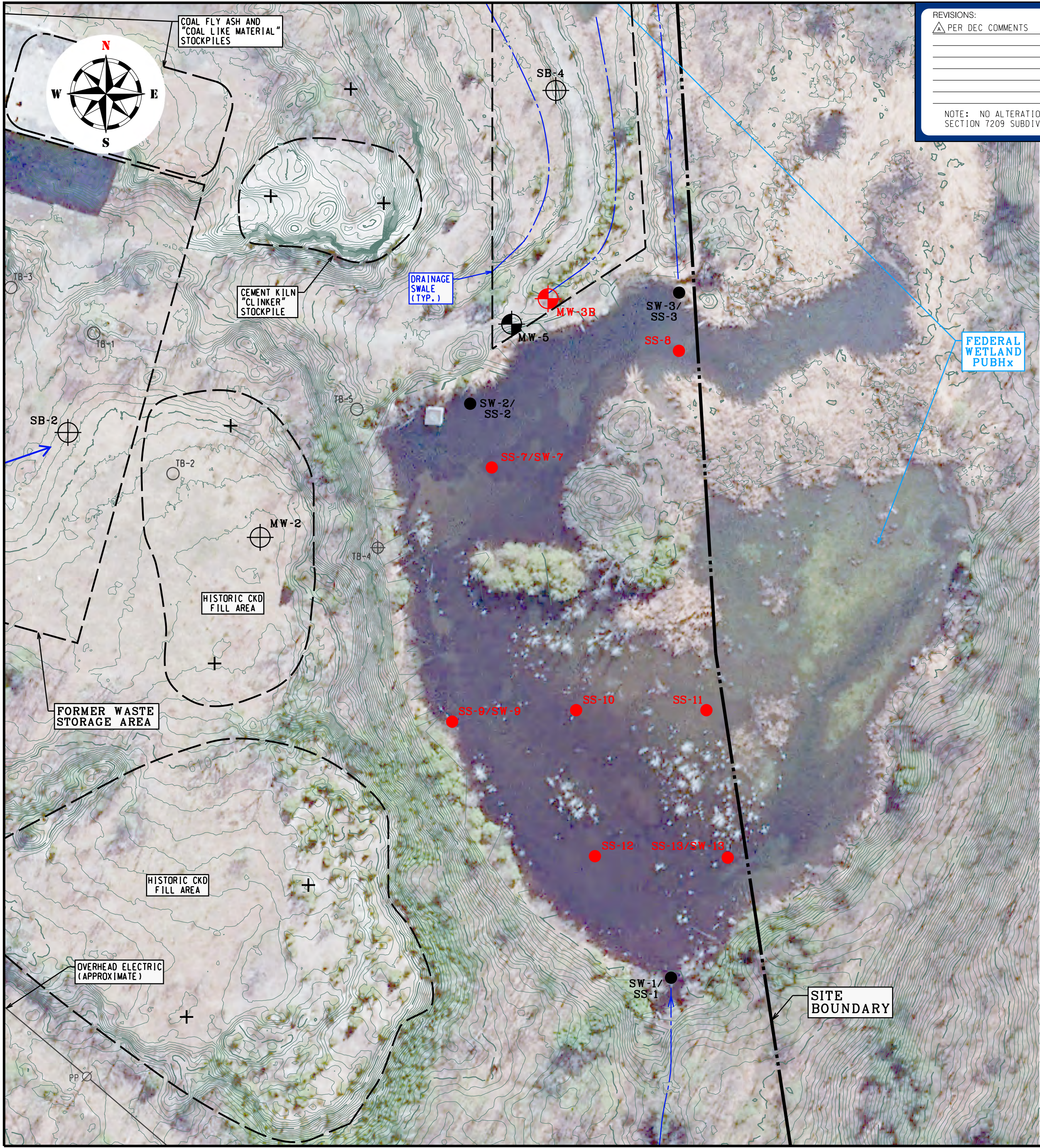
Field work shall be performed in accordance with the *Site-Specific Health and Safety Plan (HASP)* that was included within the previously approved *Site Characterization Work Plan*⁷.

⁶ DER-10 / Technical Guidance for Site Investigation and Remediation, Issued May 3, 2010.

⁷ Site Characterization Work Plan for the Alpha Portland (Otisca Industries) Site [DEC Site No. 734006], prepared by TDK, dated September 16, 2022.

APPENDIX 1

REPORT FIGURES



REVISIONS:	DATE:
△ PER DEC COMMENTS	02/04/25
NOTE: NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.	

