April 11, 2023

Andrew Zwack
Assistant Engineer
Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Avenue
Buffalo, New York 14203

Re: Excavation Work Plan Notification
Tecumseh Phase I & II Business Park – Water & Sewer Extension
Lackawanna, New York

Dear Mr. Zwack:

This Excavation Work Plan provides a description of the procedures that will be implemented during all ground intrusive activities related to the extension of water and sewer services at the Tecumseh Phase I & II Business Park (the Site). This Work Plan has been prepared in accordance with New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation "Technical Guidance for Site Investigation and Remediation" (DER-10) and the approved Site Management Plans prepared by TurnKey Environmental Restoration, LLC.

It is understood that potions of this construction are within properties that have been remediated under the Brownfield Cleanup Program. As such, intrusive activities on these properties requires compliance with the Excavation Work Plan (EWP) prepared by TurnKey Environmental Restoration, LLC. The sections below describe the scope of work. This work will be performed in compliance with the EWP and 29 CFR 1910.120.

The following BCP sites will be impacted by this construction:

- C915198M
- C915198L
- C915197
- C915197B
- C915197D
- C915197F
- C915197I
- C915197H

Project Background

Phase I Business Park

The remedial work conducted on the Site has removed all known "source area" soil/fill, which included petroleum-, metal-, and tar-impacted soil/fill. USTs and associated impacted soil/fill were also removed. The remaining soil/fill is generally characterized by widespread exceedance of the NYSDEC Part 375 unrestricted-use soil cleanup objectives (SCOs) for several ubiquitous constituents. Specifically, nearly all samples collected during the Remedial Investigation exhibited exceedance of the commercial SCOs for carcinogenic polycyclic aromatic hydrocarbons (PAHs), as well as arsenic, cadmium, lead, and mercury. Other constituents remaining above unrestricted-use SCOs in select areas of the Site include PCBs (Aroclors 1248, 1254, and 1260) and 4-4' DDT. It is assumed that the entire 102-acre Site is impacted above the unrestricted-use SCOs to the approximate native soil depth of 8 feet below grade.

Phase II Business Park

The remedial work conducted on the Site has or will: remove all known "source area" soil/fill (i.e., petroleum- and metal-impacted soil/fill); treat weathered petroleum-impacted saturated soil/fill in-situ; and remediate isolated groundwater impacts. The remaining soil/fill is generally characterized by widespread exceedance of the NYSDEC Part 375 unrestricted-use SCOs for several ubiquitous constituents. Specifically, nearly all samples collected during the Remedial Investigation exhibited exceedance of the commercial SCOs for PAHs, as well as arsenic, lead, and mercury. Other constituents remaining above unrestricted-use SCOs in select areas of the Site include PCBs (Aroclors 1248, 1254, and 1260) and inorganic compounds (i.e., cadmium, chromium, manganese, nickel, and zinc). It is assumed that the entire 142-acre Site is impacted above the unrestricted-use SCOs to the approximate native soil depth of 12 fbgs.

Site Geography, Geology, and Hydrogeology

Based on previous reports and the July 2021 Subsurface Exportation conducted by CME Associates, Inc., fill material was generally observed across the Site and comprised of non-cohesive coal and coke fines, slag, cinders, brick, concrete, metal, railroad ballast. The fill material was observed from ground surface (or underneath a one-foot cover is some areas) to approximately 10 feet below ground surface (bgs). In some cases, fill material extended to 15 – 20 feet bgs.

The fill is underlain by lacustrine clays and silts (i.e., a reworked native sandy clay unit) that are, in turn, underlain by shale or limestone bedrock. Bedrock is about 60 feet below grade.

Historically, due to the proximity of Lake Erie and municipal supplied water, groundwater in the area has not been developed for industrial, agricultural, or public supply purposes. There is a deed restriction that prohibits the use of groundwater on the 1,100-acre Tecumseh property; consequently, no groundwater supply wells are present on the Controlled Property.

Groundwater elevation measurements taken on May 6, 2006 from existing and newly installed monitoring wells and piezometers on the Controlled Property indicate that the first water bearing zone (i.e., water table) ranges from approximately 4 to 6 feet bgs within the soil/slag-fill unit. Groundwater elevations indicates that shallow groundwater generally flows west/southwest toward the Gateway Metroport Ship Canal and Lake Erie as well as northwest toward the Union Ship Canal and Buffalo Outer Harbor.

Construction Activities

Sanitary Sewer

The new PVC sanitary sewer main will be installed along the south side of the future Odell Street extension and will connect the existing pump station force main discharge from the Times Square pump station to the existing system at Odell Street. This public main will consist of new 12-inch and 18-inch SDR-35 PVC gravity sewers which will eventually connect to the existing 18-inch diameter sanitary sewer located on the west side of NYS Route 5 at Odell Street. This existing 18-inch sewer runs underneath NYS Route 5 and is proposed to be relined to avoid/limit any open-trench construction within the right-of-way of NYS Route 5. This new public sanitary sewer system will replace any existing active lines which are to be abandoned-in-place and will transport the flow easterly on Odell Street where it will eventually be treated at the Lackawanna Water Resources Recovery Facility. The existing Parshall flume and chamber will be abandoned. New flow metering/measurement from the Times Square pump station will be included in this project.

An eight-inch SDR-35 PVC sanitary sewer main will be installed along the north side of the future Ridge Road extension. This public main will connect to a new 12-inch SDR-PVC sanitary sewer located on the west side of NYS Route 5. This new 12-inch sewer will replace an existing 10-inch sanitary main that runs along the east side of NYS Route 5 which is to be abandoned. Sanitary flow will then be transported southerly on NYS Route

5 and eventually tie-in to the proposed 18" sewer at the Odell street extension where the existing 18-inch sewer main is proposed to be relined.

All of the sanitary work is to be performed per the Erie County Division of Sewerage Management standards.

Water System

A 16-inch ductile iron watermain will be tapped off of the existing 16-inch watermain on the east side of NYS Route 5 near Odell Street. The new 16-inch ductile iron watermain will run along the north side of the future Odell Street extension.

In addition, a 12-inch ductile iron water main will be tapped off of the existing 16-inch watermain on the west side of NYS Route 5 near Ridge Road. The new 12-inch ductile iron watermain will run along the south side of the future Ridge Road.

At both watermain extensions, hydrant assemblies will be spaced at a maximum of 400 to 600 feet and in-line valves will be spaced at a maximum of 500 feet.

The plan set signed and stamped by a P.E. is provided in **Appendix A**.

Excavation Work Plan

The sections below outline the applicable components from the following existing plans:

- Site Management Plan Tecumseh Phase I Business Park NYSDEC Site Nos. C915197 through C915197K (rev. December 2019)
- Site Management Plan Tecumseh Phase II Business Park NYSDEC Site Nos. C915198 through C915198L (rev. July 2021)

Soil Screening Methods

- Visual, olfactory and/or instrument-based (e.g., PID) soil screening will be performed by a C&S scientist during all ground intrusive activities into known or potentially contaminated material.

- If field evidence of potentially impacted soil/fill is encountered during intrusive work, the NYSDEC will be contacted, and the contractor will be directed to stockpile the material on polyethylene sheeting in an accessible location near the impacted area, but will remain within the same BCP site as the source to avoid administrative issues associated with import/export of these materials among differing BCP Sites.

  - Field evidence of impact is defined as having readily identifiable visual or olfactory signs of contamination, including product, tars, or elevated photoionization detector (PID) readings (i.e., sustained readings >5 parts per million; ppm).

- Slag encountered will be further field-screened by an experienced technician using a Ludlum Model 2221 Ratemeter/Scaler with a sodium iodide scintillator (2x2 meter) or equivalent for gamma radiation due to its potential to contain technologically enhanced naturally occurring radioactive material (TENORM).

Soil Staging Methods

- The excavation will progress in 40-foot sections. As the excavation advances in areas with a cover system, the cover material (top foot) will be staged on one side of the open trench. Excavated material below the cover system will not be placed on the staged cover material. After the utilities are installed and the trench backfilled to designed grades the staged cover material will be restored.

- Excavated soil/fill will be segregated, based on field screening and its status at the time of the excavation work, into material that can be reused as cover (i.e., if cover soil or NYSDEC approved-slag has been placed), non-impacted material that can be returned to the subsurface, and impacted material that requires treatment or off-site disposal. A continuous berm and/or silt fence will be placed around soil/fill stockpiles.

- Silt socks will be used as needed near catch basins, surface waters, and other discharge points. Stockpiles will be covered with appropriately anchored tarps or poly sheeting. Stockpiles will be periodically inspected and damaged tarp covers will be promptly replaced.

Materials Excavation and Load-Out

- A C&S scientist or engineer will observe and document during all excavation and load-out from known or potentially contaminated areas.

- The Site Owner and its contractors are responsible for safe execution of all intrusive and other work performed under this EWP; however, any entity performing intrusive work on the Site is required to abide by the requirements identified herein.

- The ECIDA/LIDC requires the Bethlehem Shoreline Trail to remain open during construction. Fencing, barriers and/or barricades will be used to re-route pedestrians during construction. Each section of open trench along the trail will be fenced off.

- The Contractor will investigate the presence of utilities and easements on the Site. It will be determined whether a risk or impediment to the planned work under is posed by utilities or easements on the Site.

- Loaded vehicles leaving the Site will be appropriately covered, manifested, and/or placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements). To the extent practicable, trucks will travel along routes that avoid residential areas.

- Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

- The Contractor will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

- Truck tires will not be in contact with impacted materials and/or ground conditions.

- Trucks and vehicles will utilize existing roadways to stay out of impacted materials. If areas that do not have existing roadways, then temporary roads will be constructed. Temporary roads will consist of geotextile fabric placed on top of the ground followed by one to two feet of approved crushed stone.

- A decontamination pad will not be installed for trucks or vehicles.

- At the completion of construction activities, all equipment that came into direct contact with contaminated material will be decontaminated before demobilization. Soils adhered to the equipment will be hand scraped. Soils removed from the equipment will be collected and managed according to Materials Reuse On-site Section below. After soils are removed, all equipment will be pressure washed on an area designed with poly sheets and mounded on the edges in order to hold the wash water. A vactor truck will collect the wash water and discharge into the on-site water treatment system.

- Equipment decontamination in areas that exhibit elevated radiological counts will consist of in-field scanning of the equipment that was in direct contact with the material. If residual material is detected, it will be removed from the equipment and placed with the rest of the material segregated for radiological evaluation.

Materials Transport Off-Site

- All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

- Material transported by trucks exiting the Site will be secured with canvas-type truck covers. If loads contain wet material capable of producing free liquid, truck liners will be used.

- Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during construction.

Materials Disposal Off-Site

- Contaminated and regulated material will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations.

- If material from this Site is proposed for off-site use (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Off-site management of materials from this Site will not occur without formal NYSDEC approval.

- Contaminated and regulated material will be disposed at a facility which is permitted by the New York State Department of Environmental Conservation or governing body, to accept such materials. In the event that the materials are sent to an out-of-state disposal facility samples will be collected to ensure compliance with the proposed disposal facilities permit requirements.

- The Contractor shall obtain and submit electronic copies of all transport manifests, bills of lading, and certified weight tickets for recycling and/or disposal of all materials to C&S within 3 calendar days of transport of any material. Receipts shall indicate at a minimum the following information: date, time, driver, remediation or recycling facility, quantity and type of material delivered, facility

permit number, as appropriate, and roundtrip travel mileage from the work site to the facility.

- At this time, approximately 9,000 cubic yards of contaminated material will be disposed at Republic Services Landfill in Niagara Falls, New York

Materials Reuse On-Site

- C&S will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site.

- On-site reuse of soil/fill material is acceptable provided that the material does not exhibit visual or olfactory evidence of contamination and PID measurements of the atmosphere at the soil/fill interface do not exceed 5 ppm above background.

- C&S conducted a Pre-Construction Investigation to evaluate the soil and fill material for re-use as utility trench backfill. Five test pits were excavated and samples were collected from historic fill and native soil. Historic fill consisted of a mixture of black sand, silt and clay with gravel, ash, coal, and demolition debris. C&S observed that historic fill along Route 5 contained minimal demolition debris. Native soil consisted of bluish grey silty clay with some shale, layers of peat was observed at depths over 10 feet below ground surface.

- Analytical results from the historic fill material indicate concentrations of semi-volatile organic compounds and metals above multiple Soil Cleanup Objectives (SCOs). Native soil only contained concentrations of metals above Unrestricted Use.

- Pre-Construction Investigation Test Pit Logs and a Photo Log showing the observed material are provided in **Appendix B.**

- Historic fill with minimal demolition debris will be placed, spread and compacted to achieve designed grades. Material will be placed in areas identified in **Figure 1**. Historic fill material will be graded to no higher than one foot above the existing surface and will remain within the same BCP site as the source to avoid administrative issues. It is estimated that 1,000 to 2,000 cubic yards of historic fill will be placed on the surface.

- Native soil will be reused as backfill above the stone bedding in the bottom of the trench up to a few feet from the top of the excavation. The remainder of the excavation will be backfilled with two-inch crushed stone. Peat will not be reused

as backfill. Native soil will be used as backfill within the same BCP site as the source to avoid administrative issues.

- If material other than the historic fill and native soil observed during the investigation is encountered, C&S will notify the NYSDEC and collected a sample before the material is reused. Samples collected to analyze unknown material may include some or all of the following parameters:
    - TCL VOCs
    - TCL SVOCs
    - TCL pesticides
    - Total PCBs
    - TAL metals
    - Total mercury
    - Total cyanide
    - Hexavalent chromium
    - Silvex
    - PFAS
- Petroleum impacted soil/fill will not be reused or recycled using a biotreatment facility.
- At this time demolition debris is not planned to be reused, if the construction encounters significant volumes of concrete and brick C&S will reach out to the NYSDEC PM to develop a work plan for demolition material reuse.
- Slag proposed for reuse on-site will be field screened with a 2x2 meter or equivalent for gamma radiation via test pad. If field-screening measurements are 1.5 times background for the Site, the slag will be stockpiled and evaluated for TENORM. Background levels for the Site are approximately 7,100 counts per minute (cpm). Therefore, slag measurements below 1.5 times background will not require further evaluation for reuse.
- Screening levels above 1.5 times background will require a separate submission of an action-specific work plan to address additional screening, sampling, analysis, and handling of elevated radiological material. NYSDEC and NYSDOH will be notified of any screening level exceedances.
    - Material will be segregated, placed on poly sheets and covered. The stockpile will be roped off with signage reading “DO NOT ENTER.” Stockpile inspections will occur weekly.

Fluids Management

- Liquids such as excavation dewatering and decontamination waters will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations.

- Excavation dewatering will be controlled under a NYSDEC Division of Water SPDES-equivalent permit.

Cover System Restoration

- The following BCP Sites will be impacted by the construction and have a cover system:

    - C915197
    - C915197I
    - C915198L
- After the completion of the intrusive activates the cover system will be restored in a manner that complies with the Decision Document. The existing cover system is comprised of a one foot of approved material and a vegetative layer or one foot of approved slag. The demarcation layer, consisting of orange plastic mesh will be replaced to provide a visual reference to the top of the remaining contamination zone, the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP.
- Cover system restorations will require certification by a licensed New York State Professional Engineer.

Backfilling From Off-site Sources

- Off-site backfill material consist of two-inch crushed stone, #1 and #2 round stone sourced from Holcim's Lockport, New York quarry

- Documentation was provided to NYSDEC as to the source of the material and the consistency of the material in accordance with the exemption for no chemical testing listed in DER-10 Section 5.4(e)(5)

- Material Import Request Form and NYSDEC approval is provided in **Appendix C**.

Stormwater Pollution Prevention

- Erosion and sediment control measures are provided in the Stormwater Pollution Prevention Plan prepared by C&S and provided in **Appendix D**

Excavation Contingency Plan

- Contingency Plan for underground tanks and other unidentified sources of contamination will comply with Benchmark's EWP Section 5.2

Community Air Monitoring

- Continuous air monitoring (VOCs and particulates) will be conducted at upwind and downwind locations during all ground intrusive activities as per the NYSDOH Generic Community Air Monitoring Plan (provided in **Appendix E**).

- The action threshold for VOCs established in the CAMP is 5 ppm above background. If this value is exceeded for the 15-minute average work will be halted and work may resume once instantaneous readings fall below 5 ppm work. If the VOC levels reach 25 ppm or above at the perimeter of the work area, activities must be shut down. The action level for dust is 100 micrograms per cubic meter over background during a 15-minute average. If this limit is exceeded, dust suppression techniques will be employed, including using water to wet the area.

- Special Requirements for Excavations Along the Bike Path (see **Appendix E**)

    - When work areas are within 20 feet of potentially exposed populations, the continuous monitoring locations for VOCs and particulates will reflect the nearest potentially exposed individuals. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices will be considered to prevent exposures related to the work activities and to control dust and odors. Consideration will be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- The NYSDEC and NYSDOH will be notified immediately of any exceedances of CAMP action levels.

- Explosive Vapor Community Monitoring will not be conducted for this work unless it is required as part of an Excavation Contingency Plan.

Dust and Odor Control Plan

- Dust suppression techniques will be employed by the Contractor as necessary to limit fugitive dust generated in disturbed areas during construction activities. Such techniques may be employed even if the community air monitoring results indicate that particulate levels are below action levels (if any visible dust is migrating from work areas). Techniques may include but are not limited to:
    - Applying water on haul roads
    - Wetting equipment and excavation surfaces
    - Hauling materials in properly tarped or watertight containers
    - Limiting vehicle speed on the Site
    - Limiting the size of excavations
    - Covering excavated areas and materials following excavation
- Effectiveness of the dust suppression measures will be evaluated based on the results of the air monitoring.
- If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted, and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated.
- NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project.
- All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include:
    - limiting the area of open excavations and size of soil stockpiles
    - shrouding open excavations with tarps and other covers
    - using foams to cover exposed odorous soils.
- If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include:
    - direct load-out of soils to trucks for off-site disposal

- use of chemical odorants in spray or misting systems
- use of staff to monitor odors in surrounding neighborhoods

Health and Safety

- The Contractor and C&S will comply with the Site-wide Health and Safety Plan. The Contractor's Health and Safety Plan is provided in **Appendix F**.

Schedule

- C&S anticipates starting construction activities in April 2023 and completing the utility installation by December 2023.

Should you have any questions or require additional information, please feel free to contact either of the undersigned.

Sincerely,

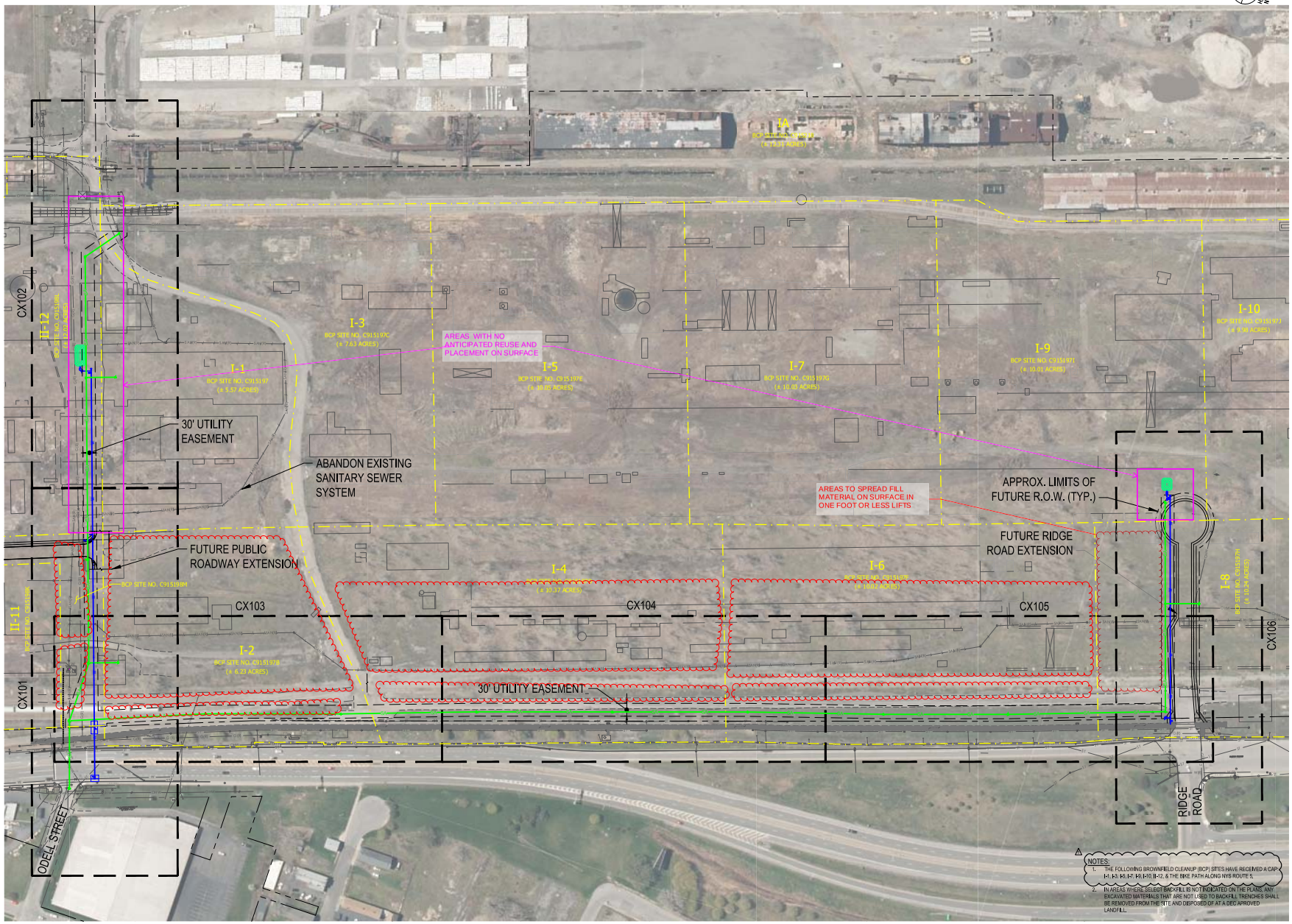
C&S ENGINEERS, INC.

Cody A. Martin
Project Environmental Scientist

Daniel E. Riker
Department Manager

F:\Project\135F - Erie County ILDC\135F001002 - Environmental Support\Design\Correspondence\Tecumseh Phase I & II Utility Construction Work Plan (REV 01).docx

FIGURES



C&S COMPANIES
C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
1	01/27/2023	ROAD B COORDINATION & RFI
2	09/29/2022	ADDENDUM #1

REVISIONS

EDA PROJECT NO:	01-79-15063
C&S PROJECT NO:	135F.001.001
DATE:	JULY 27, 2022
DRAWN BY:	MRO
DESIGNED BY:	MRO
CHECKED BY:	VJO

OVERALL PLAN

CI001

Mar. 31, 2023 - 2:07pm
F:\Projects\135F - Erie County (LDC\135F001001 - Bethlehem Water & Sewer\Design\CAD\Sheet Files\135F001001_CI001.dwg

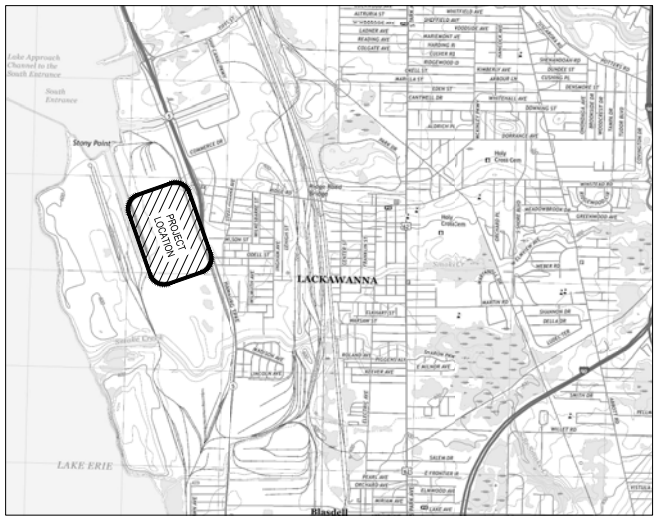
APPENDIX A
CONSTRUCTION PLANS

CONTRACT DRAWINGS
FOR THE CONSTRUCTION OF

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

BUFFALO & ERIE COUNTY INDUSTRIAL LAND DEVELOPMENT CORPORATION (ILDC)

95 PERRY STREET
BUFFALO, NEW YORK 14203



LOCATION MAP
1" = 2,000'

DRAWING LIST	
SHEET NO.	SHEET NAME
GENERAL	
GI001	TITLE SHEET
GI002	LEGEND & CONTROL POINTS
GI003	NOTES
CIVIL	
CI001	OVERALL PLAN
CU101	SANITARY SEWER PLAN & PROFILE
CU102	SANITARY SEWER PLAN & PROFILE
CU103	SANITARY SEWER PLAN & PROFILE
CU104	SANITARY SEWER PLAN & PROFILE
CU105	SANITARY SEWER PLAN & PROFILE
CU106	SANITARY SEWER PLAN & PROFILE
CW101	WATER MAIN PLAN & PROFILE
CW102	WATER MAIN PLAN & PROFILE
CW106	WATER MAIN PLAN & PROFILE
CT101	WORK ZONE TRAFFIC CONTROL PLAN
C501	SANITARY SEWER DETAILS
C502	SANITARY SEWER DETAILS
C503	WATER MAIN DETAILS
C504	WATER MAIN DETAILS
C505	WATER MAIN DETAILS
C506	MISCELLANEOUS DETAILS

EDA PROJECT: 01-79-15063
C&S PROJECT: 135F.001.001

JULY 27, 2022
REVISED DECEMBER 12, 2022

TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF THE PLANS AND SPECIFICATIONS FOR THIS PROJECT ARE IN COMPLIANCE WITH THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE AND THE BUILDING CODE OF NEW YORK STATE

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

GI001

SURVEY LEGEND:

- BENCH
- BOLLARD
- BORE HOLE/LOCATION
- CATCH BASIN (SQUARE)
- CONIFEROUS BUSH/SHRUB
- COMMUNICATION MANHOLE
- CONTROL POINT
- ELECTRIC BOX
- ELECTRIC MANHOLE
- ELECTRIC METER
- GROUND SHOT IDP
- GAS LINE MARKER
- GAS VALVE
- GUY WIRE
- HYDRANT
- I-BEAM
- IRON PIPE
- LIGHT POLE 1 LIGHTS
- MAG NAIL
- MARKER
- MONITORING WELL
- SLAG POT
- PK NAIL
- POST
- REBAR WITH CAP
- SIGN 1 POST
- SANITARY MANHOLE
- SIGN 2 POST
- STORM MANHOLE
- TRAFFIC SIGNAL HANDHOLE
- TRAFFIC SIGNAL POLE
- UNKNOWN MAN HOLE
- UTILITY POLE
- VAULT
- WATER VALVE
- YARD DRAIN

SURVEY LINE TYPES:

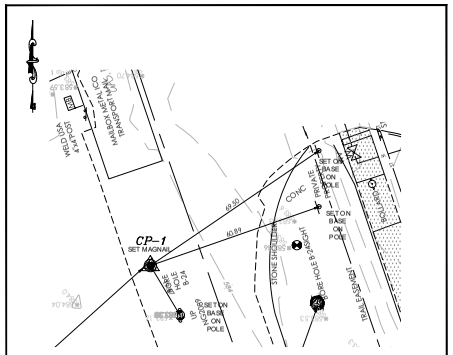
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- EDGE OF PAVEMENT
- FENCE (CHAIN LINK)
- GUIDE RAIL (BOX BEAM)
- GUIDE RAIL (W-BEAM)
- JERSEY BARRIER
- PROPERTY LOT LINE (APPROX)
- RAILROAD TRACKS
- ROAD CENTERLINE
- ROW (APPROX)
- SLOPE - TOP/BOTTOM
- WOOD LINE

SURVEY UTILITY LINE TYPES:

- COMMUNICATION LINE (RECORD)
- ELECTRIC LINE
- ELECTRIC LINE (RECORD)
- FIBER OPTIC LINE
- GAS LINE
- GAS LINE (RECORD)
- OVERHEAD WIRES
- SANITARY SEWER LINE (RECORD)
- WATER LINE
- WATER LINE (RECORD)

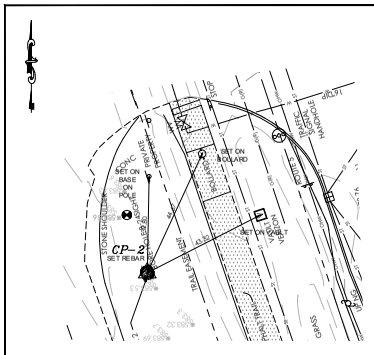
PROPOSED LEGEND:

- SANITARY SEWER
- WATER MAIN
- SANITARY MANHOLE
- FIRE HYDRANT
- GATE/BUTTERFLY VALVE
- END CAP
- SELECT FILL
- R.O.W.
- UTILITY CORRIDOR EASEMENT



TIE NOT TO SCALE

CONTROL POINT #1
SET MAG NAIL
N=1030247.82, E=1076199.28, ELEV=583.74



TIE NOT TO SCALE

CONTROL POINT #2
SET REBAR
N=1030235.09, E=1076256.18, ELEV=583.74

TABLE OF BENCHMARKS				
NAME	NORTHING	EASTING	ELEVATION	DESCRIPTION
TBM-A	1027425.34	1075815.21	582.34	SET ON MANHOLE
TBM-B	1027798.30	1076148.51	582.54	SET ON MANHOLE

C&S COMPANIES

C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
		REVISIONS

EDA PROJECT NO:	01-79-15063
C&S PROJECT NO:	135F.001.001
DATE:	JULY 27, 2022
DRAWN BY:	MRO
DESIGNED BY:	MRO
CHECKED BY:	WJO

LEGEND & CONTROL POINTS

GI002

Jul 27, 2022 – 2:48pm
F:\Project\135F – Erie County (LDC\135F001001 – Bethlehem Water & Sewer\Design\CADD\Sheet Files\135F001001_GI002.dwg

GENERAL NOTES:

1. THE APPROXIMATE LOCATION OF THE UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE TRUE LOCATION AND ELEVATIONS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES. NOTIFY ENGINEER IN INSTANCES WHERE REVISIONS TO DRAWINGS ARE REQUIRED.
2. CONTRACTOR SHALL NOTIFY DIG SAFELY NEW YORK AT LEAST THREE (3) DAYS PRIOR TO START OF WORK. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANIES AND THE OWNER. CONTRACTOR SHALL PROVIDE PRIVATE UTILITY LOCATING SERVICES FOR PRIVATELY OWNED UNDERGROUND UTILITIES IN THE PROJECT AREA IN HIS BID.
3. IN THE EVENT THAT THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES, HE SHALL IMMEDIATELY NOTIFY THE OWNER AND THE AFFECTED UTILITIES REPRESENTATIVE OF SUCH DAMAGE. ANY DAMAGE SHALL PROMPTLY AND SATISFACTORILY BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
4. CONSTRUCTION IS TO CONFORM TO ERIE COUNTY SEWER DISTRICT RULES AND REGULATIONS.
5. THE CONTRACTOR MUST BE ACQUAINTED WITH THE DRAINAGE CHARACTERISTICS OF THE WORK AREA SO THAT HE WILL PROGRESS HIS WORK EFFICIENTLY WITH FULL KNOWLEDGE OF THE POTENTIAL DRAINAGE PROBLEMS.
6. ALL EXISTING DRAINAGE SYSTEMS, INCLUDING DITCHES AND CULVERTS, WITHIN THE CONTRACT LIMITS SHALL BE CLEANED AND KEPT CLEAN AND FREE FLOWING FOR THE DURATION OF THE CONTRACT.
7. PROVIDE TEMPORARY THRUST RESTRAINT AND PIPE SUPPORTS FOR EXISTING PIPING WHENEVER REQUIRED BY THE WORK. CONTRACTOR TO REPLACE OR RESTORE THE EXISTING RESTRAINT SYSTEM OR PIPE SUPPORT SYSTEMS TO LIKE-NEW CONDITION.
8. WHERE CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
9. UNLESS DETAILED, SPECIFIED OR INDICATED OTHERWISE, CONSTRUCTION SHALL BE AS INDICATED IN THE APPLICABLE TYPICAL DETAILS AND GENERAL NOTES. TYPICAL DETAILS ARE MEANT TO APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS OR IN SPECIFIC DRAWINGS.
10. CONTRACTOR IS RESPONSIBLE FOR SECURITY AND FOR THE SECURE STORAGE OF GOODS AND MATERIALS ONSITE.
11. CONTRACTOR TO COORDINATE STAGING AREAS WITH OWNER PRIOR TO START OF CONSTRUCTION.
12. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING AND OTHER DEVICES AS MAY BE REQUIRED OR AS DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF THE ADJACENT STRUCTURES, ROADWAY AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ADJACENT STRUCTURES, ROADWAYS AND ALL UTILITIES ENCOUNTERED IN THIS WORK.
13. TOPOGRAPHIC SURVEY AND BASE MAPPING FOR THIS PROJECT WAS PREPARED BY KHEOPS ARCHITECTURE, ENGINEERING, & SURVEY, DPC. IN JULY OF 2021. THE COORDINATE DATUM IS BASED ON NEW YORK STATE PLANE COORDINATE SYSTEM - WEST ZONE, NAD83 WITH A GRID SCALE FACTOR OF 0.99984579, VERTICAL DATUM IS NAVD88 (NYSNET).
14. EXISTING SANITARY SEWER FLOW MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL ASSUME THE CLOSEST ACTIVE SANITARY SEWER ON THE WEST SIDE OF NYS ROUTE 5, TO WHICH ANY PUMPED BY-PASS FLOW COULD BE DISCHARGED, IS AT THE SOUTH SIDE OF DONA STREET (APPROX. 1,900 LF SOUTH FROM THE PROPOSED SANITARY SEWER WORK). THIS MAY REQUIRE TEMPORARY STORAGE TANKS TO BE UTILIZED TO MAINTAIN SEWER FLOW. CONTRACTOR SHALL SUBMIT DETAILED SEWER BY PASS PLAN PRIOR TO BEGINNING CONSTRUCTION.
15. SANITARY SEWER MANHOLE RIMS SHALL BE FLUSH WITH TOP OF BCP STONE CAPS AND 12" ABOVE GRADE IN LAWN AREAS AND AREAS THAT HAVE NOT BEEN CAPPED YET.
16. TRENCH WIDTHS AND ASSOCIATED SELECT BACKFILL EXTENTS ARE SHOWN SCHEMATICALLY FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO TYPICAL DETAILS FOR ACTUAL WIDTHS AND/OR LIMITS OF TRENCHING AND BACKFILL.
17. ALL PROPOSED SANITARY SEWER IS ASSUMED TO BE INSTALLED PER ECSD STANDARD DETAIL NO. 2, "SHEETED TRENCH".

DEMOLITION NOTES:

1. CONTRACTOR TO REMOVE & DISPOSE OF ALL ITEMS INDICATED & ANY ITEMS INCIDENTAL TO THE CONSTRUCTION AS REQUIRED.
2. CONTRACTOR SHALL PROTECT/PRESERVE ALL EXISTING ITEMS TO REMAIN, INCLUDING, BUT NOT LIMITED TO BUILDINGS, PAVEMENT, OVERHEAD & BURIED UTILITIES, TREES LANDSCAPING, ETC. DAMAGE TO ITEMS SCHEDULED TO REMAIN SHALL BE REPAIRED OR REPLANTED AT NO ADDITIONAL COST TO THE OWNER.
3. UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL HAVE ALL PUBLIC & PRIVATE UNDERGROUND UTILITIES LOCATED AND MARKED PRIOR TO EXCAVATION/ DEMOLITION/ CONSTRUCTION.
4. ALL UTILITY TERMINATIONS SHALL BE IN ACCORDANCE W/ THE APPLICABLE UTILITY COMPANY REQUIREMENTS.
5. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL MATERIALS/DEBRIS REMOVED FROM THE SITE.
6. THIS PLAN IS PREPARED FROM A SURVEY SHOWING KNOWN SURFACE FEATURES. IT IS INTENDED AS A GUIDE TO THE CONTRACTOR, NOT AS A COMPLETE AND UNIVERSAL DEMOLITION PLAN. CONTRACTOR MUST VISIT THE SITE TO CONFIRM DEMOLITION EFFORT PRIOR TO BIDDING.
7. REMOVE CONCRETE SIDEWALK AND/OR PAVEMENT TO THE LIMITS INDICATED. SAW CUT CONCRETE TO THE NEAREST EXISTING CONTROL/EXPANSION JOINT.
8. SAWCUT LINES ARE SHOWN SCHEMATICALLY FOR ILLUSTRATIVE PURPOSES ONLY. ACTUAL WIDTHS AND/OR LIMITS OF SAWCUTTING PAVEMENTS AND SIDEWALKS WILL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND MAY VARY BASED ON REQUIRED TRENCH WIDTH, EXCAVATION MEANS AND METHODS, LOCATION OF EXISTING JOINTS, ETC.
9. ALL UTILITIES AND MANHOLES TO BE ABANDONED SHALL BE CAPPED AND FILLED WITH FLOWABLE FILL.

ERIE COUNTY WATER AUTHORITY (ECWA) NOTES:

1. ALL ELEVATIONS REFER TO USGS NAVD83 DATUM.
2. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND FURNISH COPIES TO THE ENGINEER PRIOR TO COMMENCING WORK.
3. THE CONTRACTOR'S WORK AREA SHALL BE CONFINED TO THE LIMITS OF THE RIGHT-OF-WAYS AND EASEMENTS. THE CONTRACTOR SHALL OBTAIN ANY ADDITIONAL EASEMENTS OR WORK RELEASES SHOULD THE CONTRACTOR REQUIRE ADDITIONAL AREA TO ACCOMMODATE HIS OPERATIONS.
4. THE CONTRACTOR SHALL PROVIDE MAINTENANCE AND PROTECTION OF TRAFFIC IN ACCORDANCE WITH THE ERIE COUNTY HIGHWAY DEPARTMENT STANDARDS AND THE NYSDOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
5. THE LOCATIONS AND DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLANS AND PROFILES ARE APPROXIMATE. OTHER UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED.
   THE CONTRACTOR SHALL PERFORM TEST PITS TO VERIFY THE LOCATION AND ELEVATION OF UTILITIES AT INTERCONNECTIONS AND CROSSINGS AS SHOWN, DIRECTED, OR REQUIRED. THE CONTRACTOR SHALL EXCAVATE IN ADVANCE OF THE PIPE LAYING OPERATION AND EXPOSE ALL EXISTING UNDERGROUND UTILITIES TO PREVENT DAMAGE DURING CONSTRUCTION AND TO DETERMINE REQUIRED CHANGES IN GRADE NECESSARY TO INSTALL THE WATERMAIN TO AVOID CONFLICTS.
6. THE CONTRACTOR SHALL INSTALL THOSE MEASURES REQUIRED TO LIMIT EROSION OF AREAS DISTURBED BY THE WORK. CLEARING SHALL BE PERFORMED ON AN AS-NEEDED BASIS, PHASED TO REDUCE EROSION AND VISUAL IMPACT.
7. BLASTING WILL NOT BE PERMITTED.
8. NO MORE THAN ONE CONNECTION MAY BE MADE TO ANY EXISTING WATERMAIN PRIOR TO TESTING, DISINFECTION, AND APPROVAL OF THE WATERLINE INSTALLATION COMPLETED WORKS APPROVAL REPORT(S) BY THE ERIE COUNTY WATER AUTHORITY AND THE ERIE COUNTY HEALTH DEPARTMENT.
9. THE ERIE COUNTY WATER AUTHORITY SHALL ONLY OPERATE EXISTING VALVES AND FIRE HYDRANTS, INCLUDING NEWLY INSTALLED VALVES AND FIRE HYDRANTS THAT HAVE BEEN PLACED INTO SERVICE.
   THE CONTRACTOR IS ADVISED THAT WATERTIGHT CONDITIONS MAY NOT EXIST WHEN EXISTING VALVES ARE CLOSED.
10. THE CONTRACTOR SHALL HAVE ALL EQUIPMENT, MANPOWER, AND MATERIALS REQUIRED ON SITE AND READY FOR USE PRIOR TO COMMENCING ANY SHUT-DOWN OR REMOVING ANY EXISTING FACILITIES FROM SERVICE. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED CUSTOMERS IN WRITING OF ANY SHUT-DOWN AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE FIRE STATIONS 48 HOURS IN ADVANCE PRIOR TO TAKING ANY FIRE HYDRANTS OUT OF SERVICE. ANY FIRE HYDRANTS NOT IN SERVICE SHALL BE BAGGED IN BURLAP OR PLASTIC. ANY SHUT-DOWN SHALL BE LIMITED TO 4 CONSECUTIVE HOURS. IT MAY BE NECESSARY TO SCHEDULE SHUT-DOWNS AT NIGHT, WEEKENDS, OR OTHER OFF HOURS SO AS TO NOT AFFECT SCHOOLS, BUSINESSES OR OTHER CUSTOMERS, AS DETERMINED BY THE ENGINEER. SHUT-DOWN REQUESTS SHALL BE SUBMITTED TO THE ERIE COUNTY WATER AUTHORITY A MINIMUM OF 5 BUSINESS DAYS IN ADVANCE OF THE REQUESTED SHUT-DOWN DATE.
11. ALL WATERMAIN PIPING SHALL BE INSTALLED WITH A MINIMUM OF 5'-0" OF COVER.
12. ALL WATERMAIN PIPING SHALL BE INSTALLED WITH A MINIMUM OF 1'-6" OF VERTICAL CLEARANCE AND 10'-0" OF HORIZONTAL CLEARANCE FROM SANITARY AND STORM PIPING, MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING.
13. IF THE MATERIAL AT THE DESIGN GRADE IS UNSUITABLE AS DETERMINED BY THE ENGINEER, THE CONTRACTOR, WHEN ORDERED IN WRITING, SHALL EXCAVATE ADDITIONAL MATERIAL TO THE DEPTH NECESSARY AND SHALL BACKFILL TO THE PROPOSED GRADE WITH THE SELECT GRANULAR MATERIAL.
14. THE INSTALLATION OF 90 DEGREE BENDS IN THE WATERMAIN IS NOT ALLOWED, UNLESS APPROVED BY THE ERIE COUNTY WATER AUTHORITY.

    THRUST RESTRAINT FOR WATERMAIN PIPING SHALL CONSIST OF THRUST BLOCKS AND PIPE JOINT RESTRAINT. (4)
16. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY UTILITY POLE IN ADVANCE OF ANY EXCAVATION WORK THAT WILL TAKE PLACE WITHIN 5'-0" OF THE UTILITY POLE. THE CONTRACTOR SHALL INCLUDE THE COST OF TEMPORARY POLE SUPPORT IN THE APPROPRIATE BID ITEM.WHERE UTILITY POLES ARE REQUIRED TO BE SUPPORTED DURING CONSTRUCTION, THE CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS WITH THE UTILITY COMPANY.
17. IF MATERIALS ARE ENCOUNTERED DURING THE CONSTRUCTION THAT ARE SUSPECTED OF BEING CONTAMINATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE NYSDEC FOR DIRECTION REGARDING TESTING, SEPARATION, CONTAINMENT, AND DISPOSAL PROCEDURES.
18. EXISTING FIRE HYDRANTS REMOVED DURING CONSTRUCTION AND NOT REINSTALLED AS PART OF THE WORK SHALL BE SCHEDULED AND RETURNED TO THE ERIE COUNTY WATER AUTHORITY SERVICE CENTER, 3030 UNION ROAD, CHEEKTOWAGA, NEW YORK 14227.
19. THE CONTRACTOR SHALL COLD PATCH ALL TRENCH EXCAVATIONS IN TRAVELED AREAS INCLUDING ROADS, DRIVEWAYS, SIDEWALKS, AND PARKING AREAS.
20. THE CONTRACTOR SHALL NOT RESTRICT ACCESS FOR SCHOOL BUSES OR ANY EMERGENCY VEHICLES.
21. THE USE OF EXISTING FIRE HYDRANTS FOR ANY REASON IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ERIE COUNTY WATER AUTHORITY. THIS INCLUDES NEWLY INSTALLED FIRE HYDRANTS THAT HAVE BEEN PLACED INTO SERVICE.
22. THE CONTRACTOR SHALL SUBMIT PROCEDURES FOR TESTING AND DISINFECTION OF THE WATERMAIN TO THE ENGINEER FOR REVIEW PRIOR TO THE START OF TESTING.
23. THE CONTRACTOR SHALL BE PRESENT AND ASSIST IN THE FINAL WALK INSPECTION. THE CONTRACTOR SHALL PROVIDE SUFFICIENT PERSONNEL AND EQUIPMENT TO DEMONSTRATE TO THE ENGINEER THAT ALL VALVES, FIRE HYDRANTS, AND CURB STOPS OPERATE AS REQUIRED.

WATERMAIN TESTING & DISINFECTION NOTES:

1. WATERMAIN FLUSHING AND DISINFECTION SHALL FOLLOW AWWA STANDARD C-651, NOT INCLUDING THE TABLET METHOD.
2. PRESSURE AND LEAKAGE TESTS SHALL FOLLOW AWWA STANDARD C-605 FOR PVC WATERMAIN. (4)

ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT (ECDSM) NOTES:

1. THE ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT (DSM), WHO OPERATES AND MAINTAINS THE EXISTING SEWER LINES AND APPURTENANCES WITHIN ERIE COUNTY SEWER DISTRICTS (ECSD), IS TO BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS FOR ERIE COUNTY SEWER DISTRICTS.
3. ALL PERMITS REQUIRED BY THE FEDERAL, STATE, COUNTY, CITY AND/OR TOWN GOVERNMENTS TO PERFORM WORK MUST BE OBTAINED PRIOR TO THE START OF WORK, AND PAID FOR BY THE CONTRACTOR.
4. IF EASEMENT AND/OR OUT OF DISTRICT AGREEMENTS ARE REQUIRED, THEY MUST BE COMPLETE AND READY TO BE FILED BEFORE THE PROJECT WILL BE APPROVED FOR CONSTRUCTION.
5. THE CONTRACTOR SHALL COMPLY IN ALL RESPECTS TO THE INDUSTRIAL CODE PART (RULE NO.) 53 RELATING TO CONSTRUCTION, EXCAVATION, AND DEMOLITION OPERATIONS AT OR NEAR UNDERGROUND FACILITIES, AS ISSUED BY THE STATE OF NEW YORK DEPARTMENT OF LABOR, BOARD OF STANDARD AND APPEALS.
6. THE CONSTRUCTION OF THE SANITARY SEWER FACILITIES SHALL BE UNDER THE SUPERVISION OF A PERSON OR FIRM QUALIFIED TO PRACTICE PROFESSIONAL ENGINEERING IN NEW YORK STATE UNDER THE EDUCATION LAW OF THE STATE, WHENEVER ENGINEERING SERVICES ARE REQUIRED BY SUCH LAW FOR SUCH PURPOSES.
7. WHERE SUCH SANITARY SEWER FACILITIES ARE UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER, HE/SHE SHALL CERTIFY TO THE DSM AND TO THE APPLICANT THAT THE CONSTRUCTED FACILITIES HAVE BEEN UNDER HIS/HER SUPERVISION AND THAT THE WORK HAS BEEN FULLY COMPLETED IN ACCORDANCE WITH THE APPROVED ENGINEERING REPORTS, PLANS, SPECIFICATIONS, AND APPROVALS.
8. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SITE SAFETY. THE CONTRACTOR'S EQUIPMENT AND METHODS OF OPERATION SHALL BE IN FULL COMPLIANCE WITH OSHA STANDARDS AND SATISFY ALL FEDERAL, STATE AND LOCAL HEALTH AND SAFETY REGULATIONS.
9. THE CONTRACTOR IS ADVISED A TRENCH SHIELD AND/OR SHORING DESIGNED IN ACCORDANCE WITH OSHA STANDARDS SHALL BE USED IN ALL OPEN TRENCH EXCAVATIONS.
10. ANY CONTRACTOR AND/OR PLUMBER PERFORMING WORK IN A CONFINED SPACE (I.E. MANHOLES, WETWELLS, AND CHAMBERS) OWNED BY AN ERIE COUNTY SEWER DISTRICT, MUST CERTIFY TO THE COUNTY THAT THEY HAVE THEIR OWN CONFINED SPACE ENTRY PROGRAM THAT MEETS OR EXCEEDS OSHA'S REGULATIONS. CERTIFICATION MUST BE NOTARIZED BY A NOTARY PUBLIC.
11. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AHEAD OF THE PIPE LAYING OPERATION, SO IF MINOR ADJUSTMENTS MUST BE MADE IN THE PIPE ELEVATION AND/OR ALIGNMENT DUE TO INTERFERENCE FROM THESE UTILITIES, SAID CHANGES CAN BE MADE IN ADVANCE OF THE WORK.
12. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED TREE EXPERT TO REMOVE, WHERE NECESSARY, BRANCHES WHICH INTERFERE WITH THE CONSTRUCTION OPERATION, OR TO REPAIR TREES HAVING SUFFERED DAMAGE BY CONSTRUCTION ACTIVITIES. THE COST INVOLVED IS TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.
13. THE PROPOSED 8 THROUGH 12 INCH DIAMETER SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE CONFORMING TO THE LATEST REVISIONS OF AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) DESIGNATION D-3034, SDR-35, INSTALLED IN ACCORDANCE WITH THE ASTM DESIGNATION D-2321-83A OR THE LATEST REVISION THEREOF, OR APPROVED EQUAL. LARGER DIAMETER PIPES WILL BE REVIEWED ON A CASE BY CASE BASIS.
14. SEWERS SHALL BE LAID WITH STRAIGHT ALIGNMENT BETWEEN MANHOLES AND SHALL BE CHECKED BY USING A LASER BEAM OR LAMPING.
15. SHOULD A FLUID CONDITION BE ENCOUNTERED AT THE TRENCH BOTTOM, THE CONTRACTOR IS TO UNDERCUT THE TRENCH AND PROVIDE SUITABLE FILL MATERIAL (STONE & FABRIC) TO STABILIZE THE TRENCH BOTTOM.
16. SANITARY SEWER BEDDING MATERIAL SHALL BE NO. 1 CRUSHED STONE WITH A GRADATION CONFORMING TO THE *DSM SPECIFICATIONS FOR SUBDIVISIONS AND SANITARY SEWER EXTENSIONS.*
17. BACKFILL SHALL BE OF A SUITABLE MATERIAL REMOVED FROM THE EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSTABLE MATERIALS SHALL NOT BE USED FOR BACKFILL WITHIN TWO (2') FEET OF THE TOP OF THE PIPE.
18. ALL PIPES CROSSING UNDER PAVED AREAS ARE TO BE BACKFILLED TO SUB-GRADE WITH COMPACTED SELECT MATERIAL (NO. 2 CRUSHED STONE) TO FIVE (5') FEET OUTSIDE THE PAVEMENT EDGES OR AS REQUIRED BY THE HIGHWAY PERMIT. IF ANY PROPOSED SEWER RUNS UNDER PAVED AREAS AND HAS LESS THAN FOUR (4) FEET OF COVER, THEN CONCRETE ENCASEMENT IS REQUIRED AS SHOWN ON THE DSM TYPICAL CONCRETE ENCASEMENT DETAIL.
19. SEWERS PARALLEL TO WATERMAINS - *TEN STATE STANDARDS, LATEST EDITION, CHAPTER 30, SECTION 38.31, AND PAGE 30-11:* SEWERS SHALL BE LAID AT LEAST TEN (10') FEET (THREE (3) METERS) HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A TEN (10') FOOT SEPARATION, THE APPROPRIATE REVIEWING AGENCY MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18-INCHES (460 MM) ABOVE THE TOP OF THE SEWER.

    IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE, BOTH THE WATER MAIN AND SEWER MUST BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS OF THE REGULATORY AGENCY AND BE PRESSURE TESTED TO 150 POUNDS PER SQUARE INCH (PSI) (1034 KPA) TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.
18. SEWERS CROSSING WATERMAINS - *TEN STATE STANDARDS, LATEST EDITION, CHAPTER 30, SECTION 38.32, PAGE 30-11 TO 30-12:* SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18-INCHES (460 MM) BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.
21. WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST BE SPECIFIED:
    a. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER PIPE, AND SHALL BE PRESSURE TESTED AT 150 PSI (1034 KPA) TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.
    b. EITHER THE WATER MAIN OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS TEN (10') FEET (THREE (3) METERS) ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION.
    c. THE SEWER SHALL BE ENCASED IN CONCRETE PER THE DSM WATERMAIN CROSSING DETAIL TYPICAL FOR ENCASEMENT
22. THE MANHOLE COVERS ARE TO BEAR THE INSCRIPTION "ECSD SANITARY" AND COMPLY WITH THE DSM STANDARD FRAME AND COVER DETAIL. FOR PRIVATE PROJECTS THE COVERS SHALL BEAR THE INSCRIPTION "SANITARY SEWER" AND COMPLY WITH THE DSM STANDARD FRAME AND COVER (PRIVATE SEWER) DETAIL.
23. BUILDING SANITARY SEWER VENTS MUST BE INSTALLED SIX (6) INCHES ABOVE FINISHED GRADE IN A GRASSY AREA WITH A MUSHROOM CAP. IF THE VENT IS IN A SIDEWALK OR PAVED AREA, THEN PROTECT WITH 6" DIAMETER BOLLARDS (2 MINIMUM).

ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT (ECDSM) NOTES CONTINUED:

24. CLEANOUTS (C.O.) ARE REQUIRED ON 4" AND 6" BUILDING SEWERS EVERY FIFTY FEET AND ONE HUNDRED FEET RESPECTIVELY, AND AT EVERY CHANGE OF ALIGNMENT.
25. ABANDONED BUILDING SEWER CONNECTIONS FROM THE SITE, IF ANY, REQUIRE PROOF OF A DISTRICT PERMIT FOR DISCONNECTION PRIOR TO THE NEW CONNECTION BEING MADE.
26. THE FOLLOWING PERTAINS ONLY FOR DIRECT REPLACEMENT OF IN SERVICE SANITARY SEWERS:
    a. EACH NEW PIPE JOINT SHALL BE ULTRASONIC TESTED AFTER IT IS LAID, BUT BEFORE THE NEXT PIPE IS LAID. ALL TESTS SHALL BE IN ACCORDANCE WITH THE TESTING EQUIPMENT MANUFACTURE RECOMMENDATIONS.
    b. THE ULTRASONIC TEST SHALL BE PERFORMED IN LIEU OF THE HYDROSTATIC AND AIR TESTS.
    c. A VIDEO INSPECTION OF THE ENTIRE SEWER SHALL BE PERFORMED. FORWARD THE VIDEO INSPECTION TAPE AND RELATED PAPERWORK TO DSM FOR REVIEW AND APPROVAL.
    d. A DEFLECTION TEST IS REQUIRED IN ALL CASES.
27. FOR ALL SANITARY SEWER INSTALLATIONS, A WRITTEN CERTIFICATE OF CONSTRUCTION COMPLETENESS AND COMPLIANCE, INCLUDING THE RESULTS OF THE HYDROSTATIC LEAKAGE TEST, DEFLECTION TEST AND AIR TEST, ETC. SHALL BE SUBMITTED TO THE ERIE COUNTY HEALTH DEPARTMENT AND DSM WITHIN THIRTY (30) DAYS AFTER COMPLETION OF CONSTRUCTION.
28. FOR ALL PUBLIC AND PRIVATE 8" DIAMETER PIPE OR LARGER SANITARY SEWER INSTALLATIONS, THE DEVELOPER/CONTRACTOR MUST PROVIDE ONE (1) SET OF RECORD DRAWINGS ON "D" SIZE PAPER (24" X 36") AND IN AN ELECTRONIC FILE FORMAT (CD OR FLASH DRIVE) COMPATIBLE WITH THE LATEST AUTOCAD RELEASE.
29. ALL PUBLIC SEWER EXTENSION PROJECTS THAT CONSIST OF MORE THAN 750 LF OF 8" DIAMETER PIPE OR LARGER, SHALL FURNISH A 2 YEAR MAINTENANCE BOND TO THE DSM.
30. FINAL CERTIFICATION WILL BE ISSUED UPON THE FULL COMPLETENESS AND COMPLIANCE OF THE PROJECT INCLUDING ANY REQUIREMENT(S) OF I&I REMEDIAL WORK.

HAZARDOUS MATERIALS REMOVAL NOTES:

1. CONTRACTOR SHALL ASSUME ALL EXISTING FOUNDATION WATERPROOFING MATERIALS CONTAIN ASBESTOS. THIS INCLUDES ALL BUILDINGS, MANHOLES, TUNNELS, ETC. AND INCLUDES ALL COSTS FOR PROPER REMOVAL AND DISPOSAL AS REQUIRED TO COMPLETE THE WORK IN THEIR BID.

SOIL AND EROSION CONTROL NOTES:

1. SOIL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED AND FULLY FUNCTIONAL PRIOR TO ANY SITE DISTURBANCE. SOIL EROSION AND SEDIMENT CONTROL FACILITIES ARE TO BE MAINTAINED DURING CONSTRUCTION AND REMOVED UPON COMPLETION OF CONSTRUCTION.
2. ALL ROADWAYS SHALL BE KEPT CLEAN OF MUD AND DEBRIS. FILL SHALL NOT BE SPILLED ONTO ROADWAY. ALL SPILLED MATERIALS SHALL BE PROMPTLY REMOVED.
3. THE AREAS OF CONSTRUCTION SHALL BE LEFT IN STABLE CONDITION AT THE CLOSE OF EACH CONSTRUCTION DAY.
4. STORM INLETS SHALL BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION BY USE OF INLET PROTECTION OR OTHER APPROVED MEANS.
5. SOIL STOCKPILE AREAS ARE TO BE IMMEDIATELY SURROUNDED WITH SILT FENCING, OR OTHER EROSION CONTROL MEASURES OR AS ORDERED BY THE OWNER'S REPRESENTATIVE.
6. CONTRACTOR TO PROVIDE APPROVED DUST CONTROL MEASURES. THE CONTRACTOR SHALL HAVE A WATER TRUCK OR OTHER ACCEPTABLE MEANS OF CONTROLLING DUST AVAILABLE AT ALL TIMES.
7. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED AS OUTLINED IN THE APPROVED SWPPP FOR THE PROJECT. ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY TO ENSURE FUNCTIONALITY.
8. CONTRACTOR SHALL TOPSOIL, SEED AND MULCH ANY DISTURBED LAWN AREAS WITHIN 7 DAYS OF INACTIVITY.

ENVIRONMENTAL NOTES:

1. THIS PROJECT SITE IS GOVERNED BY A SITE MANAGEMENT PLAN WHICH HAS BEEN INCLUDED IN THE PROJECT MANUAL AS APPENDIX A. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THIS SITE MANAGEMENT PLAN IN ALL FACETS OF THE PROJECT INCLUDING, BUT NOT LIMITED TO: EXCAVATION, SOIL HANDLING AND DISPOSAL, COVER PLACEMENT, BACKFILL MATERIALS, PROCUREMENT, AND COMMUNITY AIR MONITORING.
2. ALL IMPORTED AGGREGATE AND/OR SOIL MATERIALS SHALL MEET THE REQUIREMENTS OF NYSDEC DER 10 TECHNICAL GUIDANCE FOR SITE INVESTIGATION AND REMEDIATION.
3. ALL EXCAVATED MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH NYSDEC DER 10 TECHNICAL GUIDANCE AND THE SITE MANAGEMENT PLAN. THIS INCLUDES CLEAN CAP MATERIAL.
4. CLEAN CAP MATERIAL AND DEMARCATION LAYER SHALL BE REPAIRED/REPLACED AS NECESSARY TO COMPLETE THE WORK IN ACCORDANCE WITH THE SITE MANAGEMENT PLAN.
5. THE FOLLOWING BROWNFIELD CLEANUP (BCP) SITES HAVE RECEIVED A CAP: I-1, I-3, I-5, I-7, I-9, I-10, II-12, & THE BIKE PATH PARCEL (ERIE COUNTY) ALONG NYS ROUTE 5.
6. IN AREAS WHRE SELECT BACKFILL IS NOT INDICATED ON THE PLANS, ANY EXCAVATED MATERIALS THAT ARE NOT USED TO BACKFILL TRENCHES SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT A DEC APPROVED LANDFILL.

SANITARY SEWER & MANHOLE TESTING NOTES:

1. SEWERS:
   1.1. AFTER BACKFILLING AND PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING FOUR TESTS ON ALL SEWERS BUILT UNDER THIS PROJECT:
      a. AIR TESTS
      b. INFILTRATION OR EXFILTRATION
      c. DEFLECTION TEST (15" DIA. AND SMALLER)
   2.1. REFER TO ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT SPECIFICATION SECTION 02595 - 3.02 FOR AIR TEST, INFILTRATION OR EXFILTRATION, AND DEFLECTION REQUIREMENTS.
   2.2. NO MORE THAN 1,000 LINEAR FEET OF INSTALLED SEWER SHALL BE ALLOWED TO REMAIN UNTESTED.
   2.3. THE CONTRACTOR'S TESTING PROCEDURES SHALL BE COMPLETED IN ACCORDANCE WITH OSHA STANDARDS FOR CONFINED SPACE ENTRY. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE AND OPERATE ALL EQUIPMENT NECESSARY FOR FULL COMPLIANCE FOR HIS OPERATION.
2. MANHOLES:
   2.1. THE PRECAST BASES AND MANHOLE BARREL SECTIONS ARE REQUIRED TO BE VACUUM FACTORY TESTED IN JOB LOTS IN ACCORDANCE WITH ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT SPECIFICATION SECTION 02596 - 2.03 FOR SANITARY MANHOLE BARREL AND CONE REQUIREMENTS.

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
4	12/12/2022	CHANGE WATER TO PVC & RAISE SEWER
1	08/29/2022	ADDENDUM #1

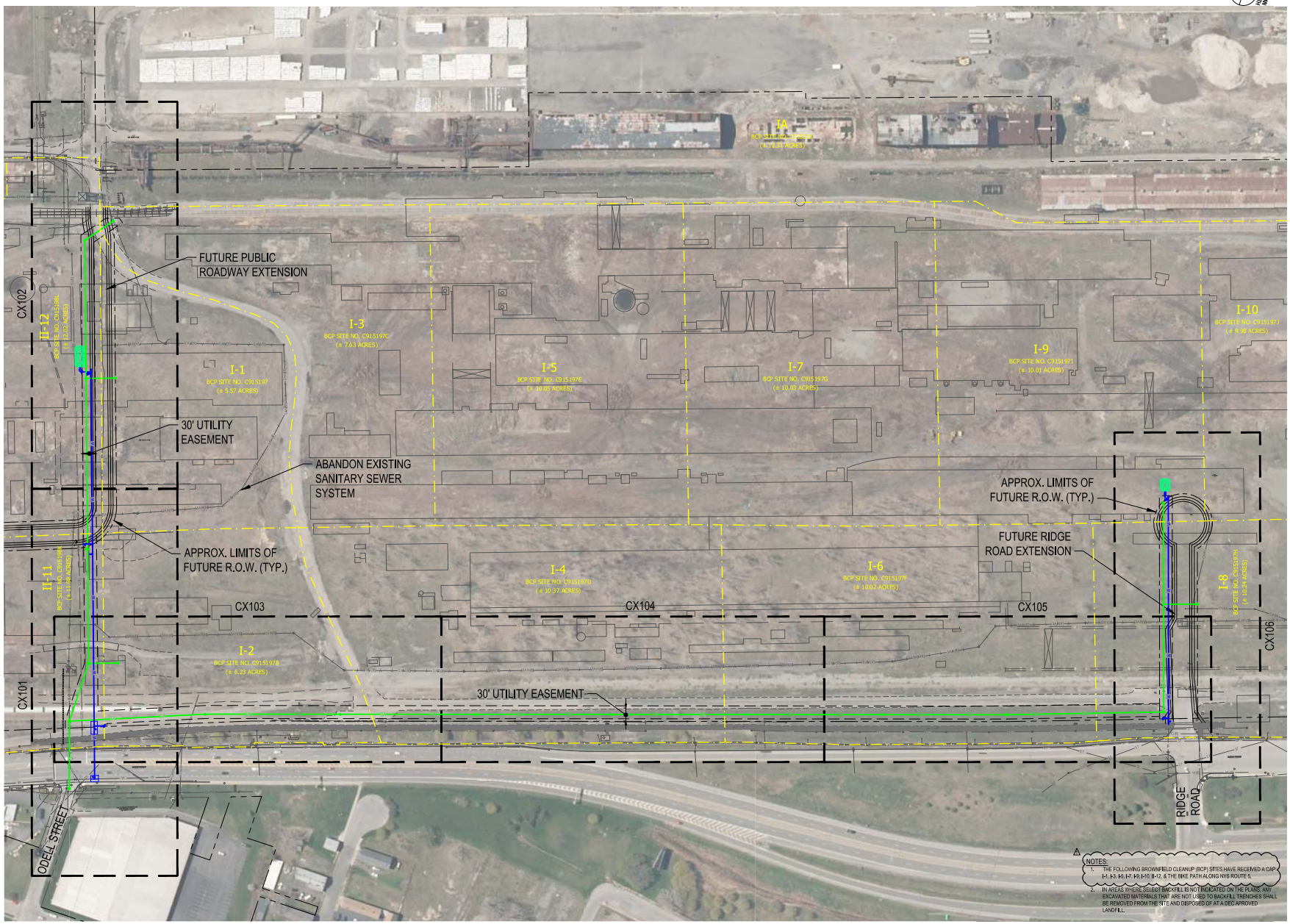
REVISIONS

EDA PROJECT NO: 01-79-15063
C&S PROJECT NO: 135F.001.001
DATE: JULY 27, 2022
DRAWN BY: MRO
DESIGNED BY: MRO
CHECKED BY: VJO

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

NOTES

GI003



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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
1	08/29/2022	ADDENDUM #1

REVISIONS

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C&S PROJECT NO:	135F.001.001
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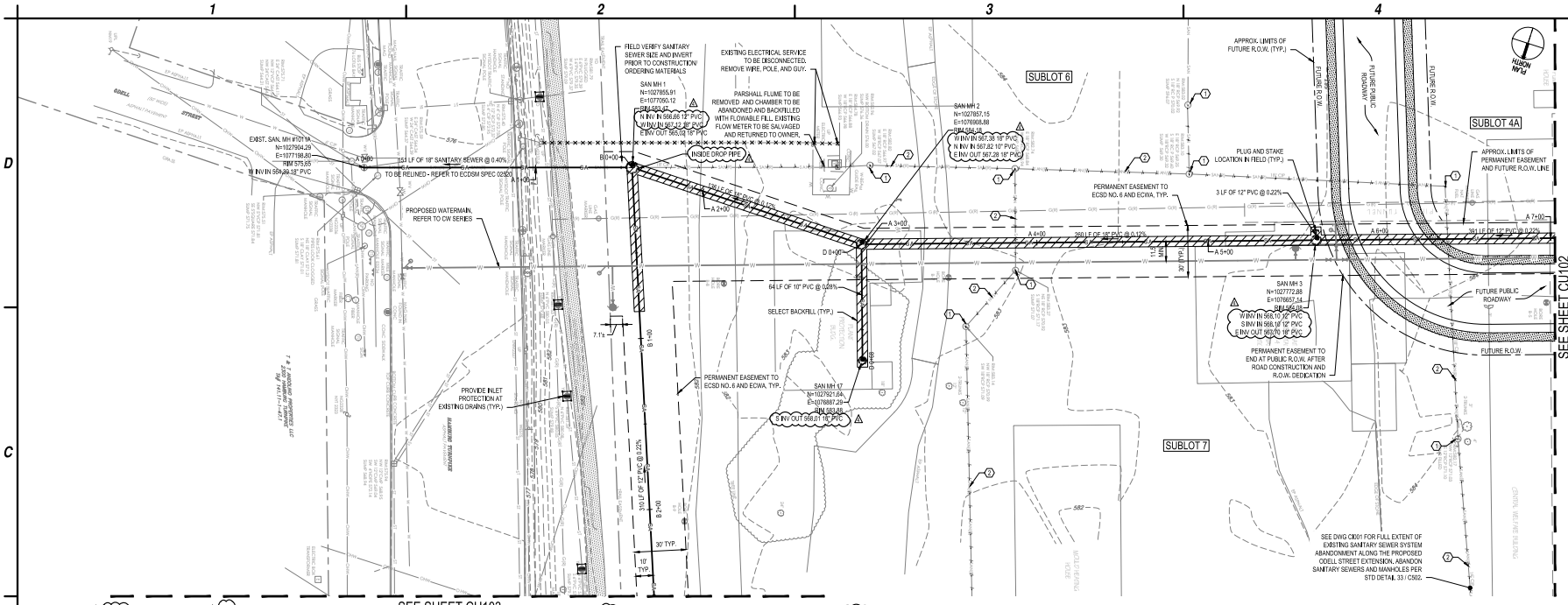
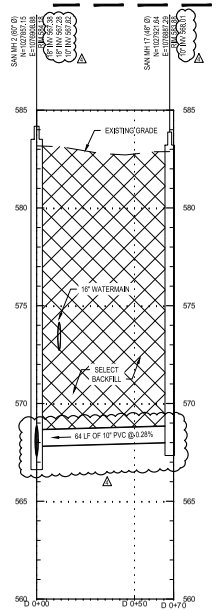
OVERALL PLAN

CI001



SANITARY SEWER PLAN LEGEND

1. ABANDON SANITARY MANHOLE (STD. DETAIL 33 / CS02)
2. ABANDON SANITARY SEWER (STD. DETAIL 33 / CS02)



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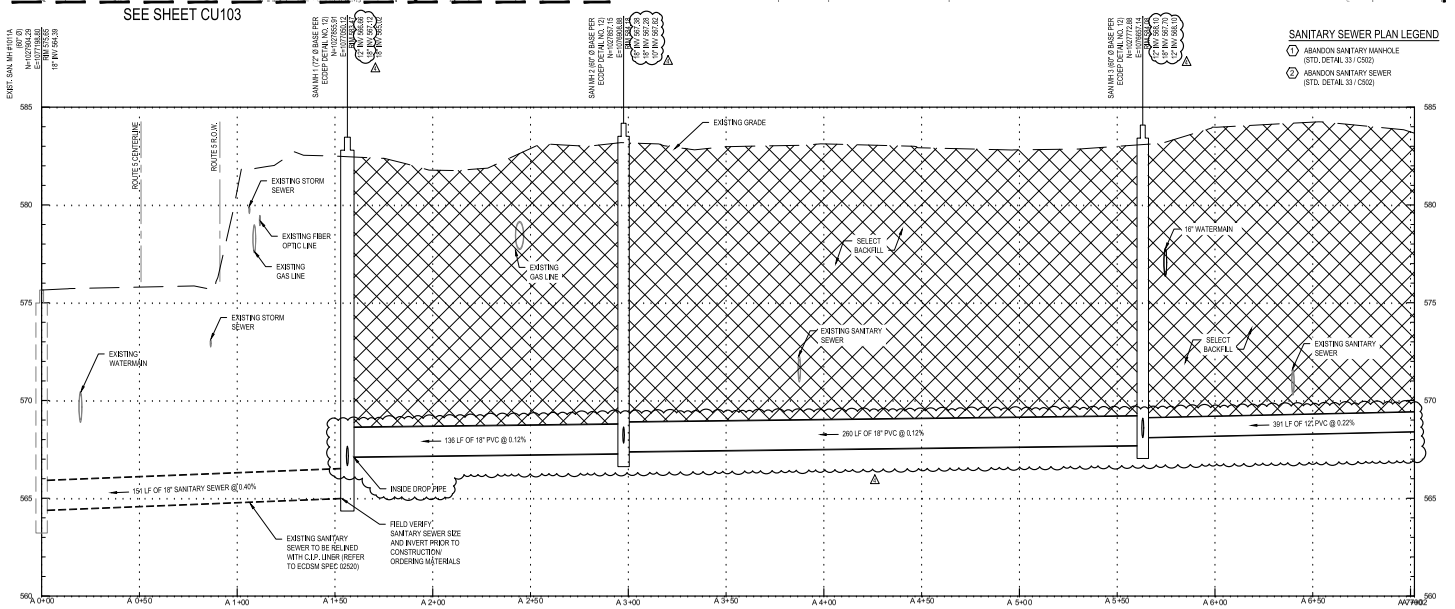
HORZ: 1" = 30'
VERT: 1" = 3'



SANITARY PROFILE - STATIONING A
HORZ: 1" = 30'
VERT: 1" = 3'

HORZ. 0 30' 60'

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
5	12/12/2022	CHANGE WATER TO PVC & RMBE SEWER
4	05/11/2022	AGENCY COMMENTS
3	04/12/2022	ECWA COMMENTS
2	03/02/2022	AGENCY COMMENTS
1		

REVISIONS

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DESIGNED BY:	MRO
CHECKED BY:	VO

SANITARY SEWER PLAN & PROFILE

CU101

Dec 14, 2023 - 11:52pm
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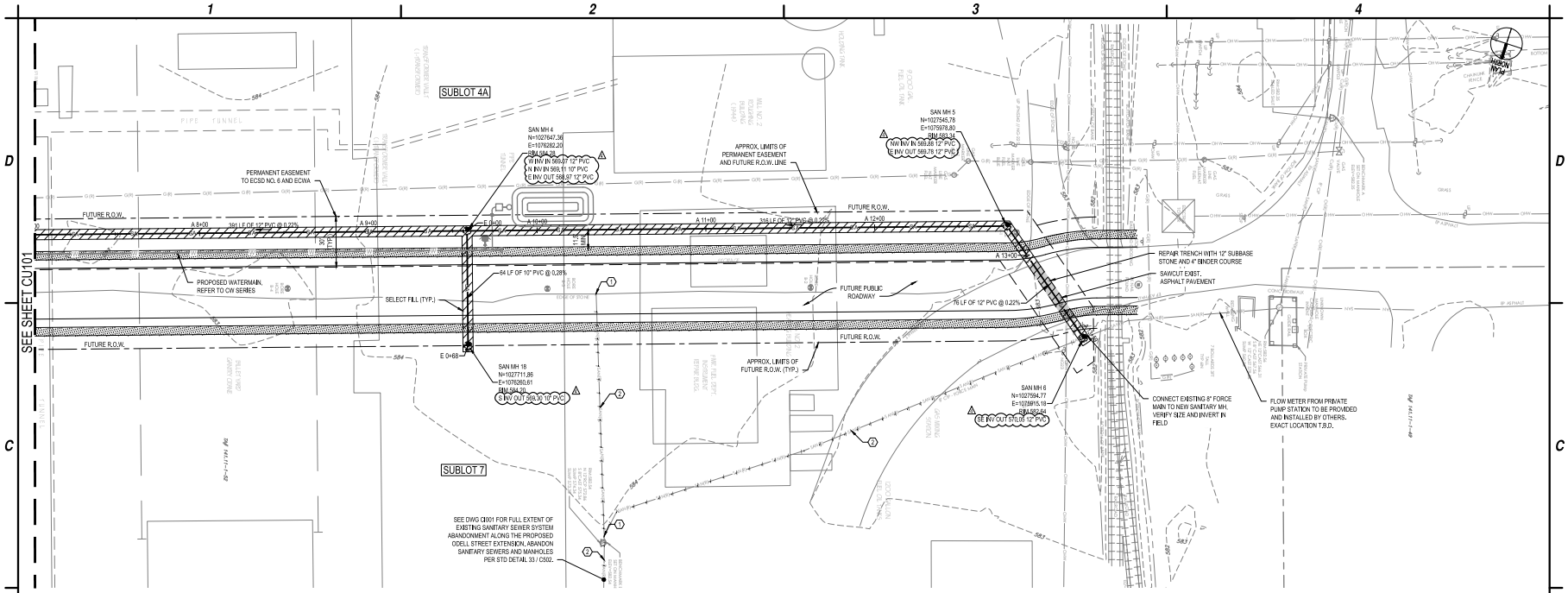

SANITARY PROFILE - STATIONING A
HORZ: 1" = 30'
VERT: 1" = 3'

SANITARY PROFILE - STATIONING E
HORZ: 1" = 30'
VERT: 1" = 3'

SANITARY SEWER PLAN LEGEND

1. ABANDON SANITARY MANHOLE (STD. DETAIL 33 / CS02)
2. ABANDON SANITARY SEWER (STD. DETAIL 33 / CS02)

HORZ. 0 30' 60'

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SANITARY SEWER PLAN & PROFILE

CU102

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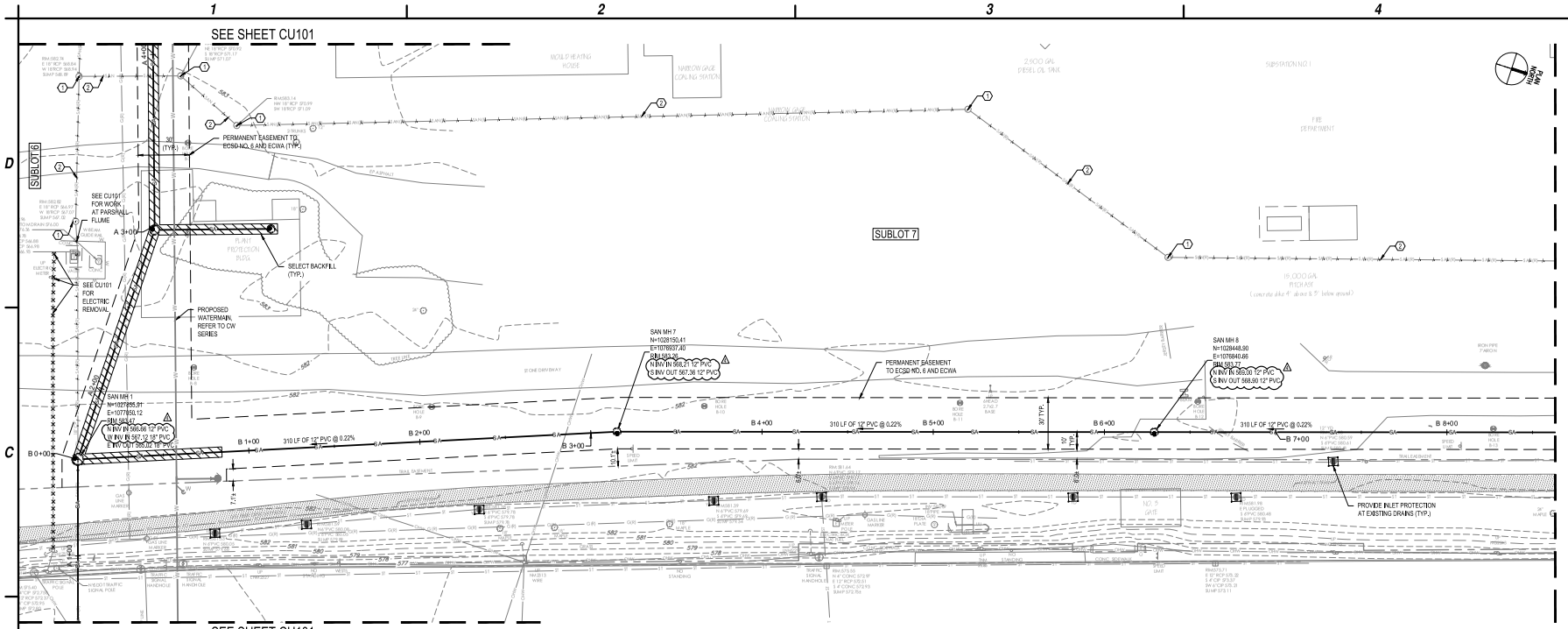

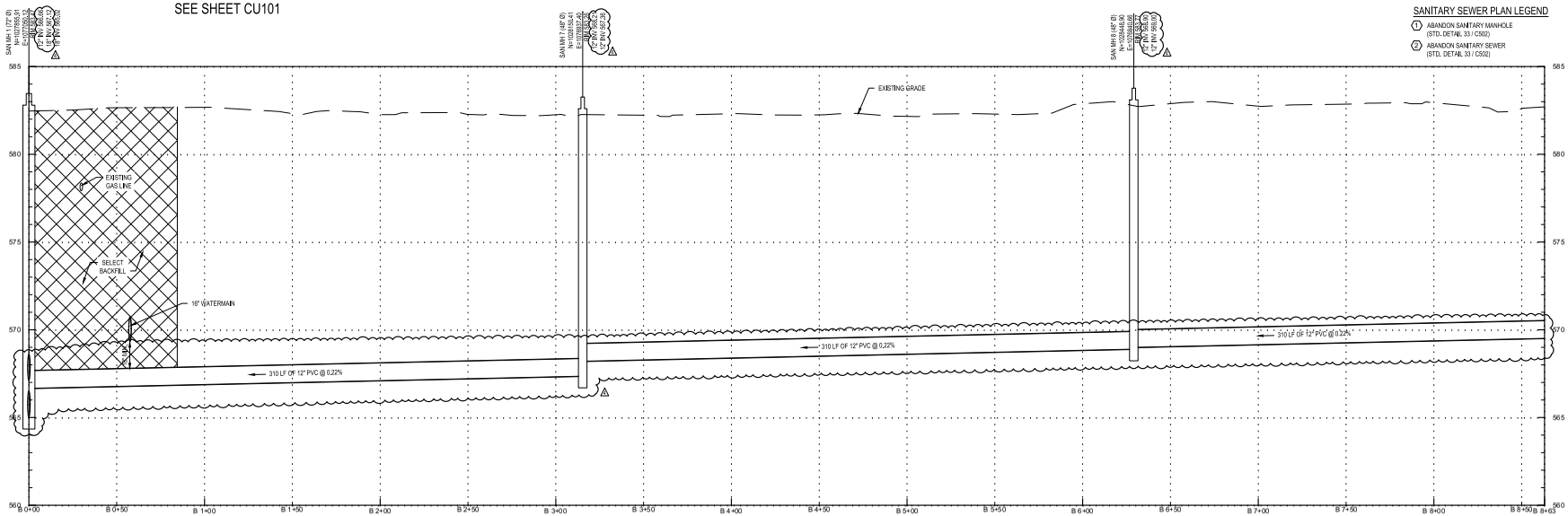

SANITARY PROFILE - STATIONING B
HORZ: 1" = 30'
VERT: 1" = 3'

SANITARY SEWER PLAN LEGEND

1. ABANDON SANITARY MANHOLE (STD. DETAIL 33 / CS02)
2. ABANDON SANITARY SEWER (STD. DETAIL 33 / CS02)

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
2	12/12/2022	CHANGE WATER TO PVC & RABS SEWER
1	05/11/2022	AGENCY COMMENTS

REVISIONS

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DATE:	JULY 27, 2022
DRAWN BY:	MRO
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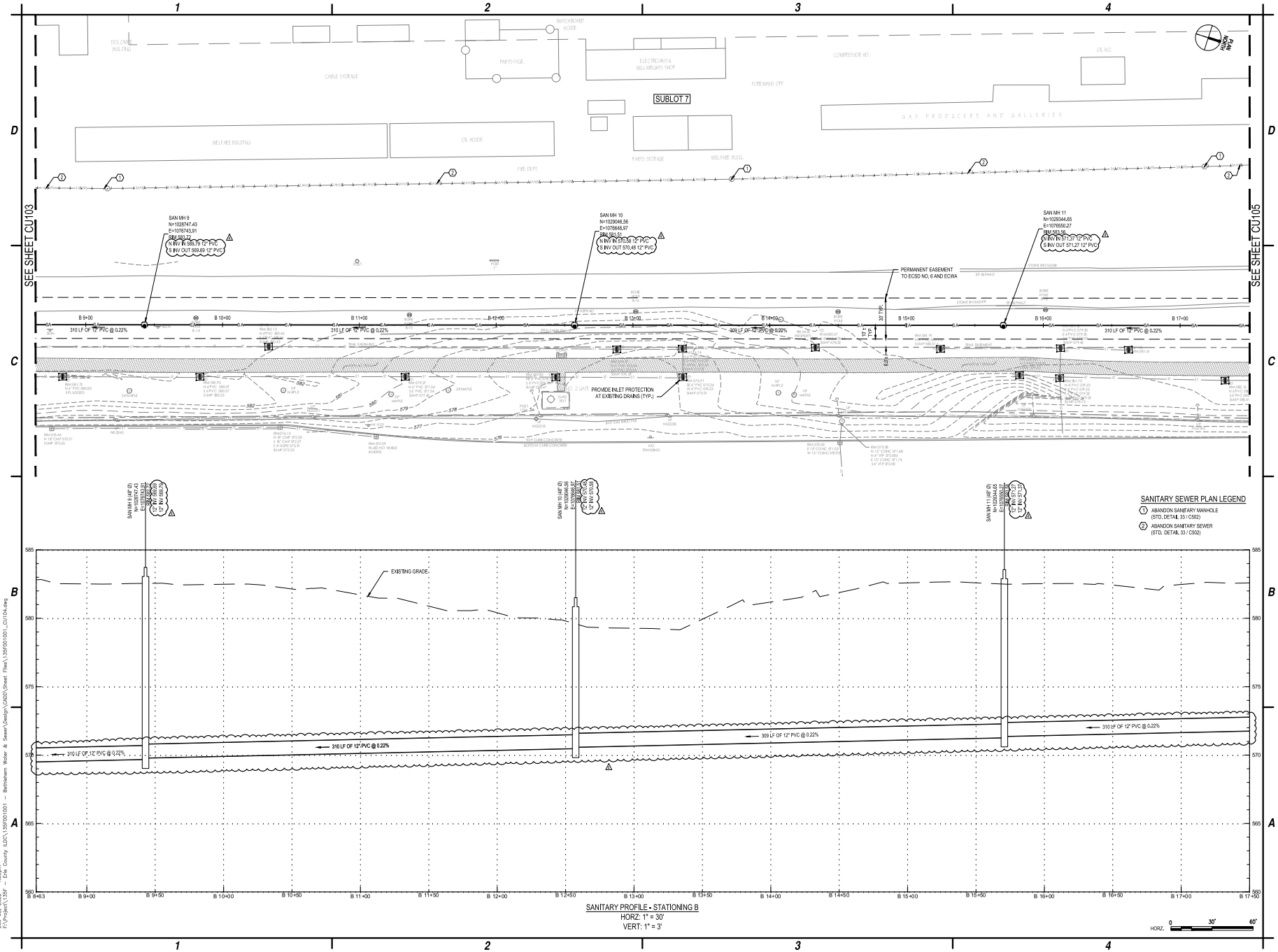
CHECKED BY:	VO

SANITARY SEWER PLAN & PROFILE

CU103



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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
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REVISIONS

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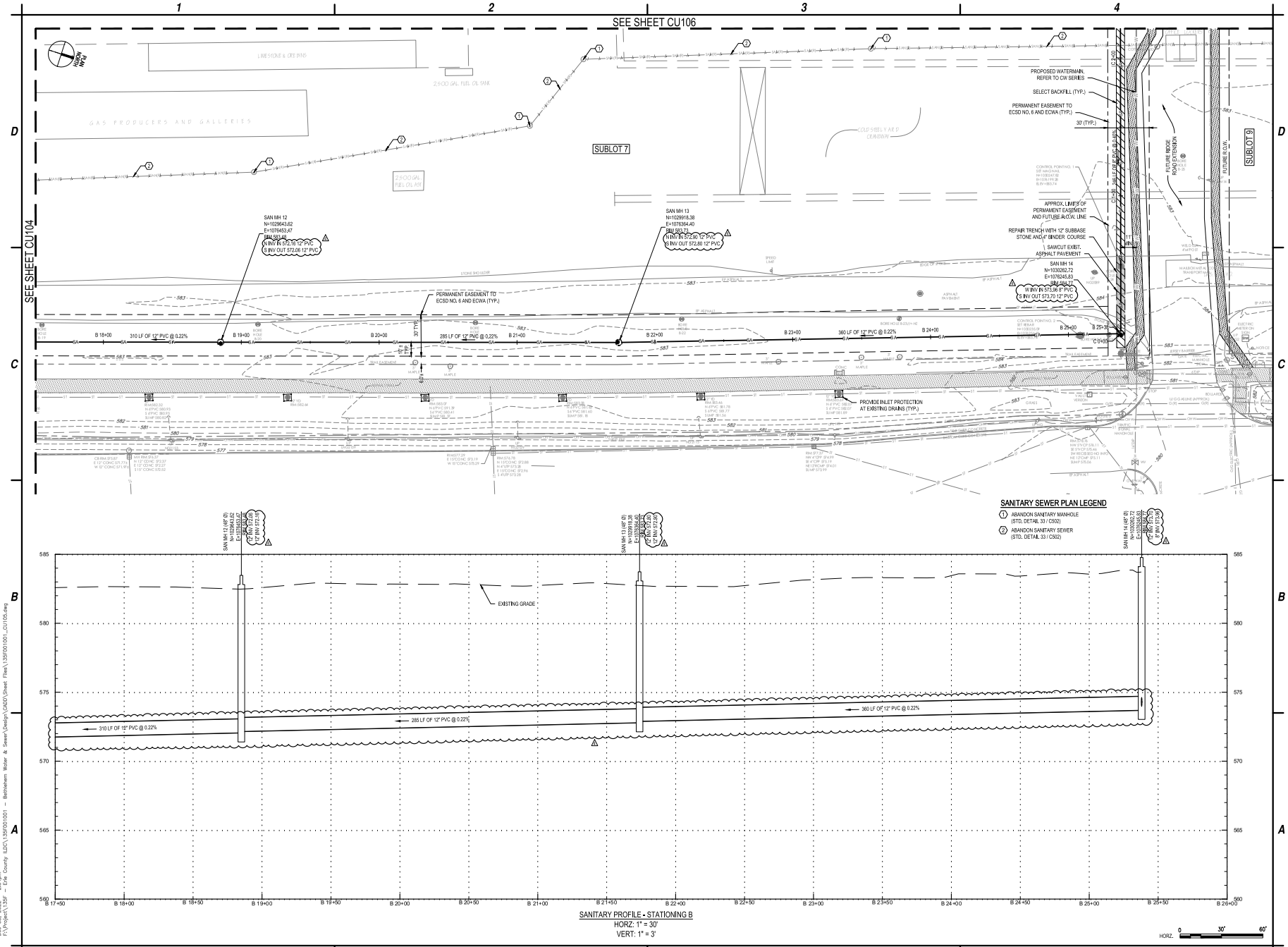
SANITARY SEWER PLAN & PROFILE

CU104



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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
3	12/12/2022	CHANGE WATER TO PVC & RABE SEWER
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REVISIONS

EDA PROJECT NO:	01-79-15063
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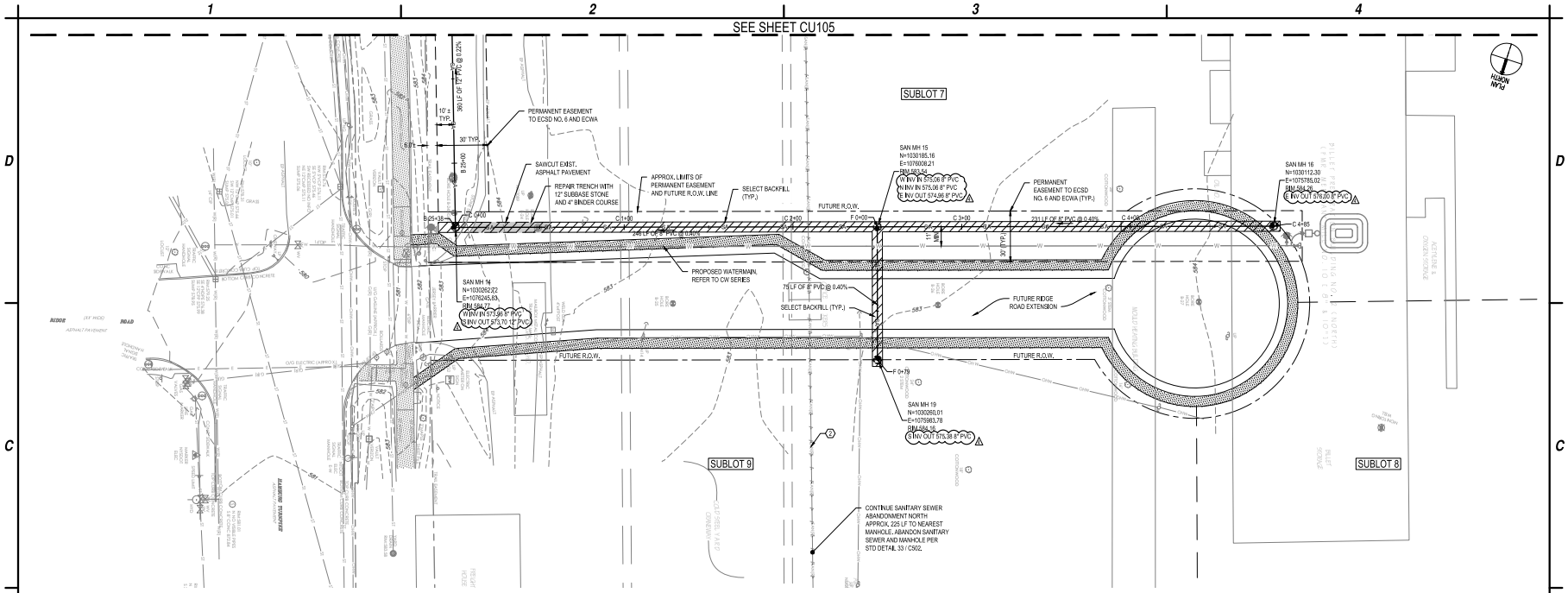
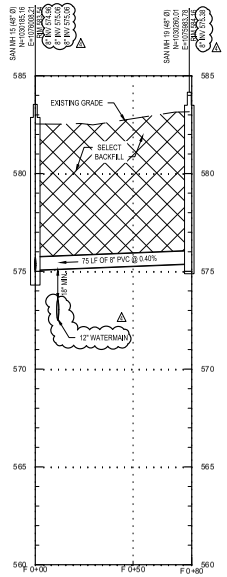
CHECKED BY:	VO

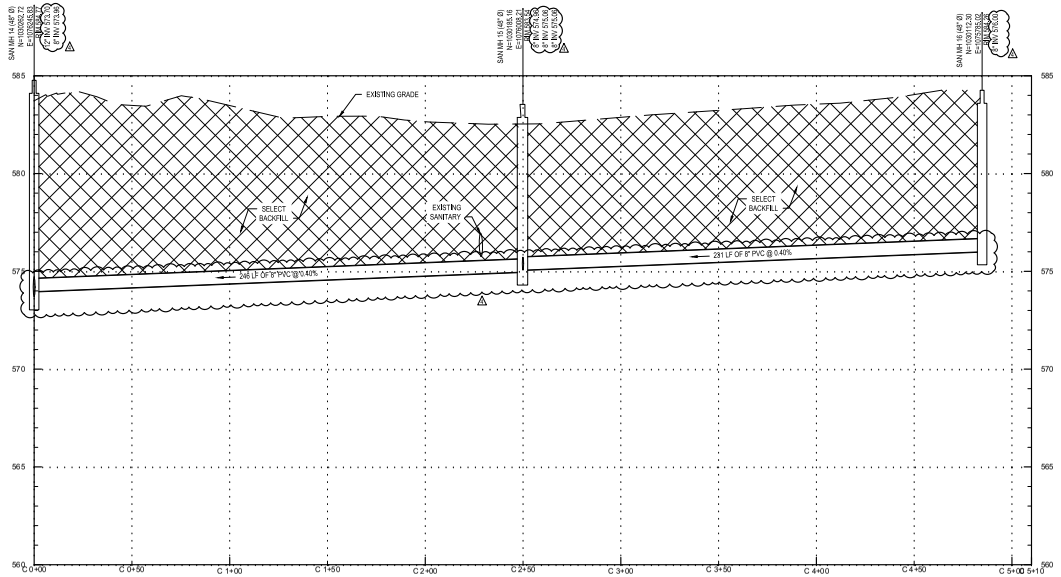
SANITARY SEWER PLAN & PROFILE

CU105





SANITARY PROFILE - STATIONING F
HORZ: 1" = 30'
VERT: 1" = 3'



SANITARY PROFILE - STATIONING C
HORZ: 1" = 30'
VERT: 1" = 3'

SANITARY SEWER PLAN LEGEND

1. ABANDON SANITARY MANHOLE (STD. DETAIL 33 / CS02)
2. ABANDON SANITARY SEWER (STD. DETAIL 33 / CS02)

HORZ. 0 30' 60'

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
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REVISIONS

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SANITARY SEWER PLAN & PROFILE

CU106

Dec 14, 2023 – 11:36am
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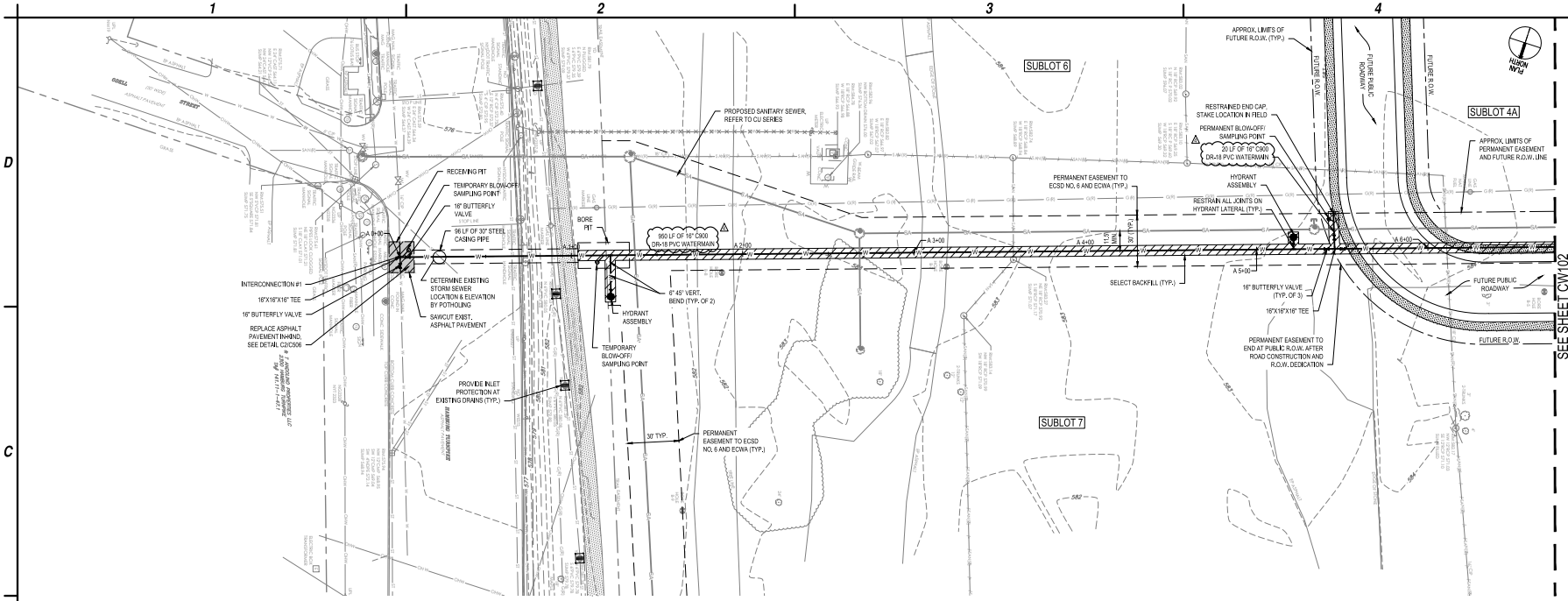
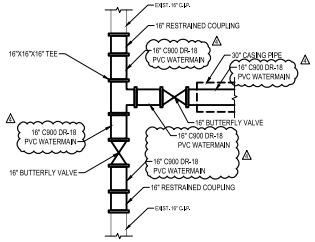
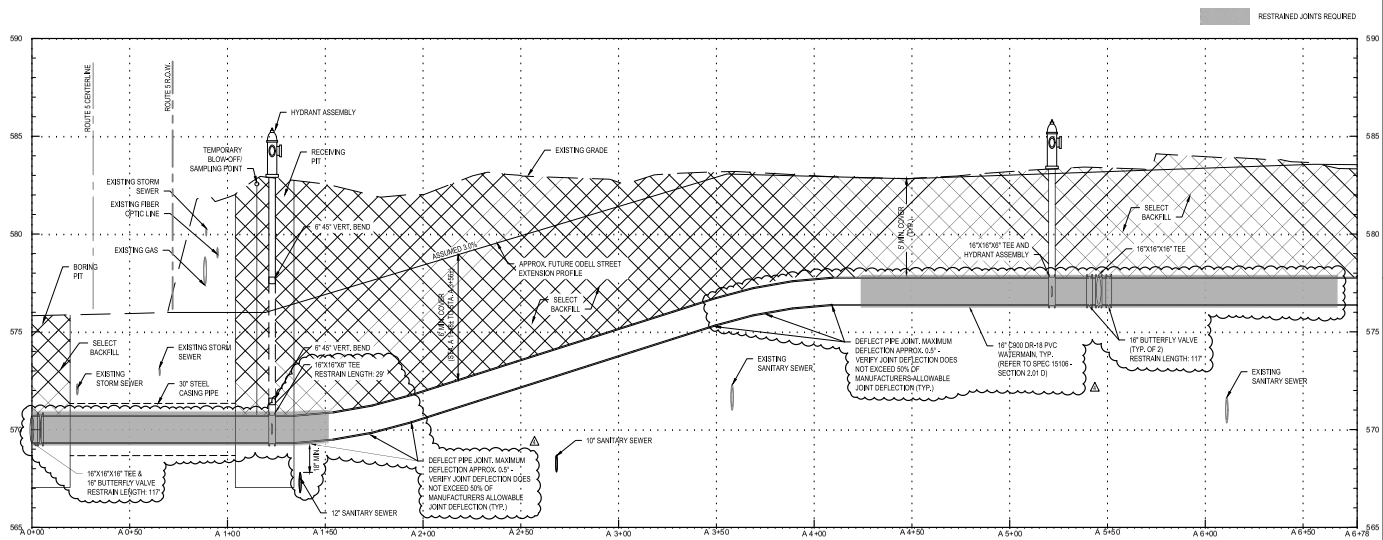




INTERCONNECTION DETAIL #1
SCALE: N.T.S.



WATER PROFILE - STATIONING A
HORZ: 1" = 30'
VERT: 1" = 3'

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
5	12/12/2022	CHANGE WATER TO PVC & RMBE SEWER
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3	04/12/2022	ECWA COMMENTS
2	03/02/2022	AGENCY COMMENTS
		REVISIONS

EDA PROJECT NO:	01-79-15063
C&S PROJECT NO:	135F.001.001
DATE:	JULY 27, 2022
DRAWN BY:	MRO
DESIGNED BY:	MRO
CHECKED BY:	VO

WATER MAIN PLAN & PROFILE

CW101

Dec. 08, 2023 – 1:46pm
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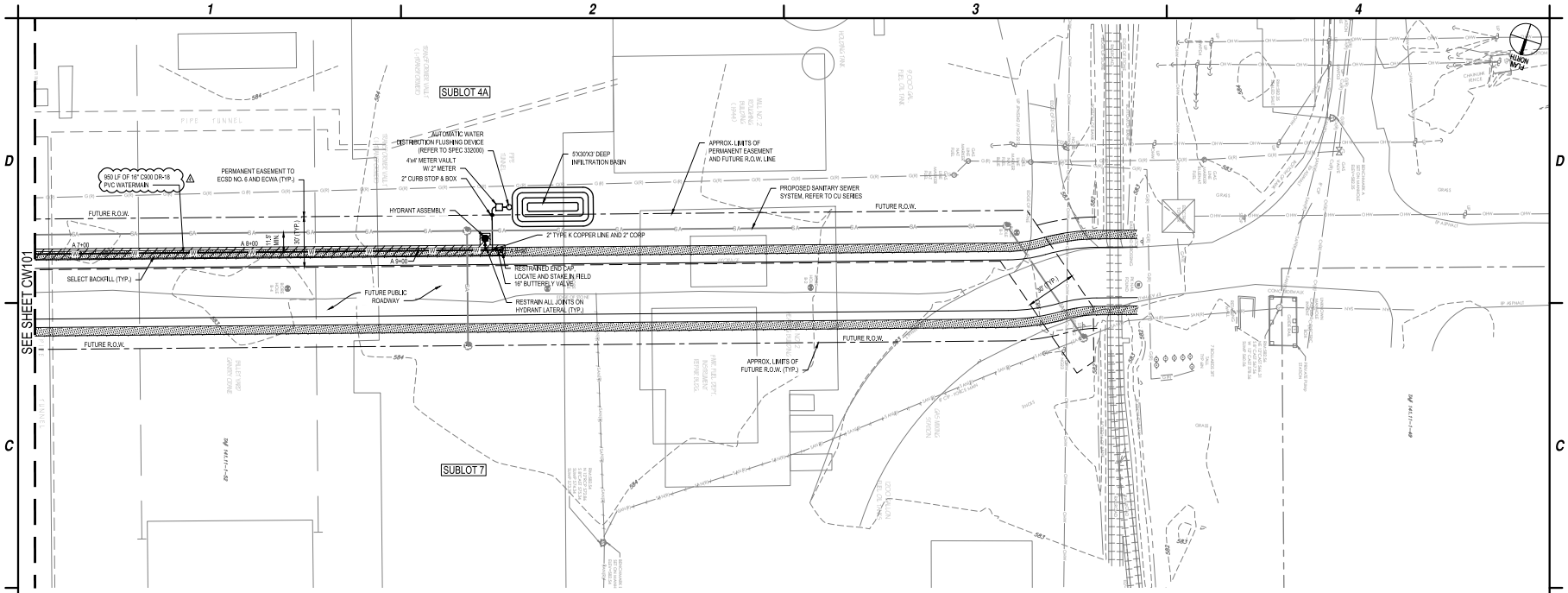

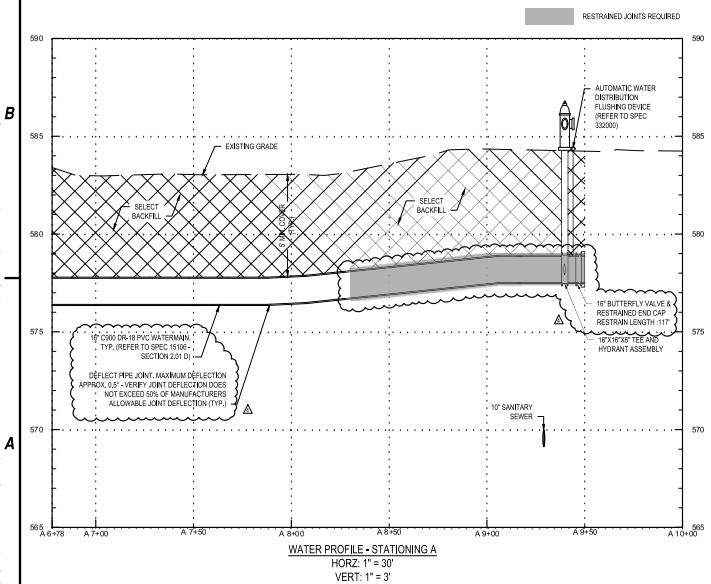

WATER PROFILE - STATIONING A
HORZ: 1" = 30'
VERT: 1" = 3'

NOTE: AUTOMATIC WATER DISTRIBUTION FLUSHING DEVICE SHALL BE PRIVATELY OWNED AND MAINTAINED BY BUFFALO & ERIE COUNTY B.D.C.

HORZ. 0 30' 60'

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
1	12/12/2022	CHANGE WATER TO PVC & RABE SEWER
2	09/11/2022	AGENCY COMMENTS
3	04/12/2022	ECWA COMMENTS
4	03/02/2022	AGENCY COMMENTS

REVISIONS

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C&S PROJECT NO:	135F.001.001
DATE:	JULY 27, 2022
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DESIGNED BY:	MRO
CHECKED BY:	VO

WATER MAIN PLAN & PROFILE

CW102

Dec. 15, 2023 - 12:44pm
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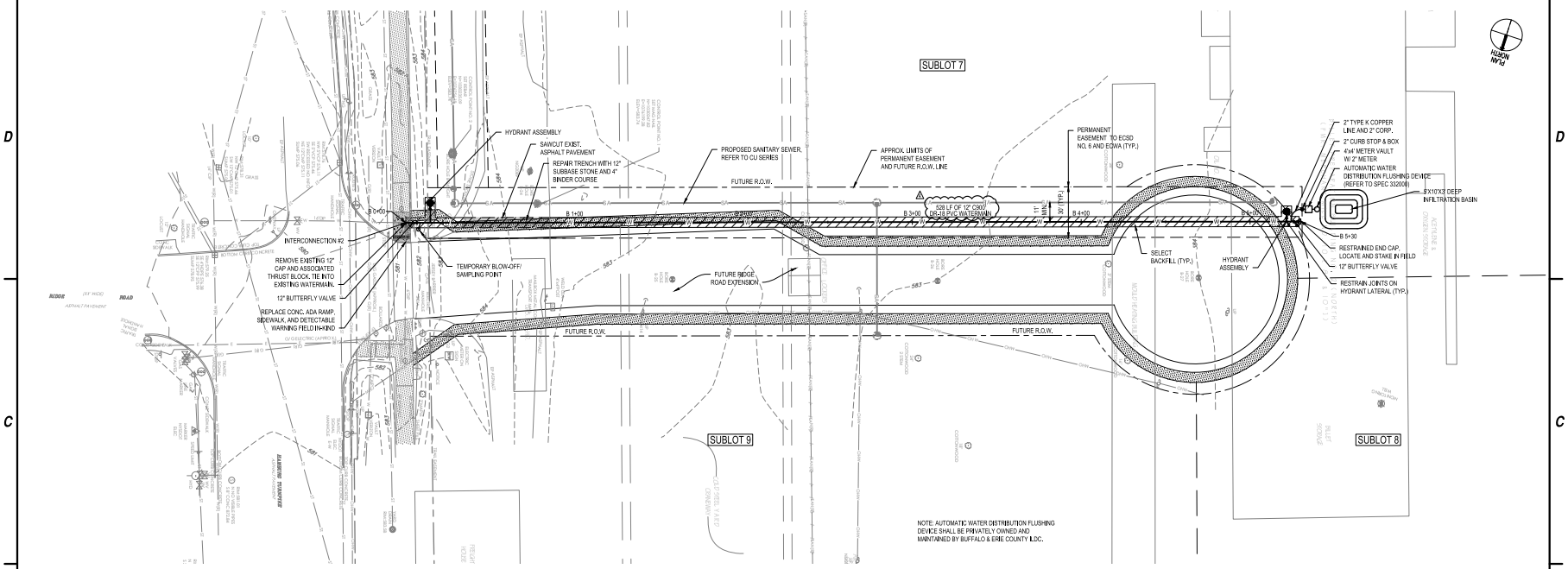
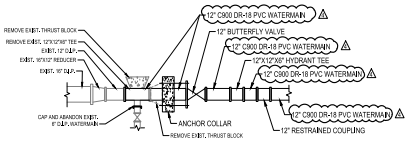
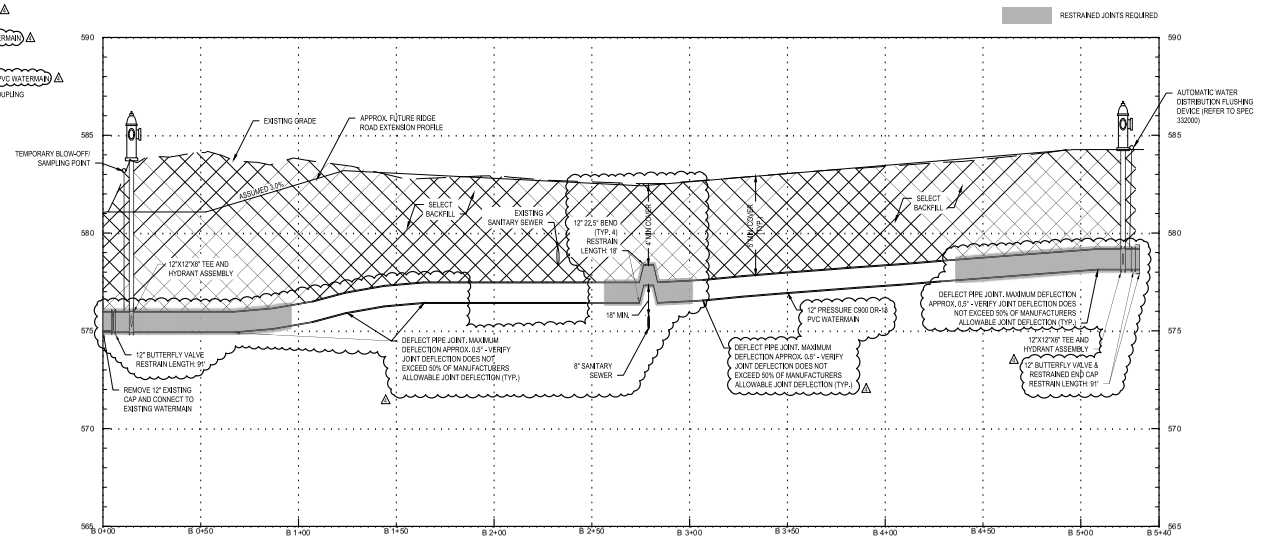




INTERCONNECTION DETAIL #2
SCALE: N.T.S



WATER PROFILE - STATIONING B
HORZ: 1" = 30'
VERT: 1" = 3'

HORZ. 0 30' 60'

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

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1	04/12/2022	ECWA COMMENTS

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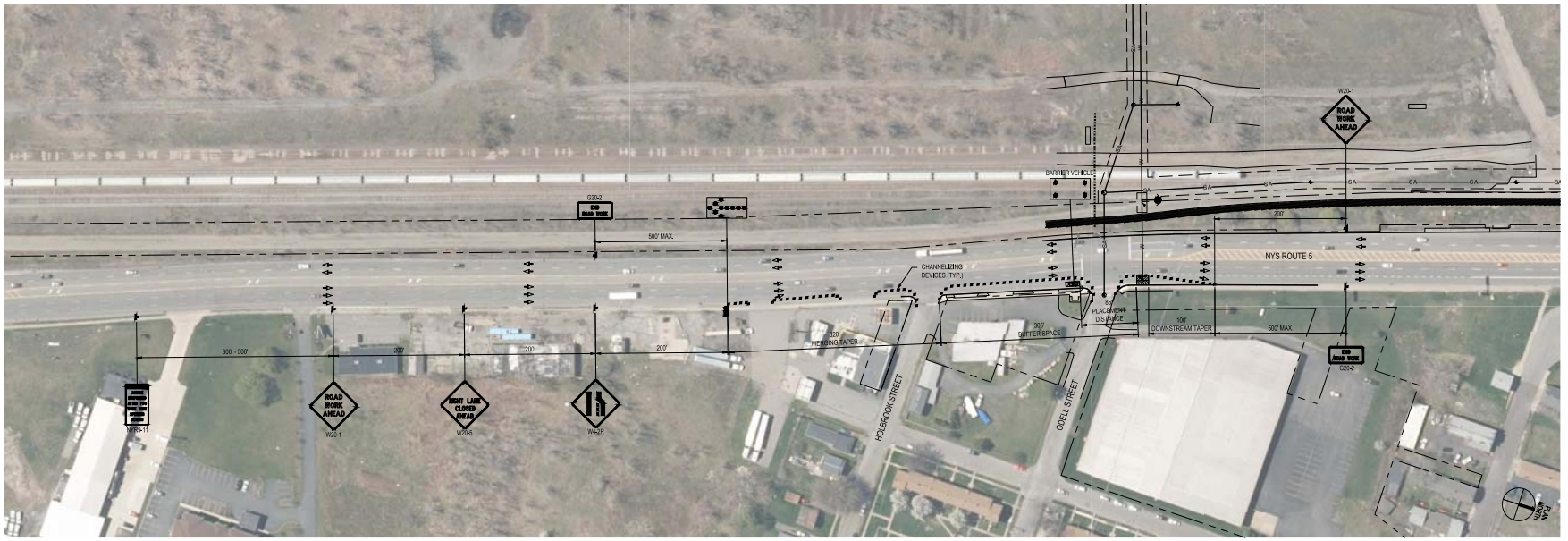
CHECKED BY:	VO

WATER MAIN PLAN & PROFILE

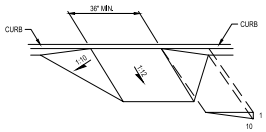
CW106



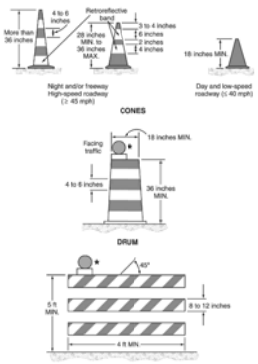
WZTC PLAN - ODELL STREET
HORZ: 1" = 80'

NOTES:

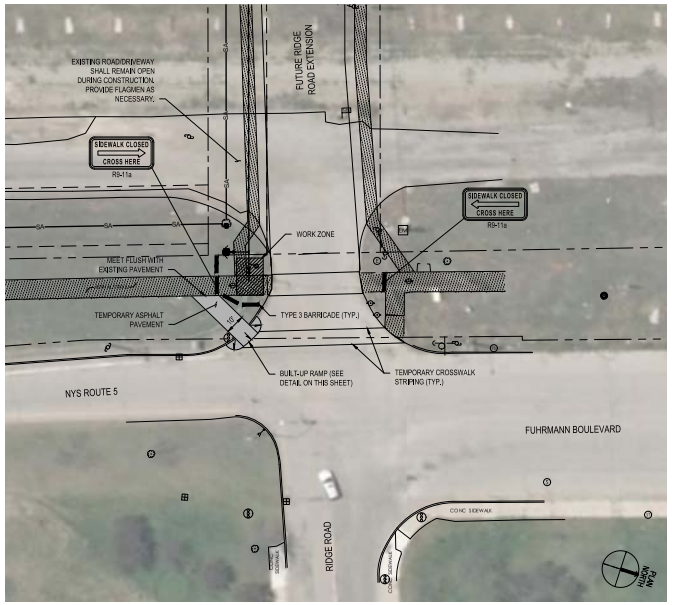
1. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL NOT EXCEED 40' IN THE ACTIVE WORK ZONE.
2. FOR BARRIER VEHICLE USE REQUIREMENTS SEE TABLES NY1-A AND NY2-A ON THE NYSDOT STANDARD SHEET TITLED "WORK ZONE TRAFFIC CONTROL LEGENDS AND NOTES".
3. ALL SIGNS SHALL CONFORM TO THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD) AND THE NEW YORK SUPPLEMENT (17 NYCRR CHAPTER V).
4. TEMPORARY SIDEWALK SHALL BE A SMOOTH, CONTINUOUS HARD SURFACE WITH NO ABRUPT CHANGES IN GRADE OR TERRAIN THAT COULD CAUSE TRIPPING OR BE A BARRIER TO WHEELCHAIR USE. THE GEOMETRY AND ALIGNMENT FOR THE FACILITY SHALL MEET THE APPLICABLE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)".



BUILT-UP CURB RAMP
SCALE: N.T.S.



CHANNELIZING DEVICES
SCALE: N.T.S.



WZTC PLAN - RIDGE ROAD
HORZ: 1" = 30'

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
REVISIONS		

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CHECKED BY:	VO

WORK ZONE TRAFFIC CONTROL PLAN

CT101

Jul 27, 2022 – 3:08pm
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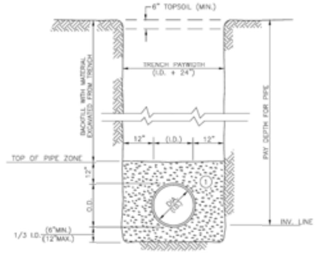
UNSHEETED TRENCH DETAIL
(JANUARY 2012)



NOTES:

A. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

B. TRENCHING OPERATIONS SHALL INCLUDE ALL NECESSARY DEWATERING.

C. TRENCH DETAILS ARE ONLY SHOWN FOR PURPOSES OF MATERIAL PLACEMENT AND MAXIMUM PAY LIMITS.

D. AN OSHA APPROVED MOVABLE PROTECTIVE TRENCH SHIELD SHALL BE USED IN ALL UNSHEETED TRENCH AREAS.

MATERIALS

PIPE BEDDING MATERIAL (NYSDOT LATEST EDITION)

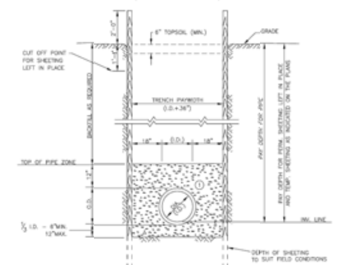
(1) NO.1 CRUSHED STONE WITH A GRADATION CONFORMING WITH NYSDOT SECTION 703-02. THE CRUSHED STONE SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN 1" AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. THE BEDDING SHALL BE COMPACTED IN 6" LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER.

NOTE: SLAG SHALL NOT BE ALLOWED FOR MATERIALS (1)

ERIE COUNTY
DEPT. OF ENVIRONMENT & PLANNING
DIVISION OF SEWERAGE MANAGEMENT

Rev.		
1	5/20/93	NOTE 2: PIPE INSTALLATION
2	2/7/94	ADDED NOTE C & D
File: d-01	Date: 3/1/91	STD.DETAIL 1

SHEETED TRENCH
(JANUARY 2012)



NOTES:

1. MAINTAIN 18" BETWEEN PIPE AND INSIDE FACE OF TEMPORARY SHEETING. IF SHEETING EXTENDS BELOW PIPE INVERT AS SHOWN, WHEN PVC PIPE MATERIAL IS USED, COMPACT MATERIAL (1) BEFORE PULLING THE SHEETING.
2. SHEETED TRENCH OPERATIONS SHALL INCLUDE ALL NECESSARY DEWATERING EQUIPMENT.
3. SHEETING DRIVEN BELOW THE INVERT OF THE PIPE FOR BEDDING MATERIAL AND TOE SUPPORT WILL NOT BE CONSIDERED IN THE FORMULA FOR PAYMENT BUT SHOULD BE FIGURED BY THE CONTRACTOR IN DETERMINING HIS UNIT BID PRICE PER SQUARE FOOT OF SHEETING.
4. WHERE INDICATED ON THE PLANS OR AS ORDERED BY THE ENGINEER, TEMPORARY SHEETING WILL BE PAID FOR UNDER THE APPLICABLE BID ITEM. OTHER AREAS WHERE THE CONTRACTOR ELECTS TO USE TEMPORARY SHEETING NOT PREVIOUSLY AUTHORIZED BY THE ENGINEER SHALL BE AT HIS OPTION AND EXPENSE.

MATERIALS

PIPE BEDDING MATERIAL (NYSDOT LATEST EDITION)

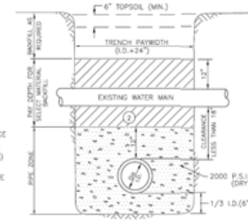
(1) NO.1 CRUSHED STONE WITH A GRADATION CONFORMING WITH NYSDOT SECTION 703-02. THE CRUSHED STONE SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN 1" AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. THE BEDDING SHALL BE COMPACTED IN 6" LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER.

NOTE: SLAG SHALL NOT BE ALLOWED FOR MATERIALS (1)

ERIE COUNTY
DEPT. OF ENVIRONMENT & PLANNING
DIVISION OF SEWERAGE MANAGEMENT

Rev.		
1	2/7/94	REVISED TOPSOIL DIMENSION
2	6/5/06	UPDATED MATERIALS TO NYSDOT LATEST EDITION
File: d-02	Date: 3/1/91	STD.DETAIL 2

WATERMAIN CROSSING DETAIL TYPICAL FOR ENCASEMENT
(JANUARY 2012)



NOTES:

A. IN ALL CASES WHERE THERE IS LESS THAN 18" CLEARANCE BETWEEN EXISTING WATER MAIN AND PROPOSED SEWER (INCLUDING HOUSE LATERALS) THE NEW WORK SHALL BE ENCASED IN CONCRETE AS SHOWN. WHEN A CASING PIPE IS SPECIFIED, NO CONCRETE ENCASEMENT IS REQUIRED.

B. THE CONCRETE ENCASEMENT SHALL EXTEND 3'-0" EACH SIDE OF THE WATER MAIN.

C. SEWERS SHALL BE LAID AT LEAST 10' (3.0 m) HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATERMAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10' SEPARATION, THE APPROPRIATE REVIEWING AGENCY MAY ALLOW DEVIATION ON A CASE BY CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATERMAIN, PROVIDED THE WATERMAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND THE ELEVATION OF THE BOTTOM OF THE WATERMAIN IS AT LEAST 18" (46 cm) ABOVE THE TOP OF SEWER.

D. SEWERS CROSSING WATERMAINS SHALL BE LAID TO PROVIDE MINIMUM VERTICAL DISTANCE OF 18" (46 CM) BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHEN THE WATERMAIN IS ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THE JOINTS OF THE SEWER PIPE WILL BE EQUIDISTANT FROM AND AS FAR AWAY FROM THE WATERMAIN JOINTS AS POSSIBLE. WHERE THE WATERMAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATERMAIN.

E. WHEN IT IS IMPOSSIBLE TO OBTAIN THE PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, THE SEWER SHALL BE EITHER ENCASED IN CONCRETE OR CONSTRUCTED OF PIPE MATERIAL EQUAL TO THE WATERMAIN AND PRESSURE TESTED AT 150 PSI TO ASSURE WATER TIGHTNESS.

F. TRENCH DETAILS ARE ONLY SHOWN FOR PURPOSES OF MATERIALS PLACEMENT AND MAXIMUM PAY LIMITS.

G. AN OSHA APPROVED MOVABLE PROTECTIVE TRENCH SHIELD SHALL BE USED IN ALL UNSHEETED TRENCH AREAS.

MATERIALS

SELECT MATERIAL BACKFILL (NYSDOT LATEST EDITION)

(2) NO.2 RUN OF CRUSHER STONE OR NO.2 RUN OF CRUSHER GRAVEL WITH A GRADATION CONFORMING WITH NYSDOT SECTION 304-2.02 TYPE 4 AND NYSDOT SECTION 703-02. (COMPACTED IN 6" LIFTS TO 90% DENSITY)

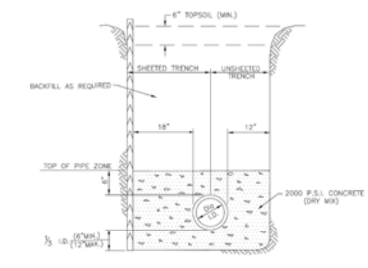
NOTE: SLAG SHALL NOT BE ALLOWED FOR MATERIALS (2)

ERIE COUNTY
DEPT. OF ENVIRONMENT & PLANNING
DIVISION OF SEWERAGE MANAGEMENT

Revisions	
2/7/94	ADDED 6" TOPSOIL(MIN.) & NOTE F&G
[illegible]	REVISED NOTE A
12/01	Revised Note "A"
File: d-05	Date: 3/1/91

STD.DETAIL 5

TYPICAL CONCRETE ENCASEMENT DETAIL
(JANUARY 2012)



TYPICAL CONCRETE ENCASEMENT NOTES:

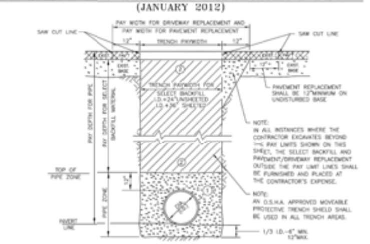
1. USE AS REQUIRED BY TEN STATE STANDARDS, OR AS ORDERED BY ENGINEER.
2. REQUIRED WHEN SEWER HAS LESS THAN 4 FEET OF COVER IN PAVED AREAS.

ERIE COUNTY
DEPT. OF ENVIRONMENT & PLANNING
DIVISION OF SEWERAGE MANAGEMENT

Revisions	
6/23/91	ADDED 6" DIMENSION ABOVE SEWER
6/4/93	DELETED DEPTH REFERENCE NOTE
2/7/94	ADDED 6" TOPSOIL(MIN.) & NOTE
6/9/05	ADDED NOTES 1&2
File: d-06	Date: 3/1/91

STD.DETAIL 6

PAVEMENT AND DRIVEWAY REPLACEMENT DETAIL
(JANUARY 2012)



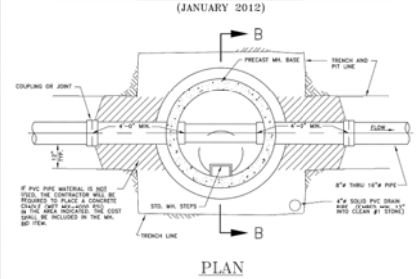
ALL ROADS AND DRIVEWAYS SHALL BE RECONSTRUCTED WITH A MIN. 3" COURSE OF BINDER AND A 1-1/2" TOP COURSE. APPLICABLE HIGHWAY PERMIT CONDITIONS SHALL GOVERN.

MATERIALS

ERIE COUNTY
DEPT. OF ENVIRONMENT & PLANNING
DIVISION OF SEWERAGE MANAGEMENT

File: d-08 | Date: 3/1/91 | STD.DETAIL 8

MONOLITHIC PRECAST BASE MANHOLES 4'-0" DIA. BASE FOR 15"ø SEWERS OR LESS
(JANUARY 2012)

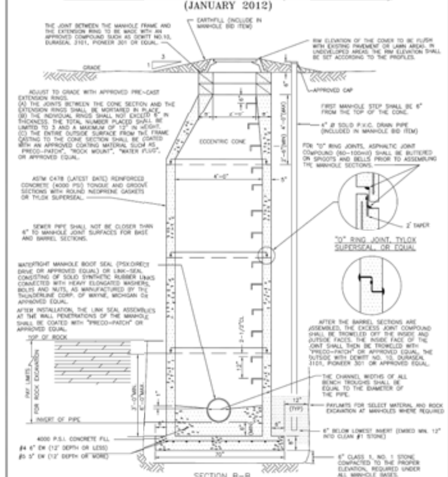


PLAN

ERIE COUNTY
DEPT. OF ENVIRONMENT & PLANNING
DIVISION OF SEWERAGE MANAGEMENT

Rev.		
1	12/01	REVISED 4" PVC TO SOLID PIPE IN #1 STONE BED
2		
File: d-10	Date: 3/1/91	STD.DETAIL 10

MONOLITHIC PRECAST BASE MANHOLES 4'-0" DIA. BASE FOR 15"ø SEWERS OR LESS (SECTION B-B)
(JANUARY 2012)

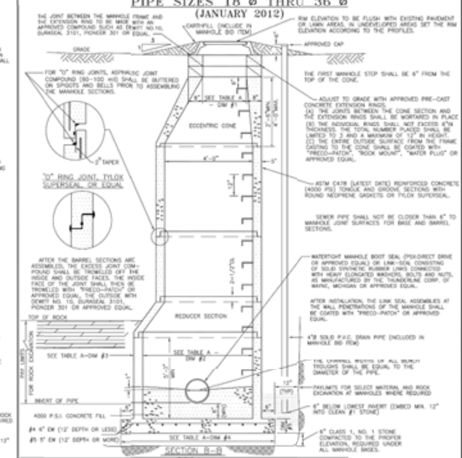


SECTION B-B

ERIE COUNTY
DEPT. OF ENVIRONMENT & PLANNING
DIVISION OF SEWERAGE MANAGEMENT

File: d-11 | Date: 3/1/91 | STD.DETAIL 11

MONOLITHIC PRECAST BASE MANHOLES PIPE SIZES 18"ø THRU 36"ø
(JANUARY 2012)



SECTION B-B

ERIE COUNTY
DEPT. OF ENVIRONMENT & PLANNING
DIVISION OF SEWERAGE MANAGEMENT

File: d-12 | Date: 3/1/91 | STD.DETAIL 12

C&S COMPANIES
C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS
LACKAWANNA, NY

MARK	DATE	DESCRIPTION
		REVISIONS

EDA PROJECT NO: 01-79-15063
C&S PROJECT NO: 135F.001.001
DATE: JULY 27, 2022
DRAWN BY: MRO
DESIGNED BY: MRO
CHECKED BY: VO

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

SANITARY SEWER DETAILS

C501

Jul 27, 2022 – 3:34pm
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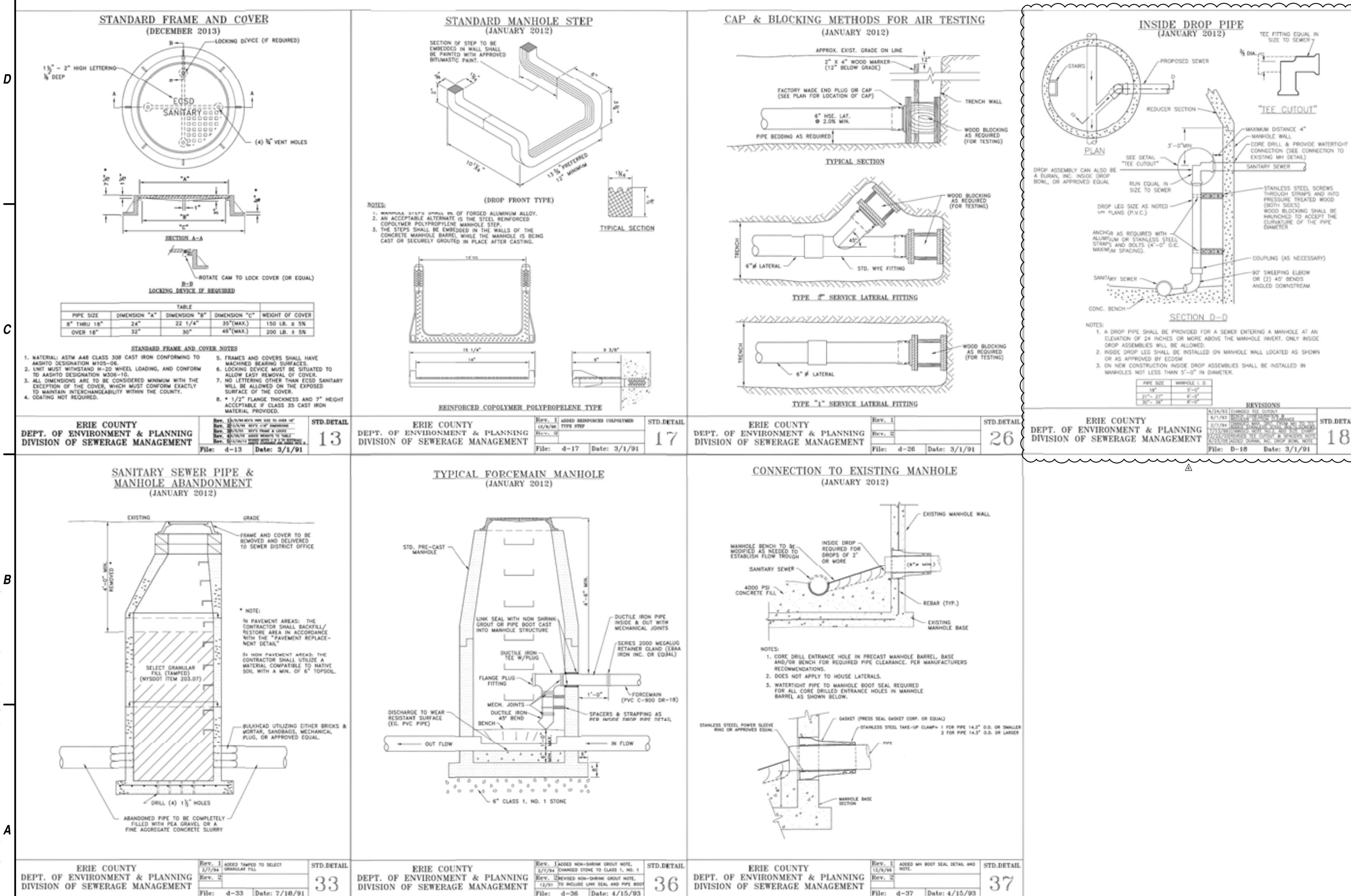

C&S COMPANIES

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Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
1	12/12/2022	CHANGE WATER TO PVC & RAISE SEWER

REVISIONS

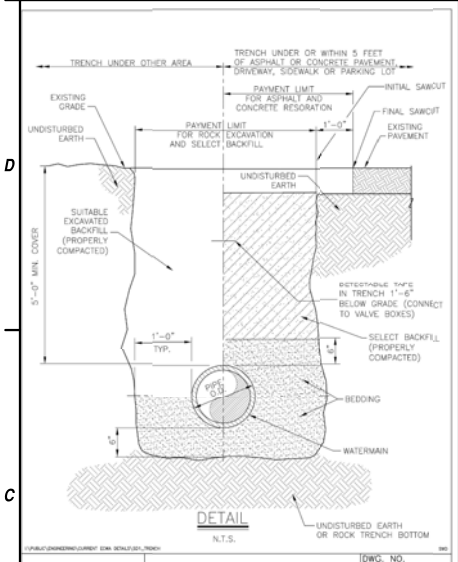
EDA PROJECT NO: 01-79-15063
C&S PROJECT NO: 135F.001.001
DATE: JULY 27, 2022
DRAWN BY: MRO
DESIGNED BY: MRO
CHECKED BY: VO

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

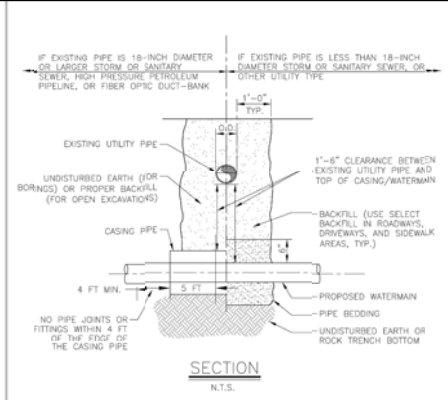
SANITARY SEWER DETAILS

C502

Dec 14, 2022 – 11:56am F:\Project\135F – Erie County ILDC\135F001001 – Bethlehem Water & Sewer\Design\CADD\Sheet Files\135F001001_C502.dwg



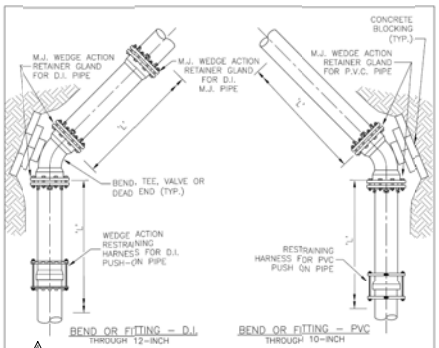
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL TRENCH THROUGH 16–INCH DIAMETER WATERMAIN	DWG. NO. SD1
		DATE 4/28/92 — REVISED 1/22



NOTES:

1. ALL EXISTING UTILITIES MUST BE SUPPORTED WITH APPROPRIATE CHAINS/STRAPS DURING CONSTRUCTION OF THE NEW WATERMAIN.
2. WHEN CROSSING A SEWERLINE WITH A NEW WATERMAIN (AND WITHOUT CASING PIPE), ONE FULL PIPE LENGTH (18. FT. MIN.) SHALL BE USED AT THE POINT OF CROSSING THE WATERMAIN SHALL BE PLACED SO THAT BOTH JOINT ENDS ARE AS FAR AS POSSIBLE FROM THE EXISTING SEWERLINE.
3. IF CASING PIPE IS USED, IT SHALL EXTEND 5 FEET BEYOND THE EXISTING PIPE OUTER WALL EDGE IN EACH DIRECTION, AND NO WATERLINE JOINTS OR FITTINGS SHALL BE LOCATED WITHIN 4 FEET FROM THE CASING PIPE EDGE.

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL PIPE CROSSING	DWG. NO. SD2
		DATE 4/92 — REVISED 8/21



RESTRAINED JOINT SCHEDULE

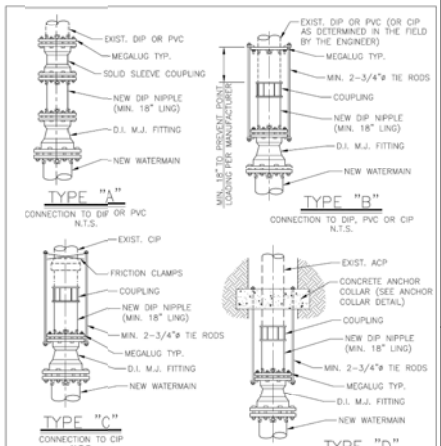
PIPE SIZE	PIPE TYPE	11.25° ELBOW 'L'	22.5° ELBOW 'L'	45° ELBOW 'L'	TEE BRANCH, 90° BEND, VALVE OR DEAD END 'L'
6"	PVC	2'-0"	3'-0"	6'-0"	48'-0"
12"	PVC	3'-0"	6'-0"	11'-0"	91'-0"
16"	PVC	4'-0"	7'-0"	15'-0"	117'-0"

NOTES:

1. DIMENSION 'L' REPRESENTS THE LENGTH OF RESTRAINING PIPE REQUIRED IN FEET EACH SIDE OF THE PIPE FITTING.

PLAN
N.T.S.

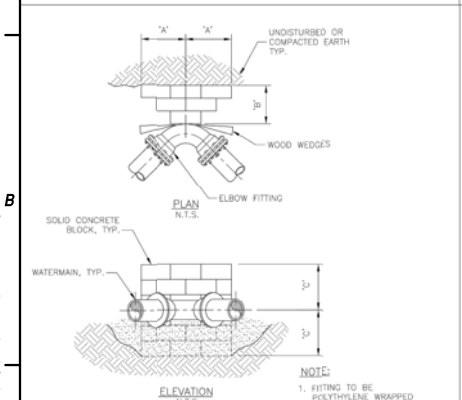
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL RESTRAINED JOINT SCHEDULE	DWG. NO. SD4
		DATE 4/28/92 — REVISED 7/16



NOTES:

1. VALVES AND TEES MAY BE HARNESSED SIMILARLY.
2. HARNESSING IS FOR RESISTANCE TO INTERNAL PRESSURE–PIPE ITSELF MUST BE SUPPORTED ON FIRM BEDDING AND CAREFULLY BACKFILLED.
3. COAT ALL EXPOSED SURFACES OF HARNESS ASSEMBLY WITH BITUMINOUS COATING.
4. TIE RODS SHALL BE PLACED ON SIDES OF PIPE.

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL TYPICAL CONNECTION TO EXISTING WATERMAIN THROUGH 12–INCH DIAMETER WATERMAIN	DWG. NO. SD5
		DATE 3/05 — REVISED 7/16



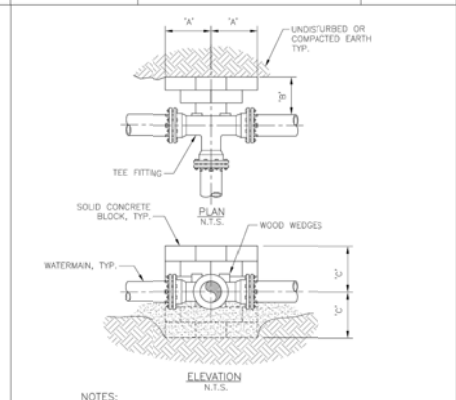
NOTE:

1. FITTING TO BE POLYTHYLENE WRAPPED PRIOR TO BEDDING AND CONCRETE BLOCK PLACEMENT.

DIMENSION SCHEDULE

PIPE SIZE	11.25° ELBOW 'A'	11.25° ELBOW 'B'	11.25° ELBOW 'C'	22.5° ELBOW 'A'	22.5° ELBOW 'B'	22.5° ELBOW 'C'	45° ELBOW 'A'	45° ELBOW 'B'	45° ELBOW 'C'	90° ELBOW 'A'	90° ELBOW 'B'	90° ELBOW 'C'
6"	0'-6"	1'-0"	0'-6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"	1'-0"	1'-6"
12"	1'-0"	1'-0"	1'-0"	1'-6"	1'-6"	1'-6"	2'-0"	1'-6"	1'-6"	2'-6"	2'-0"	2'-0"
16"	1'-6"	1'-0"	1'-0"	2'-0"	1'-6"	1'-6"	2'-6"	2'-0"	2'-0"	3'-0"	3'-0"	3'-0"

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL THRUST BLOCKS FOR ELBOW FITTING	DWG. NO. SD6
		DATE 4/28/92 — REVISED 11/20

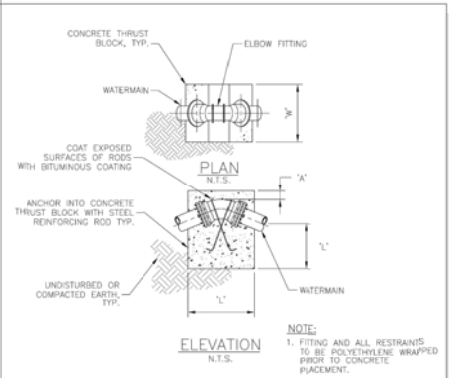


NOTES:

1. THRUST BLOCK REQUIRED FOR TEES, HYDRANT LATERAL TEES AND TAPPING SLEEVE INSTALLATIONS.
2. FITTING TO BE POLYETHYLENE WRAPPED PRIOR TO BEDDING AND CONCRETE BLOCK.

