



July 7, 2021

Milford Township Supervisors and Planning Commission

PO Box 366

Milford, PA

570-296-5540

Submitted via: milfrdtp@ptd.net and via Rachel Hendricks, Vice-Chair

Re: Proposed Milford Township Draft Wellhead Protection Ordinance – Written Comments by the Delaware Riverkeeper Network before the July 7, 2021 Township Meeting

Dear Milford Township officials:

Delaware Riverkeeper Network (DRN) is writing to provide input, raise questions as we reviewed the ordinance, and share possible resources for more research to the Milford Township and its consultant as it works with the community to better strengthen and protect the sensitive Sawkill Creek watershed through the development of a Wellhead protection ordinance that is currently being developed. DRN was contacted by members and concerned residents of the area and within the township that live within the Sawkill watershed – an Exceptional Value (EV) watershed which flows into the Delaware River which has Special Protection Waters (SPW) designation by the Delaware River Basin Commission (DRBC). We understand and are following that engaged residents have been providing detailed information, sample ordinances from other communities and detailed comments and questions to help to strengthen the proposed draft ordinance that was shared at the May township meeting of which DRN attended via Zoom.

It is refreshing to see the care and concerns the residents and the township has to undertake this effort as it continues the legacy of stewardship and protection that this region of Pike County is known for. As you are aware, Pike County residents and Milford Township residents take great pride in the clean streams and the Delaware River that flows through their backyards and that helps support a thriving conservation economy that many call home and that others come to visit for the mature forests and protected cold clean streams that flow through the region. We hope our comments and questions assist in the Township's continued review and deliberation efforts with this ordinance development; and also urge you to consider the information that has come before you by the residents and Friends of Milford Aquifer as they share suggested changes and protections both in verbal testimony and also in writing which overall look to improve and strengthen protections of the sensitive Sawkill Creek watershed an aquifer. At the prior public meeting where this ordinance was discussed it was noted that there would be ample time for

DELAWARE RIVERKEEPER NETWORK
925 Canal Street, Suite 3701
Bristol, PA 19007
Office: (215) 369-1188
fax: (215) 369-1181
drn@delawareriverkeeper.org
www.delawareriverkeeper.org

Milford Township

From: Criswell, Alexander B. [criswellab@cdmsmith.com]
Sent: Wednesday, July 07, 2021 3:54 PM
To: Milford Township; wateropr@gmail.com
Cc: King, Abraham J.; Remphrey, Byrne
Subject: RE: CDM Smith Notification Discussion at the Supervisors' Meeting
Attachments: 2021WSIPlans_MilfordTownship.pdf

Shahana,

I am attaching to this email a set of permit ready site plans detailing our designs for the Authority. These plans show the proposed locations of all construction planned at the water treatment plant and locations of proposed water main installation/replacement. In addition, these plans should aid in answering some of the questions you outlined in your email.

1. The pump station is going to be located at the water treatment plant, above the existing below-grade station on the south-west side of the building. See sheet C-6 for the exact location. According to our plans, the existing pump station will be demolished once the new station is constructed and operational.
2. As the pumps are to be driven by all electric motors, there should not be any exhaust fumes. The new pumps and controls will be connected to the existing electrical system present at the plant. There will not be significant noise from the pumps as they will be enclosed and installed in a new building.
3. The nearest building that is not on sight is a house about 600 ft away.
4. There has been no formal analysis performed to quantify the risk of one of the tanks failing. A simple analysis would suggest that if the existing tank (~400,000 gallons) were to fail, it would have to travel about 650 – 700 ft before coming in contact with the closest residential property. By this point, assuming no water is intercepted by Vantine Brook, the water would only be about 1 – 2 inches deep. The new tank is proposed to be smaller (150,000 gallons) and would not amount to this much water given a similar event. These tanks are periodically inspected for damage which could cause a failure event to occur and necessary maintenance/rehabilitation is performed to minimize the risk of such an event. The existing tank was constructed in 1998 and, to our knowledge, has not suffered major damage since. Given that the water would disperse so significantly during a catastrophic event and be intercepted by Vantine Brook, it is not likely that there would be any significant property damage outside of the water treatment plant. Additionally, the likelihood of both tanks failing at the same time is extremely unlikely as well. The most likely scenario for failure would be an unintended discharge, which would not pose a significant flood risk.
5. We are planning two stream crossings in our plans, both crossing Vantine creek. Please refer to pages C-3 and C-5 for the location of these crossings. In both cases the pipe will be buried under the stream and encased in concrete. We also plan to install a culvert over the crossing near the treatment plant to facilitate an access driveway for maintenance. In both cases, we show details on sheets CD-3 and CD-3A for how these crossings will be installed. The stream crossing detail on sheet CD-3A also includes erosion and sediment control details specific to these installations as well.
6. We intend to coordinate with the zoning and building officers as we move forward on permit submissions. Currently we are submitting three state permits (a PennDOT Highway Occupancy Permit, a chapter 105 General Permit for waterway and wetlands engineering, and a Public Water Supply Permit for the proposed water

storage tank and booster pump station) and intend to file for township permits after determining what permits we will need.

Please let me know if you have any further questions or would like clarifications on any of the above items.

Alex Criswell, EIT
Environmental Engineer 2
CDM Smith
280 Granite Run Drive, Suite 160, Lancaster, PA 17601
General: 717.581.8504
Cell: 717.203.8739
cdmsmith.com



From: Milford Township <milfrdtp@ptd.net>
Sent: Wednesday, July 7, 2021 10:55 AM
To: wateropr@gmail.com
Cc: Criswell, Alexander B. <criswellab@cdmsmith.com>
Subject: CDM Smith Notification Discussion at the Supervisors' Meeting

Mr. May,

At last night's meeting, Supervisors discussed the Municipal notification of Planned land Development for Chapter 102 permits. that permit applications needed to be provided with the sight plans so that the normal process could be done. We cannot check if it is in agreement with our ordinances without sight plans. The following are other questions that the Supervisors had:

1. What is the exact location of the above ground pump?
2. Is it going to generate any noise or exhaust fumes?
3. What's the distance from the nearest building that is not on sight?
4. In terms of emergency management planning, is there any information about what the potential for flood risk is if one of those towers comes down.
5. Will another stream crossing be added?
6. Check with the Zoning Officer and the Building Officer for what permits would be required.

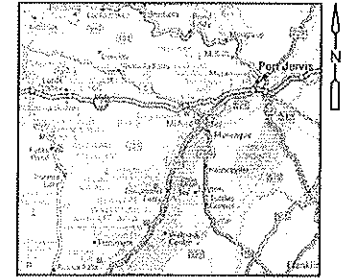
Thanks,

Shahana Shamim

MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
PIKE COUNTY, PENNSYLVANIA

WATER SYSTEM IMPROVEMENTS

JULY 2021



LOCATION MAP
NOT TO SCALE

ACT NO. 287/187

CDM SMITH INC. HEREBY STATES THAT, PURSUANT TO THE PROVISIONS OF ACT NO. 287 OF DECEMBER 10, 1974, AS AMENDED BY ACT 121 OF OCTOBER 9, 2008 OF THE PENNSYLVANIA LEGISLATURE, IT HAS PERFORMED THE FOLLOWING IN PREPARING THESE DRAWINGS: RECORDING EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION(S) SHOWN ON THE DRAWINGS:

- (1) PURSUANT TO SECTION 4, CLAUSE (1) OF SAID ACT, CDM SMITH INC. INSPECTED OR OBTAINED A COPY OF THE LIST OF USERS, AS PRESCRIBED BY SECTION 3 OF SAID ACT, IN SAID POLITICAL SUBDIVISION(S). "FACILITY OWNER" IS DEFINED IN SECTION 1 OF SAID ACT TO INCLUDE PUBLIC UTILITY, POLITICAL SUBDIVISION, MUNICIPALITY, AUTHORITY, RURAL ELECTRIC COOPERATIVE, OR OTHER PERSON OR ENTITY WHO OR WHICH OWNS OR OPERATES A LINE. THE TERM DOES NOT INCLUDE THE DEPARTMENT OF TRANSPORTATION WITHIN THE RIGHT-OF-WAY OF A STATE HIGHWAY.
- (2) PURSUANT TO SECTION 4, CLAUSE (2) OF SAID ACT, CDM SMITH INC. REQUESTED FROM EACH USER'S OFFICE DESIGNATED ON SUCH LIST THE INFORMATION PRESCRIBED BY SECTION 2, CLAUSE (A) OF SAID ACT, BEING "INFORMATION AS TO THE POSITION AND TYPE OF THE FACILITY OWNER'S LINES" AT THE SITES OF EXCAVATION OR DEMOLITION WORK "BASED ON THE INFORMATION CURRENTLY IN THE FACILITY OWNER'S POSSESSION". "LINE" IS DEFINED IN SAID ACT AS MEANING AN UNDERGROUND CONDUCTOR OR UNDERGROUND FACILITY USED IN PROVIDING ELECTRIC OR COMMUNICATION SERVICE, OR AN UNDERGROUND PIPE USED IN CARRYING OR PROVIDING GAS, OIL OR OIL PRODUCT DELIVERY, SEWAGE, WATER, OR OTHER SERVICE TO ONE OR MORE CONSUMERS OR CUSTOMERS OF SUCH SERVICE AND THE APPURTENANCES THERE TO REGARDLESS OF WHETHER SUCH LINE OR STRUCTURE IS LOCATED ON LAND OWNED BY A PERSON OR PUBLIC AGENCY OR WHETHER IT IS LOCATED WITHIN AN EASEMENT OR RIGHT-OF-WAY. THE TERM INCLUDES STORM DRAINAGE AND TRAFFIC LIGHTS.
- (3) PURSUANT TO SECTION 4, CLAUSE (3) OF SAID ACT, CDM SMITH INC. HAS SHOWN UPON THESE DRAWINGS, "THE POSITION AND TYPE OF EACH LINE, AS DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY CLAUSE (2)" OF SECTION 4 OF SAID ACT, AND THE FACILITY OWNER'S NAMES, DESIGNATED OFFICE ADDRESSES AND TELEPHONE NUMBERS, AS SHOWN ON THE LIST DESCRIBED IN PARAGRAPH NO. 1 ABOVE, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.
- (4) PURSUANT TO SECTION 4, CLAUSE (4) OF SAID ACT, CDM SMITH INC. HAS MADE "A REASONABLE EFFORT TO PREPARE THE CONSTRUCTION DRAWINGS TO AVOID DAMAGE TO AND MINIMIZE INTERFERENCE WITH A FACILITY OWNER'S FACILITIES IN THE CONSTRUCTION AREA BY MAINTAINING AN EIGHTEEN-INCH CLEARANCE OF THE FACILITY OWNER'S FACILITIES".

CDM SMITH INC. DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO SAID REQUEST AND AS REFLECTED ON THESE DRAWINGS IS CORRECT OR ACCURATE, BUT CDM SMITH INC. IS REFLECTING SAID INFORMATION ON THESE DRAWINGS ONLY DUE TO THE REQUIREMENTS OF SAID ACT 287 OF DECEMBER 10, 1974, AS AMENDED BY ACT 121 OF OCTOBER 9, 2008.