KEY

EXISTING

PROPERTY LINE

DRAINAGE SWALE

TB-1

SOIL BORING LOCATION (1985)

TB-4

MONITORING WELL LOCATION (1985)

+

CKD/FILL SAMPLE LOCATION
(PCB ANALYSIS - 2009)

MW-1

OVERBURDEN MONITORING
WELL LOCATION (NOV-DEC 2023)

SW-1/
SS-1

SURFACE WATER/
SEDIMENT SAMPLE LOCATION (DEC 2023)

SB-1

SOIL BORING LOCATION (NOV-DEC 2023)

KEY

PROPOSED

SS-8

SEDIMENT SAMPLE LOCATION

SS-7/
SW-7

SURFACE WATER/
SEDIMENT SAMPLE LOCATION

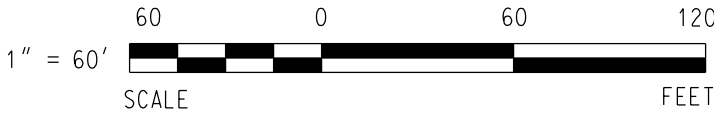
MW-3B

BEDROCK MONITORING WELL

NOTE:

ALL LOCATIONS, STOCKPILES,
DEBRIS LIMITS AND SAMPLE
LOCATIONS ARE APPROXIMATE.

△ PARTIAL SITE PLAN



- BASE MAP REFERENCES:
- AERIAL PHOTO PROVIDED BY NEW YORK STATE STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM; PHOTO TAKEN APRIL 2018.
 - TAX MAP PROVIDED BY SYRACUSE-ONONDAGA COUNTY GIS ON THE WEB, DATED 2021.
 - "ALPHA PIT FILLING AND GRADING - OVERALL SITE PLAN" AS PREPARED BY KEPLINGER FREEMAN ASSOCIATES; PROJECT No. 37046; SHEET No. L1.0; LAST REVISION DATE: JUNE 24, 2020.
 - SITE PLAN/ CONTAMINATION AREA A (FIGURES 2 AND 3) INCLUDED WITH ALPHA PORTLAND CEMENT CO. SITE CLOSURE WORK PLAN, PREPARED BY KEITH A. SCHIMEL, PH.D., P.E., DATED APRIL 1987.
 - SITE MAP (FIGURE 2) INCLUDED WITH FINAL SITE INSPECTION REPORT- ALPHA PORTLAND CEMENT, JAMESVILLE, NEW YORK, PREPARED BY ROY F. WESTON, INC., DATED FEBRUARY 11, 1994.
 - PCB SCREENING SAMPLE LOCATIONS PLAN (FIGURE 1) INCLUDED WITH ALPHA JAMESVILLE CORPORATION CKD CHARACTERIZATION PLAN, PREPARED BY O'BRIEN & GERE, DATED NOVEMBER 6, 2009.
 - FIELD MAPPING BY TDK ENGINEERING NOV-DEC 2023.
 - "FEMA LIDAR: FRANKLIN AND ST. LAWRENCE AND ONEIDA SUB-BASIN NY", DATED 2016-2017, PREPARED BY NOAA. DATED MARCH 29, 2024.
 - "SITE CHARACTERIZATION PLAN" AS PREPARED BY TDK ENGINEERING; DATED JUNE 26, 2024, DRAWING No. SC-1, PROJECT No. 2021063.

Engineering Associates, PC

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www.tdkengineering.com

PROJECT:

ALPHA PORTLAND (OSTICA INDUSTRIES)
(DEC SITE NO. 734006)

CLIENT:

ALPHA-OMEGA PRODUCTS, LLC

LOCATION:

OGLE ROAD, TOWN OF DEWITT, ONONDAGA COUNTY, NEW YORK

DRAWING TITLE:

PARTIAL
SITE
PLAN

PROJECT No.:

2021063

SCALE:

AS NOTED

DATE:

12-02-24

ENG'D BY:

JCH

DRAWN BY:

ALP

CHECKED BY:

JED

SHEET NO.