BRANCH TEE SIZE	DIMENSION SCHEDULE 'A'	'B'	'C'
6"	1'-0"	1'-0"	1'-0"
12"	2'-0"	2'-0"	2'-0"
16"	2'-6"	2'-6"	2'-6"

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL THRUST BLOCKS FOR TEE OR "DEAD END" FITTING	DWG. NO. SD7
		DATE 4/28/92 — REVISED 11/20



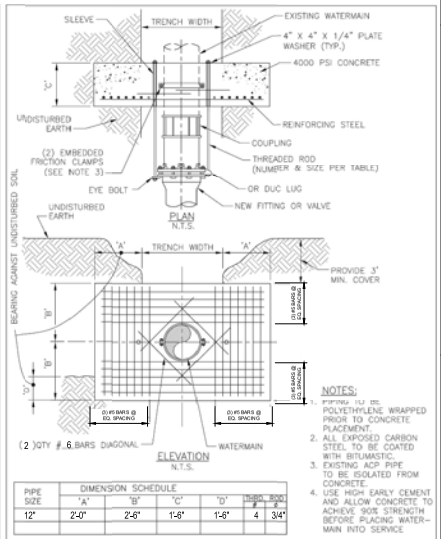
NOTE:

1. FITTING AND ALL RESTRAINTS TO BE POLYETHYLENE WRAPPED PRIOR TO CONCRETE PLACEMENT.

DIMENSION SCHEDULE

PIPE SIZE	PIPE TYPE	11.25° ELBOW 'A'	11.25° ELBOW 'W'	11.25° ELBOW 'L'	11.25° ELBOW ROD ø	22.5° ELBOW 'A'	22.5° ELBOW 'W'	22.5° ELBOW 'L'	22.5° ELBOW ROD ø	45° ELBOW 'A'	45° ELBOW 'W'	45° ELBOW 'L'	45° ELBOW ROD ø
6"	PVC	0'-6"	1'-0"	1'-0"	3/8"	0'-6"	1'-0"	1'-0"	3/8"	0'-6"	1'-6"	1'-6"	3/8"
12"	PVC	0'-6"	2'-0"	2'-0"	5/8"	0'-6"	2'-6"	2'-6"	5/8"	0'-6"	3'-0"	3'-0"	5/8"
16"	PVC	0'-6"	2'-6"	2'-6"	3/4"	0'-6"	3'-0"	3'-0"	3/4"	0'-6"	3'-6"	3'-6"	3/4"

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL THRUST BLOCKS FOR VERTICAL BEND	DWG. NO. SD8
		DATE 4/28/92 — REVISED 11/20



NOTES:

1. PIPING TO BE POLYETHYLENE WRAPPED PRIOR TO CONCRETE PLACEMENT.
2. ALL EXPOSED CARBON STEEL TO BE COATED WITH BITUMASTIC.
3. EXISTING ACP PIPE TO BE ISOLATED FROM CONCRETE.
4. USE HIGH EARLY CEMENT AND ALLOW CONCRETE TO ACHIEVE 90% STRENGTH BEFORE PLACING WATER–MAIN INTO SERVICE.

DIMENSION SCHEDULE

PIPE SIZE	'A'	'B'	'C'	'D'	RODS #	RODS ø
12"	2'-0"	2'-6"	1'-6"	1'-6"	4	3/4"

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL ANCHOR COLLAR	DWG. NO. SD9
		DATE 4/28/92 — REVISED 7/16

C&S COMPANIES

C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
2	12/12/2022	CHANGE WATER TO PVC & RAISE SEWER
1	05/11/2022	AGENCY COMMENTS

REVISIONS

EDA PROJECT NO:	01-79-15063
C&S PROJECT NO:	135F.001.001
DATE:	JULY 27, 2022
DRAWN BY:	MRO
DESIGNED BY:	MRO
CHECKED BY:	VO

WATER DETAILS

C503

Dec 14, 2022 – 1:07pm
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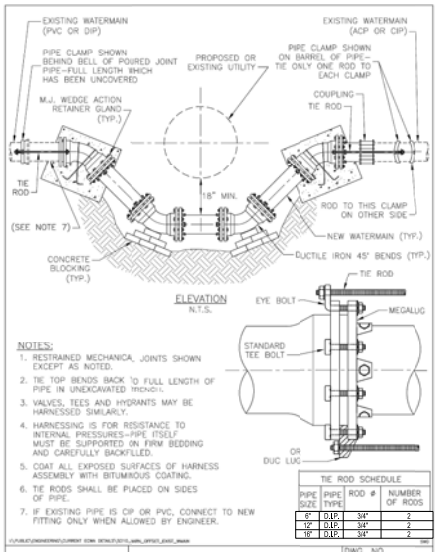
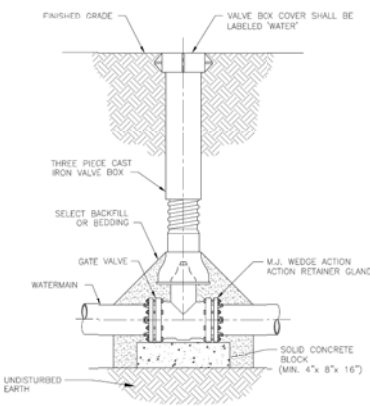


NOTES:
1. RESTRAINED MECHANICA, JOINTS SHOWN EXCEPT AS NOTED.
2. TIE TOP BENDS BACK TO FULL LENGTH OF PIPE IN UNEXCAVATED TRENCH.
3. VALVES, TEES AND HYDRANTS MAY BE HARNESSED SIMILARLY.
4. HARNESSING IS FOR RESISTANCE TO INTERNAL PRESSURES–PIPE ITSELF MUST BE SUPPORTED ON FIRM BEDDING AND CAREFULLY BACKFILLED.
5. COAT ALL EXPOSED SURFACES OF HARNESS ASSEMBLY WITH BITUMINOUS COATING.
6. TIE RODS SHALL BE PLACED ON SIDES OF PIPE.
7. IF EXISTING PIPE IS CIP OR PVC, CONNECT TO NEW FITTING ONLY WHEN ALLOWED BY ENGINEER.

TIE ROD SCHEDULE

PIPE SIZE	PIPE TYPE	ROD ø	NUMBER OF RODS
6"	D.I.P.	3/4"	2
12"	D.I.P.	3/4"	2
16"	D.I.P.	3/4"	2

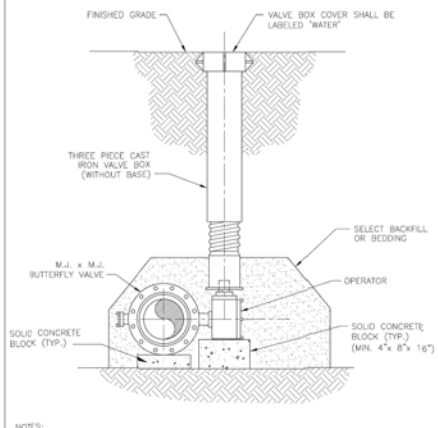
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL HARNESSING DETAILS–INSTALL OFFSET IN EXISTING WATERMAIN	DWG. NO. SD10
		DATE 6/00 — REVISED 7/16



NOTES:
1. VALVE SHALL NOT SUPPORT VALVE BOX.
2. GATE VALVE SHALL BE INSTALLED LEVEL.
3. VALVE BOX SHALL BE PLUMB TO GRADE, WITH OPERATING NUT CENTERED IN BOX.

SECTION
N.T.S.

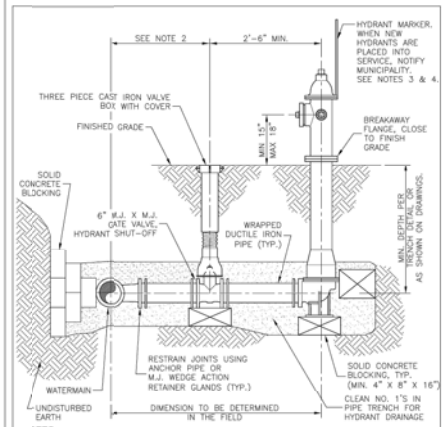
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL GATE VALVE SETTING	DWG. NO. SD11
		DATE 4/28/92 — REVISED 02/17



NOTES:
1. VALVE SHALL NOT SUPPORT VALVE BOX.
2. BUTTERFLY VALVE SHALL BE INSTALLED LEVEL.
3. VALVE BOX SHALL BE PLUMB TO GRADE, WITH OPERATING NUT CENTERED.
4. POSITION VALVE SO THAT OPERATOR IS ON SIDE OF WATERMAIN OPPOSITE THE ℄ OF ROADWAY.

SECTION
N.T.S.

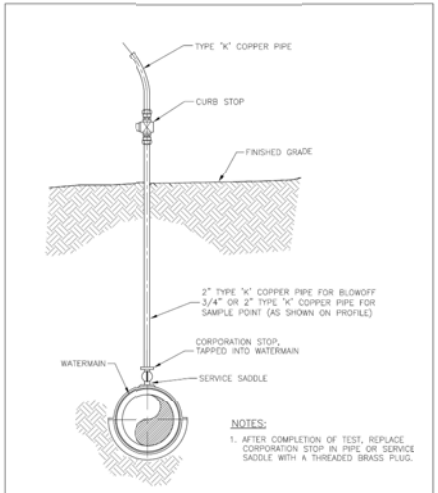
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL BUTTERFLY VALVE SETTING	DWG. NO. SD12
		DATE 6/00 — REVISED 02/17



NOTES:
1. HYDRANT RISER SHALL BE INSTALLED PLUMB.
2. VALVE BOX SHALL NOT BE PLACED IN PAVEMENT.
3. FOR WATERLINE REPLACEMENT PROJECTS, RELOCATE EXISTING MARKERS TO NEW HYDRANTS.
4. MUNICIPALITY SHALL BE RESPONSIBLE TO PROVIDE ANY NEW HYDRANT MARKERS AS NEEDED. CONTRACTOR TO COORDINATE WITH ALL MUNICIPALITIES AND FIRE DISTRICTS.
5. HYDRANT FACE TO BE A MINIMUM OF 3' FROM THE BACK FACE OF ALL CURBS OR A MINIMUM OF 5' FROM ALL EDGES OF PAVEMENT (IF NO CURB).

SECTION
N.T.S.

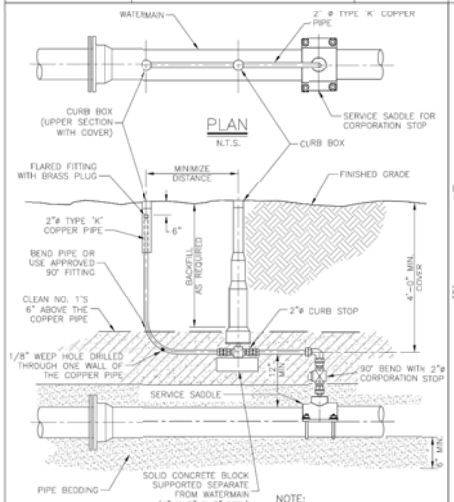
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL FIRE HYDRANT INSTALLATION	DWG. NO. SD13
		DATE 6/00 — REVISED 1/22



NOTES:
1. AFTER COMPLETION OF TEST, REPLACE CORPORATION STOP IN PIPE OR SERVICE SADDLE WITH A THREADED BRASS PLUG.

ELEVATION
N.T.S.

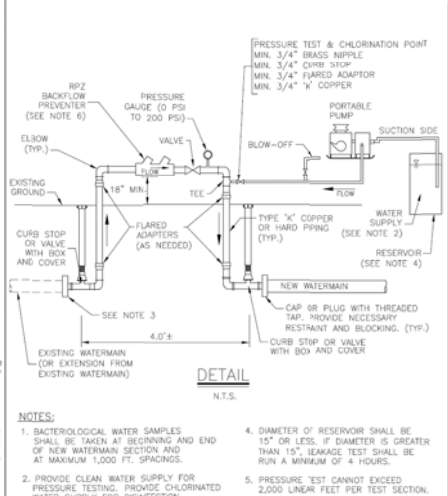
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL TEMPORARY BLOW–OFF/SAMPLING POINT	DWG. NO. SD17
		DATE 4/28/92 — REVISED 7/16



NOTE:
1. CONTRACTOR TO ADJUST DEPTH OF MAIN TO OBTAIN CLEARANCES AS SHOWN.

SECTION
N.T.S.

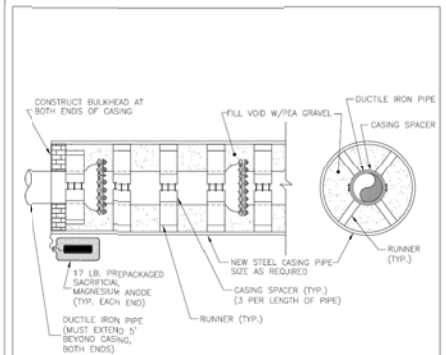
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL BLOWOFF	DWG. NO. SD18
		DATE 4/28/92 — REVISED 8/21



DETAIL
N.T.S.

NOTES:
1. BACTERIOLOGICAL WATER SAMPLES SHALL BE TAKEN AT BEGINNING AND END OF NEW WATERMAIN SECTION AND AT MAXIMUM 1,000 FT. SPACINGS.
2. PROVIDE CLEAN WATER SUPPLY FOR PRESSURE TESTING. PROVIDE CHLORINATED WATER SUPPLY FOR DISINFECTION.
3. CAP OR PLUG WITH THREADED TAP OR APPROPRIATE TAP INTO MAIN. PROVIDE NECESSARY RESTRAINT AND BLOCKING.
4. DIAMETER OF RESERVOIR SHALL BE 15" OR LESS. IF DIAMETER IS GREATER THAN 15", LEAKAGE TEST SHALL BE RUN A MINIMUM OF 4 HOURS.
5. PRESSURE TEST CANNOT EXCEED 2,000 LINEAR FEET PER TEST SECTION.
6. BACKFLOW PREVENTER TO BE SIZED TO ACHIEVE MIN 3 FPS SCOUR VELOCITY DURING FLUSHING OF NEW WATERLINE.

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL PRESSURE TESTING AND DISINFECTION APPARATUS SCHEMATIC	DWG. NO. SD23
		DATE 6/00 — REVISED 11/20



NOTES:
1. ALL PIPE JOINTS WITHIN THE CASING PIPE SHALL BE RESTRAINED JOINTS.
2. THE PROPOSED NUMBER OF CASING SPACERS SHALL BE INSTALLED TO PROVIDE SUFFICIENT SUPPORT AS PER MANUFACTURER'S RECOMMENDATION.
3. SACRIFICIAL ANODE BAG SHALL BE WETTED BEFORE BACKFILLING.
4. WIRE TO BE PLACED LOOSELY ON PIPE SURFACE AND SECURED IN PLACE WITH POLYWRAP TAPE. WIRE SHALL BE PLACED WITHOUT TENSION ONTO BOTTOM OF EXCAVATION AND CAREFULLY BACKFILLED WITH STONE TO PREVENT DAMAGE.

ELEVATION
N.T.S.

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	STANDARD DETAIL CASING PIPE WITH CASING SPACERS	DWG. NO. SD25
		DATE 6/00 — REVISED 8/16

C&S COMPANIES
C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
		REVISIONS

EDA PROJECT NO: 01-79-15063
C&S PROJECT NO: 135F.001.001
DATE: JULY 27, 2022
DRAWN BY: MRO
DESIGNED BY: MRO
CHECKED BY: VO

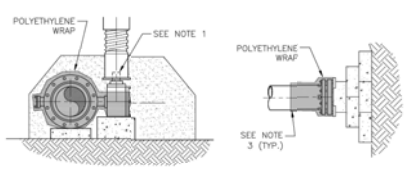
WATER DETAILS

C504

Jul 27, 2022 – 3:06pm
F:\Project\135F – Erie County (LDC\135F001001 – Bethlehem Water & Sewer\Design\CAD\Sheet Files\135F001001_C504.dwg

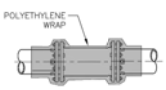
PIPE DIAMETER (in)	PIPE MATERIAL		WORKING PRESSURE (psi)	TEST PRESSURE (psi)
	Type (DIP, PVC, etc.)	Rating (Class, DR)		
6"	PVC	DR-18	105	160
12"	PVC	DR-18	105	160
16"	PVC	DR-18	105	160

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK | PRESSURE TESTING SCHEDULE | DWG. NO. SD31 | DATE 10/05 | REVISED 11/20

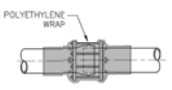


BUTTERFLY VALVE – ELEVATION
N.T.S.

END CAP / PLUG
N.T.S.



SOLID SLEEVE OR RESTRAINED COUPLING
N.T.S.

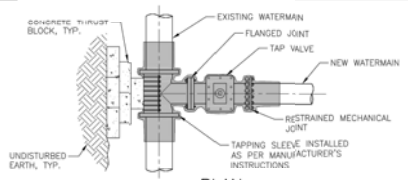


EXTERNAL JOINT RESTRAINT
N.T.S.

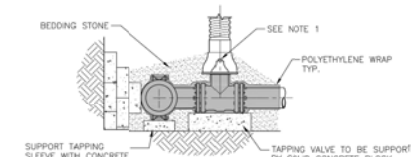
NOTES:
1. POLYETHYLENE WRAP IS TO BE PLACED AROUND THE ENTIRE FITTING, AND SECURED IN PLACE WITH POLYETHYLENE TAPE. PROVIDE SUFFICIENT SLACK SO THAT POLYETHYLENE WRAP IS NOT PUNCTURED DURING BACKFILL AND DOES NOT ENTRAP AIR. POLYETHYLENE WRAP IS NOT TO BE INSTALLED WITHIN 6 INCHES OF VALVE OPERATING NUT ON VALVES.
2. ALL FITTINGS TO BE POLYETHYLENE WRAPPED PRIOR TO BEDDING AND CONCRETE BLOCK PLACEMENT.
3. POLYETHYLENE WRAP IS TO BE EXTENDED A MINIMUM OF 12" PAST THE FITTING ON EACH LEG AND SECURED TO THE PIPE (OR POLYWRAP IF DIP) WITH AT LEAST TWO CIRCUMFERENTIAL WRAPS OF POLYETHYLENE TAPE.

I:\PUBLIC\ENGINEERING\CURRENT ECWA DETAILS\SD39B_POLYWRAPPING_FITTINGS

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK | STANDARD DETAIL POLYWRAPPING CAST/DUCTILE IRON FITTINGS | DWG. NO. SD39B | DATE 12/18 | REVISED



PLAN
N.T.S.

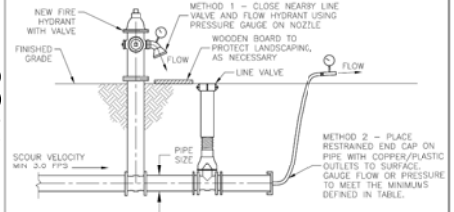


DETAIL
N.T.S.

NOTES:
1. POLYETHYLENE WRAP IS TO BE PLACED AROUND THE ENTIRE FITTING, AND SECURED IN PLACE WITH POLYETHYLENE TAPE. PROVIDE SUFFICIENT SLACK SO THAT POLYETHYLENE WRAP IS NOT PUNCTURED DURING BACKFILL AND DOES NOT ENTRAP AIR. POLYETHYLENE WRAP IS NOT TO BE INSTALLED WITHIN 6 INCHES OF VALVE OPERATING NUT.
2. ASSEMBLY TO BE POLYETHYLENE WRAPPED PRIOR TO BEDDING AND CONCRETE BLOCK PLACEMENT.
3. POLYETHYLENE WRAP IS TO BE EXTENDED A MINIMUM OF 12" PAST THE FITTING ON EACH LEG AND SECURED TO THE PIPE (OR POLYWRAP IF DIP) WITH AT LEAST TWO CIRCUMFERENTIAL WRAPS OF POLYETHYLENE TAPE.

I:\PUBLIC\ENGINEERING\CURRENT ECWA DETAILS\SD42_TAPPING SLEEVE & VALVE

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK | STANDARD DETAIL TAPPING SLEEVE AND VALVE | DWG. NO. SD42 | DATE 01/19 | REVISED



PIPE SIZE (IN)	REQUIRED FLOW (GPM)	METHOD 1 HYDRANT FLOW		METHOD 2 END CAP FLOW	
		2 1/2" NOZZLE PRESSURE (PSI)	4" NOZZLE PRESSURE (PSI)	2" I.D. PRESSURE (PSI)	3" I.D. PRESSURE (PSI)
6	275	7	1	7	2
8	500	9	2	22	5
10	750	20	4	50	10
12	1100	44	7	–	22
16	1900	–	20	–	62
20	3000	–	50	–	–

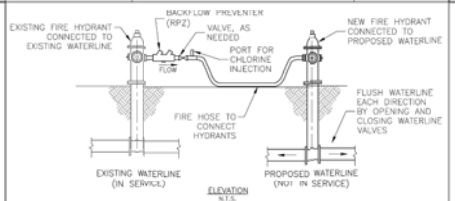
I.D. = INNER DIAMETER

NOTES:
1. TO OBTAIN SCOUR VELOCITY (3.0 FPS) IN THE WATERLINE, CONTRACTOR SHALL ACHIEVE FLOWRATE AT NOZZLE DEFINED IN TABLE. PRESSURE GAUGE USED SHALL SHOW A HIGHER PRESSURE THAN THE MINIMUMS DEFINED IN THE TABLE.
2. OUTLET PRESSURE MEASURED BY PITOT GAUGE.
3. ENGINEER SHALL PROVIDE CALCULATIONS IF CONNECTIONS ARE OTHER THAN THOSE SHOWN, IF MULTIPLE CONNECTIONS ARE USED, OR AS REQUESTED BY ECWA.
4. TO FLUSH THREE PIPE VOLUMES, MINIMUM FLUSHING TIME (IN SECONDS) EQUALS THE LENGTH OF PIPE BEING FLUSHED, IN FEET.

SECTION
N.T.S.

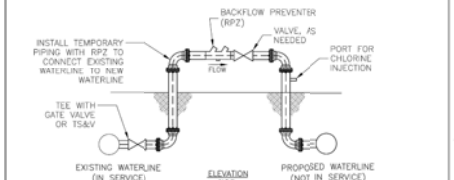
I:\PUBLIC\ENGINEERING\CURRENT ECWA DETAILS\SD36_WATERLINE_FLUSHING

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK | STANDARD DETAIL WATERLINE FLUSHING | DWG. NO. SD36 | DATE 6/16 | REVISED 3/19



ELEVATION
N.T.S.

METHOD 1 – CONNECT EXISTING HYDRANT TO PROPOSED HYDRANT



ELEVATION
N.T.S.

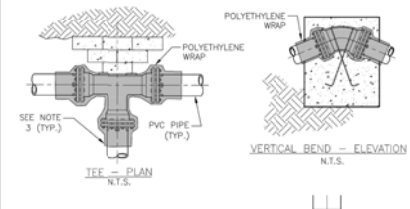
METHOD 2 – SERVICE TAP, TAPPING SLEEVE AND VALVE (TS&V), OR INTERCONNECTION

NOTES:
1. THE PURPOSE OF THIS DETAIL IS TO DEPICT ACCEPTABLE METHODS OF CONNECTING EXISTING WATERLINES TO PROPOSED WATERLINES FOR FILLING, FLUSHING, AND TESTING PROCEDURES IF 2-INCH COPPER OR POLYETHYLENE TUBING IS NOT USED TO BYPASS A VALVE. OTHER METHODS REQUIRE SUBMITTAL AND APPROVAL BY THE AUTHORITY PRIOR TO USE.
2. FIRE HOSES, TEMPORARY PIPING, AND BACKFLOW PREVENTERS SHALL NOT ENCROACH INTO ROADWAYS, DRIVEWAYS, OR SIDEWALK AREAS WITHOUT PROVIDING PROPER MAINTENANCE AND PROTECTION OF TRAFFIC MEASURES.

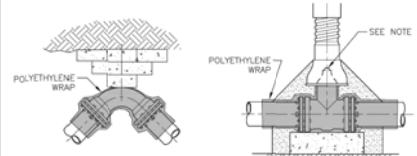
I:\PUBLIC\ENGINEERING\CURRENT ECWA DETAILS\SD44_SOURCE_WATER_CONNECTIONS

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK | STANDARD DETAIL SOURCE WATER CONNECTIONS | DWG. NO. SD44 | DATE 10/20 | REVISED

TEE – PLAN
N.T.S.



VERTICAL BEND – ELEVATION
N.T.S.



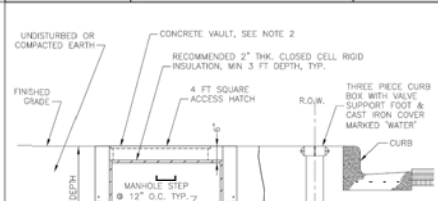
HORIZONTAL BEND – PLAN
N.T.S.

GATE VALVE – ELEVATION
N.T.S.

NOTES:
1. POLYETHYLENE WRAP IS TO BE PLACED AROUND THE ENTIRE FITTING, AND SECURED IN PLACE WITH POLYETHYLENE TAPE. PROVIDE SUFFICIENT SLACK SO THAT POLYETHYLENE WRAP IS NOT PUNCTURED DURING BACKFILL AND DOES NOT ENTRAP AIR. POLYETHYLENE WRAP IS NOT TO BE INSTALLED WITHIN 6 INCHES OF VALVE OPERATING NUT ON VALVES.
2. ALL FITTINGS TO BE POLYETHYLENE WRAPPED PRIOR TO BEDDING AND CONCRETE BLOCK PLACEMENT.
3. POLYETHYLENE WRAP IS TO BE EXTENDED A MINIMUM OF 12" PAST THE FITTING ON EACH LEG AND SECURED TO THE PIPE (OR POLYWRAP IF DIP) WITH AT LEAST TWO CIRCUMFERENTIAL WRAPS OF POLYETHYLENE TAPE.

I:\PUBLIC\ENGINEERING\CURRENT ECWA DETAILS\SD39A_POLYWRAPPING_FITTINGS

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK | STANDARD DETAIL POLYWRAPPING CAST/DUCTILE IRON FITTINGS | DWG. NO. SD39A | DATE 3/18 | REVISED 12/18



NOTES:
1. WATER METER FURNISHED AND INSTALLED BY ERIE COUNTY WATER AUTHORITY.
2. PRECAST CONCRETE VAULT SHALL BE 4,000 PSI MIX AND SHALL BE A MINIMUM 4 FT X 4 FT X 7 FT SIZE.
3. INSTALL BYPASS AROUND METER IF DIRECTED BY ECWA FORCES.
4. NO PLUMBING CONNECTIONS ALLOWED WITHIN 8" OF VAULT WALL.
5. A HOT-BOX LOCATED ABOVE GRADE IS ALSO ACCEPTABLE.

SECTION
N.T.S.

I:\PUBLIC\ENGINEERING\CURRENT ECWA DETAILS\SD22_WATER_VAULT_2_SCH

ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK | STANDARD DETAIL CONCRETE WATER METER VAULT 1 1/2-INCH AND 2-INCH METERS | DWG. NO. SD22 | DATE 4/28/92 | REVISED 12/17

C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
		REVISIONS
2	12/29/2022	CHANGE WATER TO PVC & RAISE SEWER
1	05/11/2022	AGENCY COMMENTS

EDA PROJECT NO: 01-79-15063
C&S PROJECT NO: 135F.001.001
DATE: JULY 27, 2022
DRAWN BY: MRO
DESIGNED BY: MRO
CHECKED BY: VO

WATER DETAILS

C505

Dec 29, 2022 – 12:18pm
F:\Projects\135F – Erie County (LDC)\135F001001 – Bethlehem Water & Sewer\Design\CAD\Sheet Files\135F001001_C505.dwg

SILT FENCE INLET PROTECTION NOTES:

1. FILTER FABRIC SHALL MEET THE SPECIFICATION REQUIREMENTS. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.

2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.

3. STAKE MATERIALS WILL BE STANDARD 2" X 4" WOOD OR EQUIVALENT, METAL WITH A MINIMUM LENGTH OF 3 FEET.

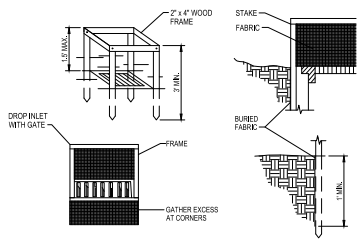
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.

5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.

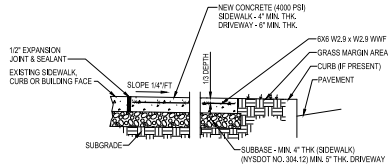
6. A 2" X 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY. MAXIMUM DRAINAGE AREA 1 ACRE.

7. COIR ROLL SHALL BE PLACED ALONG THE FRONT OF THE INLET TO THE CATCH BASIN EXTENDING ACROSS THE ENTIRE WIDTH OF THE INLET TO THE CONCRETE GUTTER APRON LIMITS ON BOTH SIDE OF THE CATCH BASIN INLET. COIR ROLL SHALL BE WEIGHTED DOWN AS NEEDED WITH SAND BAGS OR EQUAL.

8. REFER TO THE SEQUENCE OF CONSTRUCTION ACTIVITIES LOCATED WITHIN THE SWPPP FOR TIMING OF THESE MEASURES TO BE INSTALLED.



C1 TYPICAL INLET PROTECTION DETAIL (GRASS AREAS)
SCALE: N.T.S.



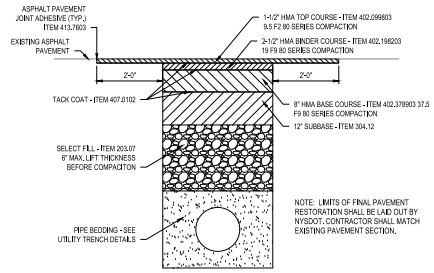
CROSS SECTION

NOTES:

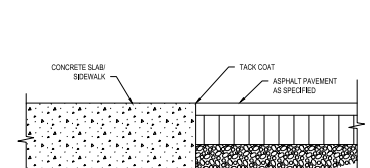
1. CONTROL JOINTS TO BE AT 5'-0" O.C. BOTH WAYS OR AS SHOWN ON DRAWINGS. SEAL JOINTS PER SPECIFICATIONS.

2. CONCRETE SIDEWALK AND DRIVEWAY MATERIAL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 501 AND CONSTRUCTION METHODS SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 608-3

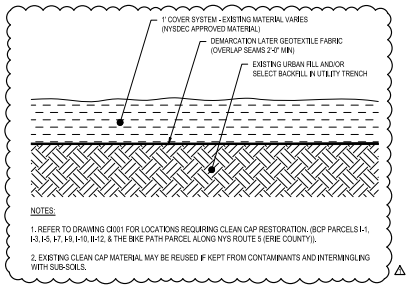
D2 CONCRETE SIDEWALK
SCALE: N.T.S.



C2 NYSDOT FINAL PAVEMENT RESTORATION DETAIL
SCALE: 1" = 1'-0"



D3 TYPICAL CONCRETE TO ASPHALT DETAIL
SCALE: N.T.S.

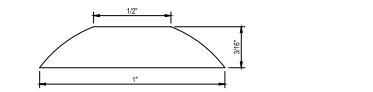


NOTES:

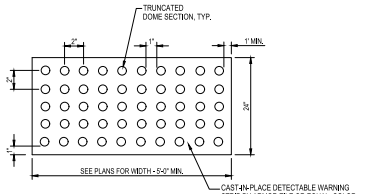
1. REFER TO DRAWING C1001 FOR LOCATIONS REQUIRING CLEAN CAP RESTORATION. (BCP PARCELS I-1, I-3, I-5, I-7, I-9, I-10, II-12, & THE BIKE PATH PARCEL ALONG NYS ROUTE 5 (ERIE COUNTY)).

2. EXISTING CLEAN CAP MATERIAL MAY BE REUSED IF KEPT FROM CONTAMINANTS AND INTERMINGLING WITH SUB-SOILS.

C3 CLEAN CAP RESTORATION DETAIL
SCALE: N.T.S.



TRUNCATED DOME SECTION



DOME SPACING

NOTE:
DETECTABLE WARNING DEVICES SHALL BE PER 2010 ADA STANDARDS SECTION 705 OR THE MOST CURRENT UPDATE

C4 DETECTABLE WARNING SURFACE
SCALE: N.T.S.

B1 NOT USED
SCALE: 1" = 1'-0"

B2 NOT USED
SCALE: 1" = 1'-0"

B3 NOT USED
SCALE: 1" = 1'-0"

A1 NOT USED
SCALE: 1" = 1'-0"

A2 NOT USED
SCALE: 1" = 1'-0"

A3 NOT USED
SCALE: 1" = 1'-0"

A4 NOT USED
SCALE: 1" = 1'-0"

C&S COMPANIES
C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

MARK	DATE	DESCRIPTION
1	08/29/2022	ADDENDUM #1

REVISIONS

EDA PROJECT NO:	01-79-15063
C&S PROJECT NO:	135F.001.001
DATE:	JULY 27, 2022
DRAWN BY:	MRO
DESIGNED BY:	MRO
CHECKED BY:	VO

MISCELLANEOUS DETAILS

C506

Sep 13, 2022 - 8:23am
F:\Project\135F - Erie County (LDC\135F001001 - Bethlehem Water & Sewer\Design\CADD\Sheet Files\135F001001_C506.dwg

APPENDIX B
PRE-CONSTRUCTION TEST PIT LOGS AND PHOTOGRAPHS

C&S COMPANIES

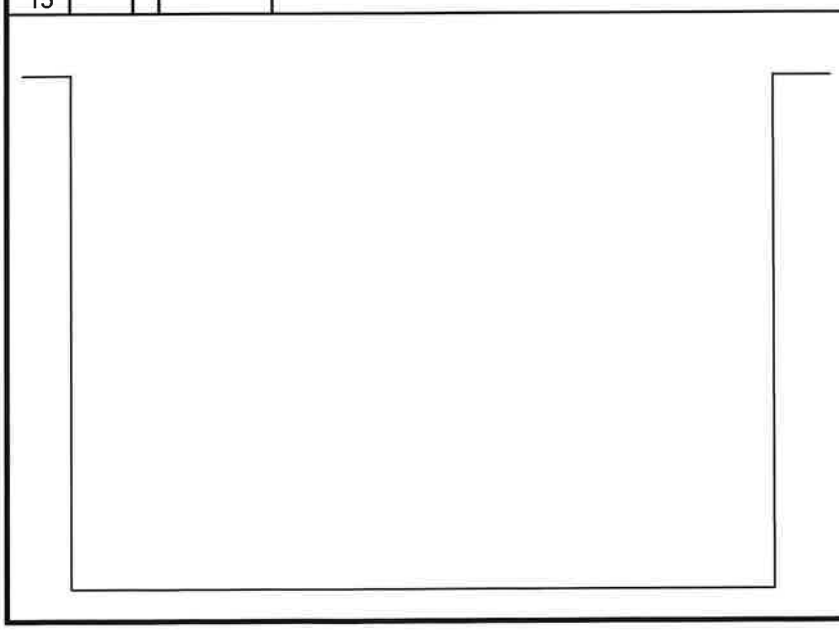
C&S Engineers, Inc.
141 Elm Street
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454

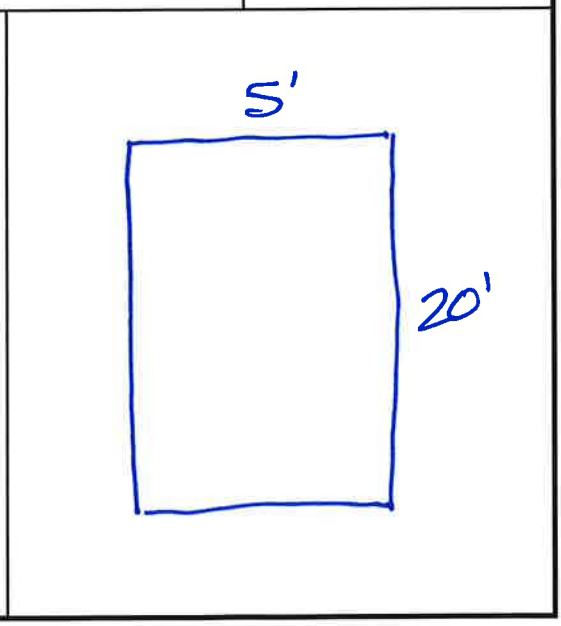
TEST PIT

Test Pit No.	TP-01A
Sheet 1 of:	
Project No.:	
Start Date:	1/18/23
Finish Date:	1/18/23
Inspector:	C. Martin

Project Name:	Tecumseh Phase I/II Pre-Construction Invest.		
Location:	Bethlehem Steel	Operator:	Pinto
Client:	ECIDA	Equipment:	

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION (c - coarse, m - medium, f - fine; S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10%)	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					9:00 am
1				Urban Fill - black, wet, mix of	
2				Sand, Silt and Clay, ash, coal	6ppm
3				Significant amount of bricks	
4					
5					Water @ 5'
6				Concrete Foundations	
7				Stopped excavation due to	
8				foundations - Moving test pit	
9				east	
10					
11					
12					
13					
14					
15					





C&S COMPANIES

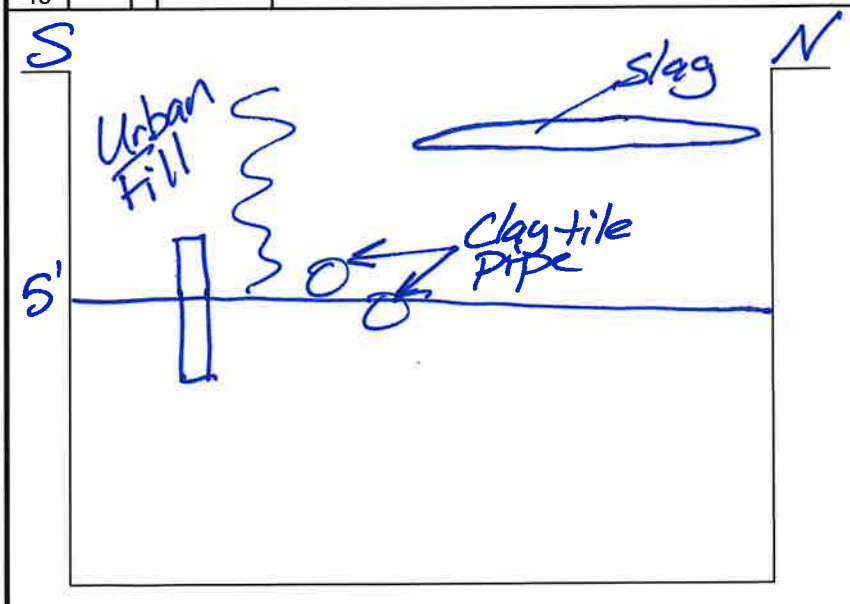
C&S Engineers, Inc.
141 Elm Street
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454

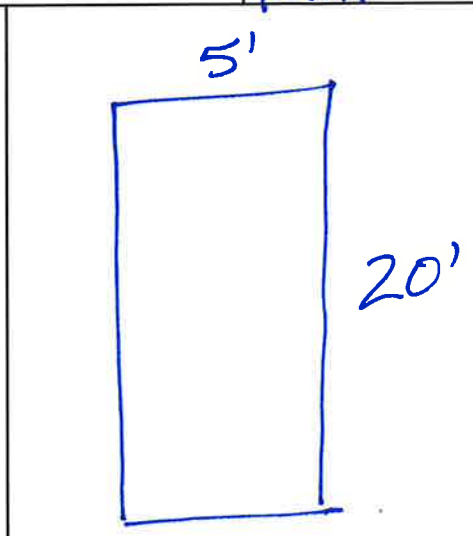
TEST PIT

Test Pit No.	TP-01B
Sheet 1 of:	
Project No.:	
Start Date:	11/18/23
Finish Date:	11/18/23
Inspector:	C. Martin

Project Name:	Tecumseh Phase I/II Pre-Construction Invest		
Location:	Bethlehem Steel	Operator:	Pinto
Client:	ECIDA	Equipment:	

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION (c - coarse, m - medium, f - fine; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10%; S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey)	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					9:15 am
1				Veg. Cover + topsoil	
2				Orange mesh demarcation	
3				Urban Fill – black material with fire brick, slag, brick, rail road ties, wet	0ppm
4					
5			5'	Foundations and clay tile pipe water flowing in from pipe	Water @ 5'
6					
7					Slag counts equal to background
8					
9					
10			10'	Some grey silty CLAY mixed with black organic material	Sampled for
11				Excavation ended at 10'	totals "TP01B"
12					and Waste Characterization "WC" – WC-01 1'–10' Composite
13					
14					
15					No dewatering point





C&S COMPANIES

C&S Engineers, Inc.
141 Elm Street
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454

TEST PIT

Test Pit No.	TP-02
Sheet 1 of:	
Project No.:	
Start Date:	11/18/23
Finish Date:	11/18/23
Inspector:	C. Martin

Project Name: Tecumseh Phase I/II Pre-Construction Invest
Location: Bethlehem Steel
Client: ECIDA
Operator: Pinto
Equipment:

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION (c - coarse, m - medium, f - fine; S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10%)	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					12:30 pm
1				Urban Fill – mostly ash, coal, and gravel	0ppm
2			2'		
3				Cinders and ash	No Slag
4			4'		
5				Silty CLAY with shale, blue grey *Moist to wet	0ppm
6				↓ higher Silt Content with depth	
7					
8					Water @ 8'
9					11/20/23 10:00 Water level -6.5'
10					
11					
12			12'		
13			13'	Peat – dark brown, moist, roots	0ppm
14			14'	SILT – grey, Moist to Wet	
15					

Dewatering point installed
TP-02 = Fill sample
TP-02-8ft = Native
WC-02

C&S COMPANIES

C&S Engineers, Inc.
141 Elm Street
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454

TEST PIT

Test Pit No.	TP-03
Sheet 1 of:	
Project No.:	
Start Date:	11/20/23
Finish Date:	11/20/23
Inspector:	C. Martin

Project Name: Tecumseh Phase I/II Pre-Construction Invest
Location: Bethlehem Steel
Client: ECIDA
Operator: Pinto
Equipment:

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION (c - coarse, m - medium, f - fine; S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10%)	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					8:00 am
1				Urban Fill - black ash, gravel, coal moist	0ppm
2			2'		
			2.5'	Slag layer	
3				Urban Fill - moist to wet	0ppm
4					
5			5'		
6				Clay SILT - some Clay, blue grey, moist to wet	0ppm
7					
8					Water @ 8.5'
9					
10					Set dewatering point
11					TP-03 = Fill
12					TP-03-5Ft (Native)
13			13'		WC-03
				Peat - dark brown, moist	
14					
15			14.5' to 18'	SILT - blue clay	

Slag counts not above background. Radiological tech collected slag sample

C&S COMPANIES

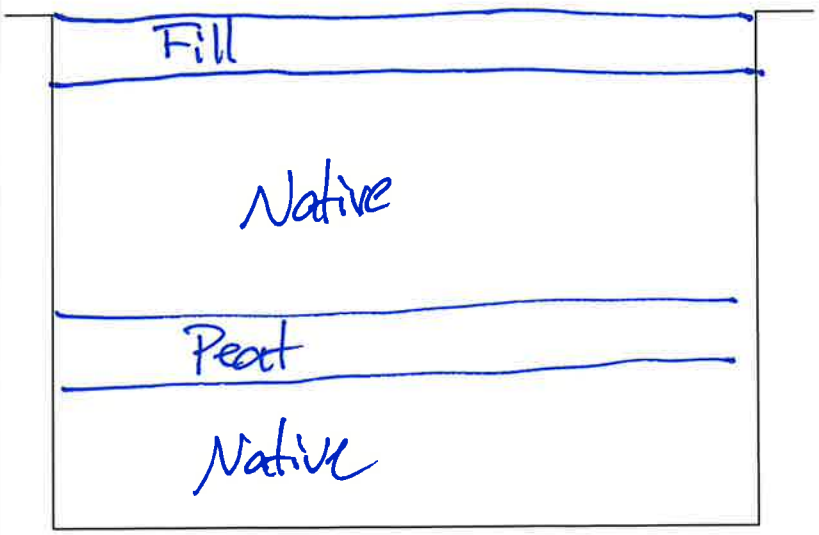
C&S Engineers, Inc.
141 Elm Street
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454

TEST PIT

Test Pit No.	TP-04
Sheet 1 of:	
Project No.:	
Start Date:	11/20/23
Finish Date:	11/20/23
Inspector:	C. Martin

Project Name: Tecumseh Phase I/II Pre-Construction Invest.
Location: Bethlehem Street
Client: ECIDA
Operator: Hinfo
Equipment:

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION (c - coarse, m - medium, f - fine; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10%; S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey)	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Ash, coal, Urban Fill - black moist	11:00am
1			1'		0ppm
2			.5'-1'	Slag	
3				SILT - some Clay, blue grey,	
4				some Shale, moist	0ppm
5					
6					
7					
8					
9					little water above peat layer
10			10.5'		
11			11'	Peat - dark brown, moist	
12				SILT - moist, grey	
13				higher Clay content with depth	
14					
15			15'-18'		Installed dewater point



TP-04 = Fill
TP-04-6ft = Native
WC-04

C&S COMPANIES

C&S Engineers, Inc.
141 Elm Street
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454

TEST PIT

Test Pit No.	TP-05
Sheet 1 of:	
Project No.:	
Start Date:	2/9/23
Finish Date:	2/9/23
Inspector:	C. Martin

Project Name: Tecumseh Phase I/II Pre-Construction Invest.
Location: Bethlehem Steel
Operator: Pinto
Client: ECIDA
Equipment:

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION	COMMENTS
					8:30
1				Urban Fill - black, ash, gravel, coal moist	0ppm
2					
3					
4					
5			5'		
6				SILT - Some Clay, blue grey	
7				Some Shale	
8					trace water @ 8'
9					
10					
11					
12			12'		
13			13'	Peat -	
14				SILT - grey moist.	
15			to 18'		No dewatering Point

c - coarse
m - medium
f - fine

S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey

a - and - 35-50%
s - some - 20-35%
l - little - 10-20%
t - trace - 0-10%

TP-05 = Fill
TP-~~01~~ 6ft = Native
WC-05

C&S Companies

Printed on Fri Feb 24, 2023 at 11:10 am EST

Bethlehem Steel Environmental

Lackawanna, New York

Pre-Construction

Description
Northern sidewall of TP-05.

Taken Date
02/09/2023 at 10:18 am

Upload Date
02/09/2023 at 10:18 am

Uploaded By
Cody Martin

File Name
7986594C-561B-4FD3-A...

Pre-Construction

Description
View of completed test pit TP-04.

Taken Date
01/20/2023 at 12:35 pm

Upload Date
01/20/2023 at 12:40 pm

Uploaded By
Cody Martin

File Name
IMG_2023_01_20_12_35...

Pre-Construction

Description
View of typical historic fill (left) and native soil (right).

Taken Date
01/20/2023 at 08:48 am

Upload Date
01/20/2023 at 08:48 am

Uploaded By
Cody Martin

File Name
IMG_2023_01_20_08_48...

Pre-Construction

Description
Completed excavation of TP-03.

Taken Date
01/20/2023 at 08:46 am

Upload Date
01/20/2023 at 08:46 am

Uploaded By
Cody Martin

File Name
IMG_2023_01_20_08_46...

Pre-Construction

Description
Completed excavation of TP-02.

Taken Date
01/18/2023 at 01:48 pm

Upload Date
01/18/2023 at 01:48 pm

Uploaded By
Cody Martin

File Name
IMG_2023_01_18_13_48...

Pre-Construction

Description
View of historic fill material from TP-02.

Taken Date
01/18/2023 at 12:57 pm

Upload Date
01/18/2023 at 12:57 pm

Uploaded By
Cody Martin

File Name
IMG_2023_01_18_12_57...

Pre-Construction

Description
View of test pit TP-01B, brick foundations and clay tile pipes.

Taken Date
01/18/2023 at 09:49 am

Upload Date
01/18/2023 at 09:49 am

Uploaded By
Cody Martin

File Name
IMG_2023_01_18_09_49...

Pre-Construction

Description
Material excavated from TP-01A.

Taken Date
01/18/2023 at 08:32 am

Upload Date
01/18/2023 at 08:32 am

Uploaded By
Cody Martin

File Name
IMG_2023_01_18_08_32...

APPENDIX C
MATERIAL IMPORT REQUEST

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9
700 Delaware Avenue, Buffalo, NY 14209
P: (716) 851-7220 | F: (716) 851-7275
www.dec.ny.gov

January 6, 2023

Cody Martin
C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, NY 14203

Tecumseh Phase I & II Business Parks
Lackawanna (C), Erie County
Import Request

Dear Cody Martin,

The Department has reviewed the request dated January 4, 2023 to import: 15,000 cubic yards of 2-inch crushed stone; 100 cubic yards of #2 round stone; and 3,500 cubic yards of #1 round stone from the Lockport Holcim quarry. Based on the information provided, the request is hereby approved.

The proposed fill materials meets the requirements for material other than soil (i.e., gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

Should you have any questions or would like to discuss the matter in further detail, feel free to contact me at andrew.zwack@dec.ny.gov or (716) 851-7220.

Sincerely,

Andrew Zwack
Assistant Engineer

ec: Benjamin McPherson – NYSDEC

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Commercial or Industrial Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? >1000

If greater than 1000 cubic yards will be imported, enter volume to be imported: 18600

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? yes

Does it contain less than 10%, by weight, material that would pass a size 10 sieve?

Does it contain less than 10%, by weight, material that would pass a size 100 sieve?

Is this virgin material from a permitted mine or quarry? yes

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

This request is for three stone products from a permitted quarry.
- 2" crushed stone (15,000 cubic yards)
- #2 round stone (100 cubic yards)
- #1 round stone (3,500 cubic yards)

Material meets requirements of DER-10 section 5.4(e)5; therefore, no chemical testing required.

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

NA

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

David Youngblood, Quality Control Manager

Location where fill was obtained:

Lockport, NY

Identification of any state or local approvals as a fill source:

NA

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Virgin stone or crushed limestone from Holcim (former Lafarge) quarry in Lockport, NY

Provide a list of supporting documentation included with this request:

Aggregate analysis

The information provided on this form is accurate and complete.

Signature

1/4/2022

Date

Cody Martin

Print Name

C&S Engineers, Inc.

Firm

12/15/2022

David Youngblood
400 Hinman Rd.
Lockport, NY 14094
571-752-1111 (cell)

Iroquois Bar Corp
155 Commerce DR
Lackawanna, NY 14218

Re: Bethlehem Steel Project

To Whom It May Concern:

This letter is to confirm that the 2" crusher run stone. clean #1 stone and clean #2 stone provided out of our Lockport NY quarry to the above stated project/customer fulfills the DER-10 requirement for less than 10% passing the #80 sieve. Please see gradation results below with % passing the #80 sieve.

2" Crusher Run: **6.9%**

Clean #2 Stone: **1.0%**

Clean #1 Stone: **1.1%**

Please feel free to contact me at the number above with any questions and I would be happy to assist in any way possible. Thank you.

Regards,

David Youngblood
Quality Control Manager
Holcim Aggregates and Asphalt

HOLCIM

David Youngblood
400 Hinman Rd.
Lockport, NY 14094
571-752-1111-cell
david.youngblood@holcim.com

12/15/2022

Iroquois Bar Corp

Att:
Re: Bethlehem Steel
Email:

To whom it may concern:

This is to certify that the material being supplied to the above project conforms to the outlined NYSDOT requirements for 304-2.02 Bases and Subbases and 703.0201 Crushed Bedrock Below is the gradation for 2" Crusher Run

Location: Lockport
Material Type: 2" ROC

Source No. 5-5R
Test No. 21AR087
Geotech Source # 2985

Sieve Size	Weight	% Ret	% Pass	Spec
2"	0.0	0.0	100.0	100
1 1/2"	270.7	2.4	97.6	
1"	2718.5	24.1	73.5	
3/4"	665.5	5.9	67.6	
1/2"	2425.2	21.5	46.1	
1/4"	1060.3	9.4	36.7	25-60
1/8"	891.1	7.9	28.8	
#20	1613.0	14.3	14.5	
#40	473.8	4.2	10.3	5-40
#80	383.5	3.4	6.9	0-10
#200	146.6	1.3	5.6	0-10
pan	631.7	5.6		
Total	11280.0			

Sincerely,

David Youngblood
Quality Control Manager
Holcim Aggregates and Asphalt

HOLCIM

David Youngblood
400 Hinman Rd.
Lockport, NY 14094
571-752-1111 (cell)
david.youngblood@holcim.com

12/15/22

Iroquois Bar Corp

Att:
Re: Bethlehem Steel
Email:

To whom it may concern:

This is to certify that the material being supplied to the above project conforms to the outlined NYSDOT requirements for Section 703-02 Coarse Aggregate. Below is a gradation for Clean #2 Stone

Location: Lockport **Source #:** 5-5R
Material Type: #2 Stone **Test No.** 21AR087

Sieve Size	Weight	% Ret	% Pass	Spec
1 1/2"	0.0	0.0	100.0	100
1"	270.4	2.7	97.3	90-100
3/4"	3305.0	33.0	64.3	
5/8"	3695.6	36.9	27.4	
1/2"	1922.9	19.2	8.2	0-15
3/8"	590.9	5.9	2.3	
1/4"	60.1	0.6	1.7	
#80	70.1	0.7	1.0	0-10
pan	100.2	1.0		
Total	10015.2			

Sincerely,

David Youngblood
Quality Control Manager
Holcim Aggregates and Asphalt

HOLCIM

David Youngblood
400 Hinman Rd.
Lockport, NY 14094
571-752-1111-cell

12/15/22

Iroquois Bar Corp

Att:
Re: Bethlehem Steel
Email:

To whom it may concern:

This is to certify that the material being supplied to the above project conforms to the outlined NYSDOT requirements for Section 703-02 Coarse Aggregate. Below is a gradation for NYSDOT Clean #1 Stone

Location: Lockport **Source No.** 5-5R
Material Type: NYSDOT #1 Stone **Test No.** 21AR087

Sieve Size	Weight	% Ret	% Pass	Spec
1"	0.0	0.0	100.0	100
3/4"	0.0	0.0	100.0	
1/2"	340.4	3.8	96.2	90-100
3/8"	2311.1	25.8	70.4	
1/4"	5276.0	58.9	11.5	0-15
#4	456.8	5.1	6.4	
#8	367.3	4.1	2.3	
#80	107.5	1.2	1.1	0-10
pan	98.5	1.1		
Total	8957.6			

Sincerely,

David Youngblood
Quality Control Manager
Holcim Aggregates and Asphalt

CME Associates, Inc.

2727 Broadway St. Suite 2
Cheektowaga, New York 14227
(716) 877-9577
(716) 877-9629 (Fax)

www.cmeassociates.com

TRANSMITTAL

Date: 09/28/2022

To: LafargeHolcim
6125 Genesee Street
Lancaster, New York 14086

Attn: Mr. Darryl Hart

Re: Lafarge Source Pre-Qualification

Gentlepeople,

Enclosed you will find:

Number of Copies	Report No.:
1	17462L-01

Respectfully Submitted:

CME ASSOCIATES, INC.

Brian Andrzejewski, P.E.
Supervisor of Special Inspections

CME Associates, Inc.

2727 Broadway St., Suite 2
Cheektowaga, New York 14227
(716) 877-9577
(716) 877-9629 (Fax)

www.cmeassociates.com

LAB REPORT SUMMARY

PROJECT: LaFarge Source PreQual
CLIENT: LaFarge
DATE: 09/28/2022

REPORT NO.: 17462L-01
REPRESENTATIVE: Austin Glasier

This CME Associates, Inc representative performed a sieve analysis and modified proctor on 2" Minus R.O.C. sample designated BL3167 delivered to the CME Buffalo laboratory on 09/26/22. Tests were performed according to ASTM standards C136, C117, and D1557.

The following table distinguishes your sample from some common NYSDOT items:

Sample No.:	Location:
BL3167	LaFarge on-site

MECHANICAL ANALYSIS (ASTM C136, C117)

Sieve Size	Percent Passing by Weight Sample BL3167	Item 304.12 Subbase Type II	Item 203.07 Select Granular Fill	Item 203.25 Sand Backfill	Item 605.0901 Underdrain Filter Type 1
4"	100		100		
2"	100	100			
1"	89				100
3/4"	76				
1/2"	58			100	30-100
3/8"	48				
1/4"	36	25-60		90-100	0-30
No. 4	29				
No. 10	17				0-10
No. 40	9	5-40	0-70		
No. 80	8				
No. 200	7	0-10	0-15	0-5	0-5

CLASSIFICATION

Gray cmf Gravel; some cmf Sand; trace Silt/Clay

LABORATORY MOISTURE-DENSITY RELATIONSHIP (ASTM D1557)

Corrected Maximum Dry Density	=	**152.4**	**Pcf**
Corrected Optimum Moisture Content	=	**4.7**	**%**

It is recommended the engineer of record review and comment on the use of this material. Please see attached documents for lab test results.
Feel free to contact this office should you have any questions.

CME Associates, Inc.

2727 Broadway Ave, Suite #2
Buffalo, New York 14227
(716) 877-9577
(716) 877-9629 (Fax)

www.cmeassociates.com

LABORATORY TEST SUMMARY
LaFarge
LaFarge Source PreQual
CME Report Number: 17462L-01
9/28/2022
Page 2 of 3

The CME Associates Representative obtained a sample at the above referenced project. The sample was delivered to CME's Buffalo facility, an AASHTO[1] accredited laboratory, for a Particle Size Analysis and a Moisture Density Relationship determination. The results are as follow:

1) Material Identification

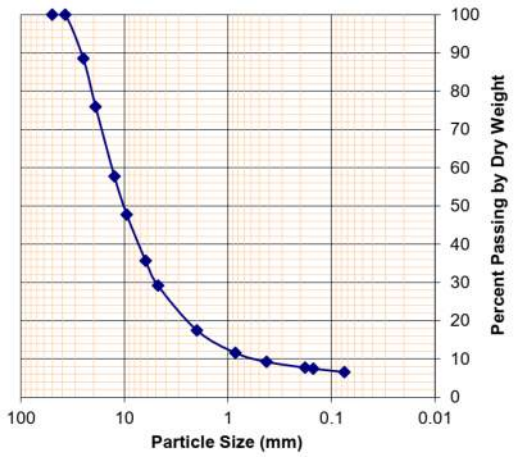
Sample #	Date Sampled	Classification	Source
BL3167	09/23/22	Gray cmf Gravel; some cmf Sand; trace Silt/Clay	on-site

2) Particle Size Analysis ASTM D422

Sieve Size	Sieve Size (mm)	% Passing by Dry Weight Sample # BL3167
2"	50	100
1-1/2'	37.5	100
1"	25	89
3/4"	19	76
1/2"	12.5	58
3/8"	9.50	48
1/4"	6.25	36
#4	4.75	29
#10	2.00	17
#20	0.850	12
#40	0.425	9
#80	0.180	8
#100	0.150	7
#200	0.075	7

Note: Proposed use of material not provided.

Grain Size Distribution



3) Moisture-Density Relationship (ASTM D-1557: Modified Proctor)

	Sample # BL3167
Corrected Maximum Dry Density (pcf)	= **152.4**
Corrected Optimum Moisture Content (%)	= **4.7**
Oversized Particles, Percent by Weight (%)	= **24** *

* Particles retained on 3/4-inch sieve

[1]AASHTO - American Association of State Highway & Transportation Officials (AASHTO) Materials Reference Laboratory. CME Buffalo accreditation includes tests of Portland Cement Concrete, Aggregate and Soil Materials. www.aashtoresource.org

LABORATORY TEST SUMMARY
LaFarge
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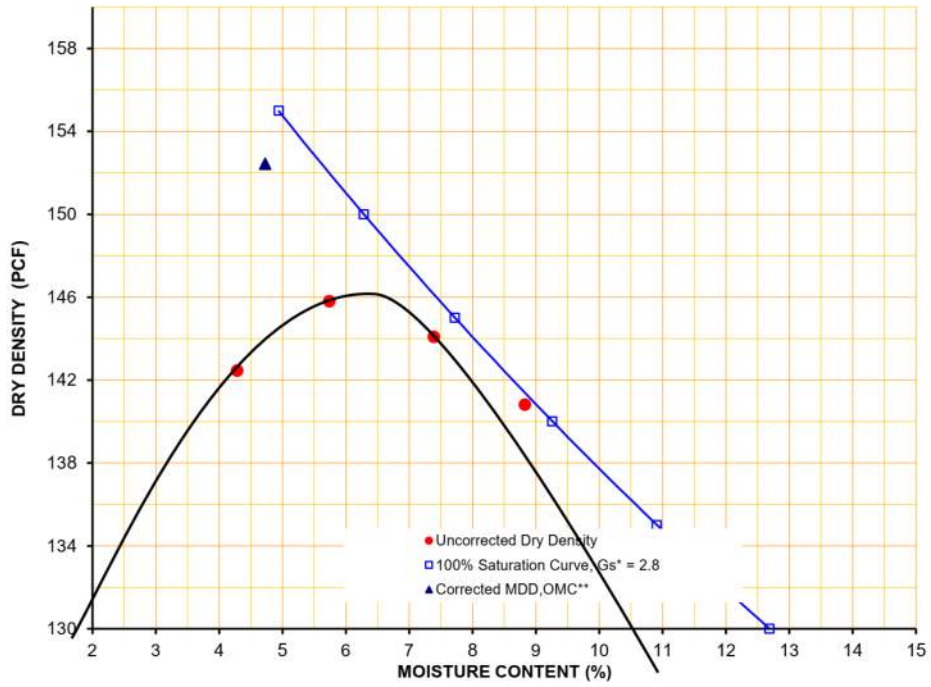
SAMPLE LOCATION:	**on-site**	DATE SAMPLED:	**9/23/22**
SOIL CLASSIFICATION:	**Gray cmf Gravel; some cmf Sand; trace Silt/Clay**	SAMPLE NO.:	**BL3167**

Moisture - Density Relationship Curve



Particle Size Analysis ASTM D422

Sieve Size	% Passing
2"	**100**
1-1/2"	**100**
1"	**89**
3/4"	**76**
1/2"	**58**
3/8"	**48**
1/4"	**36**
No.4	**29**
No.10	**17**
No.20	**12**
No.40	**9**
No.80	**8**
No.100	**7**
No.200	**7**

Test Procedure Information

Test Method	☑ ASTM D-1557 (Modified)	☐ ASTM D-698 (Standard)	
Procedure Used	☐ A ☐ B	☑ C	
Preparation Method	☐ Dry	☑ Moist	
Description of Rammer	☐ Manual	☑ Mechanical	

Test Results

Corrected MDD (PCF) = **152.4**
Corrected OMC (%) = **4.7**

Oversize Fraction by Dry Weight

24 % Retained on ☐ No.4 Sieve ☐ 3/8" Sieve ☑ 3/4" Sieve

* Specific Gravity, estimated
** MDD = Maximum Dry Density, OMC = Optimum Moisture Content
Please feel free to contact our office if you have any questions.

Austin Glasier
Supervising Laboratory Technician

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9
700 Delaware Avenue, Buffalo, NY 14209
P: (716) 851-7220 | F: (716) 851-7275
www.dec.ny.gov

January 6, 2023

Cody Martin
C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, NY 14203

Tecumseh Phase I & II Business Parks
Lackawanna (C), Erie County
Import Request

Dear Cody Martin,

The Department has reviewed the request dated November 9, 2022 to import 100 cubic yards of 2-inch crushed rock from New enterprise Sone and Lime Co., Inc. located at 8615 Wehrle Drive, Williamsville, NY. Based on the information provided, the request is hereby approved.

The proposed fill material meets the requirements for material other than soil (i.e., gravel, rock, stone, recycled concrete or recycled brick) as specified in section 5.4(e)5 of DER-10. Therefore, this material may be placed below the demarcation barrier or above the demarcation layer as part of final site cover.

Should you have any questions or would like to discuss the matter in further detail, feel free to contact me at andrew.zwack@dec.ny.gov or (716) 851-7220.

Sincerely,

Andrew Zwack
Assistant Engineer

ec: Benjamin McPherson – NYSDEC

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Commercial or Industrial Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? 50-100

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? yes

Does it contain less than 10%, by weight, material that would pass a size 10 sieve? yes

Does it contain less than 10%, by weight, material that would pass a size 100 sieve? yes

Is this virgin material from a permitted mine or quarry? yes

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

This request is for 2" crushed rock. This material passes the 80 sieve test that waives the DER-10 sampling requirement.

No samples collected

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

NA

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

New Enterprise Stone & Lime Co., Inc. (Buffalo Crushed Stone)

Location where fill was obtained:

8615 Wehrle Drive, Willamsville, New York

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

NA

Provide a list of supporting documentation included with this request:

Sieve analysis

The information provided on this form is accurate and complete.

Signature

11/09/2022

Date

Cody Martin

Print Name

C&S Engineers, Inc.

Firm

Gradation Sheet

Buffalo Crushed Stone

Sample of 2's	Date	10/6/22	Time
From Pt. 23		Mil	

Sieve Size	Sieve Size	Weight Retained	% Retained	% Passing	Spec.
90mm	3-1/2"		0.0	100.0	
75mm	3"		0.0	100.0	
63mm	2-1/2"		0.0	100.0	
50mm	2"		0.0	**100.0**	100
37.5mm	1-1/2"		0.0		
25.0mm	1"	0.75	3.8	**96.2**	90/100
19.0mm	3/4"	6.20	31.8	**64.4**	
12.5mm	1/2"	11.05	56.7	**7.7**	0/15
9.5mm	3/8"	1.25	6.4	**1.3**	
6.3mm	1/4"	0.15	0.8	**0.5**	
4.75mm	4		0.0		
3.2mm	1/8"		0.0		
2.36mm	8		0.0		
2.0mm	10		0.0		
1.4mm	14		0.0		
1.18mm	16		0.0		
850µm	20		0.0		
600µm	30		0.0		
425µm	40		0.0		
300µm	50		0.0		
180µm	80	0.05	0.3	**0.3**	<10
150µm	100		0.0		
75µm	200		0.0		
	Pan	0.05	0.3		
	Total	19.50	100		

Wash Loss:		
Before:		
After:		
Loss:	0.0	
	#DIV/0!	%

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Commercial or Industrial Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? 50-100

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? yes

Does it contain less than 10%, by weight, material that would pass a size 10 sieve? yes

Does it contain less than 10%, by weight, material that would pass a size 100 sieve? yes

Is this virgin material from a permitted mine or quarry? yes

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

This request is for 2" crushed rock. This material passes the 80 sieve test that waives the DER-10 sampling requirement.

No samples collected

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

NA

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

New Enterprise Stone & Lime Co., Inc. (Buffalo Crushed Stone)

Location where fill was obtained:

8615 Wehrle Drive, Willamsville, New York

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

NA

Provide a list of supporting documentation included with this request:

Sieve analysis

The information provided on this form is accurate and complete.

Signature

11/09/2022

Date

Cody Martin

Print Name

C&S Engineers, Inc.

Firm

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Commercial or Industrial Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? >1000

If greater than 1000 cubic yards will be imported, enter volume to be imported: 18600

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? yes

Does it contain less than 10%, by weight, material that would pass a size 10 sieve? no

Does it contain less than 10%, by weight, material that would pass a size 100 sieve? no

Is this virgin material from a permitted mine or quarry? yes

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

This request is for three stone products from a permitted quarry.
- 2" crushed stone (15,000 cubic yards)
- #2 round stone (100 cubic yards)
- #1 round stone (3,500 cubic yards)

Material meets requirements of DER-10 section 5.4(e)5; therefore, no chemical testing required.

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

NA

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

David Youngblood, Quality Control Manager

Location where fill was obtained:

Lockport, NY

Identification of any state or local approvals as a fill source:

NA

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Virgin stone or crushed limestone from Holcim (former Lafarge) quarry in Lockport, NY

Provide a list of supporting documentation included with this request:

Aggregate analysis

The information provided on this form is accurate and complete.

Signature

1/4/2022

Date

Cody Martin

Print Name

C&S Engineers, Inc.

Firm

12/15/2022

David Youngblood
400 Hinman Rd.
Lockport, NY 14094
571-752-1111 (cell)

Iroquois Bar Corp
155 Commerce DR
Lackawanna, NY 14218

Re: Bethlehem Steel Project

To Whom It May Concern:

This letter is to confirm that the 2" crusher run stone. clean #1 stone and clean #2 stone provided out of our Lockport NY quarry to the above stated project/customer fulfills the DER-10 requirement for less than 10% passing the #80 sieve. Please see gradation results below with % passing the #80 sieve.

2" Crusher Run: **6.9%**

Clean #2 Stone: **1.0%**

Clean #1 Stone: **1.1%**

Please feel free to contact me at the number above with any questions and I would be happy to assist in any way possible. Thank you.

Regards,

David Youngblood
Quality Control Manager
Holcim Aggregates and Asphalt

HOLCIM

David Youngblood
400 Hinman Rd.
Lockport, NY 14094
571-752-1111-cell
david.youngblood@holcim.com

12/15/2022

Iroquois Bar Corp

Att:
Re: Bethlehem Steel
Email:

To whom it may concern:

This is to certify that the material being supplied to the above project conforms to the outlined NYSDOT requirements for 304-2.02 Bases and Subbases and 703.0201 Crushed Bedrock Below is the gradation for 2" Crusher Run

Location: Lockport
Material Type: 2" ROC

Source No. 5-5R
Test No. 21AR087
Geotech Source # 2985

Sieve Size	Weight	% Ret	% Pass	Spec
2"	0.0	0.0	100.0	100
1 1/2"	270.7	2.4	97.6	
1"	2718.5	24.1	73.5	
3/4"	665.5	5.9	67.6	
1/2"	2425.2	21.5	46.1	
1/4"	1060.3	9.4	36.7	25-60
1/8"	891.1	7.9	28.8	
#20	1613.0	14.3	14.5	
#40	473.8	4.2	10.3	5-40
#80	383.5	3.4	6.9	0-10
#200	146.6	1.3	5.6	0-10
pan	631.7	5.6		
Total	11280.0			

Sincerely,

David Youngblood
Quality Control Manager
Holcim Aggregates and Asphalt

HOLCIM

David Youngblood
400 Hinman Rd.
Lockport, NY 14094
571-752-1111 (cell)
david.youngblood@holcim.com

12/15/22

Iroquois Bar Corp

Att:
Re: Bethlehem Steel
Email:

To whom it may concern:

This is to certify that the material being supplied to the above project conforms to the outlined NYSDOT requirements for Section 703-02 Coarse Aggregate. Below is a gradation for Clean #2 Stone

Location: Lockport **Source #:** 5-5R
Material Type: #2 Stone **Test No.** 21AR087

Sieve Size	Weight	% Ret	% Pass	Spec
1 1/2"	0.0	0.0	100.0	100
1"	270.4	2.7	97.3	90-100
3/4"	3305.0	33.0	64.3	
5/8"	3695.6	36.9	27.4	
1/2"	1922.9	19.2	8.2	0-15
3/8"	590.9	5.9	2.3	
1/4"	60.1	0.6	1.7	
#80	70.1	0.7	1.0	0-10
pan	100.2	1.0		
Total	10015.2			

Sincerely,

David Youngblood
Quality Control Manager
Holcim Aggregates and Asphalt

HOLCIM

David Youngblood
400 Hinman Rd.
Lockport, NY 14094
571-752-1111-cell

12/15/22

Iroquois Bar Corp

Att:
Re: Bethlehem Steel
Email:

To whom it may concern:

This is to certify that the material being supplied to the above project conforms to the outlined NYSDOT requirements for Section 703-02 Coarse Aggregate. Below is a gradation for NYSDOT Clean #1 Stone

Location: Lockport **Source No.** 5-5R
Material Type: NYSDOT #1 Stone **Test No.** 21AR087

Sieve Size	Weight	% Ret	% Pass	Spec
1"	0.0	0.0	100.0	100
3/4"	0.0	0.0	100.0	
1/2"	340.4	3.8	96.2	90-100
3/8"	2311.1	25.8	70.4	
1/4"	5276.0	58.9	11.5	0-15
#4	456.8	5.1	6.4	
#8	367.3	4.1	2.3	
#80	107.5	1.2	1.1	0-10
pan	98.5	1.1		
Total	8957.6			

Sincerely,

David Youngblood
Quality Control Manager
Holcim Aggregates and Asphalt

CME Associates, Inc.

2727 Broadway St. Suite 2
Cheektowaga, New York 14227
(716) 877-9577
(716) 877-9629 (Fax)

www.cmeassociates.com

TRANSMITTAL

Date: 09/28/2022

To: LafargeHolcim
6125 Genesee Street
Lancaster, New York 14086

Attn: Mr. Darryl Hart

Re: Lafarge Source Pre-Qualification

Gentlepeople,

Enclosed you will find:

Number of Copies	Report No.:
1	17462L-01

Respectfully Submitted:

CME ASSOCIATES, INC.

Brian Andrzejewski, P.E.
Supervisor of Special Inspections

CME Associates, Inc.

2727 Broadway St., Suite 2
Cheektowaga, New York 14227
(716) 877-9577
(716) 877-9629 (Fax)

www.cmeassociates.com

LAB REPORT SUMMARY

PROJECT: LaFarge Source PreQual
CLIENT: LaFarge
DATE: 09/28/2022

REPORT NO.: 17462L-01
REPRESENTATIVE: Austin Glasier

This CME Associates, Inc representative performed a sieve analysis and modified proctor on 2" Minus R.O.C. sample designated BL3167 delivered to the CME Buffalo laboratory on 09/26/22. Tests were performed according to ASTM standards C136, C117, and D1557.

The following table distinguishes your sample from some common NYSDOT items:

Sample No.:	Location:
BL3167	LaFarge on-site

MECHANICAL ANALYSIS (ASTM C136, C117)

Sieve Size	Percent Passing by Weight Sample BL3167	Item 304.12 Subbase Type II	Item 203.07 Select Granular Fill	Item 203.25 Sand Backfill	Item 605.0901 Underdrain Filter Type 1
4"	100		100		
2"	100	100			
1"	89				100
3/4"	76				
1/2"	58			100	30-100
3/8"	48				
1/4"	36	25-60		90-100	0-30
No. 4	29				
No. 10	17				0-10
No. 40	9	5-40	0-70		
No. 80	8				
No. 200	7	0-10	0-15	0-5	0-5

CLASSIFICATION

Gray cmf Gravel; some cmf Sand; trace Silt/Clay

LABORATORY MOISTURE-DENSITY RELATIONSHIP (ASTM D1557)

Corrected Maximum Dry Density	=	**152.4**	**Pcf**
Corrected Optimum Moisture Content	=	**4.7**	**%**

It is recommended the engineer of record review and comment on the use of this material. Please see attached documents for lab test results.
Feel free to contact this office should you have any questions.

CME Associates, Inc.

2727 Broadway Ave, Suite #2
Buffalo, New York 14227
(716) 877-9577
(716) 877-9629 (Fax)

www.cmeassociates.com

LABORATORY TEST SUMMARY
LaFarge
LaFarge Source PreQual
CME Report Number: 17462L-01
9/28/2022
Page 2 of 3

The CME Associates Representative obtained a sample at the above referenced project. The sample was delivered to CME's Buffalo facility, an AASHTO[1] accredited laboratory, for a Particle Size Analysis and a Moisture Density Relationship determination. The results are as follow:

1) Material Identification

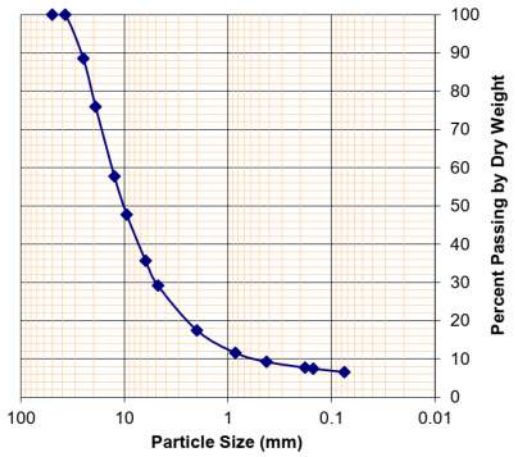
Sample #	Date Sampled	Classification	Source
BL3167	09/23/22	Gray cmf Gravel; some cmf Sand; trace Silt/Clay	on-site

2) Particle Size Analysis ASTM D422

Sieve Size	Sieve Size (mm)	% Passing by Dry Weight Sample # BL3167
2"	50	100
1-1/2'	37.5	100
1"	25	89
3/4"	19	76
1/2"	12.5	58
3/8"	9.50	48
1/4"	6.25	36
#4	4.75	29
#10	2.00	17
#20	0.850	12
#40	0.425	9
#80	0.180	8
#100	0.150	7
#200	0.075	7

Note: Proposed use of material not provided.

Grain Size Distribution



3) Moisture-Density Relationship (ASTM D-1557: Modified Proctor)

	Sample # BL3167
Corrected Maximum Dry Density (pcf)	= **152.4**
Corrected Optimum Moisture Content (%)	= **4.7**
Oversized Particles, Percent by Weight (%)	= **24** *

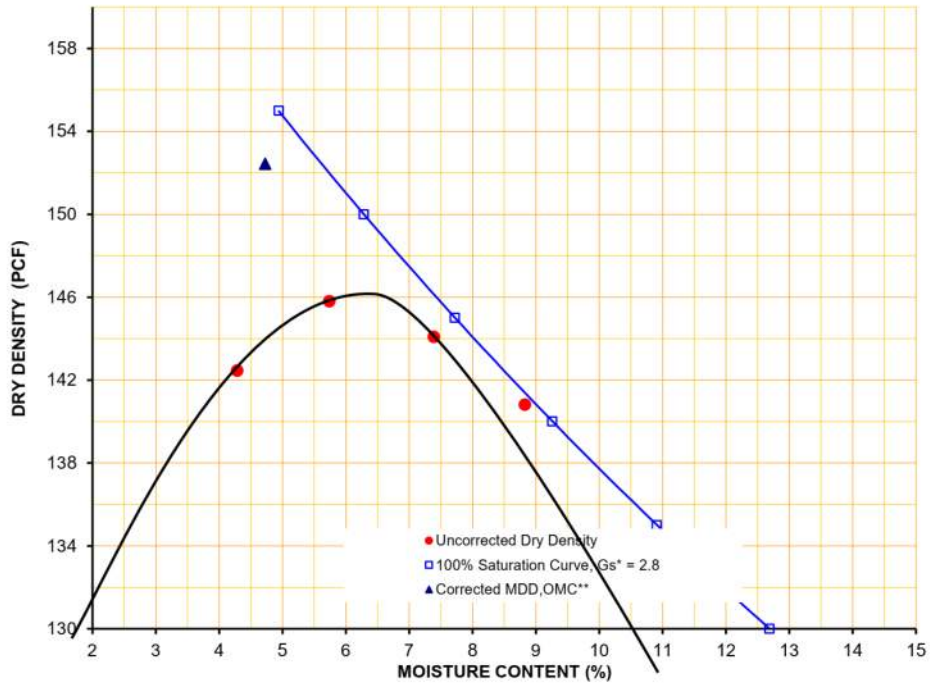
* Particles retained on 3/4-inch sieve

[1]AASHTO - American Association of State Highway & Transportation Officials (AASHTO) Materials Reference Laboratory. CME Buffalo accreditation includes tests of Portland Cement Concrete, Aggregate and Soil Materials. www.aashtoresource.org

LABORATORY TEST SUMMARY
LaFarge
LaFarge Source PreQual
CME Report Number: 17462L-01
Page 3 of 3

SAMPLE LOCATION:	**on-site**	DATE SAMPLED:	**9/23/22**
SOIL CLASSIFICATION:	**Gray cmf Gravel; some cmf Sand; trace Silt/Clay**	SAMPLE NO.:	**BL3167**

Moisture - Density Relationship Curve



Particle Size Analysis ASTM D422

Sieve Size	% Passing
2"	**100**
1-1/2"	**100**
1"	**89**
3/4"	**76**
1/2"	**58**
3/8"	**48**
1/4"	**36**
No.4	**29**
No.10	**17**
No.20	**12**
No.40	**9**
No.80	**8**
No.100	**7**
No.200	**7**

Test Procedure Information

Test Method	☑ ASTM D-1557 (Modified)	☐ ASTM D-698 (Standard)	
Procedure Used	☐ A ☐ B	☑ C	
Preparation Method	☐ Dry	☑ Moist	
Description of Rammer	☐ Manual	☑ Mechanical	

Test Results

Corrected MDD (PCF) = **152.4**
Corrected OMC (%) = **4.7**

Oversize Fraction by Dry Weight

24 % Retained on ☐ No.4 Sieve ☐ 3/8" Sieve ☑ 3/4" Sieve

* Specific Gravity, estimated
** MDD = Maximum Dry Density, OMC = Optimum Moisture Content
Please feel free to contact our office if you have any questions.

Austin Glasier
Supervising Laboratory Technician

APPENDIX D
STORMWATER POLLUTION PREVENTION PLAN

STORM WATER POLLUTION PREVENTION PLAN FOR THE CONSTRUCTION OF

FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

Lackawanna, New York

Prepared for:
Buffalo and Erie County ILDC
95 Perry Street, Suite 403
Buffalo, NY 14203

Prepared by:
C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203

December 2021

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APPENDICES:

Appendix A-1 NYSDEC SPDES General Permit from Storm Water Discharges Associated from Construction Activity Permit No. GP-0-20-001

Appendix B-1 Electronic Notice of Intent (eNOI), MS4 SWPPP Acceptance Form, NYSDEC Acknowledgment of NOI Letter

Appendix C-1 Weekly Soil Erosion and Sediment Control Inspection Checklist

Appendix D-1 Contractor's Certification Form

Appendix E-1 Notice of Termination

Appendix F-1 SWPPP Plans & Details

Appendix G-1 Standards and Specifications for Erosion and Sediment Control

1.0 INTRODUCTION

The Clean Water Act states that storm water discharges associated with an industrial activity from a point source, including through a separate municipal storm sewer system, is unlawful unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit. In New York State, the New York State Department of Environmental Conservation (NYSDEC) administers the NPDES through the State Pollution Discharge Elimination System (SPDES) program. According to the SPDES General Permit, construction sites or common plans of development, that result in soil disturbance of one or more acres that are not classified single family residential or agricultural, are subject to permitting requirements.

This plan outlines the manner in which to reduce the potential of storm water runoff pollution and assigns responsibilities to ensure that the contractor and his subcontractors implement the requirements of the Storm Water Pollution Prevention Plan (SWPPP) during construction activities until the site is stabilized. The SWPPP was developed based on the SPDES General Permit for Storm Water Discharges from Construction Activity Permit No. GP-0-20-001, dated January 29, 2020.

2.0 NOTICE OF INTENT REQUIREMENTS

To obtain coverage under a general permit, an electronic Notice of Intent (eNOI) must be submitted using the Department's online NOI. Permit coverage does not begin until five (5) business days following submittal of the eNOI.

A completed copy of the eNOI form has been included in Appendix B-1.

3.0 STORM WATER POLLUTION PREVENTION PLAN

This Storm Water Pollution Prevention Plan (SWPPP) was developed to set operating guidelines during construction activities. A copy of this SWPPP shall be retained at the construction site throughout the duration of this project.

The Contractor shall meet all conditions of this SWPPP and all conditions within the NYSDEC SPDES General Permit for Stormwater discharges from Construction Activities - Permit No. GP-0-20-001 dated January 29, 2020. The contractor shall be responsible for all measures of the SWPPP including being responsible for any subcontractors who may implement the SWPPP.

During the course of the project and upon approval by the owner, the contractor shall amend the plan whenever there is a change in construction, operation, or maintenance, which may have an effect on the potential for the discharge of pollutants. In addition, if a new subcontractor is utilized at the site who will implement tasks included in the plan, the SWPPP shall be amended. Furthermore, should the contractor wish to amend any design aspect of the SWPPP, the SWPPP preparer must be notified and must approve or address the change.

3.1 Site Description

The project site is located on the west side of Lake Shore Road (NYS Route 5) between Odell Street and Ridge Road and is part of the New York State Department of Environmental Conservation (NYS DEC) Brownfield Cleanup Program. The site has been divided up into various Brownfield cleanup sub-sites which are to be capped-in-place with clean fill. All the sub-sites zoned to be Medium Industry Districts, on the western portion of the property, have already been capped-in-place. Areas which have not been capped yet have a brush cover with various trees scattered throughout.

This project site is governed by a Site Management Plan. The Contractor shall comply with the requirements of this Site Management Plan in all facets of the project, including, but not limited to: excavation, soil handling and disposal, cover placement, backfill materials procurement, and community air monitoring.

Within recent years, additional site improvements have also been constructed. An asphalt trail and associated storm drainage system consisting of yard drains along the trail have been constructed. This trail is within a 50 foot wide easement along the property frontage with NYS Route 5. In addition, the Dona Street Extension project has been completed to the south of the project limits.

Although the old Bethlehem Steel Plant buildings and structures have been wholly and/or partially demolished on this site, various underground infrastructure remains (such as foundations, basements, etc.). The proposed sanitary sewer and water main layout acknowledges these possible structures and attempts to mitigate any encounters/removals of these existing structures. However, exact locations of existing structures are unknown and further investigation may be required prior to construction.

Development will consist of the following:

- Installation of approximately 4,400± linear feet of PVC sanitary sewer and associated manholes along the future Ridge Road and Odell Street extensions as well as along a portion of NYS Route 5 between the aforementioned roadways extensions.
- Relining of approximately 145± linear feet of existing sanitary sewer.
- Installation of approximately 1,600± linear feet of DIP water main and associated appurtenances along the future Ridge Road and Odell Street extensions.
- Removal and/or abandonment of the exiting sanitary sewer system within the work area.
- Boring and jacking under NYS Route 5 for installation of a steel casing pipe and ductile iron water main.
- Associated site restoration.

The total anticipated ground disturbance during construction of this project will be approximately 1.10 acres. There will be no increase in impervious area since the site will be restored to existing conditions. Since the construction of this site will disturb

more than one acre, a Storm Water Pollution Prevention Plan (SWPPP), in accordance with the New York State Department of Environmental Conservation (NYSDEC) standards must be prepared and a Notice of Intent (NOI) must be filed prior to beginning construction.

Per FEMA FIRMette, panel number 36029C328J, no portion of the proposed improvements are within a 100-year flood plain.

Per the USDA NRCS Web Soil Survey for the site, the existing soils on site consist of Urban Land. A soil boring exploration was performed at the project site in June, 2021. The report indicates that the underlying soils consists of miscellaneous fill material which is comprised of concrete, slag, gravel, silt, sand, bricks, coal, etc.

Upon review of the New York State Historic Preservation Office's GIS for Archeology and National Register online resources tool, and furthermore, per NYS Office of Parks, Recreation and Historic Preservation correspondence letters, neither construction activities nor the stormwater discharge from this site will have an effect upon historic properties in or eligible for inclusion in the State and National Registers of Historic Places.

B. Below is a description of the intended sequence of major construction activities which involve soil disturbance:

- Clear, grub and install temporary erosion and sediment controls simultaneously where possible.
- Remove debris from site. (Debris to be disposed of in a NYSDEC approved landfill approved to accept this type of material.)
- Remove, stockpile and seed any excess topsoil and install temporary erosion and sediment controls simultaneously.
- Install sanitary sewer and water main.
- Install pavement and pour concrete sidewalks
- Replace remaining topsoil and seed and mulch all areas disturbed from construction activities.
- After stabilization, remove temporary erosion and sediment controls.

C. Plans and details for temporary stormwater controls have been included in Appendix F-1. The plans have been included to indicate the locations of erosion and sediment controls.

The owner/operator is:	Buffalo and Erie County ILDC 95 Perry Street, Suite 403 Buffalo, NY 14203
The contact person is:	Sean Fallon (Phone) 716-362-8388 (Email) sfallon@ecidany.com

3.2 Construction Controls

The Contractor shall be required to construct and maintain the following controls in accordance with this document and the associated Contract Documents for this project. There shall not be more than five (5) acres of disturbed soil at any one time without prior written approval from the NYSDEC.

A. Stabilization Practices.

1. Seeding.
   Immediately after completion of grading operations, topsoil shall be replaced and all areas disturbed from grading operations shall be seeded in an effort to stabilize the site. Where land disturbance is necessary, temporary seeding or mulching must be used on areas which will be exposed for more than 14 days. Permanent stabilization should be performed as soon as possible after completion of grading.

2. Mulching.
   Directly after seeding, all disturbed areas shall be mulched to prevent surface compaction, reduce runoff and erosion, control weeds and help establish plant cover.

3. Preservation of Vegetation.
   The contractor shall make every effort to protect trees, shrubs, ground cover and any other vegetation adjacent to the work areas. The purpose of preserving existing vegetation where obtainable is to reduce soil erosion and enhance water quality.

4. Dust Control.
   Dust resulting from land-disturbing activities shall be controlled to prevent surface and air movement of dust from disturbed soil surfaces. Dust control measures are necessary on construction roads, access points and other disturbed areas subject to dust movement.

5. Equipment/Material Storage.
   An equipment and material storage area shall be determined by the site contractor prior to any ground disturbance. The location of the storage area may be modified if deemed necessary. The storage area will be graded to insure that any material spillage shall be directed away from the adjacent property. In addition, any identified chemical spills (oil, grease, etc.) shall be addressed immediately, a written log prepared and kept on-site with the SWPPP and appropriate local officials contacted, if necessary.

6. Temporary Soil Stockpiles.
   A temporary stockpile area shall be determined by the site contractor prior to any ground disturbance. The shape, size and location of this area may be modified by the site contractor if deemed necessary. The stockpile area shall be perimeter protected with silt fence and seeded as soon as possible to minimize the potential for sediment

transport and erosion.

7. Staging Area
   The contractor staging area shall be determined by the site contractor prior to any ground disturbance. The shape, size and location of this area may be modified by the site contractor if deemed necessary.

B. Structural Practices.

1. Storm Drain Inlet Protection (Temporary)
   - A storm drain inlet barrier shall be installed around inlets. The purpose is to prevent sediment - laden water from entering inlets to a storm drain system.
   - Inspect and clean after every storm. Sediment should be removed when 50 percent of the storage volume is achieved. This material should be incorporated in the site in a stabilized manner.

C. Other Pollution Prevention Measures (Chemicals and Debris)
   - The Contractor shall be responsible for providing onsite trash receptacles appropriate to store all litter, construction chemicals and construction debris. The contents of the receptacles shall be properly disposed of at a NYSDEC licensed waste facility (or equal).
   - Hazardous products shall be maintained in their original containers when possible, and be kept with their original labels and applicable Material Safety Data Sheets (MSDS);
   - Fertilizers shall only be applied as recommended by the manufacturer, and once applied shall be worked into the soil to limit exposure to storm water runoff. Storage shall be within an enclosed or covered area.
   - Paints, coatings and sealants shall be maintained in a tightly enclosed, leak-proof container at all times. Excess materials shall be disposed of as required by applicable laws and regulations.
   - Excess concrete material shall be removed and disposed of off-site in an appropriate manner. Concrete wash water shall not be allowed to discharge to storm water conveyances.
   - All petroleum product spills, if such occurs, shall be cleaned up immediately, the source of the spill be repaired or removed, and contained material shall be disposed of as required by applicable law. In the event a spill, the contractor shall contact the NYSDEC Spills Hotline at 1-800-457-7362 to report such spill. Within 2 hours of discovery, except spills which meet all of the following criteria:
     1) The quantity is known to be less than 5 gallons; and
     2) The spill is contained and under the control of the spiller; and
     3) The spill has not and will not reach the State's water or any land; and
     4) The spill is cleaned up within 2 hours of discovery.
     5) A spill is considered to have not impacted land if it occurs on a paved surface such as asphalt or concrete. A spill in a dirt or gravel parking lot is considered to have impacted land and is reportable.

More details on notification and reporting requirements can be found at the NYSDEC Website (http://www.dec.ny.gov/chemical/8428.html

D. Good Housekeeping and Control of Construction Wastes and Chemicals

1. Good Housekeeping
It is anticipated that construction materials such as concrete, asphalt, petroleum based products, stone, and fertilizers will be present on-site at various stages during the project. In order to prevent the conveyance to and contamination of any adjacent and/or downstream property, lands or water bodies, good housekeeping practices shall be employed. Such precautions shall include:
- Storing of only enough materials to complete the project, or active phases of the project;
- Materials stored on-site shall be stored in a neat and orderly manner and in their appropriate containers and, if possible, under a covered area or enclosed structure;
- The manufacturer's recommendations for use and disposal shall be followed at all times;
- The project site superintendent shall inspect the site daily to ensure proper use, storage and disposal of all materials on-site.

2. Hazardous Products
Hazardous products shall be maintained in their original containers when possible, and be kept with their original labels and applicable Material Safety Data Sheets (MSDS);
- All petroleum product spills, if such occurs, shall be cleaned up immediately, the source of the spill be repaired or removed, and contained material shall be disposed of as required by applicable law.
- Fertilizers shall only be applied as recommended by the manufacturer, and once applied shall be worked into the soil to limit exposure to storm water runoff. Storage shall be within an enclosed or covered area.
- Paints, coatings and sealants shall be maintained in a tightly enclosed, leak-proof container at all times. Excess materials shall be disposed of as required by applicable laws and regulations;
- Excess concrete material shall be removed and disposed of off-site in an appropriate manner. Concrete wash water shall not be allowed to discharge to storm water conveyances.

3.3 Storm Water Management.

The best approach to storm water management for construction activities is through the use of self-designed Storm Water Pollution Prevention Plan (SWPPP). The development of the SWPPP through the use of Best Management Practices (BMP) is to prevent erosion and pollutants from the construction materials mixing with storm water runoff and being discharged from the project site. BMP's should be designed to prevent, or at least control,

the pollution of storm water before it has a chance to affect receiving waters. Using BMP's in this way improves the discharge water quality.

Specific requirements for management of storm water and maintaining water quality include, but are not limited to:

A. There shall be no increase in turbidity that will cause a substantial visible contrast to natural condition;
B. There shall be no suspended, colloidal, and settleable solids that will cause deposition or impair the waters for their best usages, and;
C. There shall be no residue from oil and floating substances, visible oil film, globules or grease.

In addition, local ordinances may affect these Best Management Practices. Any conditions or specific local ordinances are to be included in the development of the BMP's for the project.

3.4 Post Construction Water Quality & Quantity Controls

A. Chapters 3-5 of the NYSDEC Stormwater Management Design Manual (SMDM) provides a green infrastructure approach to stormwater management to reduce a site's impact on the aquatic ecosystem through the use of site planning techniques, runoff reduction techniques, and standard SMP's. Runoff Reduction Volume (RRv) is the reduction of the total Water Quality Volume (WQv) by application of green infrastructure techniques and SMP's to replicate pre-development hydrology.

Per Appendix B , Table 1, this project is classified as a construction activity that requires the preparation of a SWPPP that only includes erosion and sediment controls since the project only proposes the installation of linear utilities (sanitary sewer and water main). Therefore, no post construction water quality and quantity controls are required.

3.5 Construction and Waste Materials

Some of the construction materials expected to be stored onsite include precast concrete drainage structures, PVC pipe, DIP pipe, under drain pipe, etc. These materials will be stored in the contractor's staging area. The Contractor shall install additional silt fence around the perimeter of both the staging and topsoil stockpile areas, should contaminated runoff flow off the area.

3.6 Other Requirements.

A. Any discharges other than storm water must be in compliance with the appropriate SPDES permit (other than this permit).
B. No solid materials including building materials shall be discharged to waters of the United States, except as authorized by a federal or state law.
C. All construction activities shall be in compliance with all federal, state and local laws as

required.

3.7 Inspections.

A. Inspections are important for visually evaluating potential storm water runoff pollution sources at the facility. All projects should be inspected periodically to ensure contaminants are not present in the storm water exiting a project site. On projects which apply for coverage under the SPDES General Permit, qualified inspectors of the Owner shall inspect and evaluate the site. Qualified inspectors are persons knowledgeable in the principles and practices of erosion and sediment control such as a licensed professional engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.

B. The Owner shall have a qualified inspector conduct an assessment of the site prior to the commencement of construction and certify in an inspection report that the erosion and sediment controls described in the SWPPP have been installed or implemented. Following the commencement of construction, site inspections shall occur at least once every seven calendar days. For construction sites where soil disturbance activities are on going and the owner or operator has received authorization to disturb greater than five (5) acres of soil at any one time, the qualified inspector shall conduct at least two (2) site inspections every seven (7) calendar days. When performing just two (2) inspections every seven (7) calendar days, the inspections shall be separated by a minimum of two (2) full calendar days.

C. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the qualified inspector shall conduct a site inspection at least once every thirty (30) calendar days. The owner or operator shall notify the Regional Office stormwater contact person in writing prior to reducing the frequency of inspections

D. The owner shall prepare a written summary of the project status with respect to compliance with the Permit at a minimum frequency of every three months during which coverage under the Permit exists. The summary should address the status of achieving each component of the SWPPP. The Owner shall post at the site, in a publicly-accessible location, a summary of the site inspection activities on a monthly basis.

E. For construction sites where soil disturbance activities have been shut down with partial project completion, the qualified inspector can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved final stabilization and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The owner or operator shall notify the Regional Office stormwater contact person in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the owner or

operator shall have the qualified inspector(s) perform a final inspection and certify that all disturbed areas have achieved final stabilization, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the Notice of Termination (N.O.T.). The owner or operator shall then submit the completed N.O.T. form to the address in Part II.A.1 of the permit.

F. Each inspection report shall, at the minimum, include the following:

- Date and time of inspection
- Name and title of person(s) performing inspection.
- A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection
- A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any discharges of sediment from the construction site. Include discharges from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow.
- On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period.
- Indicate on a site map all areas of the site map that have undergone temporary or permanent stabilization.
- Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period.
- Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of the sediment storage volume.
- Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (silt sock) and containment systems (sediment basins).
- Identification of all erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced
- Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching.
- Document any excessive deposition of sediment or ponding water along barriers or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water.
- Location where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking
- Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards

- Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s).

F. The process for conducting the evaluation shall follow these steps:

- Review the Storm Water Pollution Prevention Plan and draw up a list of any items of concern.
- List all specified control measures and areas covered in the plan.
- Conduct inspections to determine whether all storm water pollution prevention measures are accurately identified in the plan, are in place, and working properly.
- Document findings and inspections in a site log book.
- Modify SWPPP as appropriate. (Note: The plan shall be modified by the contractor and site inspector within 7 days of the inspection).

G. Within one business day of the completion of an inspection, the qualified inspector shall notify the owner or operator and appropriate contractor (or subcontractor) identified in Contractor's Certification Form of any corrective actions that need to be taken. The contractor (or subcontractor) shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

H. All inspection reports shall be signed by the qualified inspector. A copy of the inspection reports shall be maintained on site with the SWPPP.

A copy of the erosion and sediment control inspection checklist has been included in Appendix C-1.

3.8 Maintenance.

The contractor is required to inspect and maintain all soil erosion and siltation controls throughout the duration of the project and until final stabilization of the site. "Final Stabilization" means that all soil disturbing activities at the site have been completed, and that a uniform, perennial vegetative cover with a density of 80% has been obtained.

Maintenance shall include, but not be limited to, repair or replacement of any existing controls, removal of sediment and any other measures deemed necessary, which would reduce soil erosion and siltation runoff.

3.9 Contractors.

The contractor must sign a SWPPP certification form before undertaking any construction activity at the site identified in the Storm Water Pollution Prevention Plan. The contractor is responsible for any and all subcontractors working on the SWPPP. A copy of the Contractor's Certification Form has been included in Appendix D-1.

4.0 RECORD RETENTION

The owner or operator shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the site achieves final stabilization. This period may be extended by the Department, in its sole discretion, at any time upon written notification

5.0 NOTICE OF TERMINATION REQUIREMENTS

A. Prior to filing a Notice of Termination (NOT) the Owner shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that all disturbed areas have achieved final stabilization; and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the NOT.
B. Post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, the owner or operator has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.
C. Post-construction stormwater management practices that are privately owned, the owner or operator has a deed restriction in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.
D. Post-construction stormwater management practices that are privately owned, but will be maintained by a municipality, require an executed maintenance agreement be in place with the municipality that will maintain the post-construction stormwater management practice(s). Any right-of- way(s) needed to maintain such practice(s) must have been deeded to the municipality in which the practice(s) is located.

In addition, the Owner must certify that the permanent structure(s) have been constructed as described in the SWPPP.

When the project is completed and the site has been stabilized, the Owner must submit a NOT. A copy of the NOT form has been included in Appendix E-1. The NOT form shall be submitted to the following address:

NYS DEC "Notice of Termination"
Bureau of Water Permits
625 Broadway
Albany, NY 12233-3505

OPERATOR CERTIFICATION

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

_____

Signature Date

_____

Name, Title

_____

Affiliation

APPENDIX A-1

NYSDEC SPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED FROM CONSTRUCTION ACTIVITY
PERMIT NO. GP-0-20-001

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2020 Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator

1-23-20

Authorized Signature Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System ("NPDES")* permit or by a state permit program. New York administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of "*construction activity*", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a *point source* and therefore, pursuant to ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

Table of Contents

Part 1. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;

2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State.*

3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

B. Effluent Limitations Applicable to Discharges from Construction Activities

*Discharge*s authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* (“SWPPP”) the reason(s) for the

deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:

   (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharge*s;

   (ii) Control stormwater *discharge*s, including both peak flowrates and total stormwater volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;

   (iii) *Minimize* the amount of soil exposed during *construction activity*;

   (iv) *Minimize* the disturbance of *steep slopes*;

   (v) *Minimize* sediment *discharge*s from the site;

   (vi) Provide and maintain *natural buffer*s around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharge*s, unless *infeasible*;

   (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;

   (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

   (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.

b. **Soil Stabilization**. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments

listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

c. **Dewatering**. *Discharge*s from *dewatering* activities, including *discharge*s from *dewatering* of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures**. Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:

(i) *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;

(ii) *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use) ; and

(iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Prohibited *Discharge*s.** The following *discharge*s are prohibited:

(i) Wastewater from washout of concrete;

(ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

(iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;

(iv) Soaps or solvents used in vehicle and equipment washing; and

(v) Toxic or hazardous substances from a spill or other release.

f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

C. Post-construction Stormwater Management Practice Requirements

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices ("SMPs") are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

a. Sizing Criteria for New Development

(i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume ("Cpv"): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
(2) The site discharges directly to tidal waters, or fifth order or larger streams.

(iv) *Overbank* Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
(1) the site discharges directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

(v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
(1) the site discharges directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

b. *Sizing Criteria* for *New Development* in Enhanced Phosphorus Removal Watershed

(i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible.*

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

(iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
(2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.

(iv) *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

(v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that *overbank* control is not required.

c. Sizing Criteria for Redevelopment Activity

(i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.

(1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or

(2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or

(3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or

(4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 – 4 above.

(ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iii) *Overbank* Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site

d. Sizing Criteria for Combination of Redevelopment Activity and New Development

Construction projects that include both New Development and Redevelopment Activity shall provide post-construction stormwater management controls that meet the sizing criteria calculated as an aggregate of the Sizing Criteria in Part I.C.2.a. or b. of this permit for the New Development portion of the project and Part I.C.2.c of this permit for Redevelopment Activity portion of the project.

D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

E. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.

2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharge*s; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.

3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharge*s from *construction site* de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.

4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **not** authorized by this permit:

1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharge*s that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;

3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;

4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an *endangered or threatened species* unless the *owner or*

operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;

6. *Construction activities* for residential, commercial and institutional projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

7. *Construction activities* for linear transportation projects and linear utility projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.D.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:

   a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.

      - 1-5 acres of disturbance - 20 feet
      - 5-20 acres of disturbance - 50 feet
      - 20+ acres of disturbance - 100 feet, or

   b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
      (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
      (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
      (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
      (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or

   c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

(i) No Affect
(ii) No Adverse Affect
(iii) Executed Memorandum of Agreement, or

d. Documentation that:

(i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharge*s from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

Part II. PERMIT COVERAGE

A. How to Obtain Coverage

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the “MS4 SWPPP Acceptance” form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.

3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4* . This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

B. Notice of Intent (NOI) Submittal

1. Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (http://www.dec.ny.gov/). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

   NOTICE OF INTENT
   NYS DEC, Bureau of Water Permits
   625 Broadway, 4th Floor
   Albany, New York 12233-3505

2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.

3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.

4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

C. Permit Authorization

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.

2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:

   a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,

   b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

c. the final SWPPP has been prepared, and

d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.

3. An *owner or operator* that has satisfied the requirements of Part II.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

   a. For *construction activities* that are <u>not</u> subject to the requirements of a *regulated, traditional land use control MS4*:

      (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or

      (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has <u>not</u> been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;

      (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:

(i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed "*MS4* SWPPP Acceptance" form, or

(ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.

4. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.C. of this permit.

D. General Requirements For Owners or Operators With Permit Coverage

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination ("NOT") has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.

2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor's or subcontractor's certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the *construction site* until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land*

use control MS4, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.

c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.

e. The *owner or operator* shall include the requirements above in their SWPPP.

4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..

5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

6. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the

regulated, traditional land use control MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice.

E. Permit Coverage for Discharges Authorized Under GP-0-15-002

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of *a construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, unless otherwise notified by the Department.

   An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

F. Change of Owner or Operator

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4,* the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.

2. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.B.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

3. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or*

operator was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.

2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.

3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.

4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP, including construction drawings:

    a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*;

c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority; and

d. to document the final construction conditions.

5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.

6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor.* The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

   The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

   "I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharge*s from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:

    a. Background information about the scope of the project, including the location, type and size of project

b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge*(s);

c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);

d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;

e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;

f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;

g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;

k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the *construction site*; and

l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

   Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

   The post-construction stormwater management practice component of the SWPPP shall include the following:

   a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;

c. A Stormwater Modeling and Analysis Report that includes:
   (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;

   (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;

   (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;

   (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;

   (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and

   (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;

d. Soil testing results and locations (test pits, borings);

e. Infiltration test results, when required; and

f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria,* Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

C. Required SWPPP Components by Project Type

Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.

2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.

3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

C. Qualified Inspector Inspection Requirements

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- New York State Erosion and Sediment Control Certificate Program holder
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:

   a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located

in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and

d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.

b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.

d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization,* and all temporary, structural erosion and sediment control measures have been removed*;* and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.B.1 of this permit.

e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization,* all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.

4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

a. Date and time of inspection;

b. Name and title of person(s) performing inspection;

c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;

d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;

e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;

f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;

g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);

k. Identification and status of all corrective actions that were required by previous inspection; and

l. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

6. All inspection reports shall be signed by the *qualified inspector.* Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.B.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

   a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;

c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. of this permit.

d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.

3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.

4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) required in Part V.A.3. of this permit.

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:

a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),

c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,

d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

Part VI. REPORTING AND RETENTION RECORDS

A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

B. Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.B.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

B. Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

C. Enforcement

Failure of the *owner or operator,* its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to $37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit , or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:

    a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) the chief executive officer of the agency, or

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,

superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.

3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.

4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

   It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Requirement to Obtain Coverage Under an Alternative Permit

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge*(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. Proper Operation and Maintenance

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the owner’s or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.

4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions

Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

R. Other Permits

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

APPENDIX A – Acronyms and Definitions

Acronyms

APO – Agency Preservation Officer
BMP – Best Management Practice
CPESC – Certified Professional in Erosion and Sediment Control
Cpv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DOW – Division of Water
EAF – Environmental Assessment Form
ECL - Environmental Conservation Law
EPA – U. S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review
SEQRA - State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

Definitions

All definitions in this section are solely for the purposes of this permit.

Agricultural Building – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

Agricultural Property –means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both "sewage" and "stormwater".

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for "*Construction Activity(ies)*" also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Construction Site – means the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities"* and "*Larger Common Plan of Development or Sale" also.*

Dewatering – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a *construction site* by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system

and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or *point source*.

Embankment –means an earthen or rock slope that supports a road/highway.

Endangered or Threatened Species – see 6 NYCRR Part 182 of the Department's rules and regulations for definition of terms and requirements.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Equivalent (Equivalence) – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

Groundwater(s) - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Historic Property – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Infeasible – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Minimize – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State*;*
(ii) Designed or used for collecting or conveying stormwater;
(iii) Which is not a *combined sewer*; and
(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Natural Buffer –means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

New Development – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

Nonpoint Source - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

Overbank –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

Performance Criteria – means the design criteria listed under the "Required Elements" sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

Point Source - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq .

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Redevelopment Activity(ies) – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

Routine Maintenance Activity - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

Site limitations – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

Sizing Criteria – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank* Flood (Qp), and Extreme Flood (Qf).

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Steep Slope – means land area designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%) , or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

Streambank – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

Stormwater Pollution Prevention Plan (SWPPP) – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporarily Ceased – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and *nonpoint source*s. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for *point source* discharges, load allocations (LAs) for *nonpoint source*s, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed

training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B – Required SWPPP Components by Project Type

Table 1
Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home not located in one of the watersheds listed in Appendix C or not *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E
- Construction of a barn or other *agricultural building*, silo, stock yard or pen.

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects
- Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover
- Cross-country ski trails and walking/hiking trails
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path.
- Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

Table 1 (Continued) CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that *alter hydrology from pre to post development* conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

Table 2
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family home that disturbs five (5) or more acres of land
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

Table 2 (Continued)

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover,* and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River **-** Figure 1
- Onondaga Lake Watershed **-** Figure 2
- Greenwood Lake Watershed **-**Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

Figure 1 - New York City Watershed East of the Hudson

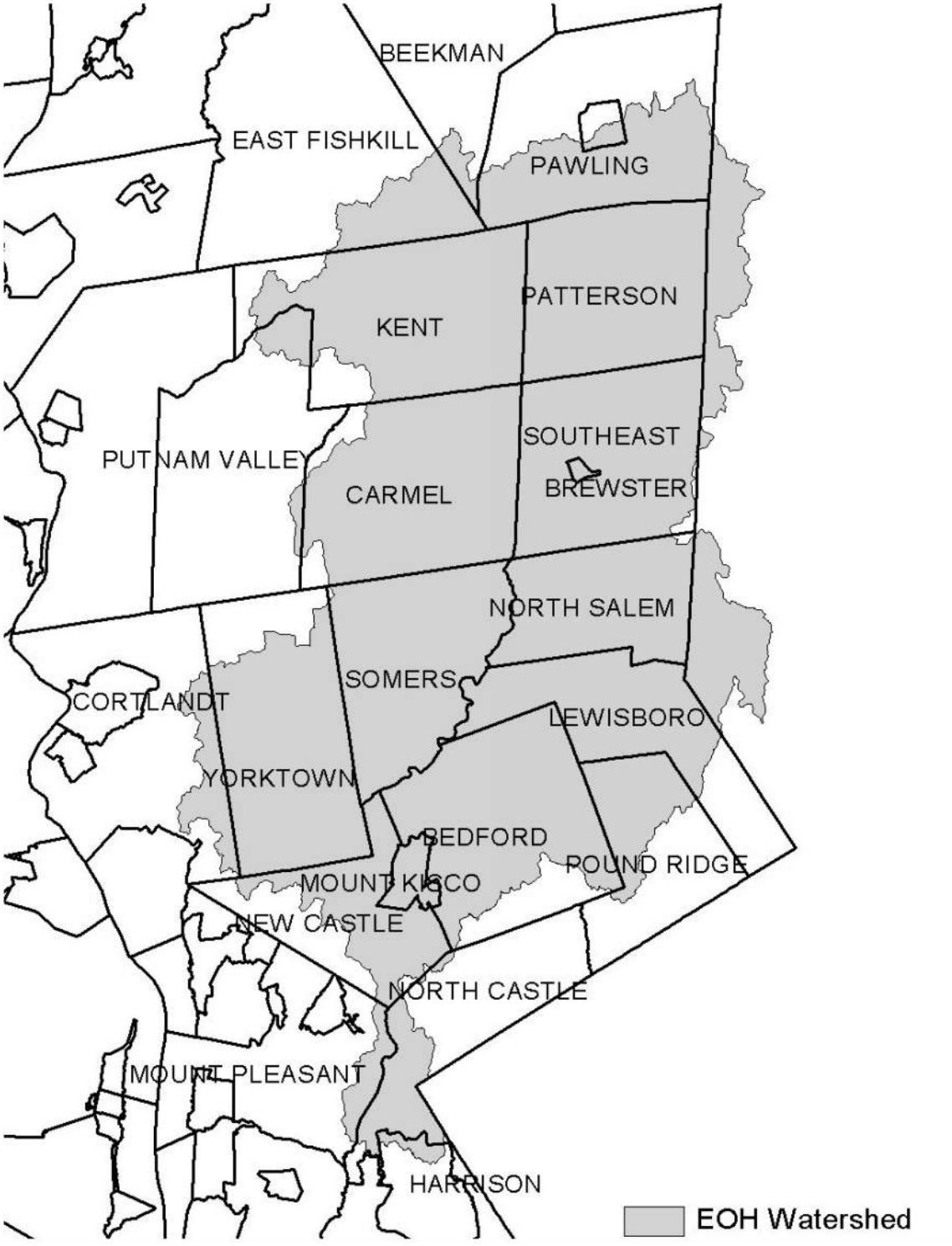


Figure 2 - Onondaga Lake Watershed

Figure 3 - Greenwood Lake Watershed

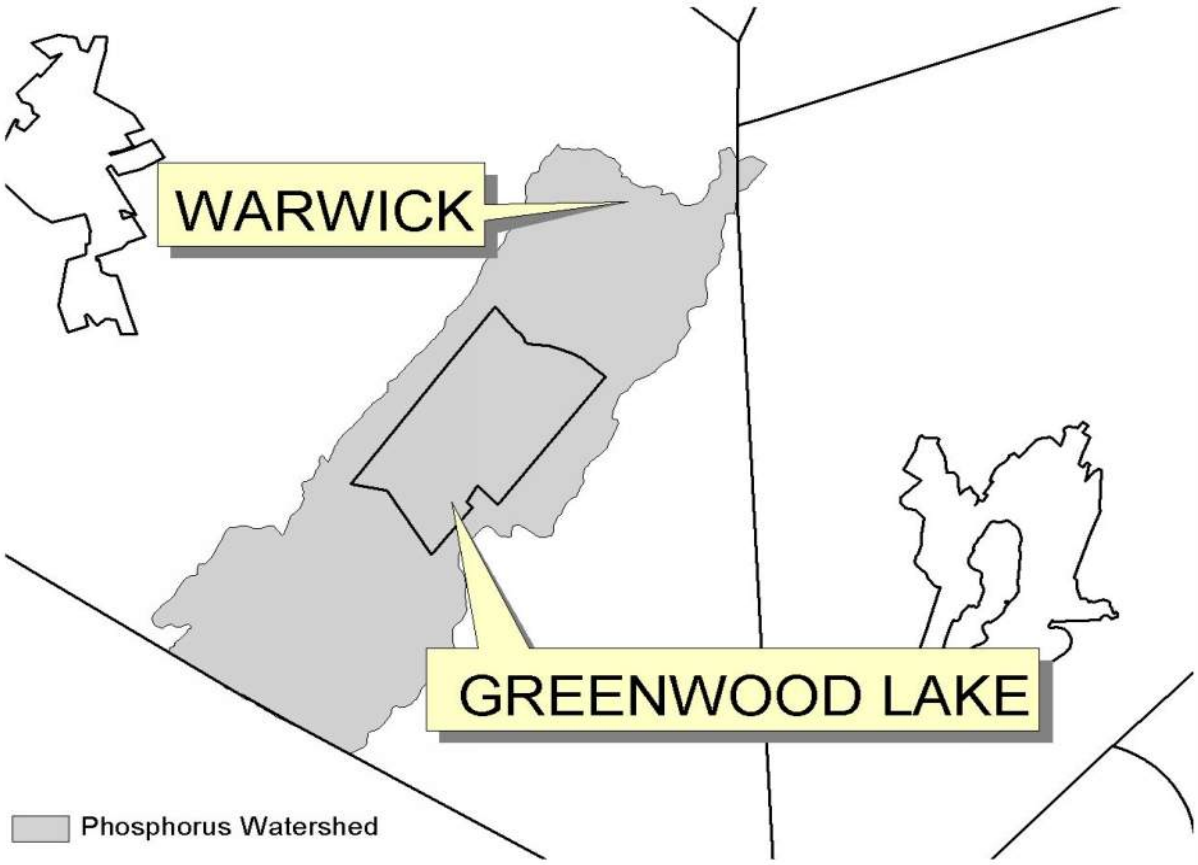


Figure 4 - Oscawana Lake Watershed

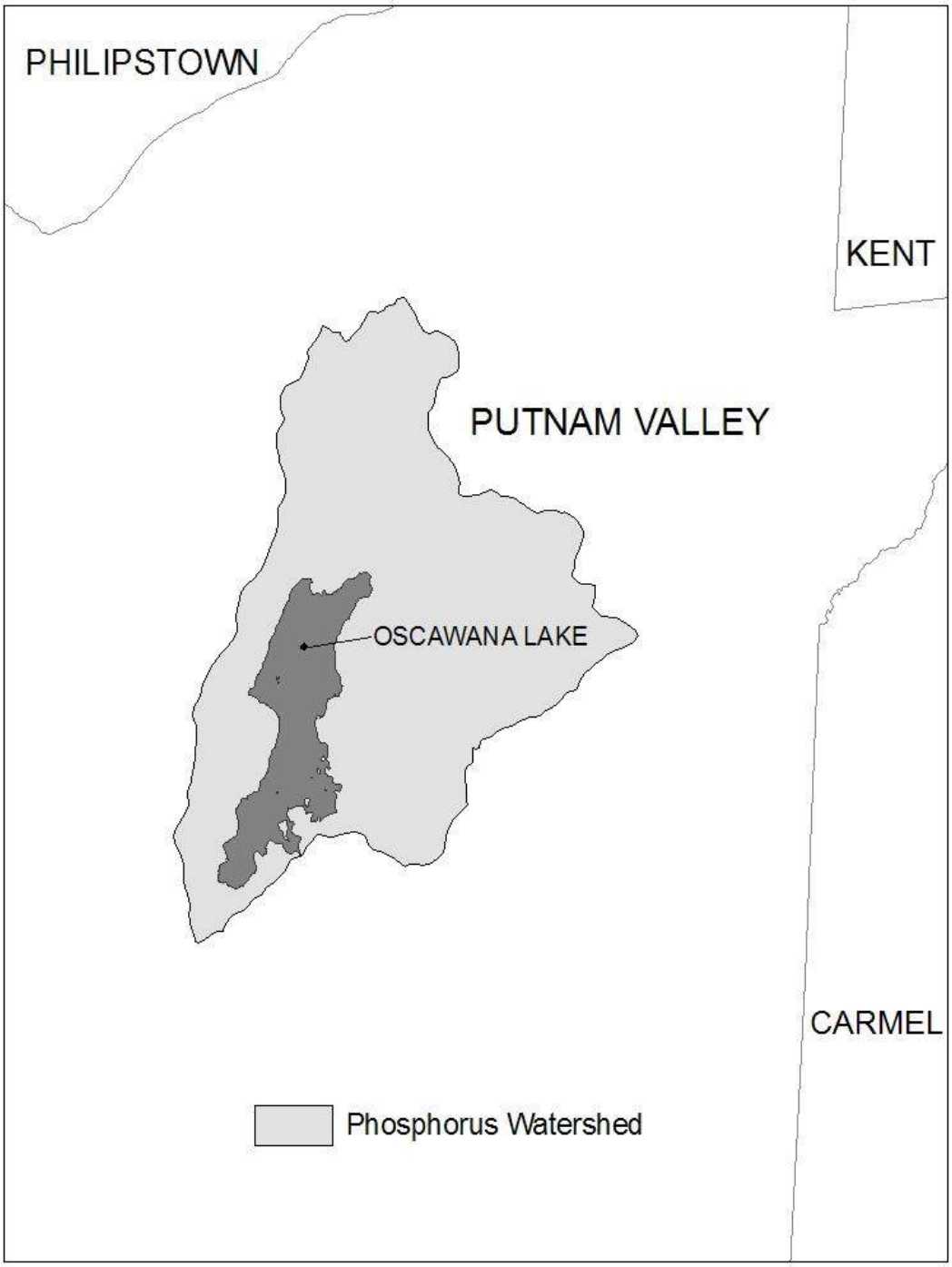
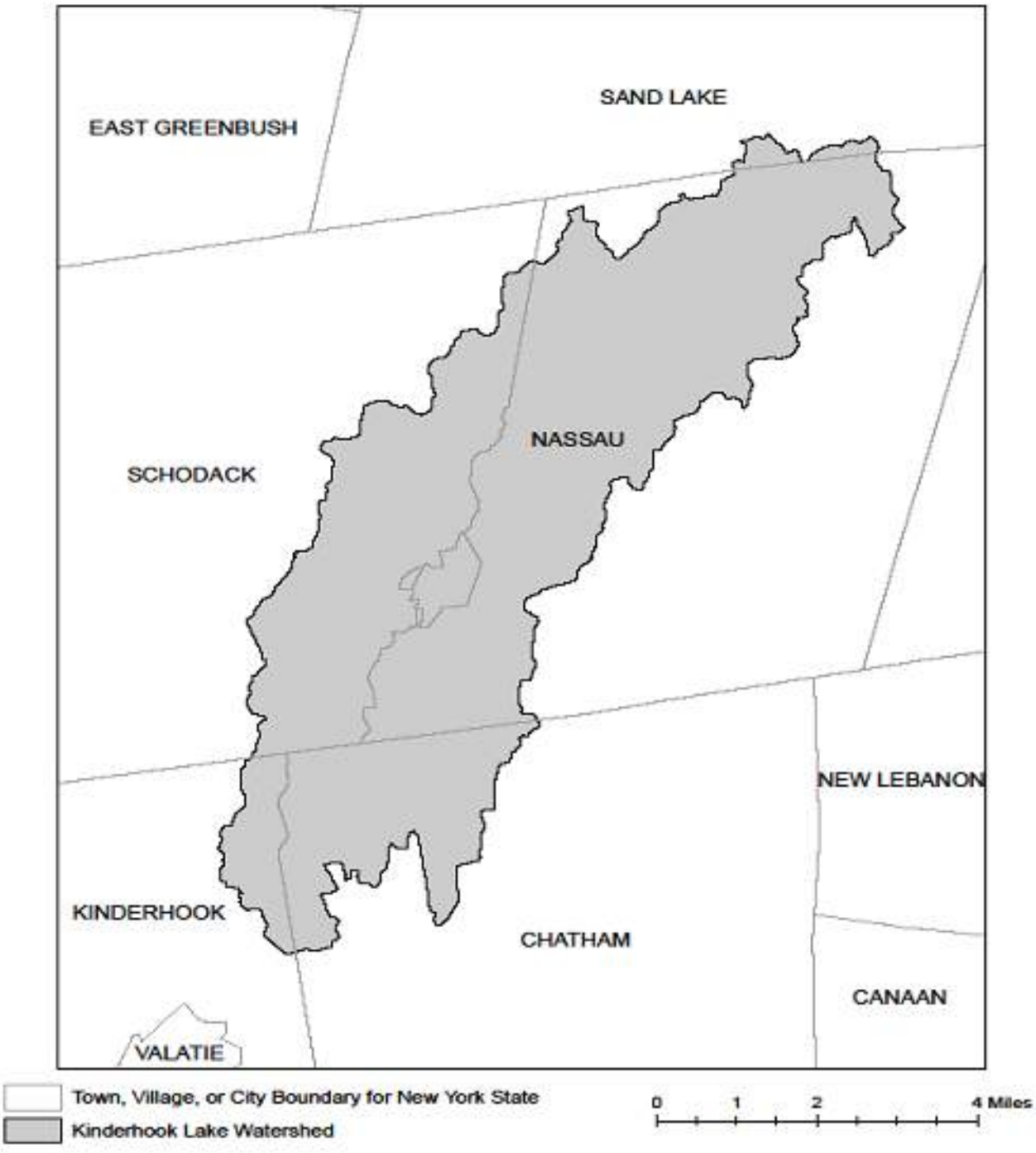


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Watersheds with Lower Disturbance Threshold

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River **-** See Figure 1 in Appendix C

APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY	WATERBODY	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

303(d) Segments Impaired by Construction Related Pollutant(s)

Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

APPENDIX F – List of NYS DEC Regional Offices

Region	Covering the following counties:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators	DIVISION OF WATER (DOW) Water (SPDES) Program
1	Nassau and Suffolk	50 Circle Road Stony Brook, NY 11790 Tel. (631) 444-0365	50 Circle Road Stony Brook, NY 11790-3409 Tel. (631) 444-0405
2	Bronx, Kings, New York, Queens and Richmond	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4997	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4933
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester	21 South Putt Corners Road New Paltz, NY 12561-1696 Tel. (845) 256-3059	100 Hillside Avenue, Suite 1w White Plains, NY 10603 Tel. (914) 428 - 2505
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1150 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2069	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	1115 State Route 86, Po Box 296 Ray Brook, NY 12977-0296 Tel. (518) 897-1234	232 Golf Course Road Warrensburg, NY 12885-1172 Tel. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070

APPENDIX B-1

ELECTRONIC NOTICE OF INTENT (eNOI), MS4 SWPPP ACCEPTANCE FORM & NYSDEC ACKNOWLEDGMENT OF NOI

FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE SPDES GENERAL PERMIT

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.32

(Submission #: HPD-V4XW-X1251, version 1)

Details

Originally Started By	Michaela Ott
Submission ID	HPD-V4XW-X1251
Submission Reason	New
Status	Draft

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)
Buffalo and Erie County ILDC

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Fallon

Owner/Operator Contact Person First Name
Sean

Owner/Operator Mailing Address
95 Perry Street, Suite 403

City
Buffalo

State
New York

Zip
14203

Phone
716-362-8388

Email
sfallon@ecidany.com

Federal Tax ID
NONE PROVIDED

Project Location

Project/Site Name
Former Bethlehem Steel - Public Sanitary Sewer and Water Line Extensions

Street Address (Not P.O. Box)
2303 Hamburg Turnpike

Side of Street
West

City/Town/Village (THAT ISSUES BUILDING PERMIT)
City of Lackawanna

State
NY

Zip
14218

DEC Region
9

County
ERIE

Name of Nearest Cross Street
Odell Street

Distance to Nearest Cross Street (Feet)
20

Project In Relation to Cross Street
West

Tax Map Numbers Section-Block-Parcel
141.11-1-52

Tax Map Numbers
NONE PROVIDED

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:
- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates
42.825507391063475,-78.85162330120896

Project Details

2. What is the nature of this project?
New Construction

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse
Industrial

Post-Development Future Land Use
Industrial

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.
NONE PROVIDED

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)
130.8

Total Area to be Disturbed (acres)
1.1

Existing Impervious Area to be Disturbed (acres)
.3

Future Impervious Area Within Disturbed Area (acres)
.6

5. Do you plan to disturb more than 5 acres of soil at any one time?
No

---

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)
0

B (%)
0

C (%)
0

D (%)
100

7. Is this a phased project?
No

8. Enter the planned start and end dates of the disturbance activities.

Start Date
5/1/2022

End Date
9/1/2022

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Smokes Creek

9a. Type of waterbody identified in question 9?
Stream/Creek Off Site

Other Waterbody Type Off Site Description
NONE PROVIDED

9b. If "wetland" was selected in 9A, how was the wetland identified?
NONE PROVIDED

10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?
Yes

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?
No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?
No

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey?
No

If Yes, what is the acreage to be disturbed?
NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?
Yes

16. What is the name of the municipality/entity that owns the separate storm sewer system?
City of Lackawanna

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?
No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

19. Is this property owned by a state authority, state agency, federal government or local government?
Yes

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)
No

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?
Yes

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?
No

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?
NONE PROVIDED

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:
Professional Engineer (P.E.)

SWPPP Preparer
Victor O'Brien

Contact Name (Last, Space, First)
Victor O'Brien

Mailing Address
141 Elm Street, Suite 100

City
Buffalo

State
New York

Zip
14203

Phone
716-955-3014

Email
vobrien@cscos.com

Download SWPPP Preparer Certification Form
Please take the following steps to prepare and upload your preparer certification form:

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form

3) Scan the signed form
4) Upload the scanned document
Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification
NONE PROVIDED
Comment
NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?
Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural
Storm Drain Inlet Protection

Biotechnical
None

Vegetative Measures
Seeding
Mulching
Topsoiling

Permanent Structural
None

Other
NONE PROVIDED

Post-Construction Criteria

*** IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
NONE PROVIDED

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).
NONE PROVIDED

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)
NONE PROVIDED

29. Post-construction SMP Identification
Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)
NONE PROVIDED

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?
NONE PROVIDED

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)
NONE PROVIDED

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?
NONE PROVIDED

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs
Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet)
NONE PROVIDED

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).
NONE PROVIDED

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?
NONE PROVIDED

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)
NONE PROVIDED

CPv Provided (acre-feet)
NONE PROVIDED

36a. The need to provide channel protection has been waived because:
NONE PROVIDED

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)
NONE PROVIDED

Post-Development (CFS)
NONE PROVIDED

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)
NONE PROVIDED

Post-Development (CFS)
NONE PROVIDED

37a. The need to meet the Qp and Qf criteria has been waived because:
NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
NONE PROVIDED

If Yes, Identify the entity responsible for the long term Operation and Maintenance
NONE PROVIDED

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.
Per Appendix B , Table 1, this project is classified as a construction activity that requires the preparation of a SWPPP that only includes erosion and sediment controls since the project only proposes the installation of linear utilities (sanitary sewer and water main). Therefore, no post construction water quality and quantity controls are required.

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs
Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)
NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)
NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)
NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)
NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)
NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Swale (O-1)
NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)
NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)
NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)
NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)
NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)
NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)
NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)
NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)
NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic
NONE PROVIDED

Total Contributing Impervious Area for Wet Vault
NONE PROVIDED

Total Contributing Impervious Area for Media Filter
NONE PROVIDED

"Other" Alternative SMP?
NONE PROVIDED

Total Contributing Impervious Area for "Other"
NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP
NONE PROVIDED

Name of Alternative SMP
NONE PROVIDED

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.
None

If SPDES Multi-Sector GP, then give permit ID
NONE PROVIDED

If Other, then identify
NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?
No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth
NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.
NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?
Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?
NONE PROVIDED

MS4 SWPPP Acceptance Form Download
Download form from the link below. Complete, sign, and upload.
MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload
NONE PROVIDED
Comment
NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download
Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.
Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form
NONE PROVIDED
Comment
NONE PROVIDED

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	Buffalo and Erie County ILDC
2. Contact Person:	Sean Fallon
3. Street Address:	95 Perry Street, Suite 403
4. City/State/Zip:	Buffalo, NY 14203
II. Project Site Information	
5. Project/Site Name:	Former Bethlehem Steel - Sanitary Sewer and Water Line Extensions
6. Street Address:	2303 Hamburg Turnpike
7. City/State/Zip:	Lackawanna, NY 14218
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	
9. Title/Position:	
10. Date Final SWPPP Reviewed and Accepted:	
IV. Regulated MS4 Information	
11. Name of MS4:	
12. MS4 SPDES Permit Identification Number: NYR20A	
13. Contact Person:	
14. Street Address:	
15. City/State/Zip:	
16. Telephone Number:	

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

VI. Additional Information

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

APPENDIX C-1

WEEKLY SOIL EROSION AND SEDIMENT CONTROL INSPECTION CHECKLIST

EROSION AND SEDIMENT CONTROL
INSPECTION CHECKLIST

Project Name:	**Date & Time of Inspection:**
Project Title:	**Current Conditions (Temp., etc.):**
Project No.:	**Reason for Inspection:**
Inspector' Name:	**Contractor:**

Project E&SC Inspection Report No. ____

(Date of Last Inspection - _____**)**

The State Pollutant Discharge Elimination System General Permit for Construction Activity (Permit) requires site inspections to be conducted at least every 7 calendar days.

Prior to conducting site inspection, review the previous site inspection report to identify reported deficiencies and the proposed corrective actions to address these deficiencies. During the site inspection, evaluate whether the implemented corrective actions proposed in the previous site inspection adequately addressed reported deficiencies.

Are the SWPPP, NOI, Acknowledgment of NOI, MS4 Acceptance Form and Contractor Certifications on site and available to review?	**Yes** ☐ **No** ☐ **N/A** ☐
Are the weekly SWPPP inspection reports on site and available to review (either in a SWPPP mailbox or job trailer?	**Yes** ☐ **No** ☐ **N/A** ☐
Did you review the previous site inspection report?	**Yes** ☐ **No** ☐ **N/A** ☐
Did the previous site inspection require an update to the Storm Water Pollution Prevention Plan (SWPPP)?	**Yes** ☐ **No** ☐ **N/A** ☐
If so was the SWPPP updated?	**Yes** ☐ **No** ☐ **N/A** ☐

Project Site Activities

Provide a description of the construction activities that have occurred on site since the last inspection, what activities are currently occurring, and what activities are planned over the course of the next week. The description should consist of general activities, with specific activities identified where appropriate, and as they relate to the implementation and maintenance of Erosion and Sediment Control Measures.

Prior Activities:
Current Activities:
Planned Activities:

Site Map

The project site map shall be utilized as part of the site inspection process. The site map shall be used to visually depict various construction stages of the site, as well as to identify specific areas requiring attention. The various stages are to be depicted by the use of different color highlighters. The following outlines the color to be used for the selected construction activity:

Blue will indicate all disturbed site areas and drainage pathways that have undergone active site work within last 14 days.

Green will indicate site areas which have been temporarily or permanently stabilized.

Yellow will indicate site areas which have not undergone construction activity within the last 14 days but will within the next seven days.

Pink will indicate site areas which have not undergone construction within the last 14 days and will not undergo construction within the next 7 days. Notify contractor that this site area needs to be temporarily or permanently stabilized.

Approximately how many acres are within the Blue area**?** _____ Acres
Approximately how many acres are within the Yellow area? _____ Acres
Approximately how many acres are within the Pink area? _____ Acres
Add all of the acreage from the three areas _____ Acres

If the total area is greater than five (5) acres, then the portion of the site in excess of five acres shall be temporarily or permanently stabilized, unless written permission has been obtained from the NYSDEC in advance for any land disturbance of five acres or greater.

INSPECTION ITEM	YES	NO	PHOTO #	COMMENTS
a. Is there any evidence of sediment deposition or the discharge of sediment laden water to adjacent properties or drainage facilities?				
b. Is there any evidence of sediment deposition in a sediment trapping device? Record percentage _____% (SPDES permit requires sediment to be removed once it exceeds 50% of the sediment storage volume.)				
Is the sediment trapping device in need of maintenance?				
c. Are protected areas such as wetlands, property boundaries, and vegetation preservation areas, properly delineated?				
d. Is there evidence of erosion at the outlet of pipes, swales or ditches?				
e. Is the construction entrance stabilized and operating correctly?				
f. If Diversion Berms and/or Earth Dikes are required, have they been installed?				
If so, are they in need of maintenance?				
g. If Check Dams are required, have they been installed?				
If so, are they in need of maintenance?				
h. Do catch basins and drainage inlets have proper protection - i.e., filter fabric, stone and block, etc. - inlet protection?				
If so, are they in need of maintenance?				
i. Is there any loss of stabilizing vegetation, or seeding and mulching?				
j. Is there evidence of rill or gully erosion occurring on slopes?				

Were the Corrective Action(s) Identified in Last Inspection Report Implemented? Yes ☐ No ☐ N/A ☐ **If yes, Did the Corrective Actions Rectify the Problem? Yes ☐ No ☐ N/A ☐**
Indicate Deficiencies Identified During the Current Site Inspection (which were not already identified in this report):
Who was Notified of Problem(s) and When Were They Notified?
Corrective Actions to be Taken by Whom and When:
Are the Corrective Actions to be taken consistent with the current SWPPP? Yes ☐ No ☐ N/A ☐ **If no, update the SWPPP prior to the next site inspection to reference the inclusion of these corrective actions**

Contractor Signature: _____ **Date:** _____

Inspector's Signature: _____ **Date:** _____

Reviewing P.E.: _____ **Date:** _____

APPENDIX D-1

CONTRACTOR'S CERTIFICATION FORM

CONTRACTOR'S STORM WATER POLLUTION PREVENTION CERTIFICATION FORM

Project Address/Location: _____

Project Name: _____

Contractor's Official Name: _____

Address: _____

Telephone Number: _____

Contractor's Responsibilities: _____

_____

_____

_____

Trained Individual(s) Responsible for SWPPP Implementation

_____ _____

Printed Name of Trained Individual Title

_____ _____

Printed Name of Trained Individual Title

Certification Statement:

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

_____ _____

Printed Name Signature

_____ _____

Title Date

APPENDIX E-1

NOTICE OF TERMINATION (NOT)

FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE SPDES GENERAL PERMIT

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person: | 4a.Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. □ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. □ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? □ yes □ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

□ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:	
Title/Position:	
Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2015)

APPENDIX F-1

SWPPP PLANS & DETAILS

GENERAL NOTES:

1. THE APPROXIMATE LOCATION OF THE UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE TRUE LOCATION AND ELEVATIONS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES. NOTIFY ENGINEER IN INSTANCES WHERE REVISIONS TO DRAWINGS ARE REQUIRED.
2. CONTRACTOR SHALL NOTIFY DIG SAFELY NEW YORK AT LEAST THREE (3) DAYS PRIOR TO START OF WORK. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANIES AND THE OWNER. CONTRACTOR SHALL PROVIDE PRIVATE UTILITY LOCATING SERVICES FOR PRIVATELY OWNED UNDERGROUND UTILITIES IN THE PROJECT AREA IN HIS BID.
3. IN THE EVENT THAT THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES, HE SHALL IMMEDIATELY NOTIFY THE OWNER AND THE AFFECTED UTILITIES REPRESENTATIVE OF SUCH DAMAGE. ANY DAMAGE SHALL PROMPTLY AND SATISFACTORILY BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
4. CONSTRUCTION IS TO CONFORM TO ERIE COUNTY SEWER DISTRICT RULES AND REGULATIONS.
5. THE CONTRACTOR MUST BE ACQUAINTED WITH THE DRAINAGE CHARACTERISTICS OF THE WORK AREA SO THAT HE WILL PROGRESS HIS WORK EFFICIENTLY WITH FULL KNOWLEDGE OF THE POTENTIAL DRAINAGE PROBLEMS.
6. ALL EXISTING DRAINAGE SYSTEMS, INCLUDING DITCHES AND CULVERTS, WITHIN THE CONTRACT LIMITS SHALL BE CLEANED AND KEPT CLEAN AND FREE FLOWING FOR THE DURATION OF THE CONTRACT.
7. PROVIDE TEMPORARY THRUST RESTRAINT AND PIPE SUPPORTS FOR EXISTING PIPING WHENEVER REQUIRED BY THE WORK. CONTRACTOR TO REPLACE OR RESTORE THE EXISTING RESTRAINT SYSTEM OR PIPE SUPPORT SYSTEMS TO LIKE-NEW CONDITION.
8. WHERE CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
9. UNLESS DETAILED, SPECIFIED OR INDICATED OTHERWISE, CONSTRUCTION SHALL BE AS INDICATED IN THE APPLICABLE TYPICAL DETAILS AND GENERAL NOTES. TYPICAL DETAILS ARE MEANT TO APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS OR IN SPECIFIC DRAWINGS.
10. CONTRACTOR IS RESPONSIBLE FOR SECURITY AND FOR THE SECURE STORAGE OF GOODS AND MATERIALS ONSITE.
11. CONTRACTOR TO COORDINATE STAGING AREAS WITH OWNER PRIOR TO START OF CONSTRUCTION.
12. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING AND OTHER DEVICES AS MAY BE REQUIRED OR AS DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF THE ADJACENT STRUCTURES, ROADWAY AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ADJACENT STRUCTURES, ROADWAYS AND ALL UTILITIES ENCOUNTERED IN THIS WORK.
13. TOPOGRAPHIC SURVEY AND BASE MAPPING FOR THIS PROJECT WAS PREPARED BY KHEOPS ARCHITECTURE, ENGINEERING, & SURVEY, DPC. IN JULY OF 2021. THE COORDINATE DATUM IS BASED ON NEW YORK STATE PLANE COORDINATE SYSTEM - WEST ZONE, NAD83 WITH A GRID SCALE FACTOR OF 0.99984579, VERTICAL DATUM IS NAVD88 (NYSNET).
14. EXISTING SANITARY SEWER FLOW MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL ASSUME THE CLOSEST ACTIVE SANITARY SEWER ON THE WEST SIDE OF NYS ROUTE 5, TO WHICH ANY PUMPED BY-PASS FLOW COULD BE DISCHARGED, IS AT THE SOUTH SIDE OF DONA STREET (APPROX. 1,900 LF SOUTH FROM THE PROPOSED SANITARY SEWER WORK). THIS MAY REQUIRE TEMPORARY STORAGE TANKS TO BE UTILIZED TO MAINTAIN SEWER FLOW. CONTRACTOR SHALL SUBMIT DETAILED SEWER BY PASS PLAN PRIOR TO BEGINNING CONSTRUCTION.
15. SANITARY SEWER MANHOLE RIMS SHALL BE FLUSH WITH TOP OF BCP STONE CAPS AND 12" ABOVE GRADE IN LAWN AREAS AND AREAS THAT HAVE NOT BEEN CAPPED YET.
16. TRENCH WIDTHS AND ASSOCIATED SELECT BACKFILL EXTENTS ARE SHOWN SCHEMATICALLY FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO TYPICAL DETAILS FOR ACTUAL WIDTHS AND/OR LIMITS OF TRENCHING AND BACKFILL.
17. ALL PROPOSED SANITARY SEWER IS ASSUMED TO BE INSTALLED PER ECSD STANDARD DETAIL NO. 2, "SHEETED TRENCH".

DEMOLITION NOTES:

1. CONTRACTOR TO REMOVE & DISPOSE OF ALL ITEMS INDICATED & ANY ITEMS INCIDENTAL TO THE CONSTRUCTION AS REQUIRED.
2. CONTRACTOR SHALL PROTECT/PRESERVE ALL EXISTING ITEMS TO REMAIN, INCLUDING, BUT NOT LIMITED TO BUILDINGS, PAVEMENT, OVERHEAD & BURIED UTILITIES, TREES LANDSCAPING, ETC. DAMAGE TO ITEMS SCHEDULED TO REMAIN SHALL BE REPAIRED OR REPLANTED AT NO ADDITIONAL COST TO THE OWNER.
3. UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL HAVE ALL PUBLIC & PRIVATE UNDERGROUND UTILITIES LOCATED AND MARKED PRIOR TO EXCAVATION/ DEMOLITION/ CONSTRUCTION.
4. ALL UTILITY TERMINATIONS SHALL BE IN ACCORDANCE W/ THE APPLICABLE UTILITY COMPANY REQUIREMENTS.
5. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL MATERIALS/DEBRIS REMOVED FROM THE SITE.
6. THIS PLAN IS PREPARED FROM A SURVEY SHOWING KNOWN SURFACE FEATURES. IT IS INTENDED AS A GUIDE TO THE CONTRACTOR, NOT AS A COMPLETE AND UNIVERSAL DEMOLITION PLAN. CONTRACTOR MUST VISIT THE SITE TO CONFIRM DEMOLITION EFFORT PRIOR TO BIDDING.
7. REMOVE CONCRETE SIDEWALK AND/OR PAVEMENT TO THE LIMITS INDICATED. SAW CUT CONCRETE TO THE NEAREST EXISTING CONTROL/EXPANSION JOINT.
8. SAWCUT LINES ARE SHOWN SCHEMATICALLY FOR ILLUSTRATIVE PURPOSES ONLY. ACTUAL WIDTHS AND/OR LIMITS OF SAWCUTTING PAVEMENTS AND SIDEWALKS WILL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND MAY VARY BASED ON REQUIRED TRENCH WIDTH, EXCAVATION MEANS AND METHODS, LOCATION OF EXISTING JOINTS, ETC.
9. ALL UTILITIES AND MANHOLES TO BE ABANDONED SHALL BE CAPPED AND FILLED WITH FLOWABLE FILL.

ERIE COUNTY WATER AUTHORITY (ECWA) NOTES:

1. ALL ELEVATIONS REFER TO USGS NAVD83 DATUM.
2. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND FURNISH COPIES TO THE ENGINEER PRIOR TO COMMENCING WORK.
3. THE CONTRACTOR'S WORK AREA SHALL BE CONFINED TO THE LIMITS OF THE RIGHT-OF-WAYS AND EASEMENTS. THE CONTRACTOR SHALL OBTAIN ANY ADDITIONAL EASEMENTS OR WORK RELEASES SHOULD THE CONTRACTOR REQUIRE ADDITIONAL AREA TO ACCOMMODATE HIS OPERATIONS.
4. THE CONTRACTOR SHALL PROVIDE MAINTENANCE AND PROTECTION OF TRAFFIC IN ACCORDANCE WITH THE ERIE COUNTY HIGHWAY DEPARTMENT STANDARDS AND THE NYSDOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
5. THE LOCATIONS AND DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLANS AND PROFILES ARE APPROXIMATE. OTHER UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED.
   THE CONTRACTOR SHALL PERFORM TEST PITS TO VERIFY THE LOCATION AND ELEVATION OF UTILITIES AT INTERCONNECTIONS AND CROSSINGS AS SHOWN, DIRECTED, OR REQUIRED. THE CONTRACTOR SHALL EXCAVATE IN ADVANCE OF THE PIPE LAYING OPERATION AND EXPOSE ALL EXISTING UNDERGROUND UTILITIES TO PREVENT DAMAGE DURING CONSTRUCTION AND TO DETERMINE REQUIRED CHANGES IN GRADE NECESSARY TO INSTALL THE WATERMAIN TO AVOID CONFLICTS.
6. THE CONTRACTOR SHALL INSTALL THOSE MEASURES REQUIRED TO LIMIT EROSION OF AREAS DISTURBED BY THE WORK. CLEARING SHALL BE PERFORMED ON AN AS-NEEDED BASIS, PHASED TO REDUCE EROSION AND VISUAL IMPACT.
7. BLASTING WILL NOT BE PERMITTED.
8. NO MORE THAN ONE CONNECTION MAY BE MADE TO ANY EXISTING WATERMAIN PRIOR TO TESTING, DISINFECTION, AND APPROVAL OF THE WATERLINE INSTALLATION COMPLETED WORKS APPROVAL REPORT(S) BY THE ERIE COUNTY WATER AUTHORITY AND THE ERIE COUNTY HEALTH DEPARTMENT.
9. THE ERIE COUNTY WATER AUTHORITY SHALL ONLY OPERATE EXISTING VALVES AND FIRE HYDRANTS, INCLUDING NEWLY INSTALLED VALVES AND FIRE HYDRANTS THAT HAVE BEEN PLACED INTO SERVICE.
   THE CONTRACTOR IS ADVISED THAT WATERTIGHT CONDITIONS MAY NOT EXIST WHEN EXISTING VALVES ARE CLOSED.
10. THE CONTRACTOR SHALL HAVE ALL EQUIPMENT, MANPOWER, AND MATERIALS REQUIRED ON SITE AND READY FOR USE PRIOR TO COMMENCING ANY SHUT-DOWN OR REMOVING ANY EXISTING FACILITIES FROM SERVICE. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED CUSTOMERS IN WRITING OF ANY SHUT-DOWN AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE FIRE STATIONS 48 HOURS IN ADVANCE PRIOR TO TAKING ANY FIRE HYDRANTS OUT OF SERVICE. ANY FIRE HYDRANTS NOT IN SERVICE SHALL BE BAGGED IN BURLAP OR PLASTIC. ANY SHUT-DOWN SHALL BE LIMITED TO 4 CONSECUTIVE HOURS. IT MAY BE NECESSARY TO SCHEDULE SHUT-DOWNS AT NIGHT, WEEKENDS, OR OTHER OFF HOURS SO AS TO NOT AFFECT SCHOOLS, BUSINESSES OR OTHER CUSTOMERS, AS DETERMINED BY THE ENGINEER. SHUT-DOWN REQUESTS SHALL BE SUBMITTED TO THE ERIE COUNTY WATER AUTHORITY A MINIMUM OF 5 BUSINESS DAYS IN ADVANCE OF THE REQUESTED SHUT-DOWN DATE.
11. ALL WATERMAIN PIPING SHALL BE INSTALLED WITH A MINIMUM OF 5'-0" OF COVER.
12. ALL WATERMAIN PIPING SHALL BE INSTALLED WITH A MINIMUM OF 1'-6" OF VERTICAL CLEARANCE AND 10'-0" OF HORIZONTAL CLEARANCE FROM SANITARY AND STORM PIPING, MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING.
13. IF THE MATERIAL AT THE DESIGN GRADE IS UNSUITABLE AS DETERMINED BY THE ENGINEER, THE CONTRACTOR, WHEN ORDERED IN WRITING, SHALL EXCAVATE ADDITIONAL MATERIAL TO THE DEPTH NECESSARY AND SHALL BACKFILL TO THE PROPOSED GRADE WITH THE SELECT GRANULAR MATERIAL.
14. THE INSTALLATION OF 90 DEGREE BENDS IN THE WATERMAIN IS NOT ALLOWED, UNLESS APPROVED BY THE ERIE COUNTY WATER AUTHORITY.

   THRUST RESTRAINT FOR WATERMAIN PIPING THROUGH 12-INCH DIAMETER SHALL CONSIST OF THRUST BLOCKS AND PIPE JOINT RESTRAINT.

16. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY UTILITY POLE IN ADVANCE OF ANY EXCAVATION WORK THAT WILL TAKE PLACE WITHIN 5'-0" OF THE UTILITY POLE. THE CONTRACTOR SHALL INCLUDE THE COST OF TEMPORARY POLE SUPPORT IN THE APPROPRIATE BID ITEM.WHERE UTILITY POLES ARE REQUIRED TO BE SUPPORTED DURING CONSTRUCTION, THE CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS WITH THE UTILITY COMPANY.
17. IF MATERIALS ARE ENCOUNTERED DURING THE CONSTRUCTION THAT ARE SUSPECTED OF BEING CONTAMINATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE NYSDEC FOR DIRECTION REGARDING TESTING, SEPARATION, CONTAINMENT, AND DISPOSAL PROCEDURES.
18. EXISTING FIRE HYDRANTS REMOVED DURING CONSTRUCTION AND NOT REINSTALLED AS PART OF THE WORK SHALL BE SCHEDULED AND RETURNED TO THE ERIE COUNTY WATER AUTHORITY SERVICE CENTER, 3030 UNION ROAD, CHEEKTOWAGA, NEW YORK 14227.
19. THE CONTRACTOR SHALL COLD PATCH ALL TRENCH EXCAVATIONS IN TRAVELED AREAS INCLUDING ROADS, DRIVEWAYS, SIDEWALKS, AND PARKING AREAS.
20. THE CONTRACTOR SHALL NOT RESTRICT ACCESS FOR SCHOOL BUSES OR ANY EMERGENCY VEHICLES.
21. THE USE OF EXISTING FIRE HYDRANTS FOR ANY REASON IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ERIE COUNTY WATER AUTHORITY. THIS INCLUDES NEWLY INSTALLED FIRE HYDRANTS THAT HAVE BEEN PLACED INTO SERVICE.
22. THE CONTRACTOR SHALL SUBMIT PROCEDURES FOR TESTING AND DISINFECTION OF THE WATERMAIN TO THE ENGINEER FOR REVIEW PRIOR TO THE START OF TESTING.
23. THE CONTRACTOR SHALL BE PRESENT AND ASSIST IN THE FINAL WALK INSPECTION. THE CONTRACTOR SHALL PROVIDE SUFFICIENT PERSONNEL AND EQUIPMENT TO DEMONSTRATE TO THE ENGINEER THAT ALL VALVES, FIRE HYDRANTS, AND CURB STOPS OPERATE AS REQUIRED.

WATERMAIN TESTING & DISINFECTION NOTES:

1. WATERMAIN FLUSHING AND DISINFECTION SHALL FOLLOW AWWA STANDARD C-651, NOT INCLUDING THE TABLET METHOD.
2. PRESSURE AND LEAKAGE TESTS SHALL FOLLOW AWWA STANDARD C-600 FOR D.I.P. WATERMAIN.

ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT (ECDSM) NOTES:

1. THE ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT (DSM), WHO OPERATES AND MAINTAINS THE EXISTING SEWER LINES AND APPURTENANCES WITHIN ERIE COUNTY SEWER DISTRICTS (ECSD), IS TO BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS FOR ERIE COUNTY SEWER DISTRICTS.
3. ALL PERMITS REQUIRED BY THE FEDERAL, STATE, COUNTY, CITY AND/OR TOWN GOVERNMENTS TO PERFORM WORK MUST BE OBTAINED PRIOR TO THE START OF WORK, AND PAID FOR BY THE CONTRACTOR.
4. IF EASEMENT AND/OR OUT OF DISTRICT AGREEMENTS ARE REQUIRED, THEY MUST BE COMPLETE AND READY TO BE FILED BEFORE THE PROJECT WILL BE APPROVED FOR CONSTRUCTION.
5. THE CONTRACTOR SHALL COMPLY IN ALL RESPECTS TO THE INDUSTRIAL CODE PART (RULE NO.) 53 RELATING TO CONSTRUCTION, EXCAVATION, AND DEMOLITION OPERATIONS AT OR NEAR UNDERGROUND FACILITIES, AS ISSUED BY THE STATE OF NEW YORK DEPARTMENT OF LABOR, BOARD OF STANDARD AND APPEALS.
6. THE CONSTRUCTION OF THE SANITARY SEWER FACILITIES SHALL BE UNDER THE SUPERVISION OF A PERSON OR FIRM QUALIFIED TO PRACTICE PROFESSIONAL ENGINEERING IN NEW YORK STATE UNDER THE EDUCATION LAW OF THE STATE, WHENEVER ENGINEERING SERVICES ARE REQUIRED BY SUCH LAW FOR SUCH PURPOSES.
7. WHERE SUCH SANITARY SEWER FACILITIES ARE UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER, HE/SHE SHALL CERTIFY TO THE DSM AND TO THE APPLICANT THAT THE CONSTRUCTED FACILITIES HAVE BEEN UNDER HIS/HER SUPERVISION AND THAT THE WORK HAS BEEN FULLY COMPLETED IN ACCORDANCE WITH THE APPROVED ENGINEERING REPORTS, PLANS, SPECIFICATIONS, AND APPROVALS.
8. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SITE SAFETY. THE CONTRACTOR'S EQUIPMENT AND METHODS OF OPERATION SHALL BE IN FULL COMPLIANCE WITH OSHA STANDARDS AND SATISFY ALL FEDERAL, STATE AND LOCAL HEALTH AND SAFETY REGULATIONS.
9. THE CONTRACTOR IS ADVISED A TRENCH SHIELD AND/OR SHORING DESIGNED IN ACCORDANCE WITH OSHA STANDARDS SHALL BE USED IN ALL OPEN TRENCH EXCAVATIONS.
10. ANY CONTRACTOR AND/OR PLUMBER PERFORMING WORK IN A CONFINED SPACE (I.E. MANHOLES, WETWELLS, AND CHAMBERS) OWNED BY AN ERIE COUNTY SEWER DISTRICT, MUST CERTIFY TO THE COUNTY THAT THEY HAVE THEIR OWN CONFINED SPACE ENTRY PROGRAM THAT MEETS OR EXCEEDS OSHA'S REGULATIONS. CERTIFICATION MUST BE NOTARIZED BY A NOTARY PUBLIC.
11. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AHEAD OF THE PIPE LAYING OPERATION, SO IF MINOR ADJUSTMENTS MUST BE MADE IN THE PIPE ELEVATION AND/OR ALIGNMENT DUE TO INTERFERENCE FROM THESE UTILITIES, SAID CHANGES CAN BE MADE IN ADVANCE OF THE WORK.
12. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED TREE EXPERT TO REMOVE, WHERE NECESSARY, BRANCHES WHICH INTERFERE WITH THE CONSTRUCTION OPERATION, OR TO REPAIR TREES HAVING SUFFERED DAMAGE BY CONSTRUCTION ACTIVITIES. THE COST INVOLVED IS TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.
13. THE PROPOSED 8 THROUGH 12 INCH DIAMETER SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE CONFORMING TO THE LATEST REVISIONS OF AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) DESIGNATION D-3034, SDR-35, INSTALLED IN ACCORDANCE WITH THE ASTM DESIGNATION D-2321-83A OR THE LATEST REVISION THEREOF, OR APPROVED EQUAL. LARGER DIAMETER PIPES WILL BE REVIEWED ON A CASE BY CASE BASIS.
14. SEWERS SHALL BE LAID WITH STRAIGHT ALIGNMENT BETWEEN MANHOLES AND SHALL BE CHECKED BY USING A LASER BEAM OR LAMPING.
15. SHOULD A FLUID CONDITION BE ENCOUNTERED AT THE TRENCH BOTTOM, THE CONTRACTOR IS TO UNDERCUT THE TRENCH AND PROVIDE SUITABLE FILL MATERIAL (STONE & FABRIC) TO STABILIZE THE TRENCH BOTTOM.
16. SANITARY SEWER BEDDING MATERIAL SHALL BE NO. 1 CRUSHED STONE WITH A GRADATION CONFORMING TO THE *DSM SPECIFICATIONS FOR SUBDIVISIONS AND SANITARY SEWER EXTENSIONS.*
17. BACKFILL SHALL BE OF A SUITABLE MATERIAL REMOVED FROM THE EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSTABLE MATERIALS SHALL NOT BE USED FOR BACKFILL WITHIN TWO (2') FEET OF THE TOP OF THE PIPE.
18. ALL PIPES CROSSING UNDER PAVED AREAS ARE TO BE BACKFILLED TO SUB-GRADE WITH COMPACTED SELECT MATERIAL (NO. 2 CRUSHED STONE) TO FIVE (5') FEET OUTSIDE THE PAVEMENT EDGES OR AS REQUIRED BY THE HIGHWAY PERMIT. IF ANY PROPOSED SEWER RUNS UNDER PAVED AREAS AND HAS LESS THAN FOUR (4) FEET OF COVER, THEN CONCRETE ENCASEMENT IS REQUIRED AS SHOWN ON THE DSM TYPICAL CONCRETE ENCASEMENT DETAIL.
19. SEWERS PARALLEL TO WATERMAINS - *TEN STATE STANDARDS, LATEST EDITION, CHAPTER 30, SECTION 38.31, AND PAGE 30-11:* SEWERS SHALL BE LAID AT LEAST TEN (10') FEET (THREE (3) METERS) HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A TEN (10') FOOT SEPARATION, THE APPROPRIATE REVIEWING AGENCY MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18-INCHES (460 MM) ABOVE THE TOP OF THE SEWER.

   IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE, BOTH THE WATER MAIN AND SEWER MUST BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS OF THE REGULATORY AGENCY AND BE PRESSURE TESTED TO 150 POUNDS PER SQUARE INCH (PSI) (1034 KPA) TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.

18. SEWERS CROSSING WATERMAINS - *TEN STATE STANDARDS, LATEST EDITION, CHAPTER 30, SECTION 38.32, PAGE 30-11 TO 30-12:* SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18-INCHES (460 MM) BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.
21. WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST BE SPECIFIED:
    a. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER PIPE, AND SHALL BE PRESSURE TESTED AT 150 PSI (1034 KPA) TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.
    b. EITHER THE WATER MAIN OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS TEN (10') FEET (THREE (3) METERS) ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION.
    c. THE SEWER SHALL BE ENCASED IN CONCRETE PER THE DSM WATERMAIN CROSSING DETAIL TYPICAL FOR ENCASEMENT
22. THE MANHOLE COVERS ARE TO BEAR THE INSCRIPTION "ECSD SANITARY" AND COMPLY WITH THE DSM STANDARD FRAME AND COVER DETAIL. FOR PRIVATE PROJECTS THE COVERS SHALL BEAR THE INSCRIPTION "SANITARY SEWER" AND COMPLY WITH THE DSM STANDARD FRAME AND COVER (PRIVATE SEWER) DETAIL.
23. BUILDING SANITARY SEWER VENTS MUST BE INSTALLED SIX (6) INCHES ABOVE FINISHED GRADE IN A GRASSY AREA WITH A MUSHROOM CAP. IF THE VENT IS IN A SIDEWALK OR PAVED AREA, THEN PROTECT WITH 6" DIAMETER BOLLARDS (2 MINIMUM).

ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT (ECDSM) NOTES CONTINUED:

24. CLEANOUTS (C.O.) ARE REQUIRED ON 4" AND 6" BUILDING SEWERS EVERY FIFTY FEET AND ONE HUNDRED FEET RESPECTIVELY, AND AT EVERY CHANGE OF ALIGNMENT.
25. ABANDONED BUILDING SEWER CONNECTIONS FROM THE SITE, IF ANY, REQUIRE PROOF OF A DISTRICT PERMIT FOR DISCONNECTION PRIOR TO THE NEW CONNECTION BEING MADE.
26. THE FOLLOWING PERTAINS ONLY FOR DIRECT REPLACEMENT OF IN SERVICE SANITARY SEWERS:
    a. EACH NEW PIPE JOINT SHALL BE ULTRASONIC TESTED AFTER IT IS LAID, BUT BEFORE THE NEXT PIPE IS LAID. ALL TESTS SHALL BE IN ACCORDANCE WITH THE TESTING EQUIPMENT MANUFACTURE RECOMMENDATIONS.
    b. THE ULTRASONIC TEST SHALL BE PERFORMED IN LIEU OF THE HYDROSTATIC AND AIR TESTS.
    c. A VIDEO INSPECTION OF THE ENTIRE SEWER SHALL BE PERFORMED. FORWARD THE VIDEO INSPECTION TAPE AND RELATED PAPERWORK TO DSM FOR REVIEW AND APPROVAL.
    d. A DEFLECTION TEST IS REQUIRED IN ALL CASES.
27. FOR ALL SANITARY SEWER INSTALLATIONS, A WRITTEN CERTIFICATE OF CONSTRUCTION COMPLETENESS AND COMPLIANCE, INCLUDING THE RESULTS OF THE HYDROSTATIC LEAKAGE TEST, DEFLECTION TEST AND AIR TEST, ETC. SHALL BE SUBMITTED TO THE ERIE COUNTY HEALTH DEPARTMENT AND DSM WITHIN THIRTY (30) DAYS AFTER COMPLETION OF CONSTRUCTION.
28. FOR ALL PUBLIC AND PRIVATE 8" DIAMETER PIPE OR LARGER SANITARY SEWER INSTALLATIONS, THE DEVELOPER/CONTRACTOR MUST PROVIDE ONE (1) SET OF RECORD DRAWINGS ON "D" SIZE PAPER (24" X 36") AND IN AN ELECTRONIC FILE FORMAT (CD OR FLASH DRIVE) COMPATIBLE WITH THE LATEST AUTOCAD RELEASE.
29. ALL PUBLIC SEWER EXTENSION PROJECTS THAT CONSIST OF MORE THAN 750 LF OF 8" DIAMETER PIPE OR LARGER, SHALL FURNISH A 2 YEAR MAINTENANCE BOND TO THE DSM.
30. FINAL CERTIFICATION WILL BE ISSUED UPON THE FULL COMPLETENESS AND COMPLIANCE OF THE PROJECT INCLUDING ANY REQUIREMENT(S) OF I&I REMEDIAL WORK.

HAZARDOUS MATERIALS REMOVAL NOTES:

1. CONTRACTOR SHALL ASSUME ALL EXISTING FOUNDATION WATERPROOFING MATERIALS CONTAIN ASBESTOS. THIS INCLUDES ALL BUILDINGS, MANHOLES, TUNNELS, ETC. AND INCLUDES ALL COSTS FOR PROPER REMOVAL AND DISPOSAL AS REQUIRED TO COMPLETE THE WORK IN THEIR BID.

SOIL AND EROSION CONTROL NOTES:

1. SOIL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED AND FULLY FUNCTIONAL PRIOR TO ANY SITE DISTURBANCE. SOIL EROSION AND SEDIMENT CONTROL FACILITIES ARE TO BE MAINTAINED DURING CONSTRUCTION AND REMOVED UPON COMPLETION OF CONSTRUCTION.
2. ALL ROADWAYS SHALL BE KEPT CLEAN OF MUD AND DEBRIS. FILL SHALL NOT BE SPILLED ONTO ROADWAY. ALL SPILLED MATERIALS SHALL BE PROMPTLY REMOVED.
3. THE AREAS OF CONSTRUCTION SHALL BE LEFT IN STABLE CONDITION AT THE CLOSE OF EACH CONSTRUCTION DAY.
4. STORM INLETS SHALL BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION BY USE OF INLET PROTECTION OR OTHER APPROVED MEANS.
5. SOIL STOCKPILE AREAS ARE TO BE IMMEDIATELY SURROUNDED WITH SILT FENCING, OR OTHER EROSION CONTROL MEASURES OR AS ORDERED BY THE OWNER'S REPRESENTATIVE.
6. CONTRACTOR TO PROVIDE APPROVED DUST CONTROL MEASURES. THE CONTRACTOR SHALL HAVE A WATER TRUCK OR OTHER ACCEPTABLE MEANS OF CONTROLLING DUST AVAILABLE AT ALL TIMES.
7. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED AS OUTLINED IN THE APPROVED SWPPP FOR THE PROJECT. ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY TO ENSURE FUNCTIONALITY.
8. CONTRACTOR SHALL TOPSOIL, SEED AND MULCH ANY DISTURBED LAWN AREAS WITHIN 7 DAYS OF INACTIVITY.

ENVIRONMENTAL NOTES:

1. THIS PROJECT SITE IS GOVERNED BY A SITE MANAGEMENT PLAN WHICH HAS BEEN INCLUDED IN THE PROJECT MANUAL AS APPENDIX A. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THIS SITE MANAGEMENT PLAN IN ALL FACETS OF THE PROJECT INCLUDING, BUT NOT LIMITED TO: EXCAVATION, SOIL HANDLING AND DISPOSAL, COVER PLACEMENT, BACKFILL MATERIALS, PROCUREMENT, AND COMMUNITY AIR MONITORING.
2. ALL IMPORTED AGGREGATE AND/OR SOIL MATERIALS SHALL MEET THE REQUIREMENTS OF NYSDEC DER 10 TECHNICAL GUIDANCE FOR SITE INVESTIGATION AND REMEDIATION.
3. ALL EXCAVATED MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH NYSDEC DER 10 TECHNICAL GUIDANCE AND THE SITE MANAGEMENT PLAN. THIS INCLUDES CLEAN CAP MATERIAL.
4. CLEAN CAP MATERIAL AND DEMARCATION LAYER SHALL BE REPAIRED/REPLACED AS NECESSARY TO COMPLETE THE WORK IN ACCORDANCE WITH THE SITE MANAGEMENT PLAN.
5. THE FOLLOWING BROWNFIELD CLEANUP (BCP) SITES HAVE RECEIVED A STONE CAP: I-3, I-5, I-7, I-9, I-10, II-12, & THE BIKE PATH PARCEL (ERIE COUNTY) ALONG NYS ROUTE 5.
6. IN AREAS WHERE SELECT BACKFILL IS NOT INDICATED ON THE PLANS,ANY EXCAVATED MATERIALS THAT ARE NOT USED TO BACKFILL TRENCHES SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT A DEC APPROVED LANDFILL.

SANITARY SEWER & MANHOLE TESTING NOTES:

1. SEWERS:
   - 1.1. AFTER BACKFILLING AND PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING FOUR TESTS ON ALL SEWERS BUILT UNDER THIS PROJECT:
     a. AIR TESTS
     b. INFILTRATION OR EXFILTRATION
     c. DEFLECTION TEST (15" DIA. AND SMALLER)
   - 2.1. REFER TO ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT SPECIFICATION SECTION 02595 - 3.02 FOR AIR TEST, INFILTRATION OR EXFILTRATION, AND DEFLECTION REQUIREMENTS.
   - 2.2. NO MORE THAN 1,000 LINEAR FEET OF INSTALLED SEWER SHALL BE ALLOWED TO REMAIN UNTESTED.
   - 2.3. THE CONTRACTOR'S TESTING PROCEDURES SHALL BE COMPLETED IN ACCORDANCE WITH OSHA STANDARDS FOR CONFINED SPACE ENTRY. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE AND OPERATE ALL EQUIPMENT NECESSARY FOR FULL COMPLIANCE FOR HIS OPERATION.
2. MANHOLES:
   - 2.1. THE PRECAST BASES AND MANHOLE BARREL SECTIONS ARE REQUIRED TO BE VACUUM FACTORY TESTED IN JOB LOTS IN ACCORDANCE WITH ERIE COUNTY DIVISION OF SEWERAGE MANAGEMENT SPECIFICATION SECTION 02596 - 2.03 FOR SANITARY MANHOLE BARREL AND CONE REQUIREMENTS.

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C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

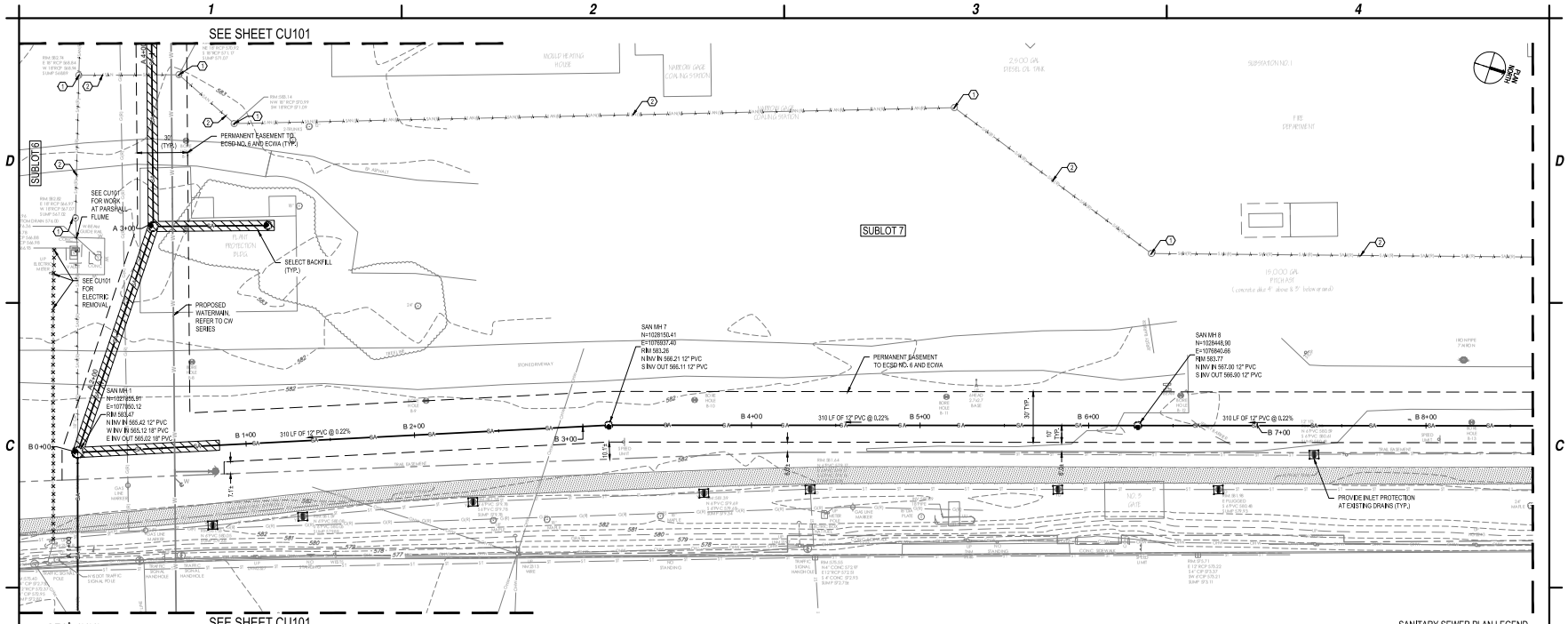
MARK	DATE	DESCRIPTION

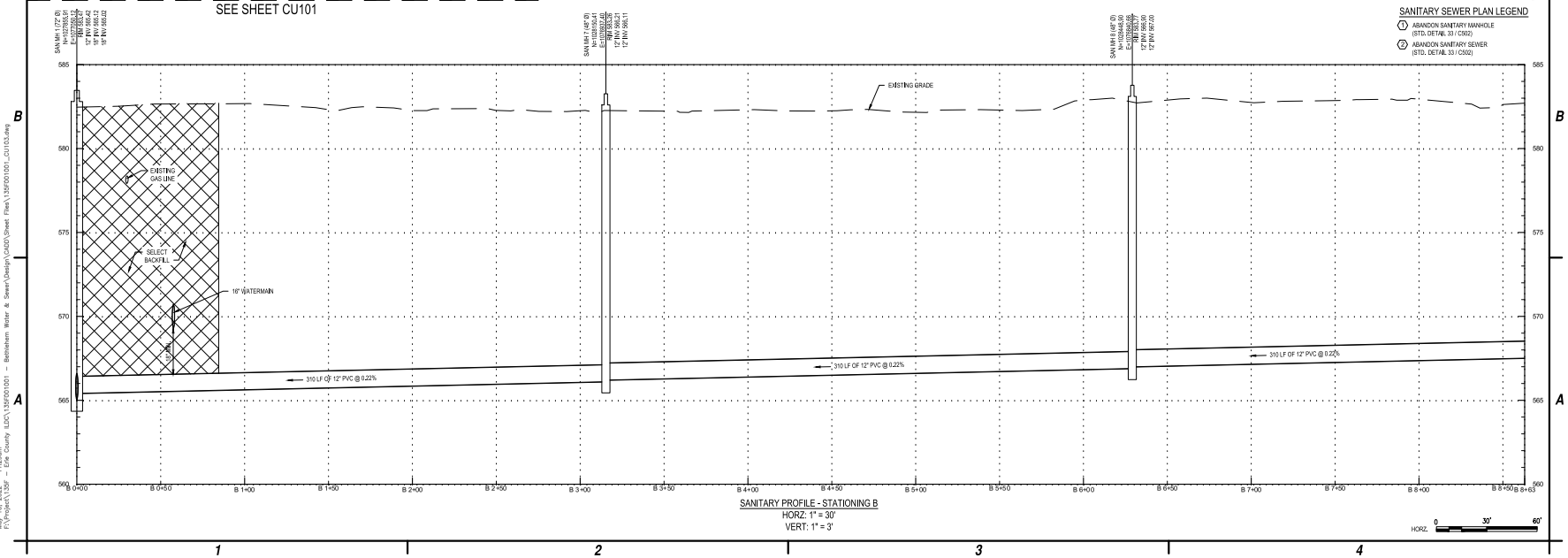
REVISIONS

EDA PROJECT NO:	01-79-15063
C&S PROJECT NO:	135F.001.001
DATE:	FEBRUARY 8, 2022
DRAWN BY:	MRO
DESIGNED BY:	MRO
CHECKED BY:	VJO

NOTES

GI003





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LACKAWANNA, NY

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DESIGNED BY:	MRO
CHECKED BY:	VO

SANITARY SEWER PLAN & PROFILE

CU103

Mar. 10, 2022 - 11:28am
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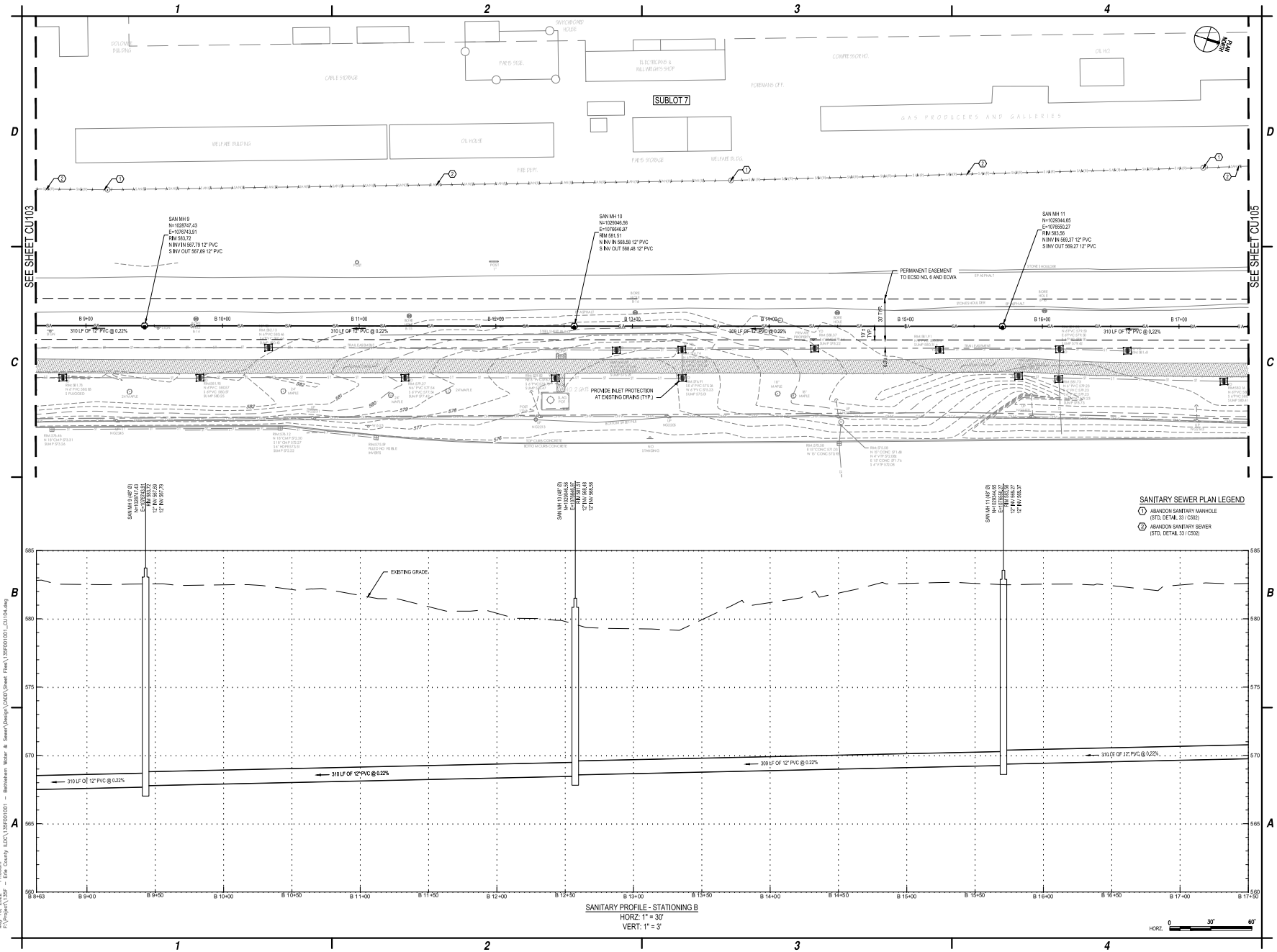

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DRAWN BY: MRO
DESIGNED BY: MRO
CHECKED BY: VO

SANITARY SEWER PLAN & PROFILE

CU104

May 10, 2022 - 11:20am
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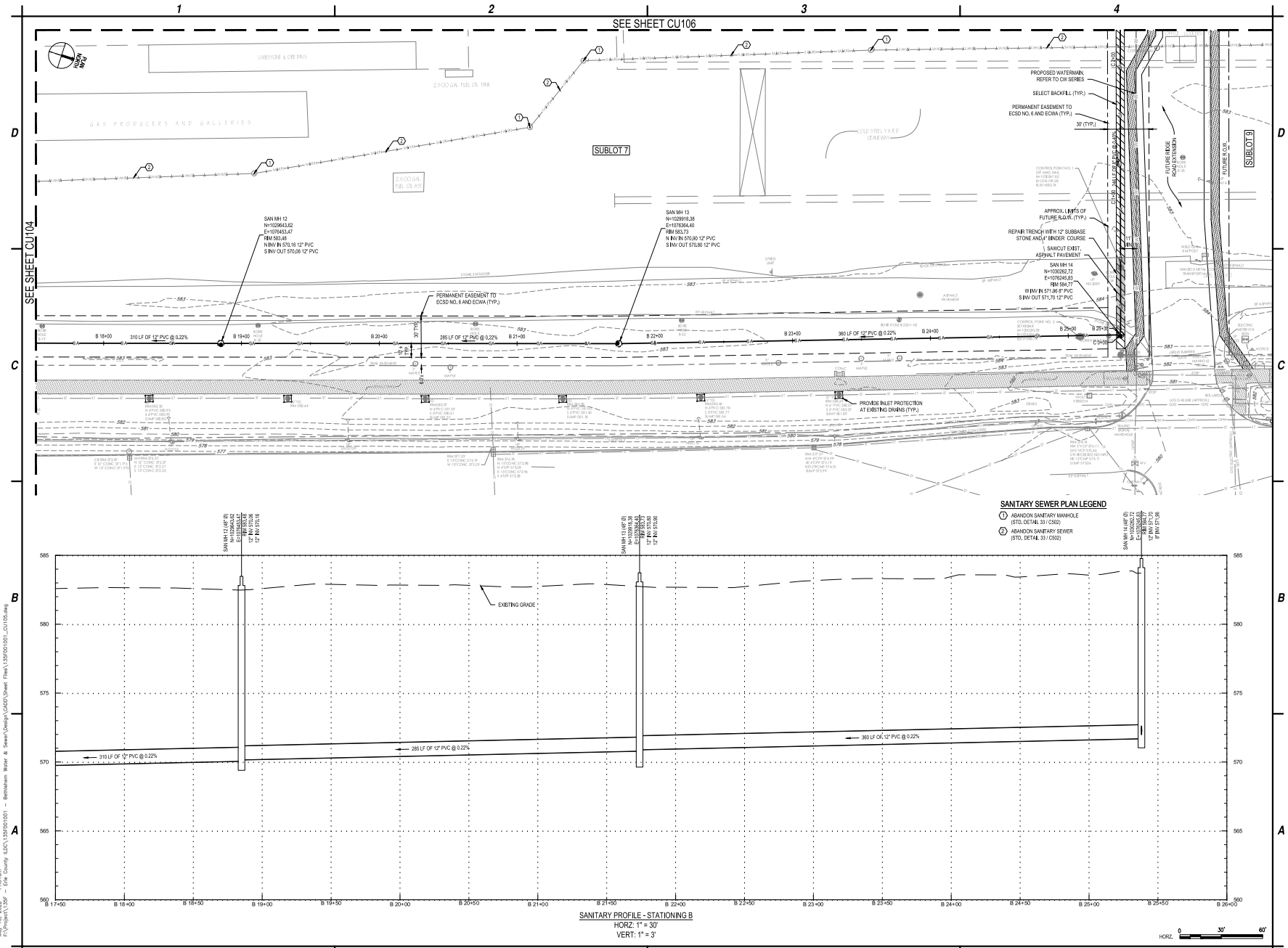

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LACKAWANNA, NY

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CHECKED BY:	VO

SANITARY SEWER PLAN & PROFILE

CU105

May 10, 2022 - 11:37pm
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SILT FENCE INLET PROTECTION NOTES:

1. FILTER FABRIC SHALL MEET THE SPECIFICATION REQUIREMENTS. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.

2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.

3. STAKE MATERIALS WILL BE STANDARD 2" X 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.

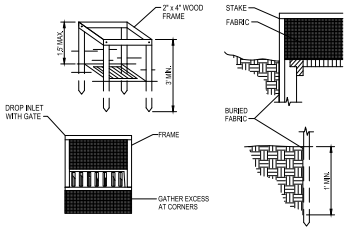
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.

5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.

6. A 2" X 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY. MAXIMUM DRAINAGE AREA 1 ACRE.

7. COIR ROLL SHALL BE PLACED ALONG THE FRONT OF THE INLET TO THE CATCH BASIN EXTENDING ACROSS THE ENTIRE WIDTH OF THE INLET TO THE CONCRETE GUTTER APRON LIMITS ON BOTH SIDE OF THE CATCH BASIN INLET. COIR ROLL SHALL BE WEIGHTED DOWN AS NEEDED WITH SAND BAGS OR EQUAL.

8. REFER TO THE SEQUENCE OF CONSTRUCTION ACTIVITIES LOCATED WITHIN THE SWPPP FOR TIMING OF THESE MEASURES TO BE INSTALLED.



C1 TYPICAL INLET PROTECTION DETAIL (GRASS AREAS)
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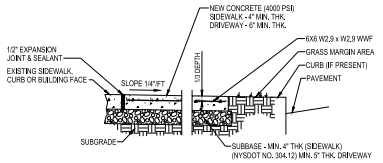


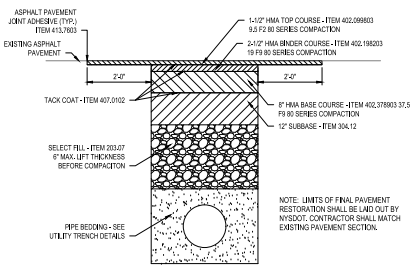
CROSS SECTION

NOTES:

1. CONTROL JOINTS TO BE AT 5'-0" O.C. BOTH WAYS OR AS SHOWN ON DRAWINGS. SEAL JOINTS PER SPECIFICATIONS.

2. CONCRETE SIDEWALK AND DRIVEWAY MATERIAL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 501 AND CONSTRUCTION METHODS SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 608-3

D2 CONCRETE SIDEWALK
SCALE: N.T.S.



C2 NYSDOT FINAL PAVEMENT RESTORATION DETAIL
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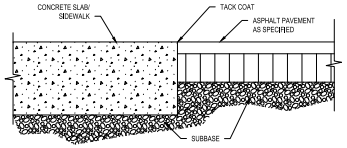
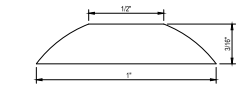


D3 TYPICAL CONCRETE TO ASPHALT DETAIL
SCALE: N.T.S.

C3 NOT USED
SCALE: X" = 1'-0"



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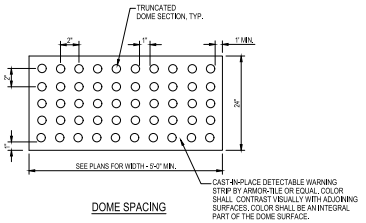

DOME SPACING

NOTE:
DETECTABLE WARNING DEVICES SHALL BE PER 2010 ADA STANDARDS SECTION 705 OR THE MOST CURRENT UPDATE

C4 DETECTABLE WARNING SURFACE
SCALE: N.T.S.

B1 NOT USED
SCALE: X" = 1'-0"

B2 NOT USED
SCALE: X" = 1'-0"

B3 NOT USED
SCALE: X" = 1'-0"

B4 NOT USED
SCALE: X" = 1'-0"

A1 NOT USED
SCALE: X" = 1'-0"

A2 NOT USED
SCALE: X" = 1'-0"

A3 NOT USED
SCALE: X" = 1'-0"

A4 NOT USED
SCALE: X" = 1'-0"

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FORMER BETHLEHEM STEEL PUBLIC SANITARY SEWER AND WATER LINE EXTENSIONS

LACKAWANNA, NY

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REVISIONS

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CHECKED BY: VO

MISCELLANEOUS DETAILS

C506

May 10, 2022 - 11:32am
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APPENDIX G-1

STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL

STANDARD AND SPECIFICATIONS FOR STORM DRAIN INLET PROTECTION

Definition & Scope

A **temporary** barrier with low permeability, installed around inlets in the form of a fence, berm or excavation around an opening, detaining water and thereby reducing the sediment content of sediment laden water by settling thus preventing heavily sediment laden water from entering a storm drain system.

Conditions Where Practice Applies

This practice shall be used where the drainage area to an inlet is disturbed, it is not possible to temporarily divert the storm drain outfall into a trapping device, and watertight blocking of inlets is not advisable. **It is not to be used in place of sediment trapping devices.** This practice shall be used with an upstream buffer strip if placed at a storm drain inlet on a paved surface. It may be used in conjunction with storm drain diversion to help prevent siltation of pipes installed with low slope angle.

Types of Storm Drain Inlet Practices

There are five (5) specific types of storm drain inlet protection practices that vary according to their function, location, drainage area, and availability of materials:

I. Excavated Drop Inlet Protection
II. Fabric Drop Inlet Protection
III. Stone & Block Drop Inlet Protection
IV. Paved Surface Inlet Protection
V. Manufactured Insert Inlet Protection

Design Criteria

Drainage Area – The drainage area for storm drain inlets shall not exceed one acre. Erosion control/temporary stabilization measures must be implemented on the disturbed drainage area tributary to the inlet. The crest elevations of these practices shall provide storage and minimize bypass flow.

Type I – Excavated Drop Inlet Protection

This practice is generally used during initial overlot grading after the storm drain trunk line is installed.

Limit the drainage area to the inlet device to 1 acre. Excavated side slopes shall be no steeper than 2:1. The minimum depth shall be 1 foot and the maximum depth 2 feet as measured from the crest of the inlet structure. Shape the excavated basin to fit conditions with the longest dimension oriented toward the longest inflow area to provide maximum trap efficiency. The capacity of the excavated basin should be established to contain 900 cubic feet per acre of disturbed area. Weep holes, protected by fabric and stone, should be provided for draining the temporary pool.

Inspect and clean the excavated basin after every storm. Sediment should be removed when 50 percent of the storage volume is achieved This material should be incorporated into the site in a stabilized manner.

Type II – Fabric Drop Inlet Protection

This practice is generally used during final elevation grading phases after the storm drain system is completed.

Limit the drainage area to 1 acre per inlet device. Land area slope immediately surrounding this device should not exceed 1 percent. The maximum height of the fabric above the inlet crest shall not exceed 1.5 feet unless reinforced.

The top of the barrier should be maintained to allow overflow to drop into the drop inlet and not bypass the inlet to

unprotected lower areas. Support stakes for fabric shall be a minimum of 3 feet long, spaced a maximum 3 feet apart. They should be driven close to the inlet so any overflow drops into the inlet and not on the unprotected soil. Improved performance and sediment storage volume can be obtained by excavating the area.

Inspect the fabric barrier after each rain event and make repairs as needed. Remove sediment from the pool area as necessary with care not to undercut or damage the filter fabric. Upon stabilization of the drainage area, remove all materials and unstable sediment and dispose of properly. Bring the adjacent area of the drop inlet to grade, smooth and compact and stabilize in the appropriate manner to the site.

Type III – Stone and Block Drop Inlet Protection

This practice is generally used during the initial and intermediate overlot grading of a construction site.

Limit the drainage area to 1 acre at the drop inlet. The stone barrier should have a minimum height of 1 foot and a maximum height of 2 feet. Do not use mortar. The height should be limited to prevent excess ponding and bypass flow.

Recess the first course of blocks at least 2 inches below the crest opening of the storm drain for lateral support. Subsequent courses can be supported laterally if needed by placing a 2x4 inch wood stud through the block openings perpendicular to the course. The bottom row should have a few blocks oriented so flow can drain through the block to dewater the basin area.

The stone should be placed just below the top of the blocks on slopes of 2:1 or flatter. Place hardware cloth of wire mesh with ½ inch openings over all block openings to hold stone in place.

As an optional design, the concrete blocks may be omitted and the entire structure constructed of stone, ringing the outlet ("doughnut"). The stone should be kept at a 3:1 slope toward the inlet to keep it from being washed into the inlet. A level area 1 foot wide and four inches below the crest will further prevent wash. Stone on the slope toward the inlet should be at least 3 inches in size for stability and 1 inch or smaller away from the inlet to control flow rate. The elevation of the top of the stone crest must be maintained 6 inches lower than the ground elevation down slope from the inlet to ensure that all storm flows pass over the stone into the storm drain and not past the structure. Temporary diking should be used as necessary to prevent bypass flow.

The barrier should be inspected after each rain event and repairs made where needed. Remove sediment as necessary to provide for accurate storage volume for subsequent rains. Upon stabilization of contributing drainage area, remove all materials and any unstable soil and dispose of properly.

Bring the disturbed area to proper grade, smooth, compact and stabilize in a manner appropriate to the site.

Type IV – Paved Surface Inlet Protection

This practice is generally used after pavement construction has been done while final grading and soil stabilization is occurring. These practices should be used with upstream buffer strips in linear construction applications, and with temporary surface stabilization for overlot areas, to reduce the sediment load at the practice. This practice includes sand bags, compost filter socks, geo-tubes filled with ballast, and manufactured surface barriers. Pea gravel can also be used in conjunction with these practices to improve performance. When the inlet is not at a low point, and is offset from the pavement or gutter line, protection should be selected and installed so that flows are not diverted around the inlet.

The drainage area should be limited to 1 acre at the drain inlet. All practices will be placed at the inlet perimeter or beyond to maximize the flow capacity of the inlet. Practices shall be weighted, braced, tied, or otherwise anchored to prevent movement or shifting of location on paved surfaces. Traffic safety shall be integrated with the use of this practice. All practices should be marked with traffic safety cones as appropriate. Structure height shall not cause flooding or by-pass flow that would cause additional erosion.

The structure should be inspected after every storm event. Any sediment should be removed and disposed of on the site. Any broken or damaged components should be replaced. Check all materials for proper anchorage and secure as necessary.

Type V - Manufactured Insert Inlet Protection

The drainage area shall be limited to 1 acre at the drain inlet. All inserts will be installed and anchored in accordance with the manufacturers recommendations and design details. The fabric portion of the structure will equal or exceed the performance standard for the silt fence fabric. The inserts will be installed to preserve a minimum of 50 percent of the open, unobstructed design flow area of the storm drain inlet opening to maintain capacity for storm events.

Figure 5.31
Excavated Drop Inlet Protection

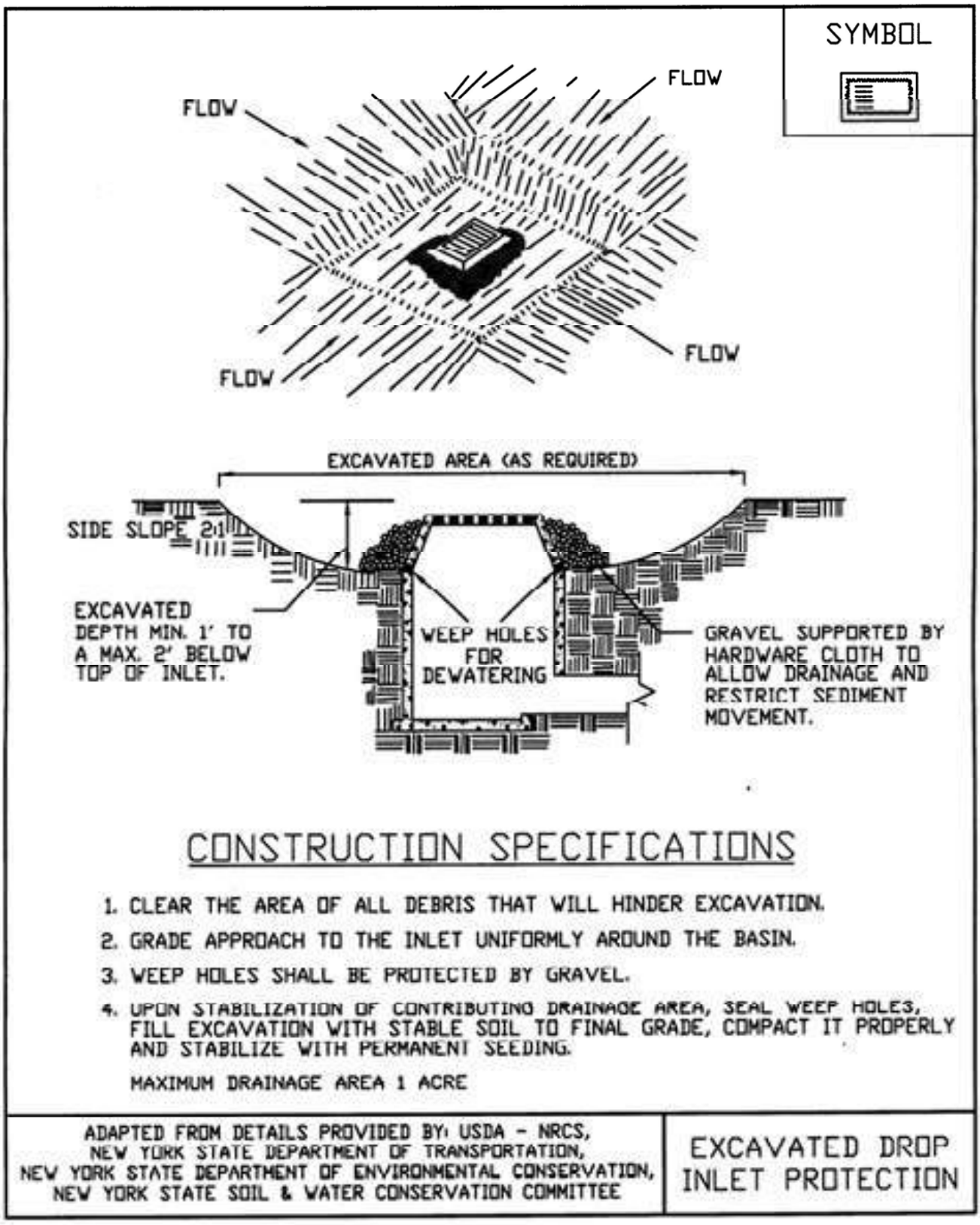


Figure 5.32
Fabric Drop Inlet Protection

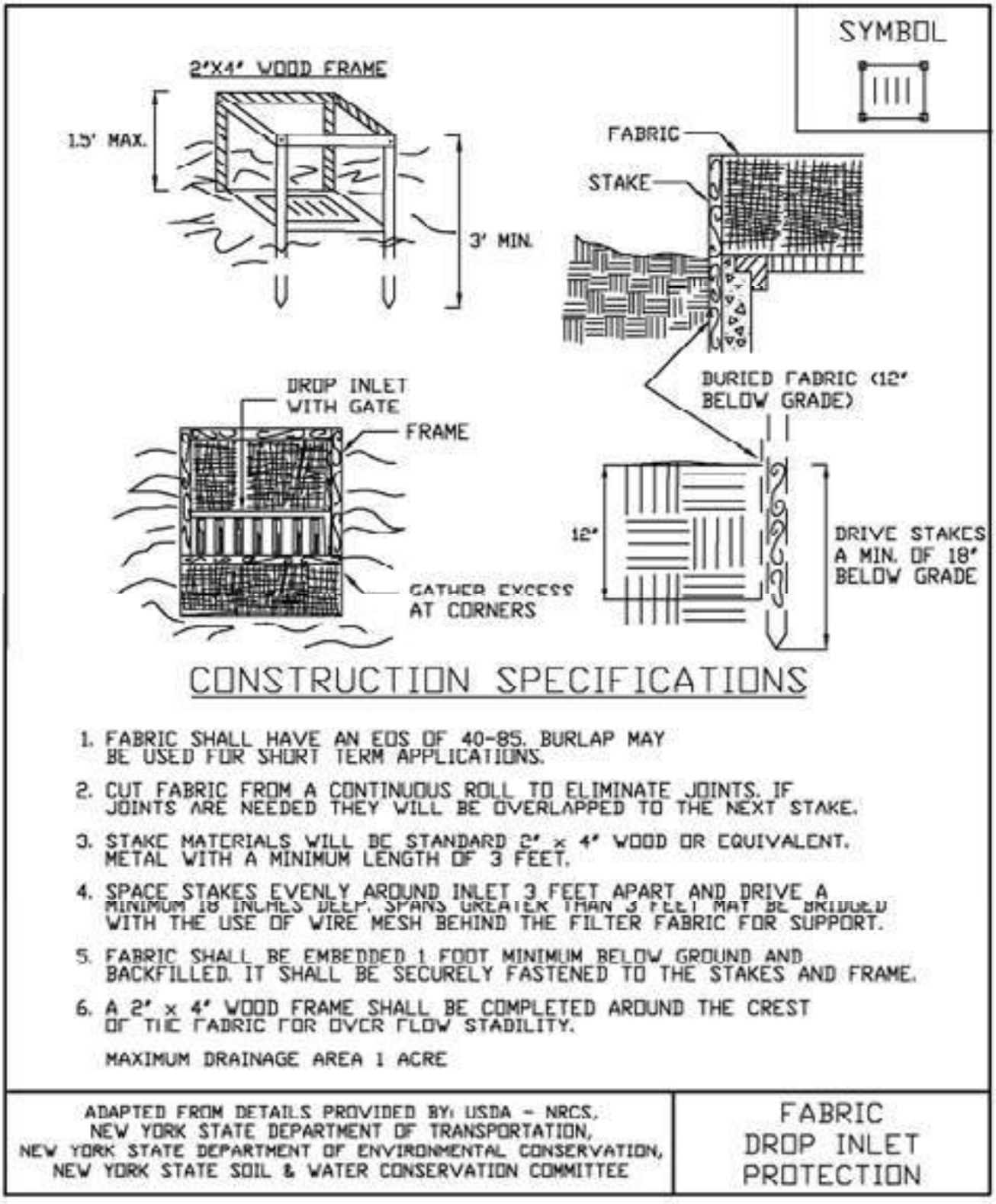
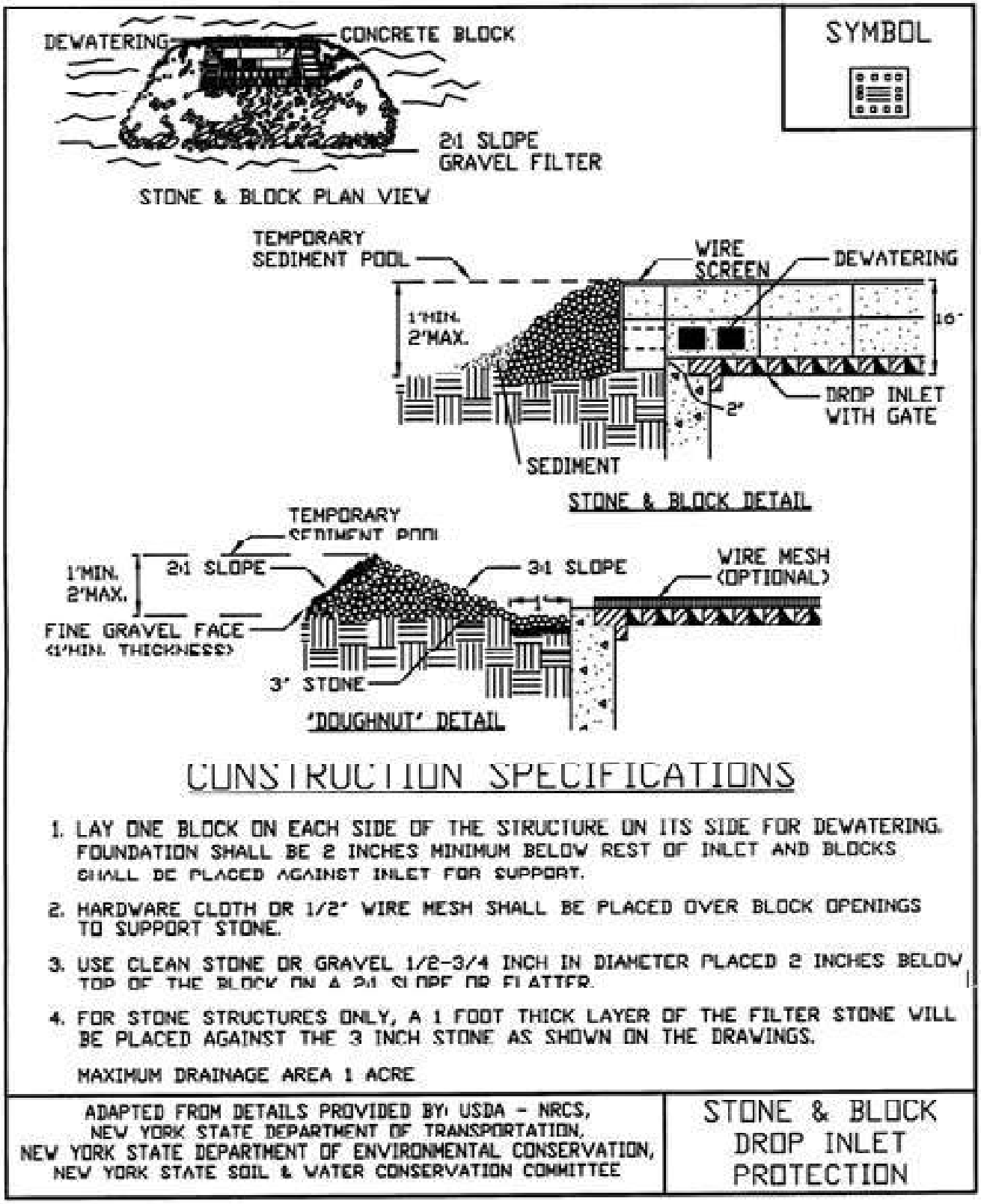


Figure 5.33
Stone & Block Drop Inlet Protection



CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

STONE & BLOCK DROP INLET PROTECTION

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printed on 50% recycled paper, including 25% post-consumer waste

APPENDIX E
COMMUNITY AIR MONITORING PLAN

Community Air Monitoring Plan

for

Tecumseh Phase I & II Business Park

Lackawanna, Erie County, New York

BCP Site Number
C915198M
C915198L
C915198K
C915197
C915197B
C915197D
C915197F
C915197I
C915197H

March 2023

Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil / waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

<u>VOC Monitoring, Response Levels and Actions</u>

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate

surrogate, such as isobutylene. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust

suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number;
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;

(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50$_o$ C (14 to 122$_o$ F); and
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record-keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative, this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM-10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:
(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

Special Requirements:

In addition or in combination with the above, the following special requirements apply for work within 20 feet of potentially exposed individuals or structures:

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates will reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices will be considered to prevent exposures related to the work activities and to control dust and odors. Consideration will be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring will occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m^3, work activities will be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m^3 or less at the monitoring point.

- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements are as stated above under "Special Requirements for Work within 20 Feet of Potentially Exposed Individuals or Structures" except that in this instance "nearby/occupied structures" would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, shall be understood and the monitoring locations established accordingly. In these situations, exhaust fans or other engineering controls will be used to create negative air pressure within the work area during remedial activities. Additionally, the planned work will be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.

APPENDIX F
CONTRACTOR'S HEALTH AND SAFETY PLAN

PINTO CONSTRUCTION SERVICES, INC. HEAVY EQUIPMENT CONTRACTOR
132 Dingens Street, Buffalo NY 14206
OFFICE: (716) 825-6666
FAX: (716) 825-6773

NO. 22-4520-41

LETTER OF TRANSMITTAL

To: C&S Companies
141 Elm Street, Suite 100
Buffalo, NY 14203
Victor O'Brien, PE, (716) 713-8222
vobrien@cscos.com

From: Greg Maziarz
Job No. 22-4520
Name: Former Bethlehem Steel Public Sanitary and Waterline Ext.
Date: 01/23/2023
Re: Health & Safety Plan

WE ARE SENDING YOU ■ ATTACHED ☐ UNDER SEPARATE COVER VIA ☐ EMAIL ☐ US MAIL THE FOLLOWING ITEMS:

☐ SHOP DRAWINGS ☐ PRINTS/PLANS ☐ SPECIFICATIONS ☐ SAMPLES ■ SUBMITTALS
☐ COPY OF LETTER ☐ CHANGE ORDER ☐ CONTRACT ☐ SUBCONTRACT ☐ OTHER

COPIES	DESCRIPTION
1	Pinto - Health & Safety Plan - Project Specific

THESE ARE TRANSMITTED:

■ FOR APPROVAL ☐ AS REQUESTED ☐ APPROVED AS NOTED ☐ RETURNED FOR CORRECTIONS
☐ FOR YOUR USE ☐ FOR REVIEW AND COMMENT ☐ APPROVED AS SUBMITTED ☐

COMMENTS:

Please add the following per spec 01 1100, Health and Safety: personnel and equipment decontamination, heat & cold stress and community protection.

CC.

GREG MAZIARZ – PROJECT MANAGER

Health & Safety Plan

Bethlehem Steel Utility Extension Project

January 11, 2023
Rev. 1

PINTO CONSTRUCTION SERVICES INC.
132 Dingens St., Buffalo, NY 14206

Table of Contents

1. INTRODUCTION

General

This Health & Safety Plan (HASP) has been prepared to address health & safety hazards associated with the Pinto Construction Services (Pinto) Bethlehem Steel Utility Project.

Compliance with this HASP is required of Pinto employees and subcontractors involved with work activities at the project site. Employees are required to follow all designated safety procedures, be alert to the hazards and potential hazards associated with the project, and exercise reasonable caution at all times. Although comprehensive, this HASP is not all inclusive and should not be treated as such.

2. APPLICABILITY

Pinto has developed the following site HASP in accordance with Erie County Industrial Development Agency (ECIDA) requirements and Federal, State and Local regulations. All operations and equipment used in conjunction with this contract shall, at a minimum, comply with the following:

- ECIDA Document Section 01-1100- Health & Safety
- Benchmark Turn Key Site Management Plan & HASP
- Pinto Health & Safety Plan (This HASP)
- Pinto Corporate Health, Safety and Environmental Program Manual
- OSHA 29 CFR 1926: Safety and Health Regulations for Construction
- Daily Safety Briefs including Daily Job Safety Analysis
- Work Permit Process
- Training – Work/Task Specific and Weekly Toolbox Talks

This HASP presents information on known site health and safety hazards using available information.

3. WORK AREA DESCRIPTION

The project is located at the former Bethlehem Steel Facility in Lackawanna, NY. The project borders NYS Route 5 (Hamburg Turnpike) and other former industrial sites under development. Major work will include excavation and boring to install sanitary sewer, water, and related structures.

4. PROJECT SCOPE OF WORK

Scope of Work

- Mobilize
- Utility Locate
- Excavate & Backfill – Sanitary Sewer Lines & Related Structures
- Excavate & Backfill – Water Lines & Related Structures
- Line Existing Sanitary Sewer Underneath Route 5 (1 location)
- Bore and Install Water Line Under Route 5 & Ancillary Roadways (2 locations)
- Ground Water and Other Environmental Controls
- Demobilization

5. PINTO PROJECT CONTACTS & RESPONSIBILITIES

PROJECT TEAM

Project Manager	Greg Maziarz	716-374-5973
Superintendent	David Fedeli	716-534-4248
H&S Coordinator & Site Safety Officer	Robert Broomfield	716-622-8412
Site Health & Safety Technician	To Be Assigned	
Medical Consultant	WellNow (Occupational Health)	

COMPETENT PERSON

A competent person as defined by OSHA “means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.” Each contractor shall assign a “Competent Person” as required by Federal, State, and Local regulations.

QUALIFIED PERSON

A qualified person as defined by OSHA “means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.” Each contractor shall assign a “Qualified Person” as required by Federal, State, and Local regulations.

PROJECT MANAGER

1. Overall safety of the project.
2. Performing a pre-bid and pre-construction hazard assessment of the scope of work.
3. Providing the management support, leadership and direction necessary for the overall implementation and execution of this safety program.
4. Support of the Pinto Safety Process, Pinto HASP, and Site Management Plan.
5. Planning and executing all work in a manner that promotes compliance with the stated objectives of this HASP.
6. Complying with all of the provisions of the contract applicable to safety and accident prevention requirements.

SUPERINTEDENT

1. To work in conjunction with the Project Executive, Project Manager, Safety Officer, and employees to assure the safe conditions exist at the project.
2. Provide the support, leadership and direction necessary for overall implementation and execution of this HASP.
3. Support of the Pinto Safety Process, Pinto HASP, and Site Management Plan
4. Serve as the Competent Person.
5. Monitor compliance of applicable Federal, State and Local regulations.
6. Authorize the immediate action necessary to correct any substandard safety condition; reported or personally observed.
7. Comply with the provisions of the contract applicable to safety and accident prevention requirements.
8. Facilitate safety meeting as required. Take a leadership role in project safety meetings.
9. Lead daily safety briefs and job safety analysis.
10. Perform daily safety inspections (frequent & regular) of the project, review findings with contractors and prepare written record of findings/corrective actions.
11. Perform weekly toolbox talks.
12. Complete applicable safe work permits.
13. Supply and enforce the use of proper protective equipment and suitable tools for the job.
14. Seeing that prompt first aid is administered to any injured Pinto employee and that all employees know the locations of first aid kits on site and are familiar with the first aid and emergency procedures.
15. Initial investigation of any accident / incident, completion, and submission of required forms. Assist the project manager and safety officer (as needed) in making a complete investigation of accidents to determine facts necessary to take corrective action.

HEALTH & SAFETY COORDINATOR / SITE SAFETY OFFICER

1. Serve as technical resources in safety, health, and environmental matters.
2. Overall development, monitoring, and implementation of this HASP.
3. Responsibility for initial training of onsite workers with respect of contents to this HASP and the Site Management Plan.
4. Provide safety technical support for work activities.
5. Coordinate with the Pinto Project Manager and Superintendent to proactively identify safety issues, collaborate on the development of solutions; ensure implementation and monitor results.
6. Perform comprehensive safety inspections / audits, review findings the project team, and prepare written record of findings and corrective actions.
7. Participate in incident investigations as needed.

EMPLOYEES

1. Each employee has a duty to take reasonable care to protect the health and safety of himself / herself and other workers present while he/she is working.
2. Each employee shall report to work fit for duty.
3. Employees shall report all accidents and injuries to their supervisor immediately.
4. Each employee shall ensure that his/her personal protective equipment is in working order. If this equipment is defective in any manner, the employee shall inform his/her supervisor to obtain new personal protective equipment.
5. Employees shall inspect tools and equipment before use. Tools and equipment found to be faulty shall be removed from service.
6. Employees must attend and are encouraged to contribute and participate in daily job safety briefings.
7. Employees must attend and are encouraged contribute to the weekly “Toolbox” meetings and JSA development.
8. Employees shall cooperate with all safety representatives having jurisdiction at the project sites.

EMPLOYEES RIGHT TO REFUSE / STOP WORK

Pinto considers no activity to be so urgent or important that employee safety or health may be compromised. Employees and subcontractor employees have the right and responsibility not to perform tasks or activities they feel pose undue risk to themselves, co-workers, or the public. Stop work actions take precedence over all other priorities and procedures. This right comes without fear of reprisal and harassment.

6. SUBCONTRACTORS

On this project, Pinto is typically responsible (controlling contractor) for the safety of their own employees and subcontractors under their contract at the project site. This does not relieve our subcontractors from their safety responsibility to their own employees and their assignment of their own competent person.

The subcontractor's "competent person" or "qualified person" or "authorized/designated person" will be held responsible for their own scope of work as it relates to all safety rules, regulations, and requirements.

Under this HASP, each subcontractor is required to administer their own activities and those of all of their subcontractors.

- Subcontractors, prior to starting work, are required to develop and submit their own HASP for review.
- Hazard Communication programs, chemical inventory lists, and site specific chemical/hazardous safety data sheets (SDS) are required to be submitted to Pinto prior to starting work.
- Any deficiencies noted during the subcontractor program review are required to be corrected prior to starting work on the project.
- Any deficiencies noted during a Pinto safety inspection are required to be corrected immediately or when not able to be corrected immediately, effectively mitigated to prevent injury, illness, property, and/or environmental damage.
- Subcontractors are required to enforce the project work safe rules. Workers on this project shall follow any designated site specific safety rules, life safety measure controls, and security procedures and controls.

Compliance with this HASP is required of all personnel working at this project site. Subcontractors will provide a safe working environment in accordance with applicable Owner, Pinto, Federal, State and Local requirements.

7. INCIDENT REPORTING PROCEDURES

All incidents must be immediately reported to the Pinto project superintendent. The Pinto superintendent will then promptly report the accident to the owner representative. Incidents will be promptly investigated and corrective actions will be implemented and closed within reasonable time frames related to the hazard. Incident reports will be submitted to as requested.

8. PROJECT BIOLOGICAL HAZARDS

Insect Stings General

Bees and other biting insects may be present on the project during spring, summer and fall seasons. Insect bites and stings are usually irritants that cause localized swelling, itching and minor pain and can be handled with first aid treatment. Personnel with known allergic reactions to bee stings should carry the appropriate medication and should notify their superintendent they may need additional medical attention.

Ticks and Lyme Disease

Ticks may be present in vegetated areas during the spring, summer and fall seasons. Preventative measures include protective clothing that covers the entire body, tucking pant legs into boots or socks and tucking a long sleeved shirt into pants; head/hair protection; and the use of insect repellant containing DEET on all exposed areas and coveralls. Project workers should check their bodies thoroughly for ticks and should bathe soon after returning home. Remove any ticks carefully, using a gentle firm, tugging motion with fine tweezers. Do not kill the tick before it has been removed. Save the tick (place in zip lock bag for freezing and lab test) and monitor their bites, checking for a rash and any other symptoms for up to eight weeks after the bite. If employees feel they have been bitten they should notify their supervisor immediately.

Toxic Plants

Poison Ivy and poison oak may be present during the spring, summer and fall seasons in areas adjacent to the project. Avoid contact with these plants. If a project worker has come in contact, the affected area should be washed thoroughly with soap and cool water. Notify your supervisor immediately.

COVID 19

COVID 19 safety controls will follow current NYS and Erie County requirements as published throughout the duration of the project.

9. PROJECT CHEMICAL & RADIOLOGICAL HAZARDS

Soil Contaminate Hazards

A wide range of soil contaminates, and related hazards exist on the project. Reference Benchmark Turnkey Site Management plan for potential soil contamination constituents, hazards, and controls.

Ground Water Contaminate Hazards

A wide range of ground water contaminates, and related hazards exist on the project. Reference Benchmark Turnkey Site Management plan for potential soil contamination constituents, hazards, and controls.

Radiological Hazards

The possibility of Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) exists on the project. Reference Benchmark Turnkey Site Management Plan and ongoing sampling/monitoring.

Asbestos Hazards

An asbestos coating may exist as a water proofing material on the exterior of buried concrete pier foundation structures. Any coating on these structures should be considered Presumed Asbestos Containing Material (PACM) until confirmed otherwise. Reference Benchmark Turnkey Site Management Plan and ongoing sampling/monitoring.

Chemicals Brought on Site

The use of chemical products onsite will follow the requirements set forth in OSHA 29 CFR 1910.1200 (OSHA's Hazard Communication Standard), all applicable Federal, State and Local regulations. The potential hazards associated with these products will be mitigated through site specific training, administrative controls (e.g. proper labeling and storage) and proper use of the prescribed PPE.

Safety Data Sheets (SDS) for all chemicals brought onto the project, will be available at the project site via an IPAD tablet. All chemical products shall be properly labeled which shall include, product name, manufacturers name, and appropriate hazard warnings.

10. PROJECT PHYSICAL HAZARD ASSESSMENT

A project specific general hazard and risk assessment has completed for Pinto work related to this project. The purpose of this assessment is to identify general potential hazards at the work site and general controls to eliminate or control the potential hazard. Physical hazards anticipated during site preparation and demolition activities include:

TASK	HAZARD	MITIGATION
Mobilization	Moving equipment Manual Lifting Hydraulic Fluid Spills	• Defined routes • Spotters • Trained flaggers • Proper lifting equipment and procedures • Spill Kit(s) on Site • Use ANSI Class 2 High Visibility Vest or Coat
Weather	Fall/Winter Weather Wet conditions – Slip & Fall Icy conditions – Slip & Fall Cold Weather Conditions	• Monitor forecast in preparation of inclement weather. • Clothing Layering • Cold Weather Stress Awareness Training • Clean and maintain walk/work areas as needed. • Anti-Slip over boots
Survey	Struck By Vehicles	• High visibility protection • Flaggers if required when entering traffic
Erosion Control Installation	Moving equipment Slip trips and falls, Insects Hand Lacerations Debris in Eye	• Spotters • Use ANSI Class 2 High Visibility Vest or Coat • Follow PPE rules – Hard Hat & Eye Protection • Follow Pinto 100% Glove Rule • Advise caution on traversing uneven ground. • Insect repellant • Tick Kit on site
		•
		•
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		•
Excavating & Backfill General	Employee struck by or caught in between injury from moving equipment or falling materials	• Pre inspection of excavator and bucket. • Trained operators • Equipment spotters. • Trained flaggers where required.

		• Functioning Back Up Alarms • Make eye contact with operator. • Clean cab glass and mirrors on equipment and trucks. • Defined equipment and pedestrian routes. • Use ANSI Class 2 High Visibility Vest or Coat • No work under suspended or moving loads.
Excavating - All	Equipment hydraulic leak	• Pinto 55 gallon spill kit located in close proximity to work area.
Excavating - All	Equipment Fire	• Fire extinguishers mounted on each machine • Fire extinguisher annual inspections in place
Excavating Trench	Underground Utility Strike	• Call 811 (DIGNY) • Underground utilities must be marked prior to any excavation activities. • Review As Built Drawings • Coordinate with Owner Rep/Site Engineer • Pot Hole and locate as necessary • Review Utility locations at each daily safety brief • Check above ground conduits for indication where the below ground conduits may be. • Explore for utilities by hand digging • Use of Class 2 rated electrical rubber gloves while hand digging near unknown electrical. • Use an equipment electrical rated ground on all excavating equipment. (as needed) • Complete Pinto Excavation Safety Checklist
Excavating/Trucking In/Out	Striking overhead energized power lines	• Maintain proper equipment and personnel clearance from energized lines per OSHA. • Review clearance distance and record during Pinto Daily Safety Brief.
Excavating Trench	Surface encumbrances not supported	• Review site drawings for surface encumbrances. • Competent person perform site inspection prior to excavating.

Excavating Trench	Adjacent structures not supported	• Review site drawings for adjacent structures, trees, poles. etc. • Competent person perform site inspection prior to excavating. • Excavation that undermines a structure must be designed by an engineer.
Working Near or Above Trench	Open trench/excavation fall hazard	• No jumping or stepping across trenches permitted. • Trench bridges 6 feet or more above the trench bottom must be equipped with standard guardrail (42 inch top rail and 21 inch midrail) • Trenches shall be barricaded to prevent persons from walking into them when the excavation edge is not readily visible. • When an excavation will remain open longer than one work shift, a barrier sufficient to protect people from falling into the excavation or erected at a minimum of 6-feet from the excavation in order to warn of the fall hazard must be erected and maintained for the time duration that the excavation remains open.
Working in Excavation	No Inspection of trench or excavation leading to conditions of trench collapse	• Daily and other required inspections (after rain storm/freeze thaw, etc.) of excavations shall be performed by the competent person. • Pre work inspections shall be documented on the Pinto Excavation Safety Checklist.
Working in Excavation	Trench/Excavation collapse due to water, overburden pressure, and lack of worker protection	• Competent Person reviews all trenches and excavations no matter what the depth. • Mandatory worker protection provided at 5 feet or more in depth • No spoils, materials, or equipment stored within 2 feet of excavation edge. • Water controls are implemented to prevent water accumulation. Employees shall not work in excavations in which there is accumulated

		water. • Collapse protection implemented before employee entry.
Working in Excavation	Trench/Excavation collapse due depth of 20 feet or more	• Any excavation protection deeper than 20 feet must be designed and approved by a Registered Professional Engineer. This includes stackable trench boxes.
Working in Excavation	Improper trench shield/box use causing struck by and caught between injury	• Trench box must be rated for soils and depth. Tabulated data must be available. • Trench box must be stabilized to prevent shifting. • Trench box pins must be rated for box and locked in place. • Trench box movement by machines is prohibited when the trench box is occupied. • Trench box can reveal not more than 2 feet of soils from bottom of trench to bottom of box. If water is seeping or raveling is occurring, the trench box must be set at full depth. • Access ladder must be within the trench box. • Employees are not permitted to leave the ends of an open trench box.
Working in Excavation	Improper sloping or benching causing trench collapse	• No A Soil Classification Permitted • B Soil Classification – Bench or Slope per OSHA Tables – 1:1. Maximum 20 feet deep • C Soil Classification – Slope Only 1:1 ½. Maximum 20 feet deep • Any excavation protection deeper than 20 feet must be designed and approved by a Registered Professional Engineer.
Working in Excavation	No/improper egress or access	• Provide access/egress every 25 feet of lateral travel. • Use fiberglass extension or straight ladder. • Inspection of ladder each day before use. • Ladders must extend 36 inches above landing surface.
Working in Excavation	Falling objects	• No work under suspended or

		moving loads. • Store equipment, tools, materials, and spoils 2 feet or more from trench/excavation edge. • No storage on trench benches/shelfs • Use of Hard Hat PPE
Working in Excavation	Hazardous Atmosphere	• Competent Person Inspection • Minimize use of combustion engines around and in trench. • Implementation of 4 gas monitoring (O2, LEL, CO, & H2S) when the use of a combustion engine is required in or around the trench. • Implementation of 4 gas monitoring (O2, LEL, CO, & H2S) when tapping into sanitary and storm sewers. • Implementation of 4 gas monitoring (O2, LEL, CO, & H2S) when removing sanitary and storm sewers. • Implementation of other air monitoring based on soil constituents and the Benchmark Turnkey Site Management Plan. • Implementation of other air monitoring based on ground water constituents and the Benchmark Turnkey Site Management Plan.
Working in Excavation	Soil and Ground Water Contact	• Level D protection expected for current work scope. • SO to monitor Benchmark Turnkey Site Management Plan and sampling to determine if a PPE upgrade is required. • Employees trained on upgraded PPE. • Decontamination of Level D PPE (boot wash station)
Manual Material Handling	Lifting/Back Injuries Lacerations	• Follow Pinto 100% glove rule. • When lifting equipment by hand, use proper lifting technique to avoid back and muscle strains. • Stretch and Flex.
Machine Material Handling	Pipe and Structure Rigging Failure	• Trained Rigger • Trained Operator • Pre-Use Inspection of Slings

		• Slings capacity tags visible and in place • Use designated lifting points on equipment. • No work under suspended or moving loads.
Install Pipe	Pipe Movement- Struck By, Caught Between, Rigging Failure, Stored Energy	• Only trained and qualified operators are permitted to run heavy equipment. • Material weights known. • Excavator and lull lifting capacity known. • Rigging capacity known. • Rigging inspected before each use. • Use of trained rigger. • Ensure all workers are in line of sight when lifting pipe sections. • Safety latches on rigging and lifting hooks. • Lifts more than 80% of equipment capacity are considered critical lifts (not expected) • Ensure pipe moves freely and excessive pressures are not applied causing the pipe to snap and strike a worker. • Do not stick fingers between pipes when sliding.
Asphalt/Concrete Saw Cutting (if necessary)	Flying debris, contact with cutting blade	• Pre-Use inspection of saw, blade, & guard • Saw guard in place • Proper PPE including eye and face protection • Proper working position • Spotters
Asphalt/Concrete Saw Cutting (if necessary)	Silica dust generated by handheld saw	• Use handheld saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Less than 4 hours of operation of saw per worker per day (administrative control)
Asphalt/Concrete Saw Cutting (if necessary)	Silica dust generated by walk behind saw	• Use walk behind saw equipped with integrated water delivery system that continuously feeds water to the blade.

		• Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.
Demolition and Removal of Asphalt & Concrete	Struck By, Caught in Between, Crushing Injury	• Controlled/restricted areas • Impalement protection for exposed rebar (as needed) • High visibility apparel for ground personnel • Head, eye, hearing, foot and hand protection.
Establish Vehicle / Pedestrian Closures and Detours	Struck by Vehicle & Pedestrian Traffic	• In the event vehicle traffic is affected by site work activities, road closures and signage will be installed per MUTCD requirements. • In the event pedestrian traffic is affected by site work activities, existing sidewalks will be closed and appropriately re-routed. • In the event contractors direct traffic, flag persons need to be provided with and use the necessary equipment per 29 CFR 1926.201 Signaling, i.e. ANSI class 2 or 3 apparel, flag, stop/slow paddle etc. Each contractor must provide a flagger when equipment, dump trucks, delivery trucks etc. have the potential to impact the flow of pedestrian and/or vehicle traffic.
Demobilization	Moving equipment Manual Lifting	• Spotters • Trained flaggers • Proper lifting equipment and procedures • Stretch & Flex • Use ANSI Class 2 High Visibility Vest or Coat

11. PERSONAL PROTECTIVE EQUIPMENT (PPE) – PROJECT SPECIFIC

General

The anticipated level of protection for work on this project is a Level D for most tasks. The following PPE is mandatory on this project.

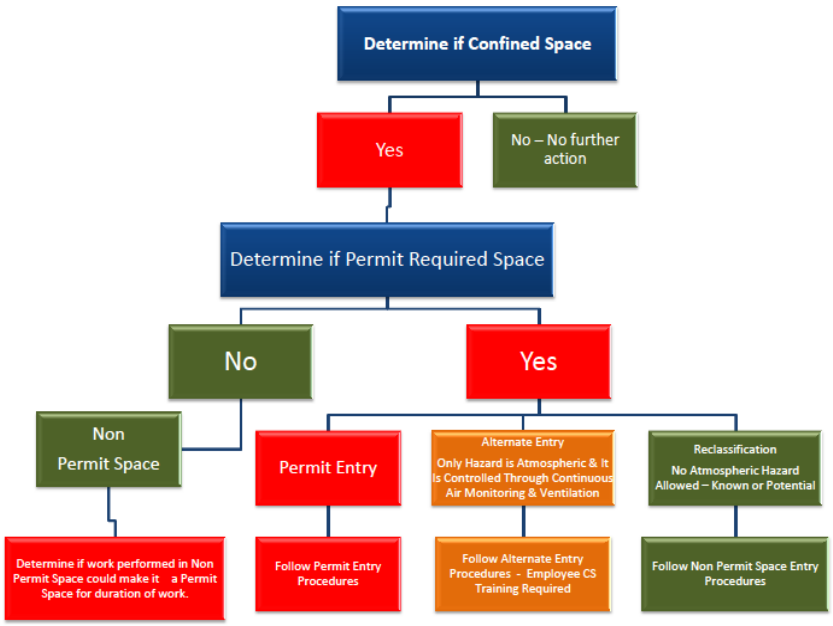
- Cold Weather Protection – Work gear for weather conditions.
- Hand Protection – Use of Cut Level 2 glove minimum when performing general tasks.
- Hand Protection – Chemical Resistant Glove per Site Management Plan when working in excavation/with soils/ground water

- Foot Protection – Work Boot
- Foot Protection – Chemical Resistant Boot per Site Management Plan when working in excavation/with soils/ground water
- Eye Protection – Safety Glasses. Prescription glasses with side shields.
- Face Protection – Based on Task
- Hearing Protection – Based on Task
- Body Protection – Basked on Task – Tyvek or other coverall

12. CONFINED SPACE – PROJECT SPECIFIC

- Multiple Confined Space Entries are anticipated on the project.
- All confined space work shall follow Pinto and OSHA requirements.
- An evaluation will be completed by the Pinto Competent Person to determine the existence of confined spaces and permit required (permit) spaces at the project site. This includes new and existing structure evaluations.
- Permit required confined spaces will be entered per Pinto Policy and OSHA requirements.

CONFINED SPACE DETERMINATION FLOW CHART



13. ELECTRICAL SAFETY – PROJECT SPECIFIC

- All tools, cords and power sets shall have an assured equipment inspection program maintained on quarterly basis and shall be used in conjunction with GFCI.
- Extension cords used with portable tools must be of a heavy duty 3-wire type and must be 12 gauge or greater.
- Lock Out/Tag Out procedures from either the contractor or the owner must be used. Use the more stringent program.

14. DAILY SAFETY BRIEF & JOB SAFETY ANALYSIS

Before the start of each workday, and subsequently before the start and re-start of work near proximity of high voltage tension lines, a Pre-Job Safety Brief (meeting) will be conducted for all personnel involved. This meeting will identify potential hazards associated with the specific task of their pertinent job and address steps to be taken to eliminate such hazards. All employees will sign the pre-job brief.

Pinto shall perform job safety analysis (JSA) for major tasks and non-routine tasks as part of the daily safety brief.

15. INSPECTIONS

Safety & Risk Inspections General

1. Corrective actions shall be immediately implemented for unsafe conditions and/or unsafe acts observed.
2. Additional inspections will be performed as required.

Project Safety & Risk Inspection Requirements

Frequent and regular inspections of the project and individual work areas are an important tool in identifying and eliminating /controlling potential hazards. The following inspection requirements shall be implemented on this project:

1. The Pinto Superintendent and Safety Officer will conduct daily inspections of their work area(s) to assess compliance with project specific safety and health requirements and with OSHA standards. Any hazards identified shall be corrected. These inspections are not documented.
2. The Pinto Safety Officer will perform frequent and regular safety inspections of the project site to assess compliance with project specific safety and health requirements. These inspections shall be performed weekly. Hazards identified shall be corrected by the applicable contractor(s). Results of these inspections shall be documented, recorded, and communicated.
3. Pinto will perform comprehensive inspections of the project site to assess compliance with all site-specific safety and health requirements. These inspections shall be performed by a Pinto Representative or Pinto safety consultant group. Hazards identified shall be corrected by the applicable contractor(s). Results of these inspections shall be documented, recorded, and communicated.

16. COMMUNICATION AND MEETINGS

Meetings when used effectively can increase communication and eliminate hazards.

1. Pinto will perform daily safety brief meetings.
2. Pinto will perform/attend coordination and sequencing meetings with contactors, the site engineer, and owner. The frequency of these meeting shall be determined by the level of work being performed on the project.
3. Pinto will perform/attend safety meetings as warranted / required.

17. TRAINING

Safety training is an important component in the prevention of injury, illness, property, and environmental damage. Pinto shall provide ongoing safety and health training for its employees related to the project work scope. The following are minimum training requirements for this project:

1. **OSHA 40 Hour HAZWOPER** - Pinto employees shall be 40 Hour Hazwoper certified with their current refresher training in place to work on the project.
2. **OSHA 10 Construction 10 Hour** – Pinto employees shall be in possession of a OSHA 10 hour training Construction Outreach card.
3. **Site Specific HASP** - Pinto employees shall be trained on the contents of this HASP including any documents incorporated by reference such as the Benchmark Turnkey Site Management Plan. Pinto employees will be retrained on any changes made to the HASP throughout the phases of this project.
4. **Weekly Toolbox Talks** – Documented weekly too box talks shall be performed by Pinto and each subcontractor for its employees. Toolbox talk subjects shall be applicable to the work being performed. The Pinto aQuiRe safety training application may be used in lieu of some toolbox talks.
5. **Daily Safety Briefs** – Each Pinto work crew shall hold a daily safety brief before the workday to review potential hazards specific to their work for that day. The daily brief shall be documented on the Pinto form and signed by each employee.
6. **Task Specific Instruction** – Pinto shall provide workers with instructions on the safety and health requirements related to their work tasks and operations. JSA forms may be used during this training. Subcontractors shall allow a Pinto representative attend the training if requested.

18. REGULATORY ACTIVITY

All regulatory activity at the project shall be reported to the Pinto Superintendent immediately. This includes but is not limited to OSHA, NYSDOL, NYS DEC, & EPA activity. The Pinto Superintendent and or Safety Officer will then immediately report the activity to the owner project representative.

19. EMERGENCY PROCEDURES

General

1. The project evacuation alarm is 3 Short Blasts of an Air Horn. When the evacuation horn is sounded workers must report to the Pinto evacuation assembly point. The evacuation assembly point will change throughout the phases of the project. The evacuation location will be noted during the daily safety brief.
2. Emergency numbers and directions to the nearest hospital are included as part of this plan in Attachment 1. The emergency numbers will be posted where employees can see them.
3. Pinto shall maintain a minimum of 1 CPR/First Aid trained employee on site during their work.
4. Pinto shall maintain a eye rinse stations on site.
5. Pinto shall maintain and inspected first aid kits on site.
6. Pinto shall maintain fire extinguishers at all fuel storage locations, hot work locations, on equipment, and in general work areas.
7. All fire safety equipment shall be checked before each use and recorded as inspected monthly. Annual certifications must be in place.

Accountability

In the event of an emergency, Pinto employees shall evacuate to the assembly area noted in the daily brief that day.

It is imperative that all on-site personnel are accounted for during an emergency. Pinto and subcontractors shall maintain a daily tally of employees.

Fire Emergency

1. Notify everyone in the area and begin a general evacuation of that area.
2. Call 911.

3. Notify the Pinto Superintendent.

Fire Extinguisher Use

1. Only use a fire extinguisher if trained and it is safe to do so.
2. **Ensure you maintain an escape zone when using an extinguisher.** Never place yourself in a situation in which you do not have an escape zone.
3. To activate a fire extinguisher, remember **PASS! Pull, Aim, Squeeze and Sweep.**

Pull out the retaining pin in the handle of the extinguisher.
Aim the nozzle or hose at the base of the fire.
Squeeze the handle to discharge the extinguisher.
Sweep in a side-to-side motion.

First Aid

Pinto first aid/CPR trained employees may perform basic first aid on injuries that are non-serious at their discretion.

For any injury that requires treatment beyond first aid, but is not a medical emergency contact the Pinto project supervisor. When in doubt Call 911.

Medical Emergency

1. Evaluate the scene. If the scene is safe evaluate the victim and their severity of injury / medical needs. If the scene is not safe, do not get near the victim.
2. Comfort but do not move the victim.
3. **Call 911 immediately.** When reporting the emergency provide the following information:
    a. Type of Emergency
    b. Location of the Victim
    c. Condition of the Victim
    d. Any dangerous conditions
    e. Do not move the individual unless authorized by some medical authority, or it is obvious that delay in movement would be detrimental to the individual.
4. For choking, if trained and willing to do so, administer the Heimlich maneuver.

Environmental Spill

In the event of a spill of potentially environmentally damaging materials, immediate response is required to prevent or minimize the impact this event will have upon the environment and public welfare. Personnel should continue to observe standard precautions for handling the materials the materials as detailed in the SDS, including the use of PPE. Spills shall be reported the Pinto Superintendent immediately.

20. Appendices

Appendix 1 – Emergency Information

Appendix 1

SITE EMERGENCY TELEPHONE NUMBERS

Police:	**911**
Fire Department:	**911**
Medical:	**911**
Poison Control	**(800)-222-1222**

PROJECT ADDRESS

Bethlehem Steel Site – Enter at Fuhrmann Blvd and Ridge Road Entrance.
Lackawanna Fire Station # 1 is located near this entrance location on the other side of Route 5.

Emergency Room – Mercy Hospital (South Buffalo)	716-826-7000
UDig NY	811

DIRECTIONS TO THE HOSPITAL

Directions to Mercy Hospital (South Buffalo)

565 Abbott Road, Buffalo, NY 14220

Take NY Route 5 to the Tift Street Exit – Take Exit & at Traffic Circle Take Tift Street

Follow Tift Street to McKinley Parkway – Turn to Right onto McKinley Parkway

Follow McKinley Parkway a Short Distance to Lorraine Place – Turn left onto Lorraine Place

Follow Lorraine Place to Abbott Road & Arrive at Mercy Hospital on Your Right.