UTILITY LISTING

GREEN ACRES COMMUNITY
113 ROBERTS LN
MILFORD, PA 18337

PIKE COUNTY LIGHT & POWER COMPANY
C/O ORANGE & ROCKLAND UTILITIES INC
380 WEST ROUTE 59
SPRING VALLEY, NY 10977

CABLEVISION OF WAYMACK LLC
C/O UTILITYQUEST/STS
833 ROUTE 537, SUITE 2
CREAM RIDGE, NJ 08514

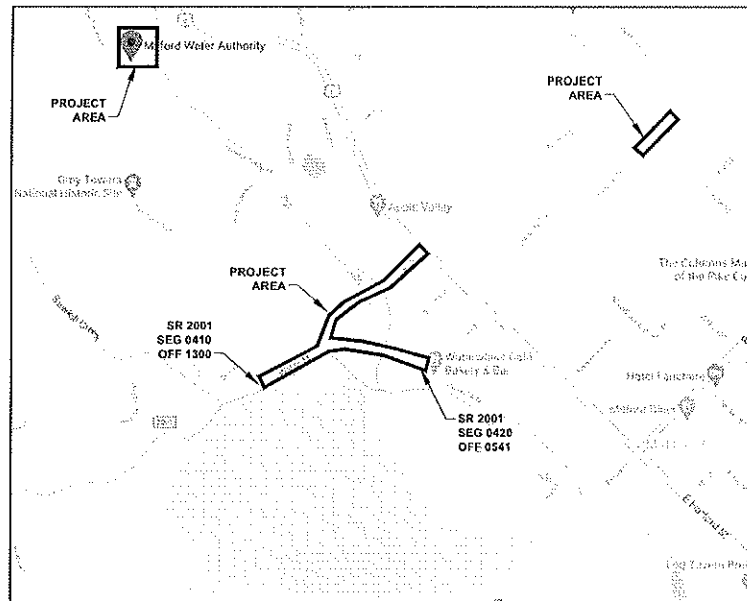
MATAMORAS MUNICIPAL AUTHORITY OF BORO
304 PENNSYLVANIA AVENUE
MATAMORAS, PA 18336

VERIZON NORTH
7441 W GRANDVIEW BLVD
ERE, PA 16508

TENNESSEE GAS PIPELINE
124 TENNESSEE GAS RD
CLIFFORD TWP, PA 18470

WESTFALL TOWNSHIP
PO BOX 247
MATAMORAS, PA 18336-0247

ING PENN NATURAL GAS
1 PEI CENTER
WILKES BARRE, PA 18711-0001



SITE PLAN

SCALE: 1" = 500'

AUTHORITY MEMBERS

CHAIRMAN	SCOTT SHELDON
VICE CHAIRMAN	RUSS BORONOW
SECRETARY	MICHAEL ASMAKOPOULOS
TREASURER	GREG MYER
ASSISTANT TREASURER	CRAIG COX
MEMBER	DOUG MANION

SOLICITOR

JOHN KLEMEYER, ESQ.

DRAWING INDEX

SHEET	DRAWING NAME
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C-2	PLAN AND PROFILE STA 7+00 TO STA 12+00
C-3	PLAN AND PROFILE STA 12+00 TO STA 18+11
C-4	WATER STREET PLAN
C-5	FOSTER HILL ROAD PLAN AND PROFILE
C-6	WTP PLAN AND PROFILE STA 0+00 TO 4+84
C-7	PUMP STATION SITE PLAN
CD-1	GENERAL DETAILS I
CD-2	GENERAL DETAILS II
CD-3	GENERAL DETAILS III
CD-3A	GENERAL DETAILS IV
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CD-5	PermitDOT DETAILS
CD-6	TRAFFIC CONTROL AND PermitDOT DETAILS
CD-7	MAINTENANCE AND PROTECTION OF TRAFFIC NOTES AND PermitDOT UTILITY LOCATION TABLES
PL-1	EXISTING PUMP STATION, WTP, LIFT STATION, AND DISTRIBUTION NETWORK PLAN AND PROFILE
PL-2	NEW PUMPING STATIONS
PL-3	NEW PUMPING STATIONS, BEST PRACTICES
PL-4	EXISTING AND NEW PUMPING STATIONS
PL-5	EXISTING AND NEW PUMPING STATIONS
PL-6	EXISTING AND NEW PUMPING STATIONS
PL-7	EXISTING AND NEW PUMPING STATIONS
PL-8	EXISTING AND NEW PUMPING STATIONS
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PL-99	EXISTING AND NEW PUMPING STATIONS
PL-100	EXISTING AND NEW PUMPING STATIONS

DATE: _____ BY: CDM SMITH
SERIAL NO.: _____

**CDM
Smith**

LANCASTER, PENNSYLVANIA

Water

Environment

Transportation

Energy

Facilities

GENERAL NOTES

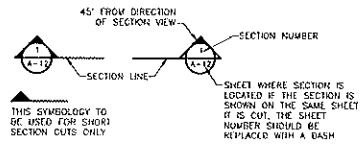
1. UNLESS OTHERWISE NOTED ON THE PLANS, ALL WATER MAINS SHALL BE CLASS 52 DCL WITH DOUBLE LIVING THICKNESS.
2. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 4 FEET OF COVER AND BE HORIZONTAL OR RISING TO A FIRE HYDRANT UNLESS OTHERWISE NOTED.
3. UNLESS OTHERWISE NOTED ON PLANS, ALL WATER SERVICES SHALL BE PLACED TO THE EDGE OF THE PUBLIC RIGHT-OF-WAY. FUTURE MAINTENANCE OF WATER SERVICES WITHIN PERMITS RIGHT-OF-WAY WILL BE THE RESPONSIBILITY OF THE MILFORD WATER AUTHORITY.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES.
5. THESE PLANS REFLECT THE USE OF THRUST BLOCKS TO PROVIDE THRUST RESTRAINT. OTHER ACCEPTABLE METHODS OF PROVIDING PIPE RESTRAINT ARE OUTLINED IN THE CONTRACT SPECIFICATIONS.
6. A MINIMUM SEPARATION OF 18" MUST BE MAINTAINED BETWEEN THE WATER MAIN AND OTHER UTILITIES.

ABBREVIATIONS

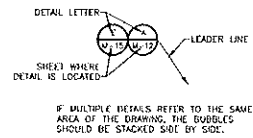
ABS	ASBESTOS CEMENT
BS	BULK BRUTE
CI	CAST IRON
CONC	CONCRETE
DI	DUCTILE IRON
DCL	DUCTILE IRON CEMENT LINED
EXST	EXISTING
FTE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
G	GAS
GV	GALVANIZED GATE VALVE
IN	INVERT
MH	MANHOLE
Nb	NUMBER
OE	OVERHEAD ELECTRIC
PLA	PLASTIC
R/W	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
RED	REDUCER
SD	STORM DRAIN
SS	SANITARY SEWER
STL	STEEL
TEL	TELEPHONE
TYP	TYPICAL
UTEL	UNDERGROUND TELEPHONE
W	WATER
WV	WATER VALVE

SYMBOLS

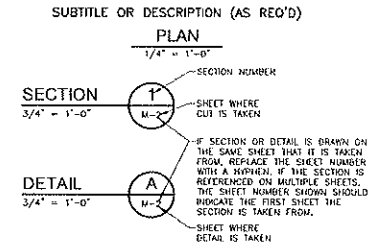
SECTION CUT SYMBOLS



DETAIL CALL OUT SYMBOLS

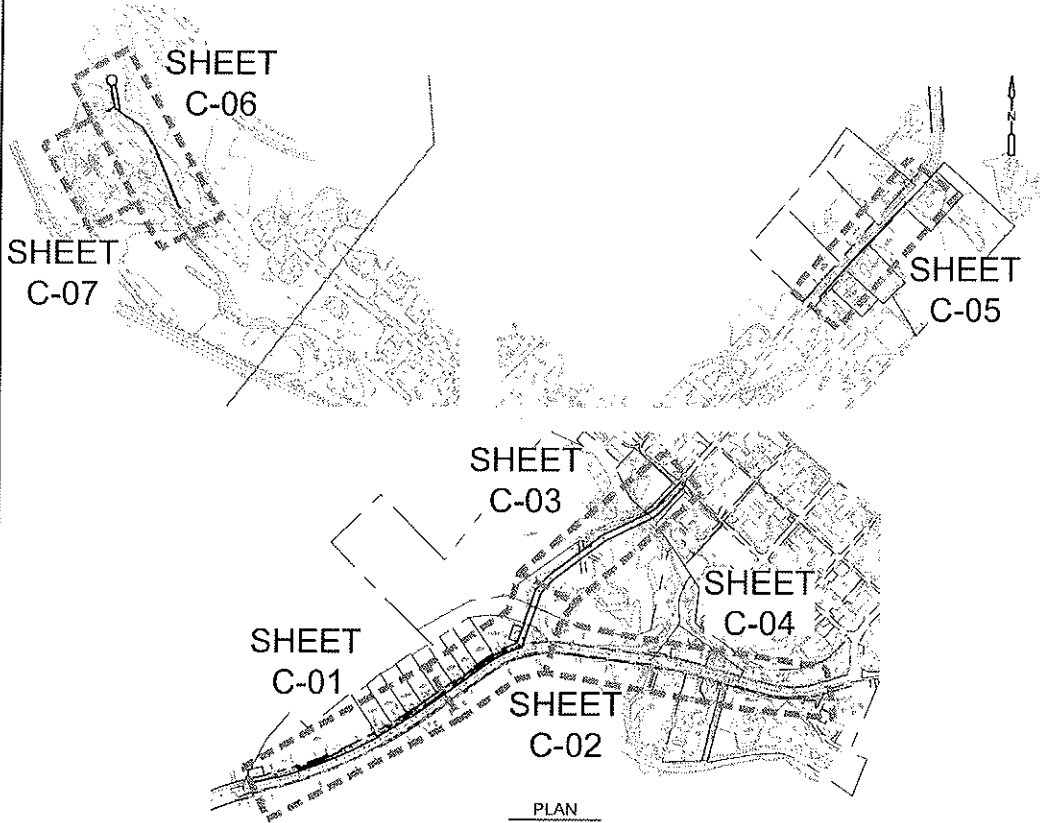


DRAWING SECTION AND DETAIL TITLES



LEGEND

	EXISTING WATER METER
	EXISTING MAN BOX
	CONIFEROUS TREE
	TREE/BRUSH LINE
	UTILITY POLE
	CURB STOP
	GAS VALVE
	EXISTING WATER VALVE
	SIGN
	STORM INLET
	PROPERTY CORNER IRON PIN
	THRUST BLOCK
	EXISTING FIRE HYDRANT
	FIRE HYDRANT
	GATE VALVE
	RIGHT-OF-WAY LINE
	FENCE LINE
	GAS LINE
	WATER LINE
	SANITARY SEWER LINE
	STORM DRAIN
	STREAM
	OVERHEAD ELECTRIC
	UNDERGROUND TELEPHONE
	CURB STOP
	WATER MAIN
	INDEX CONTOUR
	INTERMEDIATE CONTOUR
	CONCRETE MONUMENT



DESIGNED BY: J. LARKER
 DRAWN BY: J. SESA
 SHEET CHECKED BY: A. KINS
 CROSS CHECKED BY: H. KUMHARTY
 APPROVED BY: [Signature]
 DATE: JUNE 2021

CDM Smith
 220 Franklin Road, Suite 100
 Lehigh Valley, PA 18101
 TW (717) 560-7500

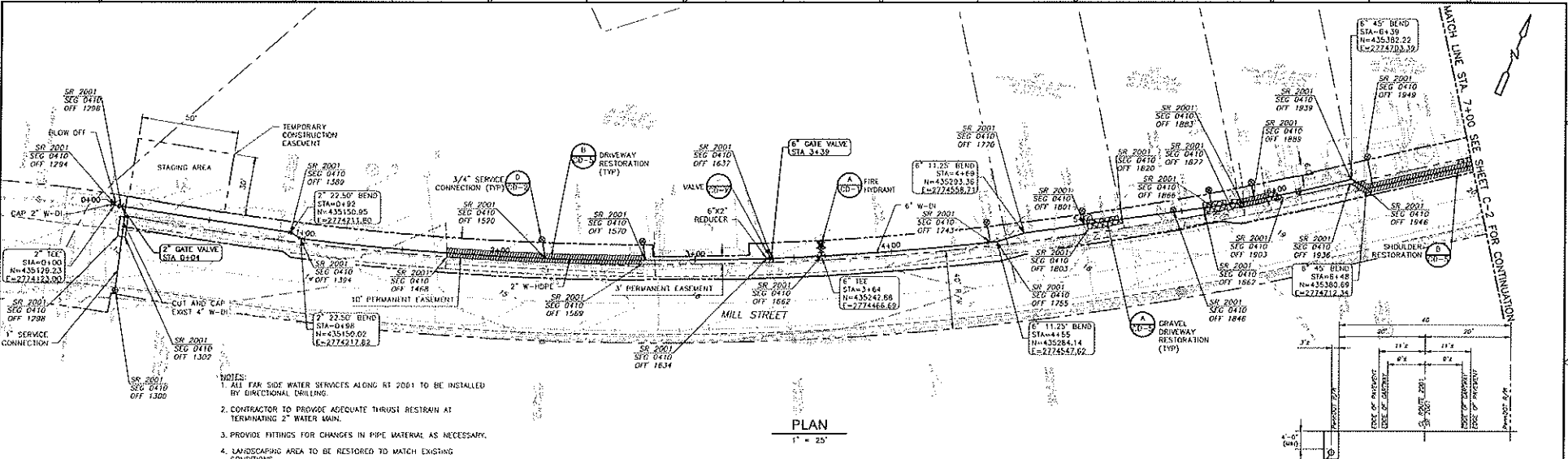
MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
 PIKE COUNTY, PENNSYLVANIA
 2021 WATER SYSTEM IMPROVEMENTS

GENERAL NOTES, ABBREVIATIONS
 SYMBOLS AND LEGEND

PROJECT NO. S348-241336
 FILE NAME: CDD11LPL.DWG
 SHEET NO. G-1

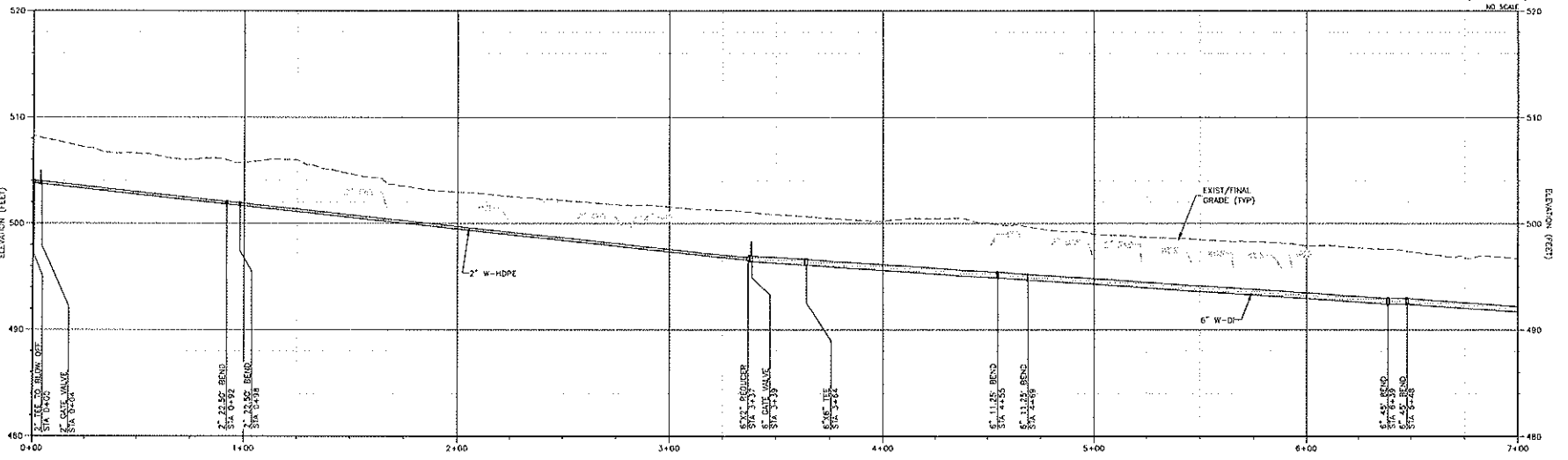
PERMIT SUBMISSION

PROJECT: 2021 WATER SYSTEM IMPROVEMENTS
 DATE: 07/23/2021 10:43:07 AM
 DRAWN BY: J. LARSEN
 CHECKED BY: A. KING
 APPROVED BY: B. SEMPERNY
 DATE: JULY 2021
 PROJECT NO: 5340-24133A
 FILE NAME: 0001WLP.DWG
 SHEET NO: C-1
 PERMIT SUBMISSION



- NOTES:
1. ALL FAR SIDE WATER SERVICES ALONG RT 2001 TO BE INSTALLED BY DIRECTIONAL DRILLING.
 2. CONTRACTOR TO PROVIDE ADEQUATE THRUST RESTRAIN AT TERMINATING 2" WATER MAIN.
 3. PROVIDE FITTINGS FOR CHANGES IN PIPE MATERIAL AS NECESSARY.
 4. LANDSCAPING AREA TO BE RESTORED TO MATCH EXISTING CONDITIONS.

PLAN
1" = 25'

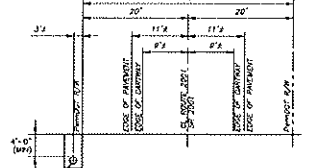
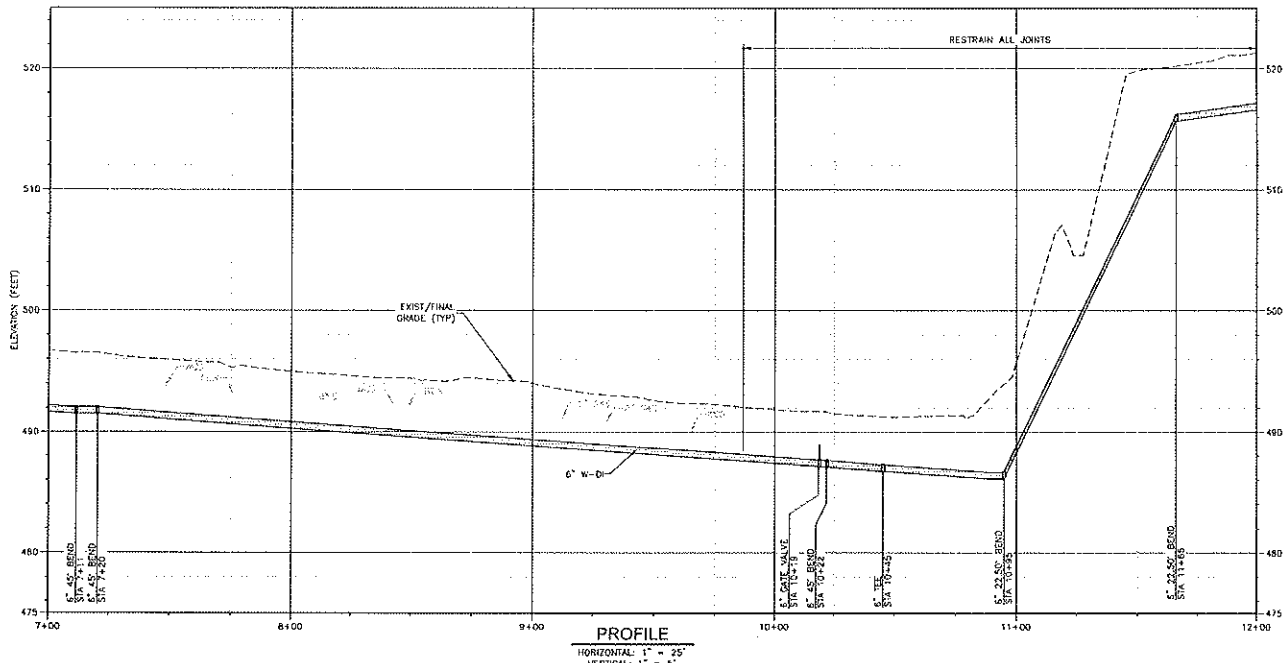
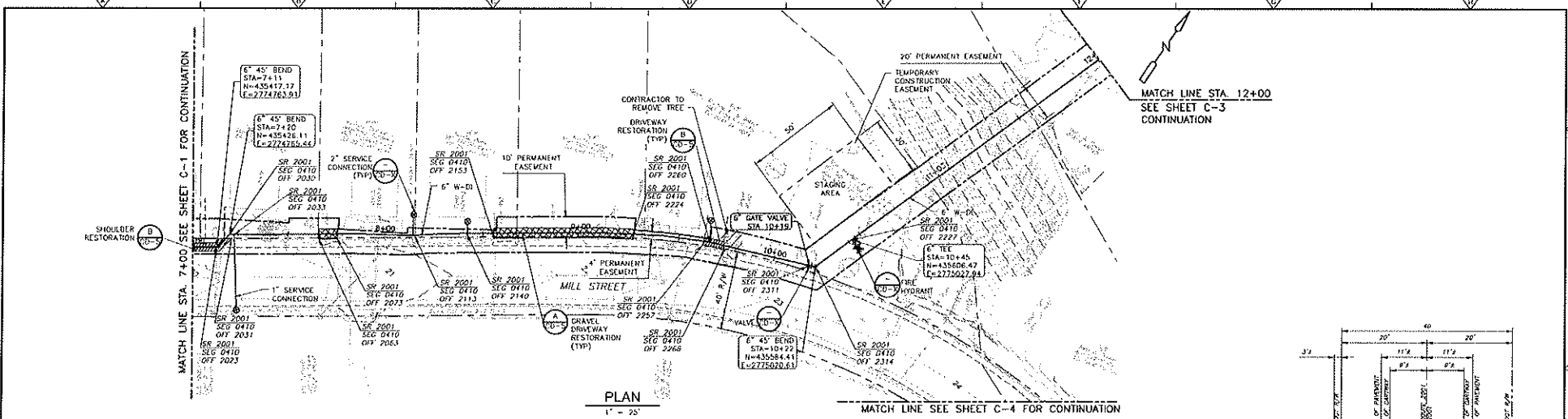


PROFILE
HORIZONTAL: 1" = 25'
VERTICAL: 1" = 5'

DESIGNED BY: J. LARSEN DRAWN BY: J. SESA SHEET CHECKED BY: A. KING CROSS CHECKED BY: B. SEMPERNY APPROVED BY: DATE: JULY 2021				CDM Smith 240 Gravel Run Drive, Suite 100 Lincoln, PA 15621 Tel: (717) 562-7400		MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD PIKE COUNTY, PENNSYLVANIA 2021 WATER SYSTEM IMPROVEMENTS		PROJECT NO: 5340-24133A FILE NAME: 0001WLP.DWG SHEET NO: C-1	
REV. NO.	DATE	DRWN	CHGD	REMARKS					

PERMIT SUBMISSION

SHEET: C0021.PLT - 05/20/21
 PROJECT: 2021 WATER SYSTEM IMPROVEMENTS
 DRAWN BY: J. SGAZZA
 CHECKED BY: B. REMPHREY
 DATE: MAY 2021
 ALL RIGHTS RESERVED.
 THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN. ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



NOTES:
 1. ALL FAR SIDE WATER SERVICES ALONG RT 2001 TO BE INSTALLED BY TRENCHLESS METHOD.
 2. PROVIDE FITTINGS FOR CHANGES IN PIPE MATERIAL AS NECESSARY.
 3. LANDSCAPING AREA TO BE RESTORED TO MATCH EXISTING CONDITIONS.

REV	DATE	DRAWN	CHK'D	REMARKS

DESIGNED BY: J. SGAZZA
 DRAWN BY: J. SGAZZA
 SHEET CHECKED BY: A. SGAZZA
 CROSS CHECKED BY: B. REMPHREY
 APPROVED BY:
 DATE: MAY 2021

CDM Smith
 250 Graven Run Drive, Suite 110
 Lancaster, PA 17601
 Tel: (717) 560-7500

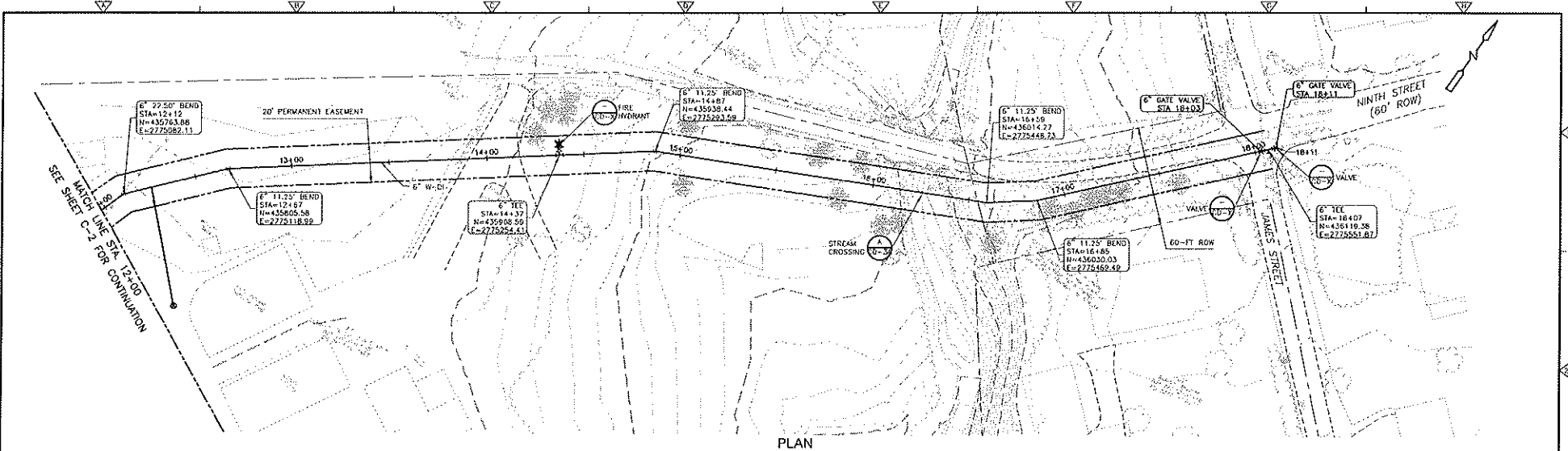
MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
 PIKE COUNTY, PENNSYLVANIA
 2021 WATER SYSTEM IMPROVEMENTS

PLAN AND PROFILE
 STA 7+00 TO STA 12+00

PROJECT NO: 5348-241334
 FILE NAME: C0021.PLT.DWG
 SHEET NO:
 C-2

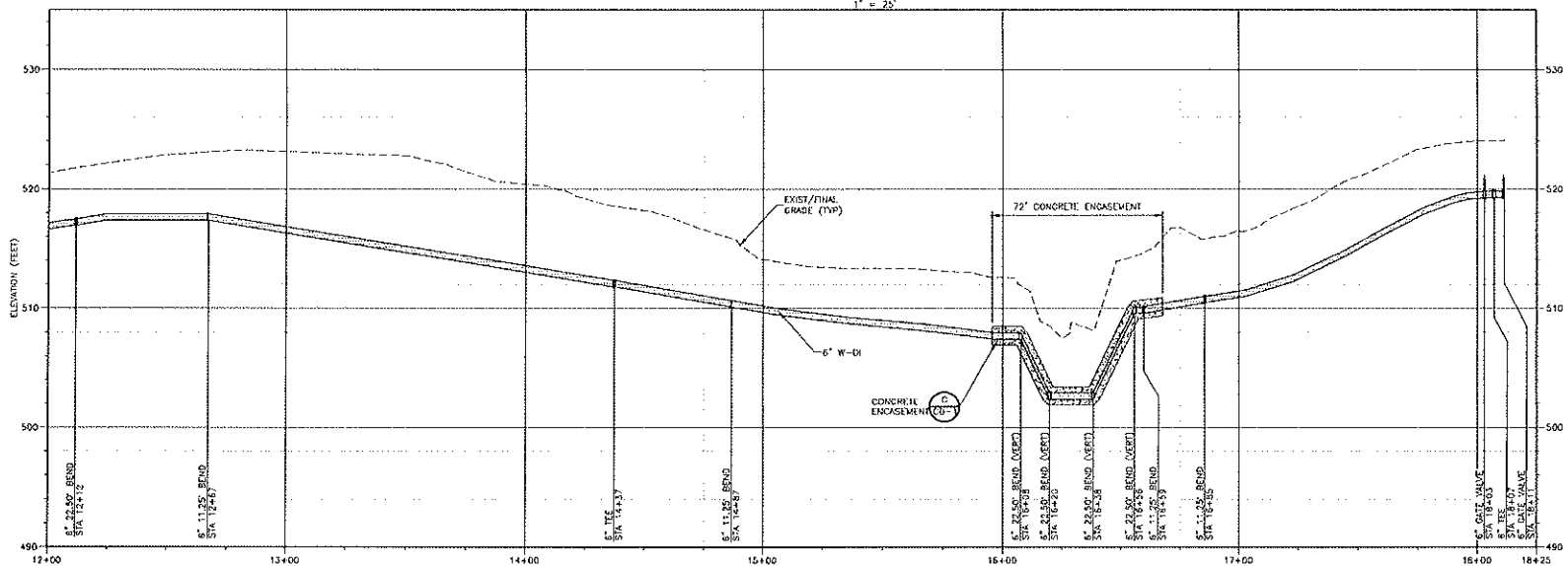
PERMIT SUBMISSION

DESIGN: JAMES W. ZIMMERMAN, P.E. (10/12/01) 7/27/2021 10:31:12 AM
 DATE: 7/27/2021
 FILE: C:\Projects\2021\2021-Water-System-Improvements\2021-Water-System-Improvements\2021-Water-System-Improvements.dwg
 PROJECT: 2021 WATER SYSTEM IMPROVEMENTS
 SHEET: 2021 WATER SYSTEM IMPROVEMENTS - PLAN AND PROFILE STA 12+00 TO STA 18+11
 DRAWN BY: J. SOGA
 CHECKED BY: B. BELZURRY
 DATE: JULY 2021



PLAN

1" = 20'



PROFILE

HORIZONTAL: 1" = 20'
 VERTICAL: 1" = 5'

REV.	DATE	DRAWN	CHECK	REMARKS

DESIGNED BY: J. LAMMER
 DRAWN BY: J. SOGA
 SHEET CHECKED BY: A. KING
 CROSS CHECKED BY: B. BELZURRY
 APPROVED BY: [Signature]
 DATE: JULY 2021

CDM Smith
 2000 Centre Hill Drive, Suite 100
 Lancaster, PA 17601
 Tel: (717) 366-7300

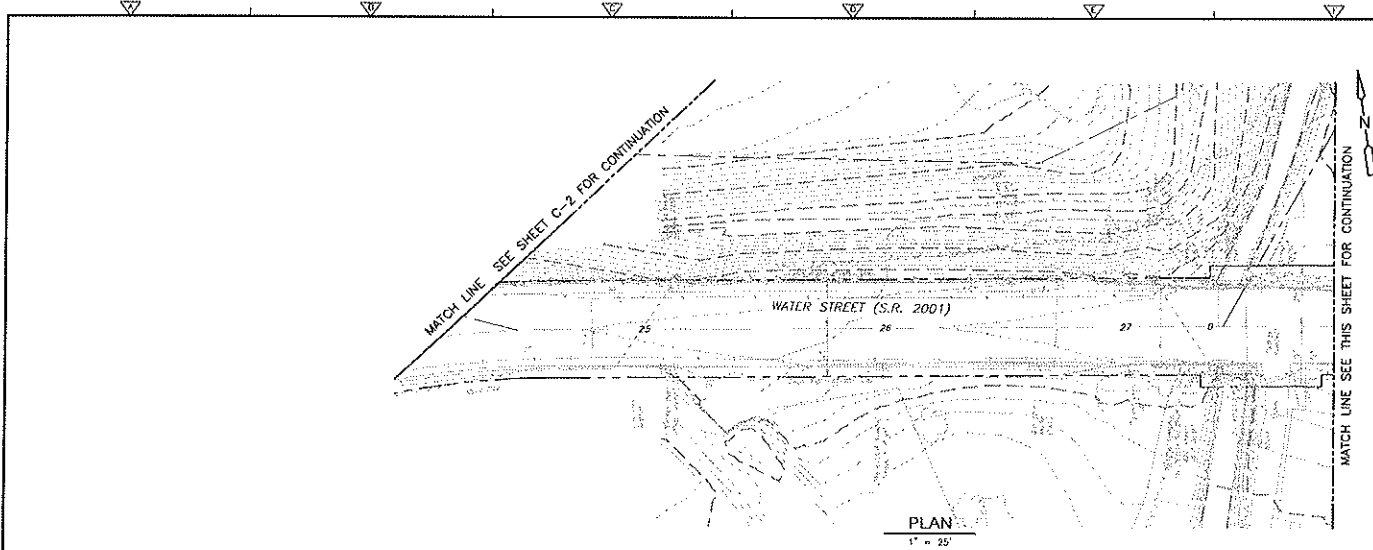
MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
 PIKE COUNTY, PENNSYLVANIA
 2021 WATER SYSTEM IMPROVEMENTS

PLAN AND PROFILE
 STA 12+00 TO STA 18+11

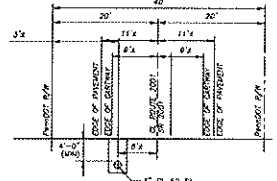
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 FILE NAME: C003WLPD.DWG
 SHEET NO:
 C-3

PERMIT SUBMISSION

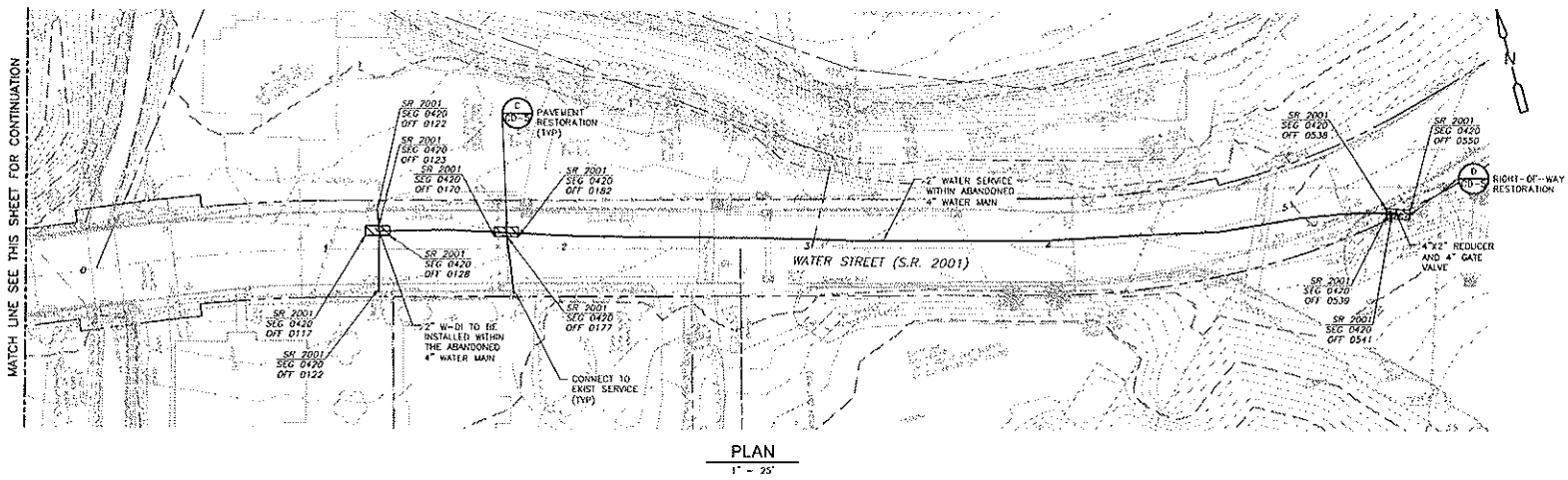
FILED: (COUNTY: PIKE, PROJECT: 2021 WATER SYSTEM IMPROVEMENTS)
 DATE: 7/23/2021 10:58:54 AM
 USER: J. FARKER
 PROJECT: 2021 WATER SYSTEM IMPROVEMENTS
 SHEET: C-4
 DRAWN BY: J. SENA
 CHECKED BY: D. HUMPHREY
 DATE: JULY 2021



- NOTES:**
1. ALL FAR SIDE WATER SERVICES ALONG RT 2001 TO BE INSTALLED BY DIRECTIONAL DRILLING.
 2. PROVIDE FITTINGS FOR CHANGES IN PIPE MATERIAL AS NECESSARY.
 3. OWNER TO PROVIDE TEMPORARY WATER TO HOMEOWNERS.
 4. LANDSCAPING AREA TO BE RESTORED TO MATCH EXISTING CONDITIONS.



SR 2001/SEG 0420/OFF 0117
TO
SR 2001/SEG 0420/OFF 0550
NO SCALE



REV. NO.	DATE	DRAWN	CHECK	REMARKS

DESIGNED BY:	J. FARKER
DRAWN BY:	J. SENA
SHEET CHECK BY:	A. KING
CROSS CHECK BY:	D. HUMPHREY
APPROVED BY:	
GATE:	JULY 2021

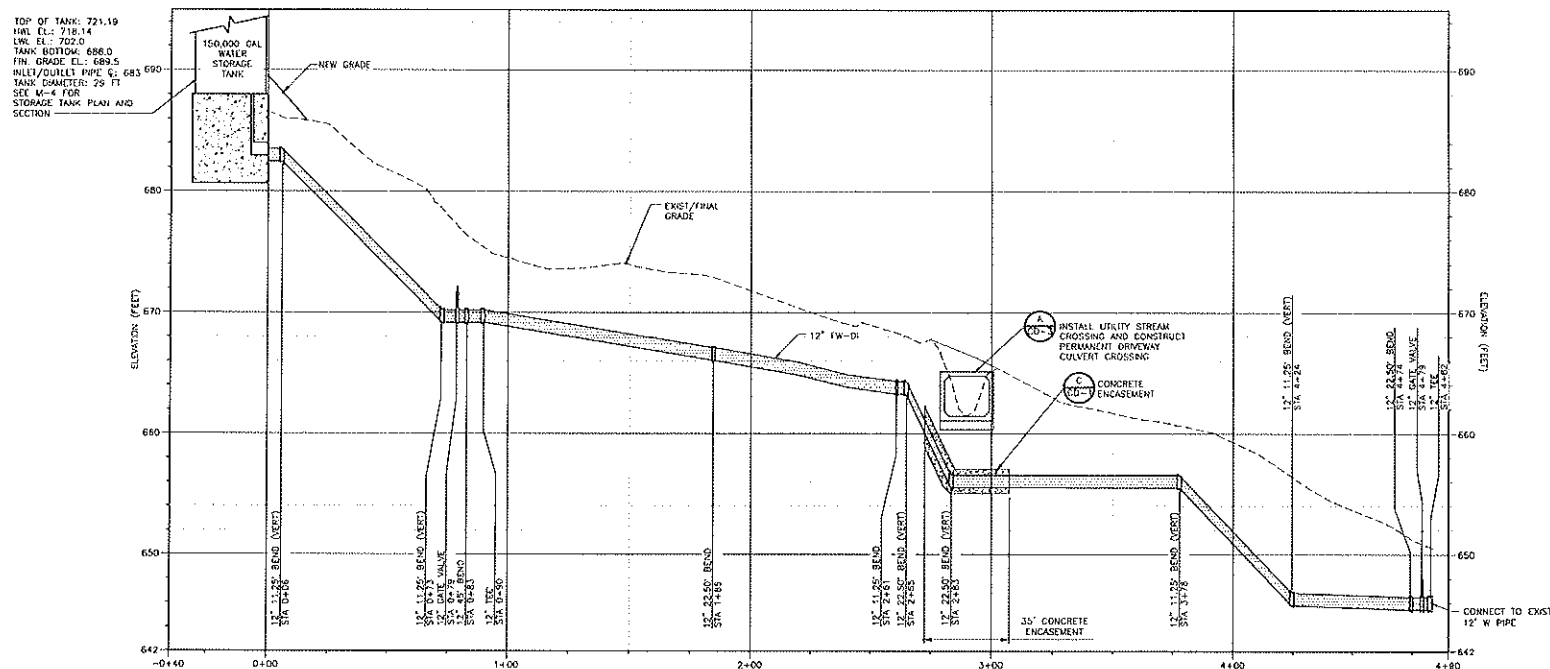
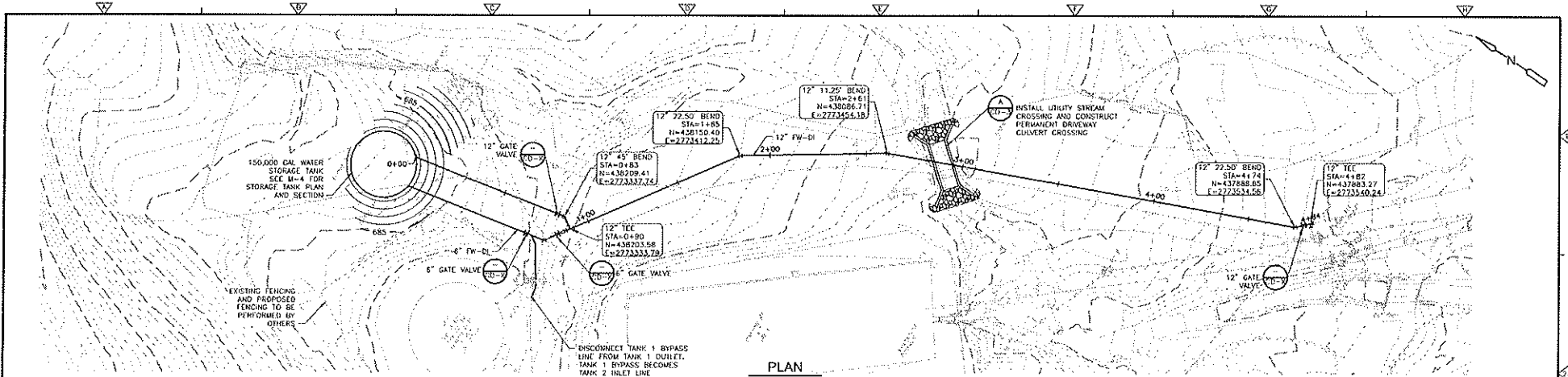
CDM Smith 280 Crane Run Drive, Suite 100 Lehigh Valley, PA 18101 Tel: (717) 550-7800	MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD PIKE COUNTY, PENNSYLVANIA 2021 WATER SYSTEM IMPROVEMENTS
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WATER STREET PLAN

PROJECT NO.	5348-243358
FILE NAME:	C204WLS.P/DWG
SHEET NO.	C-4

PERMIT SUBMISSION

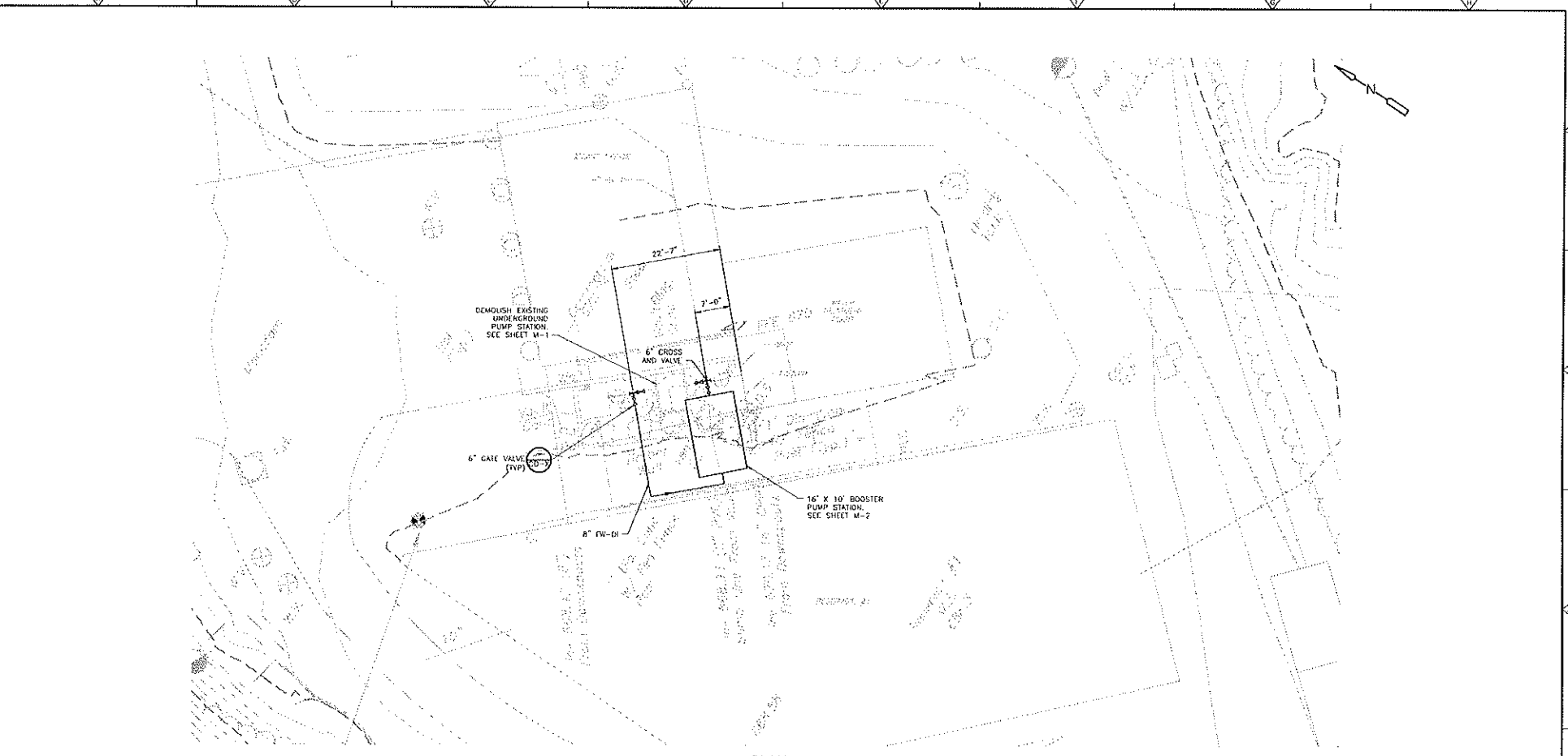
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 DATE: 2021/07/11 14:13
 PROJECT: 2021 WATER SYSTEM IMPROVEMENTS
 DRAWN BY: J. SORSA
 SHEET CHECKED BY: A. KING
 CROSS CHECKED BY: B. BILUPSEY
 APPROVED BY: []
 DATE: JUL 2021



REVISIONS NO. DATE DRAWN CHECKED 1 07/11/2021 J.SORSA A.KING 2 07/11/2021 B.BILUPSEY		DESIGNED BY: J. SORSA DRAWN BY: J. SORSA SHEET CHECKED BY: A. KING CROSS CHECKED BY: B. BILUPSEY APPROVED BY: [] DATE: JUL 2021	CDM Smith 200 Green Run Drive, Suite 100 Langhorne, PA 19047 Tel: (717) 540-7500	MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD PIKE COUNTY, PENNSYLVANIA 2021 WATER SYSTEM IMPROVEMENTS	WTP PLAN AND PROFILE STA 0+00 TO STA 4+84	PROJECT NO: 5348-211338 FILE NAME: C05DWLPP.dwg SHEET NO: C-6
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PERMIT SUBMISSION

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 Title: 2021_07_27_10_00_00.dwg
 Date: 7/27/2021 4:16:18 PM
 Project: 2021_07_27_10_00_00.dwg
 Description: 2021 WATER SYSTEM IMPROVEMENTS
 THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



PLAN
1" = 10'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. LAMON
 DRAWN BY: J. SOSA
 SHEET CHECKED BY: A. KING
 CROSS CHECKED BY: B. RUMPHREY
 APPROVED BY: [Signature]
 DATE: JULY 2021

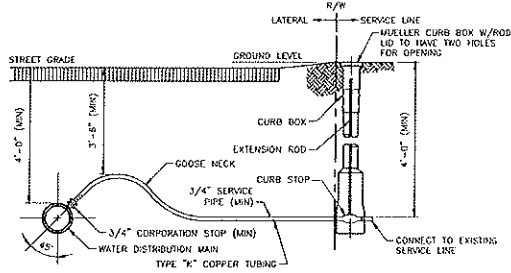


MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
 PIKE COUNTY, PENNSYLVANIA
 2021 WATER SYSTEM IMPROVEMENTS

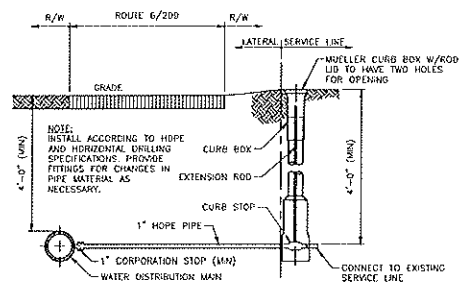
PUMP STATION
 SITE PLAN

PROJECT NO: 5348-241330
 FILE NAME: C007PSP1.dwg
 SHEET NO:
 C-7

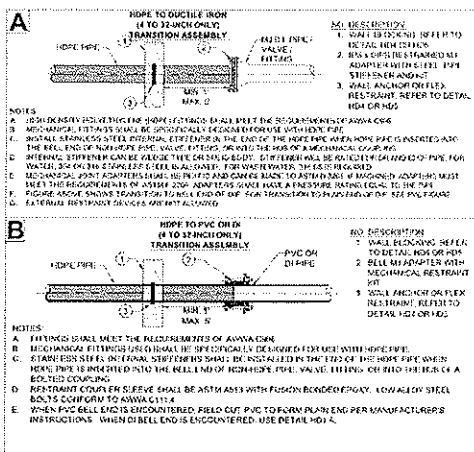
PERMIT SUBMISSION



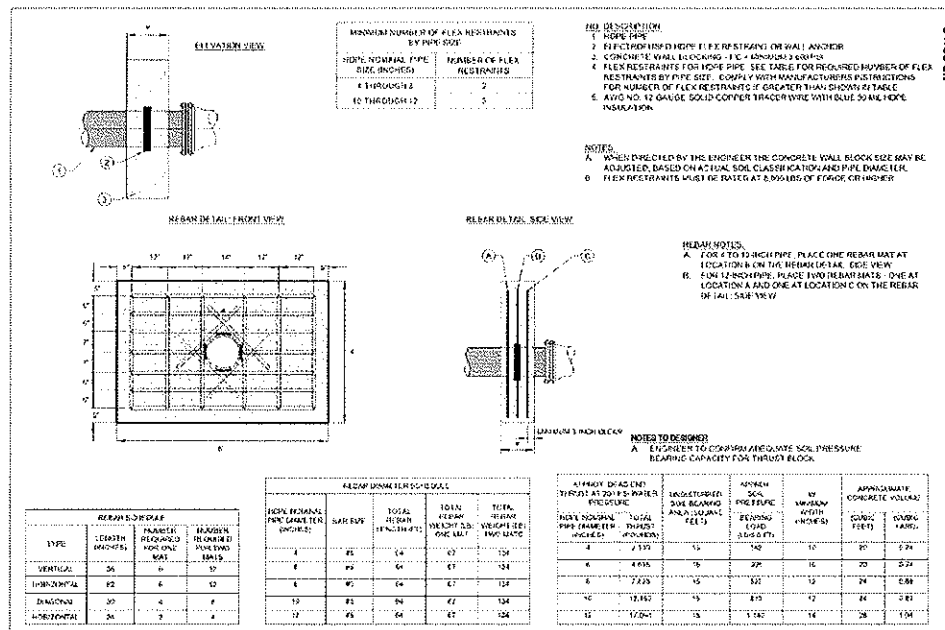
SERVICE CONNECTION
DETAIL
A
N/S



SERVICE CONNECTION (FAR SIDE)
DETAIL
B
N/S



TRANSITION ASSEMBLY FOR HDPE TO PVC OR DI
(4-INCH TO 32-INCH)
DETAIL
D
N/S



CONCRETE WALL BLOCKING
FOR HDPE PIPE (4-INCH TO 12-INCH)
DETAIL
D
N/S

PROJECT: [City, County, State, Zip, Street Name, Address, City, State, Zip] (City, County, State, Zip, Street Name, Address, City, State, Zip)
 DRAWN BY: J. S. SMITH
 CHECKED BY: J. S. SMITH
 DATE: 07/15/2021

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. S. SMITH
 DRAWN BY: J. S. SMITH
 SHEET CHECKED BY: J. S. SMITH
 CROSS CHECKED BY: B. BEMPHREY
 APPROVED BY: J. S. SMITH
 DATE: JULY 2021

MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
 PIKE COUNTY, PENNSYLVANIA
 2021 WATER SYSTEM IMPROVEMENTS

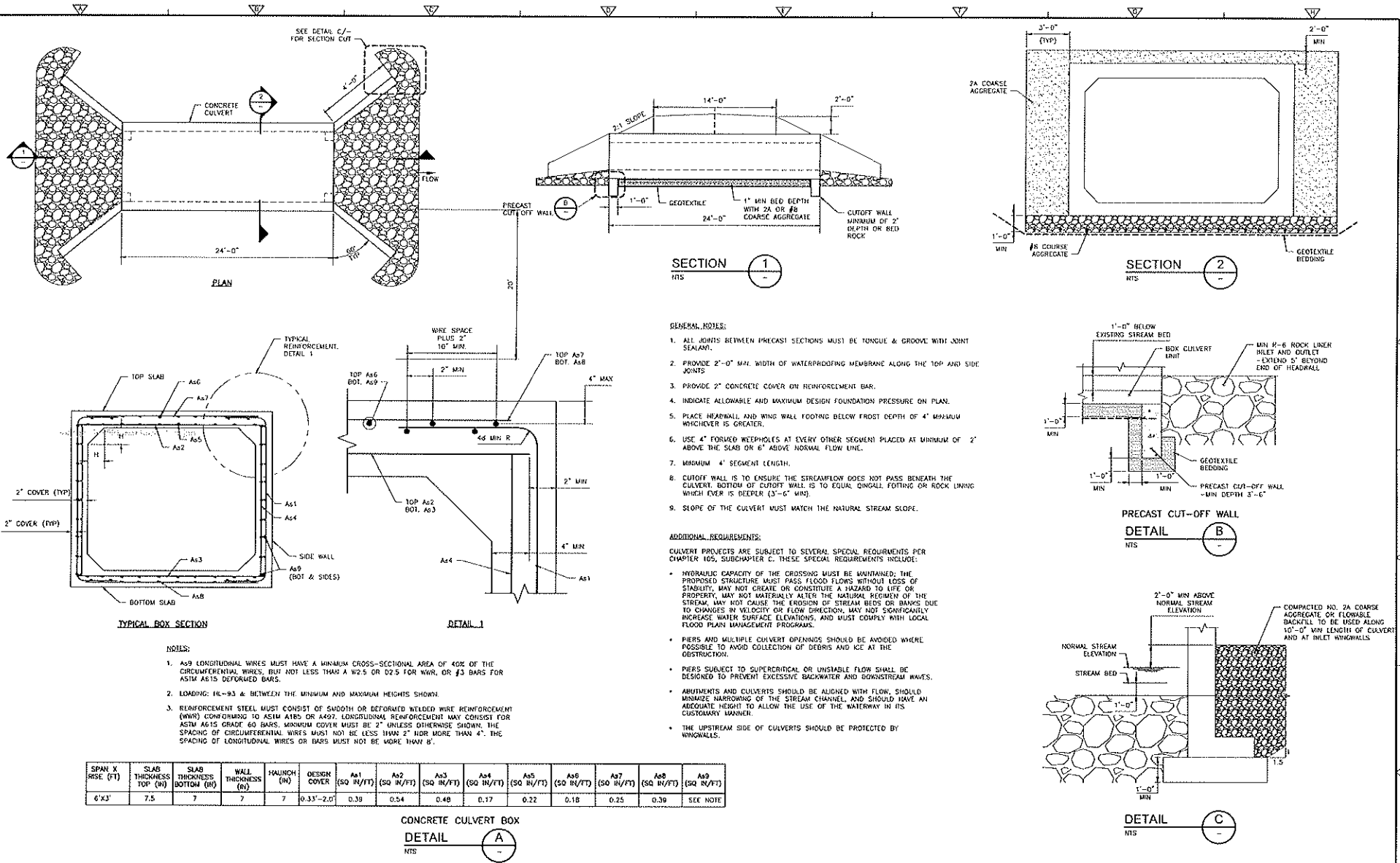
GENERAL
 DETAILS II

PROJECT NO.	5348-241330
FILE NAME	CD02SD01.DWG
SHEET NO.	CD-2

PERMIT SUBMISSION

ISSUE: (DATE, 2021) (REV, 01) (BY, J. SORACE) (DATE, 04/29/2021) (REV, 01) (BY, J. SORACE)
 DATE: 04/29/2021
 TIME: 10:00 AM
 PROJECT: 2021 WATER SYSTEM IMPROVEMENTS
 SHEET NO.: CD-3
 DRAWN BY: J. SORACE
 CHECKED BY: J. SORACE
 APPROVED BY: D. BEMPHIS
 DATE: JULY 2021

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- GENERAL NOTES:**
- ALL JOINTS BETWEEN PRECAST SECTIONS MUST BE TONGUE & GROOVE WITH JOINT SEALANT.
 - PROVIDE 2'-0" MIN. WIDTH OF WATERPROOFING MEMBRANE ALONG THE TOP AND SIDE JOINTS.
 - PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BAR.
 - INDICATE ALLOWABLE AND MAXIMUM DESIGN FOUNDATION PRESSURE ON PLAN.
 - PLACE HEADWALL AND WING WALL FOOTING BELOW FROST DEPTH OF 4" MINIMUM WHICHEVER IS GREATER.
 - USE 4" FORMED WEEPHOLES AT EVERY OTHER SEGMENT PLACED AT MINIMUM OF 2" ABOVE THE SLAB OR 6" ABOVE NORMAL FLOW LINE.
 - MINIMUM 4' SEGMENT LENGTH.
 - CUTOFF WALL IS TO ENSURE THE STREAMFLOW DOES NOT PASS BENEATH THE CULVERT. BOTTOM OF CUTOFF WALL IS TO EQUAL DIMALL FOOTING OR ROCK LINING WHICH EVER IS DEEPER (3'-0" MIN).
 - SLOPE OF THE CULVERT MUST MATCH THE NATURAL STREAM SLOPE.

- ADDITIONAL REQUIREMENTS:**
- CULVERT PROJECTS ARE SUBJECT TO SEVERAL SPECIAL REQUIREMENTS PER CHAPTER 105, SUBCHAPTER C. THESE SPECIAL REQUIREMENTS INCLUDE:
- HYDRAULIC CAPACITY OF THE CROSSING MUST BE MAINTAINED. THE PROPOSED STRUCTURE MUST PASS FLOOD FLOWS WITHOUT LOSS OF STABILITY, MAY NOT CREATE OR CONSTITUTE A HAZARD TO LIFE OR PROPERTY, MAY NOT MATERIALLY ALTER THE NATURAL REGIMEN OF THE STREAM, MAY NOT CAUSE THE EROSION OF STREAM BEDS OR BANKS DUE TO CHANGES IN VELOCITY OR FLOW DIRECTION, MAY NOT SIGNIFICANTLY INCREASE WATER SURFACE ELEVATIONS, AND MUST COMPLY WITH LOCAL FLOOD PLAN MANAGEMENT PROGRAMS.
 - PIERS AND MULTIPLE CULVERT OPENINGS SHOULD BE AVOIDED WHERE POSSIBLE TO PREVENT EXCESSIVE BACKWATER AND DOWNSTREAM WAVES.
 - PIERS SUBJECT TO SUPERCRITICAL OR UNSTABLE FLOW SHALL BE DESIGNED TO PREVENT EXCESSIVE BACKWATER AND DOWNSTREAM WAVES.
 - ABUTMENTS AND CULVERTS SHOULD BE ALIGNED WITH FLOW, SHOULD MINIMIZE NARROWING OF THE STREAM CHANNEL, AND SHOULD HAVE AN ADEQUATE HEIGHT TO ALLOW THE USE OF THE WATERWAY IN ITS CUSTOMARY MANNER.
 - THE UPSTREAM SIDE OF CULVERTS SHOULD BE PROTECTED BY WINGWALLS.

MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
PIKE COUNTY, PENNSYLVANIA

2021 WATER SYSTEM IMPROVEMENTS

GENERAL
DETAILS III

PROJECT NO.: S340-24133A

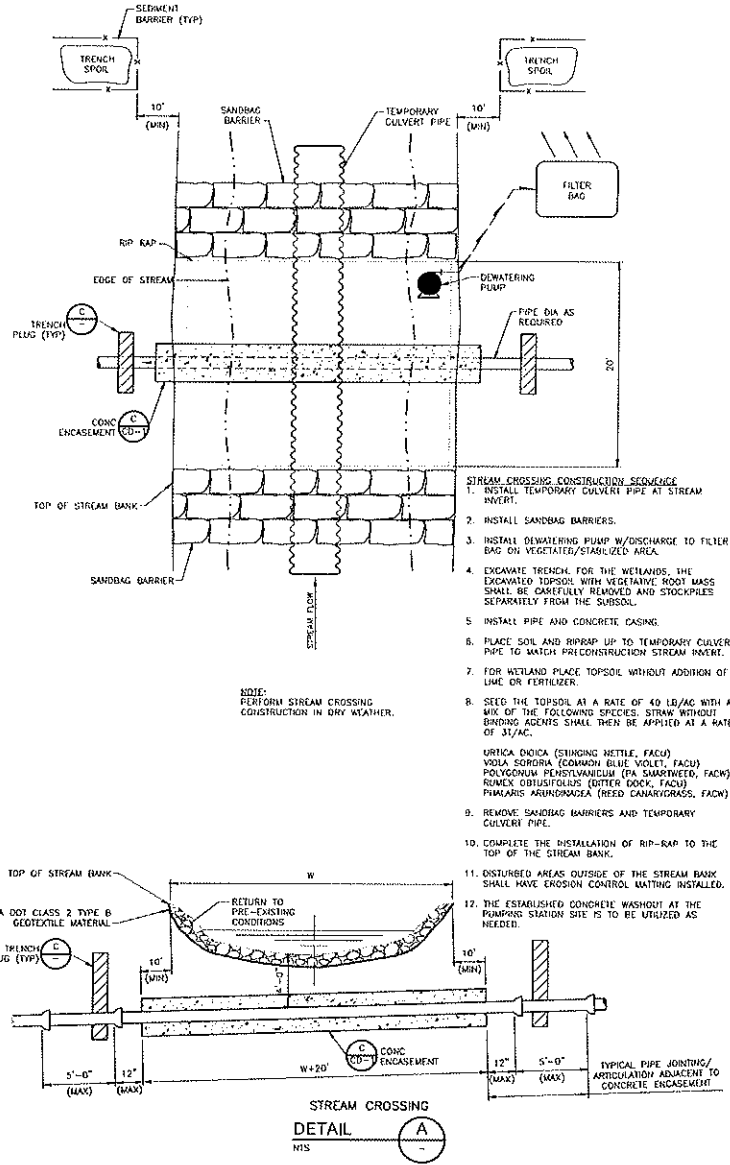
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SHEET NO.:

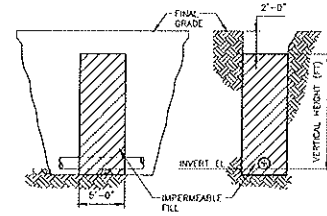
CD-3

PERMIT SUBMISSION

PROJECT: 2021-07-23/23
 DRAWN BY: J. SODA
 DATE: 7/17/2023 10:26:20 AM
 PROJECT: 2021-07-23/23
 DRAWN BY: J. SODA
 DATE: 7/17/2023 10:26:20 AM
 PROJECT: 2021-07-23/23
 DRAWN BY: J. SODA
 DATE: 7/17/2023 10:26:20 AM
 PROJECT: 2021-07-23/23
 DRAWN BY: J. SODA
 DATE: 7/17/2023 10:26:20 AM



STREAM CROSSING
 DETAIL A



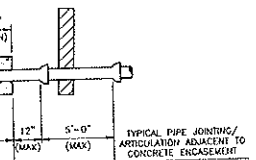
NOTES:

1. COMPACTED TRENCH PLUG SHALL EXTEND VERTICALLY FROM UNDISTURBED GROUND AT BOTTOM OF TRENCH TO WITHIN TWO (2') FEET OF FINAL GRADE, AND FROM UNDISTURBED GROUND ON TRENCH SIDES FOR FULL WIDTH OF TRENCH.
2. EACH TRENCH PLUG SHALL CONSIST OF CLAY CONTAINING NO MORE THAN 15% (BY VOLUME) STONE NOT LARGER THAN TWO (2") INCHES IN DIAMETER. CLAY SHALL BE PLACED IN SIX (6") HIGH LIFTS AND COMPACTED BY MECHANICAL TAMPER TO NOT LESS THAN 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
3. INSTALL AT LEAST ONE CLAY DIKE BETWEEN EACH PAIR OF MANHOLES OR EVERY 300 FEET WHICHEVER IS LESS, AT BOTH SIDES OF STREAM CROSSINGS AND AT UPSTREAM AND DOWNSTREAM LIMITS OF WETLAND CROSSINGS.

TRENCH PLUG
 DETAIL C

STREAM CROSSING CONSTRUCTION SEQUENCE

1. INSTALL TEMPORARY CULVERT PIPE AT STREAM INVERT.
2. INSTALL SANDBAG BARRIERS.
3. INSTALL DEWATERING PUMP W/DISCHARGE TO TIER BAG ON VEGETATED/STABILIZED AREA.
4. EXCAVATE TRENCH FOR THE TRENCH. THE EXCAVATED TOPSOIL WITH VEGETATIVE ROOT MASS SHALL BE CAREFULLY REMOVED AND STOCKPILED SEPARATELY FROM THE SUBSOIL.
5. INSTALL PIPE AND CONCRETE CASING.
6. PLACE SOIL AND RIPRAP UP TO TEMPORARY CULVERT PIPE TO MATCH PRECONSTRUCTION STREAM INVERT.
7. FOR WETLAND PLACE TOPSOIL WITHOUT ADDITION OF LIME OR FERTILIZER.
8. SEED THE TOPSOIL AT A RATE OF 40 LB/AC WITH A MIX OF THE FOLLOWING SPECIES: STRAW WITHOUT BINDING AGENTS SHALL THEN BE APPLIED AT A RATE OF 31/AC.
 URTICA DIOICA (STINGING NETTLE, FACU)
 VIOLA SORORIA (COMMON BLUE VIOLET, FACU)
 POLYGONUM PENNSYLVANICUM (PA SMARTWEED, FACU)
 RUMEX OBTUSIFOLIUS (BITTER DOCK, FACU)
 PRAIRIE ANTHRAXIS (TREED CANYONGRASS, FACU)
9. REMOVE SANDBAG BARRIERS AND TEMPORARY CULVERT PIPE.
10. COMPLETE THE INSTALLATION OF RIP-RAP TO THE TOP OF THE STREAM BANK.
11. DISTURBED AREAS OUTSIDE OF THE STREAM BANK SHALL HAVE EROSION CONTROL MATING INSTALLED.
12. THE ESTABLISHED CONCRETE WASHOUT AT THE PUMPING STATION SITE IS TO BE UTILIZED AS NEEDED.



REV. NO.	DATE	BY	CHKD	REMARKS

DESIGNED BY: J. LAPRER
 DRAWN BY: J. SODA
 SHEET CHK'D BY: A. HROG
 CROSS CHK'D BY: B. KEMPNEY
 APPROVED BY: [Signature]
 DATE: JULY 2023

CDM Smith
 221 Gwynn Park Drive, Suite 100
 Lancaster, PA 17604
 Tel: (717) 460-7300

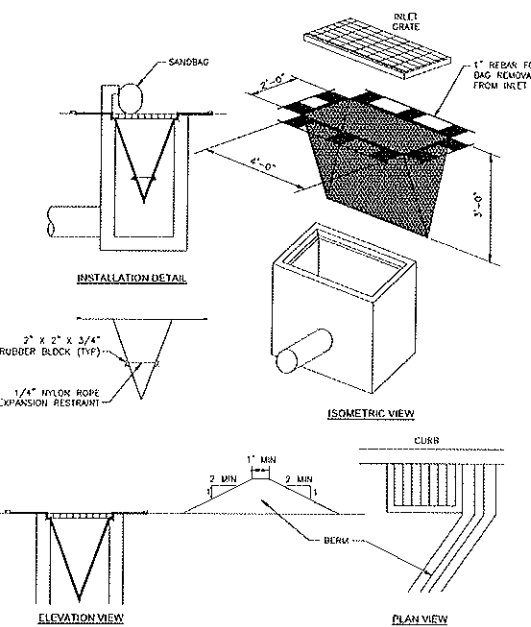
MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
 PIKE COUNTY, PENNSYLVANIA
 2021 WATER SYSTEM IMPROVEMENTS

GENERAL DETAILS IV

PROJECT NO: 2148-241338
 FILE NAME: CD33SDT.DWG
 SHEET NO:
 CD-3A

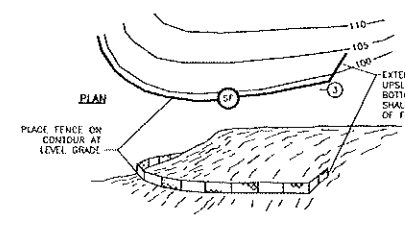
PERMIT SUBMISSION

P:\21\21021\21021.dwg, 7/7/2021 8:11:20 AM
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 Title: 2021 Water System Improvements
 Project: 2021 Water System Improvements
 Description: EROSION AND SEDIMENTATION CONTROL MONITORING AND REPORTING REQUIREMENTS
 Date: 07/07/2021
 Time: 8:11:20 AM
 File Name: C:\Users\j.sosa\Documents\2021 Water System Improvements\2021 Water System Improvements - EROSION AND SEDIMENTATION CONTROL MONITORING AND REPORTING REQUIREMENTS.dwg
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 Description: EROSION AND SEDIMENTATION CONTROL MONITORING AND REPORTING REQUIREMENTS
 Date: 07/07/2021
 Time: 8:11:20 AM
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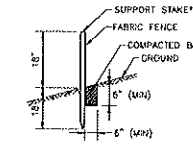
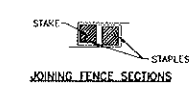


- NOTES:**
1. MAXIMUM DRAINAGE AREA = 1/2 ACRE. INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERRS REQUIRED FOR ALL INSTALLATIONS.
 2. EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STORED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED.
 3. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
 4. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.
 5. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.

FILTER BAG INLET PROTECTION
DETAIL B



SILT FENCE INSTALLATION
DETAIL A



STANDARD FILTER FABRIC FENCE (18" HEIGHT)

SILT FENCE
DETAIL C

EROSION AND SEDIMENTATION CONTROL CONSTRUCTION SEQUENCE

1. HOLD PRE-CONSTRUCTION MEETING BETWEEN PIKE COUNTY CONSERVATION DISTRICT (PCCD), CONTRACTOR, AND ENGINEER AT LEAST 10 DAYS PRIOR TO DISTURBANCE ACTIVITIES.
 2. INSTALL ROCK CONSTRUCTION ENTRANCE # WELEDO.
 3. INSTALL SILT FENCE, IF NEEDED.
 4. REMOVE AND STOCKPILE TOPSOIL. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
 5. CONSTRUCT PROJECT (WATER MAIN). ALL SPOIL MATERIAL WILL BE REMOVED FROM THE PROJECT SITE. ANY SITE TO BE USED FOR STOCKPILING OF SPOIL MATERIAL MUST BE APPROVED BY PCCD PRIOR TO USE. THE CONTRACTOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE PIKE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
 6. RESTORE PAVEMENT AND RIGHT-OF-WAY.
 7. REMOVE ALL NON-UTILIZED MATERIALS AND EQUIPMENT.
 8. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE CHANNELS AND IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES. THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
 9. AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. ON BUFFERS, CLEARING, SOIL DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAWWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.
 10. GRADE AND SEED PROJECT AREAS. SEEDING AND MULCHING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, SECTION 02770 - SEEDING AND EROSION CONTROL, AND SECTION 02830 - LOAMING AND PROPOSED:
- A. REWEAVING/SEEDING (AREAS WHERE ROUGH GRADING HAS BEEN COMPLETED BUT WILL NOT BE FINAL GRADED WITHIN 30 DAYS):** INSTALL STRAW MULCH AT THE RATE OF 3 TONS/ACRE AND TACKY WITH LATEX ACRYLIC COPOLYMER AT A RATE OF 1 GALLON PER 1000 SQ-FT DILUTED IN A RATION OF 30 PARTS WATER TO 1 PART LATEX ACRYLIC COPOLYMER MIX. STRAW MULCH SHALL BE APPLIED IN LONG STRIPES, NOT CHOPPED OR FINELY BROKEN.
- B. REWEAVING:** PLACE TOPSOIL TO A MINIMUM COMPACTED DEPTH OF 6-INCHES. INSTALL LIME AT THE RATE OF 150-POUNDS PER 1000 SQ-FT, FERTILIZER (10-20-30) AT THE RATE OF 30-POUNDS PER 1000 SQ-FT, AND SEED AT 5-POUNDS PER 1000 SQ-FT. SEED SHALL BE AS SPECIFIED IN SECTION 809 OF PENNSYLVANIA PUBLICATION NO. 409. WOOD FIBER MULCH SHALL BE APPLIED TO ALL NEWLY GRADED AREAS WITH SLOPES (LESS THAN 3:1) AT THE RATE OF 45-POUNDS PER 1000 SQ-FT AND STRAW MULCH SHALL BE INSTALLED ON ALL SLOPES OR 3:1 OR STEEPER AT THE RATE OF 75-POUNDS PER 1000 SQ-FT. LATEX ACRYLIC COPOLYMER TACKIFIER SHALL BE INSTALLED ON THE STRAW MULCH AT THE RATE OF 1-GALLON PER 1000 SQ-FT.

EROSION AND SEDIMENTATION CONTROL MONITORING AND REPORTING REQUIREMENTS

1. MONITORING AND REPORTING REQUIREMENTS

A. VISUAL INSPECTIONS: THE CONTRACTOR MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND AFTER EACH PRECIPITATION EVENT BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL TO ASCERTAIN THAT THE BMP ARE OPERATIONAL AND EFFECTIVE IN PREVENTION POLLUTION TO THE WATERS OF THE COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT, AND INCLUDE:

 - (1) A SUMMARY OF SITE CONDITIONS, BMP AND COMPLIANCE; AND
 - (2) THE DATE, TIME, AND THE NAME OF THE PERSON CONDUCTING THE INSPECTION.

B. NON-COMPLIANCE REPORTING: WHERE BMP ARE FOUND TO BE INOPERATIVE OR DEFECTIVE DURING AN INSPECTION, OR AT ANY OTHER TIME, THE CONTRACTOR SHALL NOTIFY THE REVIEWING ENTITY, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NON-COMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

 - (1) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION;
 - (2) THE PERIOD OF NON-COMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;
 - (3) STEPS BEING TAKE TO REDUCE, ELIMINATE, AND PREVENT RECCURENCE OF THE NON-COMPLIANCE; AND
 - (4) THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NON-COMPLIANCE CONDITIONS.

C. SUPPLEMENTAL MONITORING: THE DEPARTMENT AND THE LOCAL CONSERVATION DISTRICT, WHEN ACTING AS THE REVIEWING ENTITY, RESERVE THE RIGHT TO REQUIRE ADDITIONAL MONITORING WHERE A DANGER OF WATER POLLUTION IS PRESENT, OR WATER POLLUTION IS SUSPECTED TO BE OCCURRING FROM A CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL COMPLY WITH SUCH MONITORING UPON NOTIFICATION FROM THE DEPARTMENT, OR THE LOCAL COUNTY CONSERVATION DISTRICT WHEN ACTING AS THE REVIEWING ENTITY.

D. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL, RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE 14, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
2. RECORD KEEPING

A. RETENTION OF RECORDS: THE CONTRACTOR SHALL RETAIN RECORDS OF ALL MONITORING INFORMATION INCLUDING COPIES OF ALL MONITORING AND INSPECTION REPORTS AND RECORDS OF DATA USED TO COMPLETE THE NOTICE OF INTENT FOR THIS PERMIT, FOR A PERIOD OF THREE YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION.

B. REPORTING OF MONITORING REPORTS: MONITORING REPORTS SHALL BE SUBMITTED TO THE REVIEWING ENTITY UPON REQUEST.

REV. NO.	DATE	BY	CHKD.	REMARKS

DESIGNED BY: J. LAKE
DRAWN BY: J. SOSA
CHECKED BY: A. KING
CROSS CHECK BY: R. SEMPER
APPROVED BY: [Signature]
DATE: JULY 2021

CDM Smith
 250 Centre Plaza Drive, Suite 100
 Lancaster, PA 17601
 Tel: (717) 360-7500

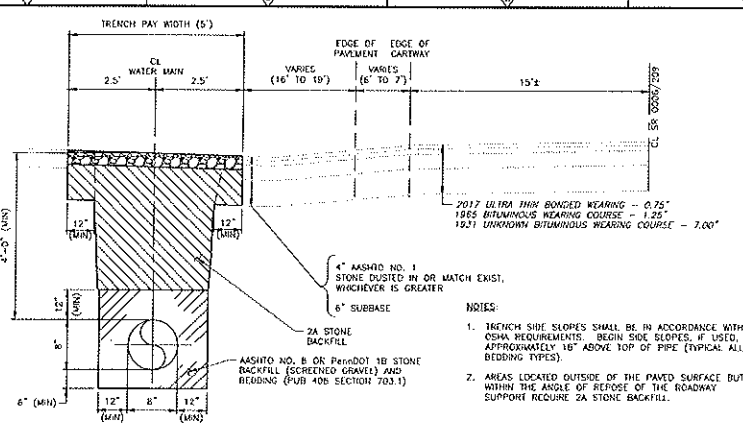
MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
 PIKE COUNTY, PENNSYLVANIA

2021 WATER SYSTEM IMPROVEMENTS

EROSION AND SEDIMENTATION CONTROL
 DETAILS AND NOTES

PROJECT NO: 5348-241338
FILE NAME: C:\2021\21021.DWG
SHEET NO:
CD-4

PERMIT SUBMISSION

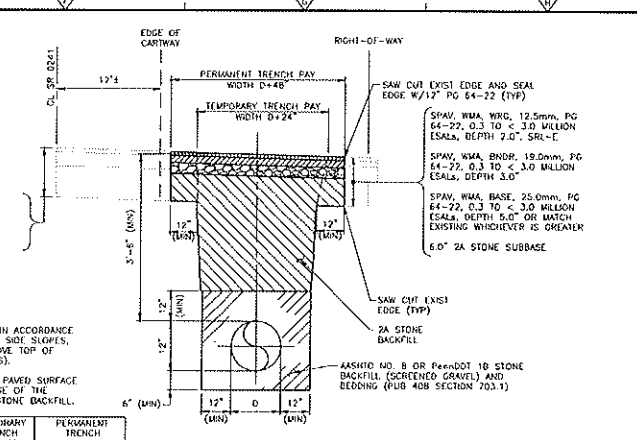


- NOTES:**
- TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS. BEGIN SIDE SLOPES, IF USED, APPROXIMATELY 18" ABOVE TOP OF PIPE (TYPICAL ALL BEDDING TYPES).
 - AREAS LOCATED OUTSIDE OF THE PAVED SURFACE BUT WITHIN THE ANGLE OF REPOSE OF THE ROADWAY SUPPORT REQUIRE 2A STONE BACKFILL.

TRENCH PAY WIDTH	PLAN PATTERN
60"	[Pattern]

MILL ROAD/WATER STREET (SR 2001)
PennDOT RIGHT-OF-WAY GRAVEL RESTORATION
 SR 2001 / SEG 0410 / OFF 1803 TO OFF 1820
 SR 2001 / SEG 0410 / OFF 1862 TO OFF 1872
 SR 2001 / SEG 0410 / OFF 1877 TO OFF 1883
 SR 2001 / SEG 0410 / OFF 2063 TO OFF 2073
 SR 2001 / SEG 0410 / OFF 2153 TO OFF 2224

DETAIL A
 NTS

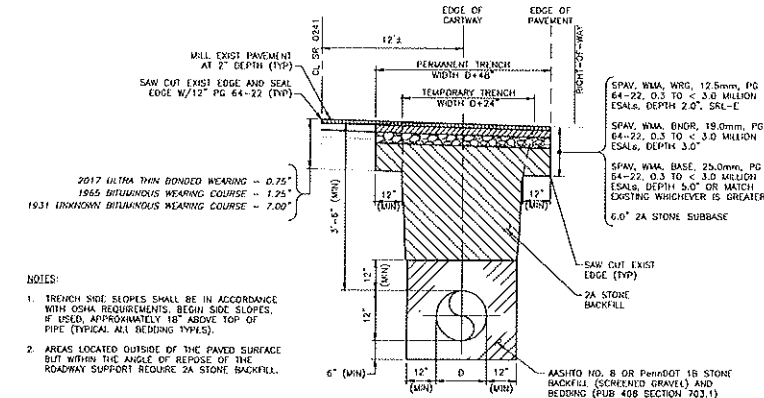


- NOTES:**
- TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS. BEGIN SIDE SLOPES, IF USED, APPROXIMATELY 18" ABOVE TOP OF PIPE (TYPICAL ALL BEDDING TYPES).
 - AREAS LOCATED OUTSIDE OF THE PAVED SURFACE BUT WITHIN THE ANGLE OF REPOSE OF THE ROADWAY SUPPORT REQUIRE 2A STONE BACKFILL.

PERMANENT BASE COURSE PAY WIDTH	PERMANENT WEARING COURSE PAY WIDTH	TEMPORARY TRENCH PAY WIDTH	PERMANENT TRENCH PAY WIDTH	PLAN PATTERN
D+24"	D+48"	D+24"	D+48"	[Pattern]

MILL ROAD/WATER STREET (SR 2001)
PennDOT SHOULDER/DRIVEWAY PAVEMENT RESTORATION
 SR 2001 / SEG 0410 / OFF 1468 TO OFF 1569
 SR 2001 / SEG 0410 / OFF 1883 TO OFF 1903
 SR 2001 / SEG 0410 / OFF 1936 TO OFF 2031
 SR 2001 / SEG 0410 / OFF 2257 TO OFF 2258

DETAIL B
 NTS

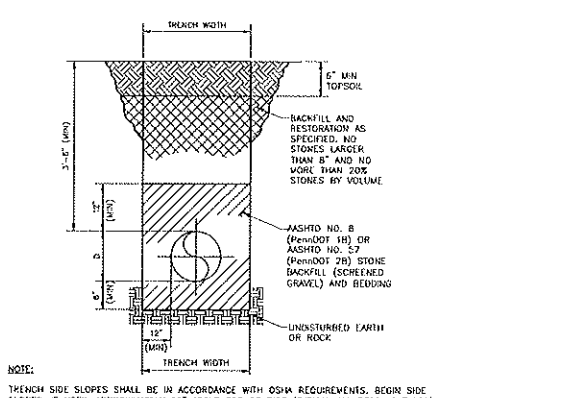


- NOTES:**
- TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS. BEGIN SIDE SLOPES, IF USED, APPROXIMATELY 18" ABOVE TOP OF PIPE (TYPICAL ALL BEDDING TYPES).
 - AREAS LOCATED OUTSIDE OF THE PAVED SURFACE BUT WITHIN THE ANGLE OF REPOSE OF THE ROADWAY SUPPORT REQUIRE 2A STONE BACKFILL.

PERMANENT BASE COURSE WIDTH	PERMANENT WEARING COURSE WIDTH	PLAN PATTERN
D+24"	D+48"	[Pattern]

MILL ROAD/WATER STREET (SR 2001)
PennDOT PAVEMENT RESTORATION
 SR 2001 / SEG 0420 / OFF 0117 TO OFF 0128
 SR 2001 / SEG 0420 / OFF 0170 TO OFF 0182

DETAIL C
 NTS



- NOTE:**
 TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS. BEGIN SIDE SLOPES, IF USED, APPROXIMATELY 18" ABOVE TOP OF PIPE (TYPICAL ALL BEDDING TYPES).

MAX TRENCH PAY WIDTH (R)	FINAL RESTORATION PAY WIDTH (R)	PLAN PATTERN
D+24"	D+48"	[Pattern]

MILL ROAD/WATER STREET (SR 2001)
PennDOT RIGHT-OF-WAY RESTORATION
 SR 2001 / SEG 0420 / OFF 0538 TO OFF 0550

DETAIL D
 NTS

PROJECT: [CDMS_2234] Project: []
 Last saved by: SDCAU Time: 6/14/2021 14:45:59 PM
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DESIGNED BY: A. KING
 DRAWN BY: C. MILLER
 SHEET CHECKED BY: B. McPHIBREY
 CROSS CHECKED BY:
 APPROVED BY:
 DATE: 06/14/2021



MUNICIPAL AUTHORITY OF THE BOROUGH OF MILFORD
 PIKE COUNTY, PENNSYLVANIA
 2021 WATER SYSTEM IMPROVEMENTS

PennDOT
 DETAILS

PROJECT NO. 5348-241338
 FILE NAME: C00SPDDT.DWG
 SHEET NO.
 CD-5

PERMIT SUBMISSION