SC-2

APPENDIX 2
SOIL BORING LOG

SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: _____
Date: _____
Ground Surface Elev.: _____
Groundwater Depth/Elev.: _____
Groundwater Elev.: _____

Depth (ft)	Sample Depth (ft)	Blow Count	N	Recovery Length (in)	PID (ppm)	Description
1	0 -					
2	2.0					
3						
4						
5	5.0 -					
6	7.0					
7						
8						
9						
10	10.0 -					
11	12.0					
12						
13						
14						
15	15.0 -					
16	17.0					
17						
18						
19						
20						

N - Number of blows required for 140# hammer falling 30" to drive a 2" diameter split spoon sampler 12" into undisturbed soil (ASTM D-1586: Standard Penetration Test).
 ppm - Parts per Million

Monitoring Well Construction Details:

Diameter / Material _____
 Bottom Depth _____
 Screen Size _____
 Screened Interval _____
 Filter Sand Interval _____
 Bentonite Interval _____

Note: Depths refer to depth below ground surface.

SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: _____
Date: _____
Ground Surface Elev.: _____
Groundwater Depth/Elev.: _____
Groundwater Elev.: _____

Depth (ft)	Sample Depth (ft)	Blow Count	N	Recovery Length (in)	PID (ppm)	Description
21	20.0 -					
22	22.0					
23						
24						
25	25.0 -					
26	27.0					
27						
28						
29						
30	30.0 -					
31	32.0					
32						
33						
34						
35	35.0 -					
36	37.0					
37						
38						
39						
40						

N - Number of blows required for 140# hammer falling 30" to drive a 2" diameter split spoon sampler 12" into undisturbed soil (ASTM D-1586: Standard Penetration Test).

ppm - Parts per Million

Monitoring Well Construction Details:

Diameter / Material _____
 Bottom Depth _____
 Screen Size _____
 Screened Interval _____
 Filter Sand Interval _____
 Bentonite Interval _____

Note: Depths refer to depth below ground surface.

SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: _____
Date: _____
Ground Surface Elev.: _____
Groundwater Depth/Elev.: _____
Groundwater Elev.: _____

Depth (ft)	Sample Depth (ft)	Blow Count	N	Recovery Length (in)	PID (ppm)	Description
41	40.0 -					
42	42.0					
43						
44						
45	45.0 -					
46	47.0					
47						
48						
49						
50	50.0 -					
51	52.0					
52						
53						
54						
55	55.0 -					
56	57.0					
57						
58						
59						
60						

N - Number of blows required for 140# hammer falling 30" to drive a 2" diameter split spoon sampler 12" into undisturbed soil (ASTM D-1586: Standard Penetration Test).

ppm - Parts per Million

Monitoring Well Construction Details:

Diameter / Material _____
 Bottom Depth _____
 Screen Size _____
 Screened Interval _____
 Filter Sand Interval _____
 Bentonite Interval _____

Note: Depths refer to depth below ground surface.

SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: _____
Date: _____
Ground Surface Elev.: _____
Groundwater Depth/Elev.: _____
Groundwater Elev.: _____

Depth (ft)	Sample Depth (ft)	Blow Count	N	Recovery Length (in)	PID (ppm)	Description
61	60.0 -					
62	62.0					
63						
64						
65	65.0 -					
66	67.0					
67						
68						
69						
70	70.0 -					
71	72.0					
72						
73						
74						
75	75.0 -					
76	77.0					
77						
78						
79						
80						

N - Number of blows required for 140# hammer falling 30" to drive a 2" diameter split spoon sampler 12" into undisturbed soil (ASTM D-1586: Standard Penetration Test).

ppm - Parts per Million

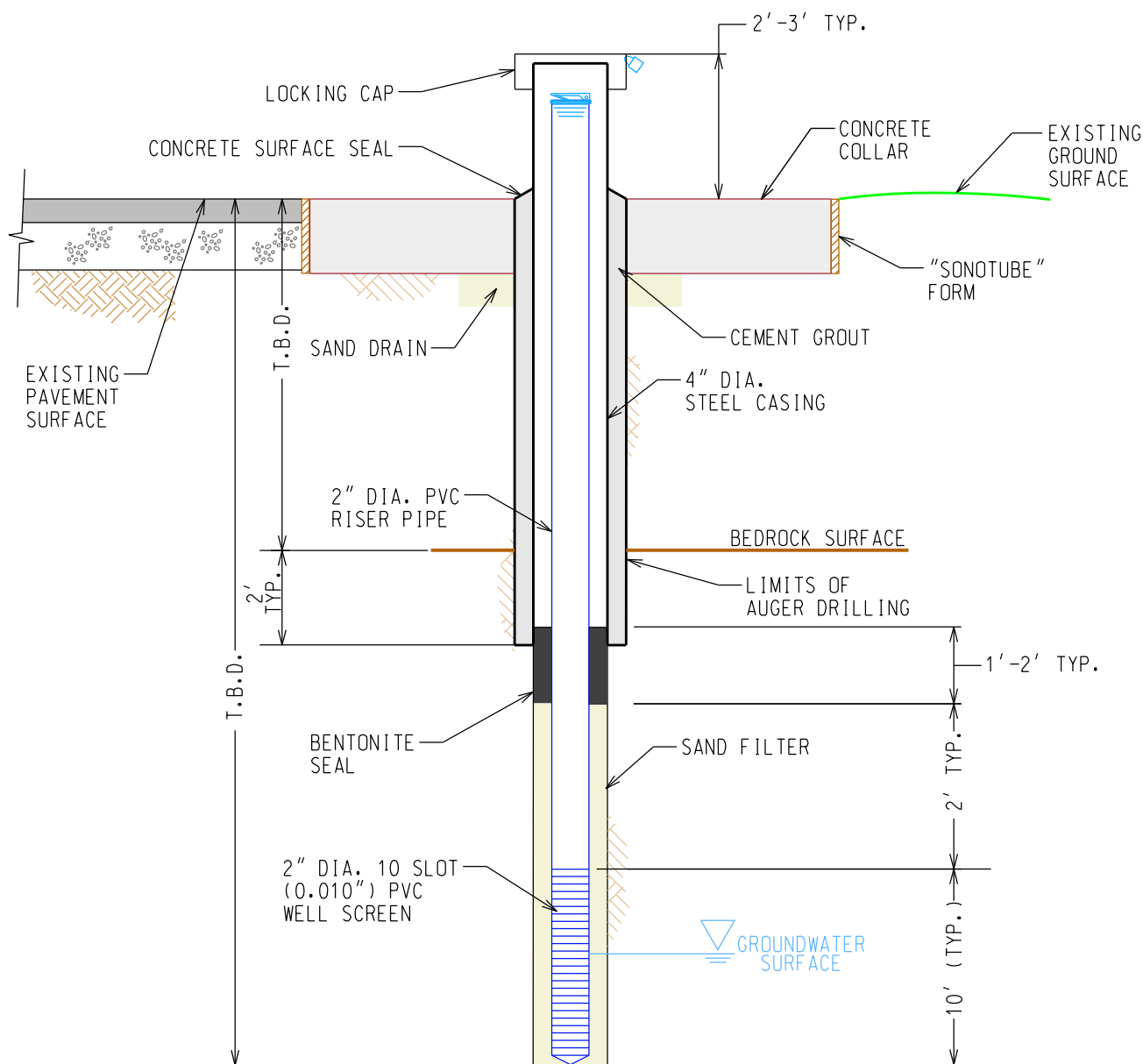
Monitoring Well Construction Details:

Diameter / Material _____
 Bottom Depth _____
 Screen Size _____
 Screened Interval _____
 Filter Sand Interval _____
 Bentonite Interval _____

Note: Depths refer to depth below ground surface.

APPENDIX 3

MONITORING WELL CONSTRUCTION DETAIL



BEDROCK MONITORING WELL CONSTRUCTION DETAIL

NOT TO SCALE



19 Genesee Street
Camillus, New York 13031
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www.tdkengineering.com

DRAWING TITLE:

TYPICAL MONITORING WELL DETAIL

PROJECT: **SITE CHARACTERIZATION PROGRAM
ALPHA PORTLAND (OTISCA INDUSTRIES) SITE**

CLIENT:

ALPHA OMEGA PRODUCTS, LLC

LOCATION:

OGLE ROAD, TOWN OF DEWITT, ONONDAGA COUNTY, NEW YORK

PROJECT No.: 2021063

SCALE: AS NOTED

DATE: 4/19/22

ENG'D BY: JCH

DRAWN BY: NAR

CHECKED BY: JED

SHEET NO.

BW-1

APPENDIX 4

GROUNDWATER SAMPLING FIELD LOG

Field Observation Log
Groundwater Sampling Record

Site NameAlpha Portland (Otisca Industries) SiteTechnician(s)

TDK Project #2021063Date

DEC Site #734006Weather/Temperature

Time of Arrival/Departure /

Well I.D.	Time	Well Depth (ft)	Well Diameter (in)	DTP (ft)	Product Thickness (in)	Depth to Groundwater (ft)	pH	Temp (deg C)	Conductivity (ms/cm)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)	Purge Method	Purge Amount (gal)	Observations Color/Sheen

DTP: Depth to product
D.O.: Dissolved Oxygen
ORP: Oxidation-Reduction Potential

Comments: