

# POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

## PENNSYLVANIA PIPELINE PROJECT DELMONT STATION

SALEM TOWNSHIP, WESTMORELAND COUNTY, PENNSYLVANIA

NOVEMBER 2016

PREPARED FOR:



SUNOCO PIPELINE PARTNERS L.P.  
525 FRITZTOWN ROAD  
SINKING SPRING, PA 19608



DRAWING INDEX	
SHEET No.	DRAWING TITLE
PCS-1	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN GENERAL NOTES & LEGEND
PCS-2	EXISTING CONDITIONS PLAN
PCS-3	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN (SHEET 1 OF 2)
PCS-4	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN (SHEET 2 OF 2)
PCS-5	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN DETAILS (SHEET 1 OF 3)
PCS-6	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN DETAILS (SHEET 2 OF 3)
PCS-7	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN DETAILS (SHEET 3 OF 3)

PREPARED BY:



complex world | CLEAR SOLUTIONS™

661 ANDERSEN DRIVE – FOSTER PLAZA 7, PITTSBURGH, PA 15220  
TEL: (412) 921-7090 | FAX: (412) 921-4040



LOCATION MAP  
DELMONT STATION  
SALEM TOWNSHIP, WESTMORELAND COUNTY, PENNSYLVANIA

0 1000 2000  
SCALE IN FEET

I DO HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THAT THE E&S CONTROLS AND DR/PCSM BMPs ARE TRUE AND CORRECT, REPRESENT ACTUAL FIELD CONDITIONS AND ARE IN ACCORDANCE WITH THE 25 PA. CODE CHAPTERS 78 AND 102 OF THE DEPARTMENTS RULES AND REGULATIONS. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

\_\_\_\_\_  
SIGNATURE DATE

**NOTE:**

A GEOTECHNICAL REPORT IS BEING PREPARED SEPARATELY FROM THIS PLAN. THE CERTIFYING ENGINEER OF THIS PLAN HAS NOT ASSESSED AND DOES NOT CERTIFY THE GEOTECHNICAL FEATURES OF THIS PLAN, INCLUDING FOUNDATION DESIGN AND SLOPE STABILITY.



**NOTES:**

1. TOPOGRAPHIC MAPPING AND FEATURES COMPILED FROM WWW.PASDA.PSU.EDU.
2. BOUNDARY AND ADJACENT PROPERTY LINES FROM TRICO SURVEYING & MAPPING, INC..
3. THE PROJECT TAKES PLACE WITHIN SALEM TOWNSHIP, WESTMORELAND COUNTY, PENNSYLVANIA.
4. THE EASTERN PORTION OF THE SITE DRAINS TO UNT TO BEAVER RUN. BEAVER RUN IS LISTED AS HQ-CWF UNDER CHAPTER 93. THE WESTERN PORTION OF THE SITE DRAINS TO A UNT TO TURTLE CREEK. TURTLE CREEK IS LISTED AS TSF UNDER CHAPTER 93.
5. THE RIGHTS-OF-WAYS AND EASEMENTS SHOWN ON THIS PLAN ARE THE RESPONSIBILITY OF SUNOCO PIPELINE L.P. TO SECURE WITH THE INDIVIDUAL PROPERTY OWNER. THE RIGHTS-OF-WAY AND EASEMENTS SHOWN ON THIS PERMIT DRAWING REPRESENT THE BEST AVAILABLE PROPERTY INFORMATION AS PROVIDED TO TETRA TECH, INC. BY SUNOCO PIPELINE L.P. THE RIGHTS-OF-WAY AND EASEMENTS SHALL BE VERIFIED AND LOCATED IN THE FIELD BY SUNOCO PIPELINE L.P.
6. THE RESPONSIBILITY FOR LONG TERM OPERATION AND MAINTENANCE OF THE BEST MANAGEMENT DETAILED ON THESE PLANS IS A COVENANT THAT RUNS WITH THE LAND AND IS BINDING AND ENFORCEABLE BY SUBSEQUENT GRANTEEES. AN INSTRUMENT SHALL BE RECORDED AT THE RECORDER OF DEEDS TO PROVIDE FOR NECESSARY ACCESS FOR LONG TERM OPERATION AND MAINTENANCE OF THE BEST MANAGEMENT PRACTICES.

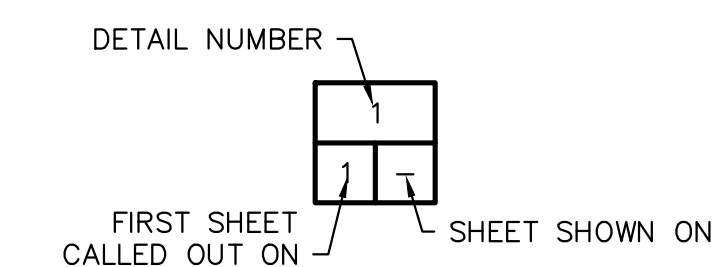
**PROJECT DESCRIPTION:**

THE PROJECT INCLUDES THE CONSTRUCTION OF A PUMP STATION FOR A PROPOSED GAS TRANSMISSION LINE, A POWER SUB-STATION, AND ACCESS ROADS.

**LEGEND**

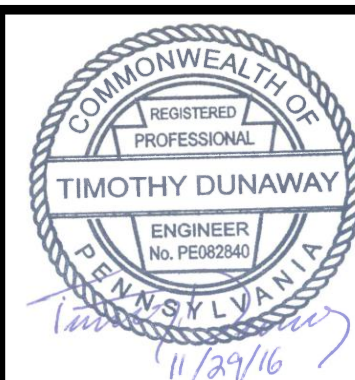
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- EXISTING TREE LINE
- EXISTING FENCELINE
- EXISTING STREAM WITH FLOW DIRECTION
- EXISTING ELECTRIC OVERHEAD
- EXISTING ELECTRIC UNDERGROUND
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING SANITARY SEWER LINE
- EXISTING ENCLOSURE
- EXISTING PIPING
- TOWNSHIP BOUNDARY
- PROPERTY LINE
- SET BACK LINE
- EXISTING PEM WETLAND
- EXISTING PFO WETLAND
- PROPOSED POWER POLE
- PROPOSED ELECTRIC OVERHEAD
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED ENCLOSURE
- PROPOSED STORM PIPE
- PROPOSED FENCE
- EXISTING DRAINAGE FEATURE
- LIMIT OF DISTURBANCE

**DETAIL INDICATOR**



www.tetrattech.com  
661 ANDERSEN DRIVE - FOSTER PLAZA 7  
PITTSBURGH, PA 15220  
T: (412) 921-7090 | F: (412) 921-4040

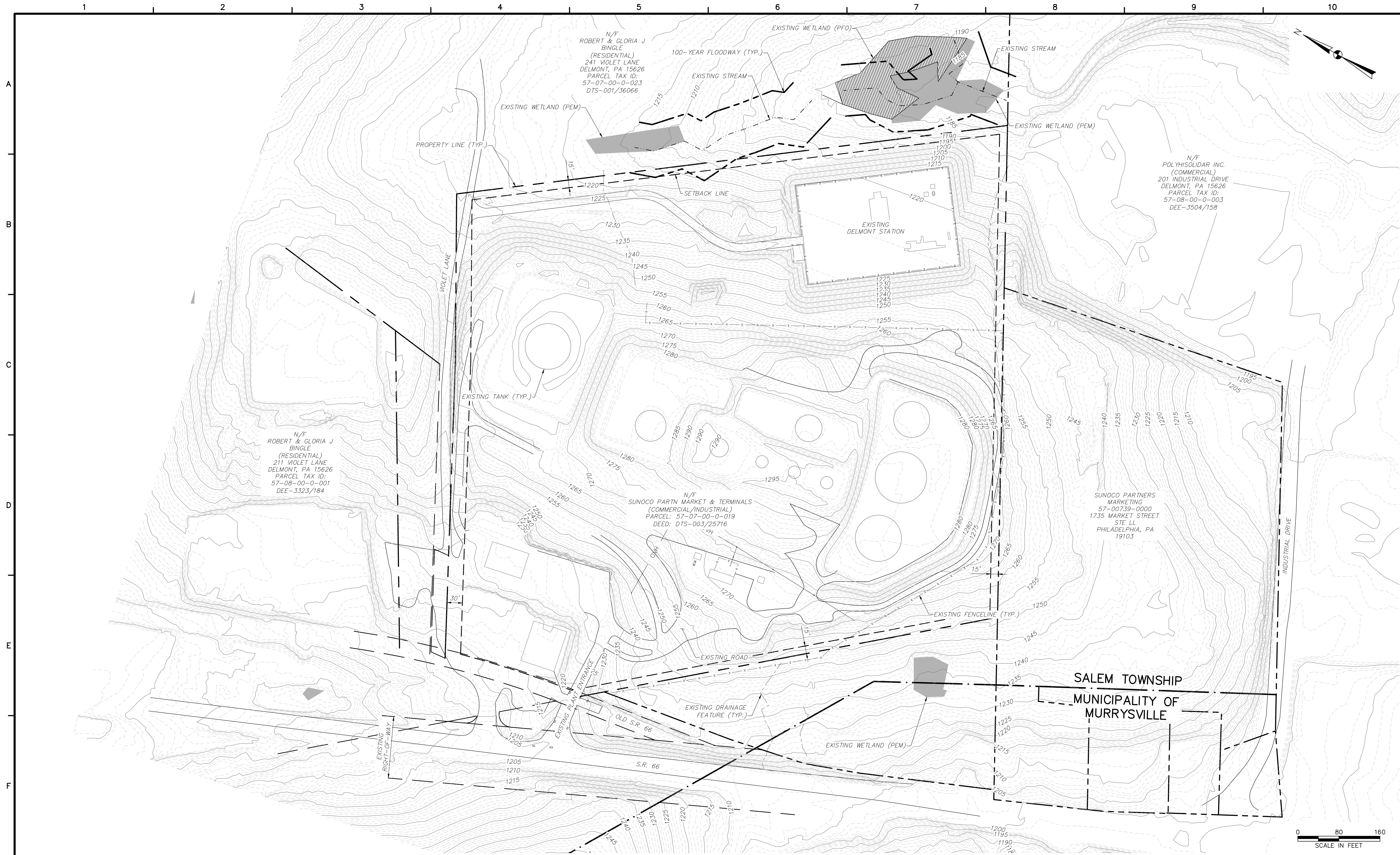
REVISIONS			
NO.	BY	DATE	REMARKS
1	TD	11/30/16	REVISED FOR DEP TECHNICAL COMMENTS



SUNOCO PIPELINE L.P.  
SINKING SPRING, PENNSYLVANIA  
  
DELMONT STATION

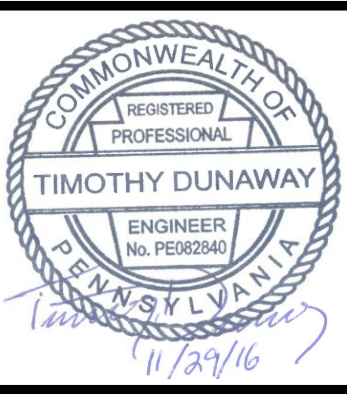
ESCGP-2  
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN  
GENERAL NOTES & LEGEND

DATE:	3/22/16
PROJECT NO.:	PB-00136
DESIGNED BY:	RS
DRAWN BY:	BH
CHECKED BY:	RS
COPYRIGHT TETRA TECH INC.	
<b>PCS-1</b>	
SHEET	1 OF 7



661 ANDERSEN DRIVE - FOSTER PLAZA 7  
PITTSBURGH, PA 15220  
T: (412) 921-7090 | F: (412) 921-4040

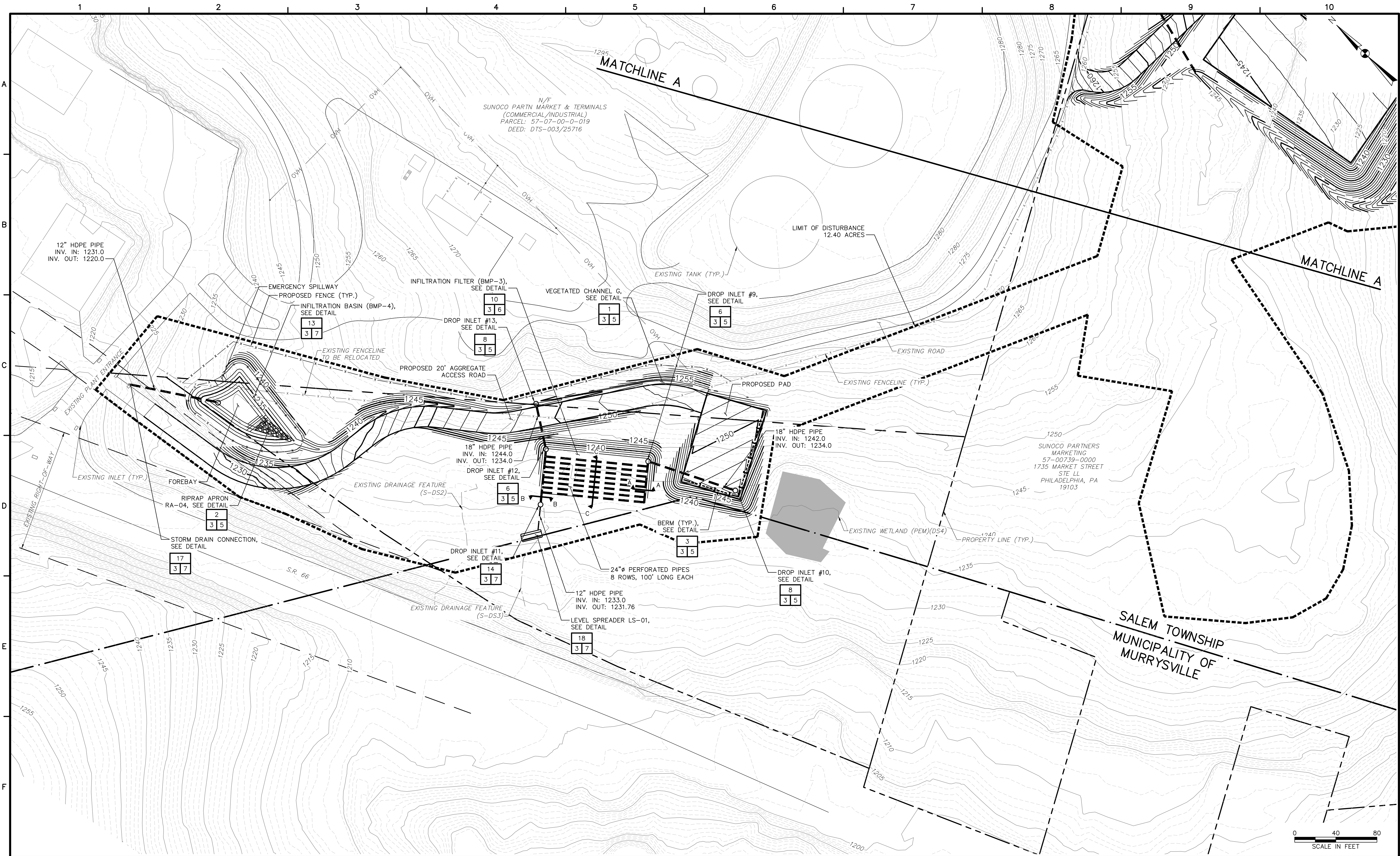
REVISIONS			
NO.	BY	DATE	REMARKS
1	TD	11/30/16	REVISED FOR DEP TECHNICAL COMMENTS



SUNOCO PIPELINE L.P.  
SINKING SPRING, PENNSYLVANIA  
  
DELMONT STATION

SALEM TOWNSHIP  
MUNICIPALITY OF MURRYSVILLE  
  
ESCGP-2  
EXISTING CONDITIONS PLAN

DATE:	3/22/16
PROJECT NO.:	PB-00136
DESIGNED BY:	TD
DRAWN BY:	BH
CHECKED BY:	TD
COPYRIGHT TETRA TECH INC.	
<b>PCS-2</b>	
SHEET 2 OF 7	



MATCHLINE A

MATCHLINE A

N/F  
SUNOCO PARTN MARKET & TERMINALS  
(COMMERCIAL/INDUSTRIAL)  
PARCEL: 57-07-00-0-019  
DEED: DTS-003/25716

LIMIT OF DISTURBANCE  
12.40 ACRES

SALEM TOWNSHIP  
MUNICIPALITY OF  
MURRYSVILLE

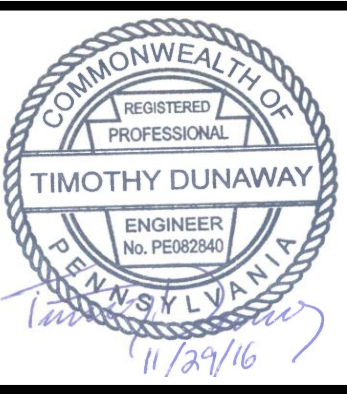
SUNOCO PARTNERS  
MARKETING  
57-00739-0000  
1735 MARKET STREET  
STE LL  
PHILADELPHIA, PA  
19103

0 40 80  
SCALE IN FEET



661 ANDERSEN DRIVE - FOSTER PLAZA 7  
PITTSBURGH, PA 15220  
T: (412) 921-7090 | F: (412) 921-4040

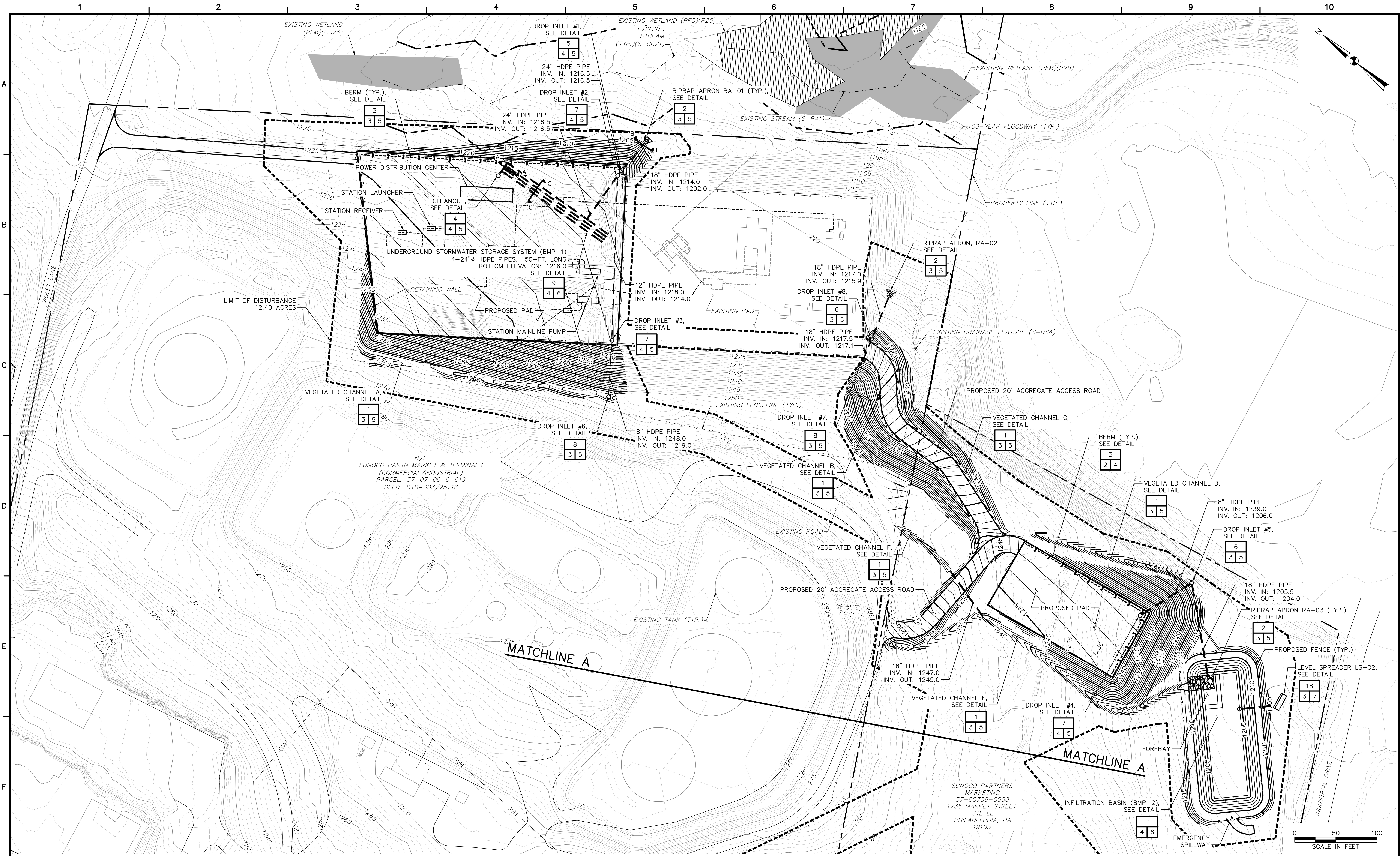
REVISIONS		
NO.	BY	DATE
1	TD	11/30/16



SUNOCO PIPELINE L.P.  
SINKING SPRING, PENNSYLVANIA  
  
DELMONT STATION

ESC GP-2  
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN  
(SHEET 1 OF 2)

DATE:	3/22/16
PROJECT NO.:	PB-00136
DESIGNED BY:	RS
DRAWN BY:	BH
CHECKED BY:	RS
COPYRIGHT TETRA TECH INC.	
<b>PCS-3</b>	
SHEET 3 OF 7	



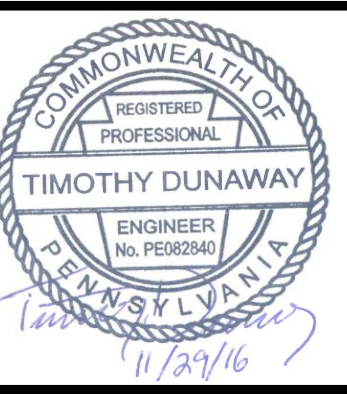
N/F  
SUNOCO PARTN MARKET & TERMINALS  
(COMMERCIAL/INDUSTRIAL)  
PARCEL: 57-07-00-0-019  
DEED: DTS-003/25716

SUNOCO PARTNERS  
MARKETING  
57-00739-0000  
STE LL  
PHILADELPHIA, PA  
19103



661 ANDERSON DRIVE - FOSTER PLAZA 7  
PITTSBURGH, PA 15220  
T: (412) 921-7090 | F: (412) 921-4040

REVISIONS		
NO.	BY	DATE
1	TD	11/30/18



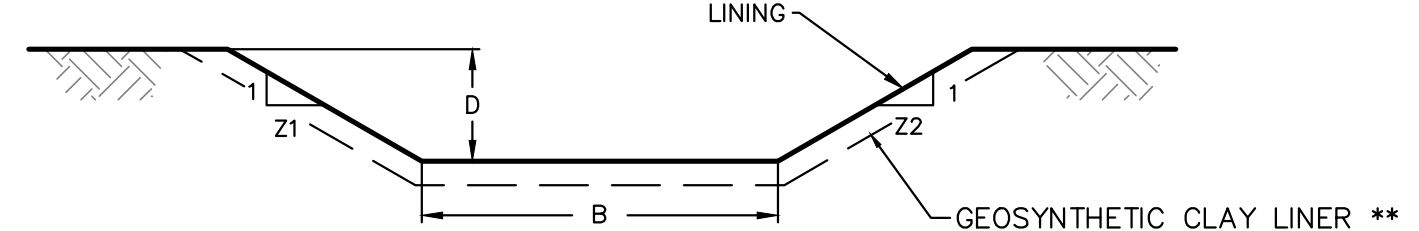
SUNOCO PIPELINE L.P.  
SINKING SPRING, PENNSYLVANIA  
  
DELMONT STATION

ESCGP-2  
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN  
(SHEET 2 OF 2)

DATE:	3/22/16
PROJECT NO.:	PB-00136
DESIGNED BY:	RS
DRAWN BY:	BH
CHECKED BY:	RS
COPYRIGHT:	TETRA TECH INC.
<b>PCS-4</b>	
SHEET 4 OF 7	

R:\\_212 - 06A\0&G\Sunoco\00136 - Delmont Station\PCS\00136PCS004.dwg PLOT: SARAH.WARMAN 11/21/2016 4:03:13 PM

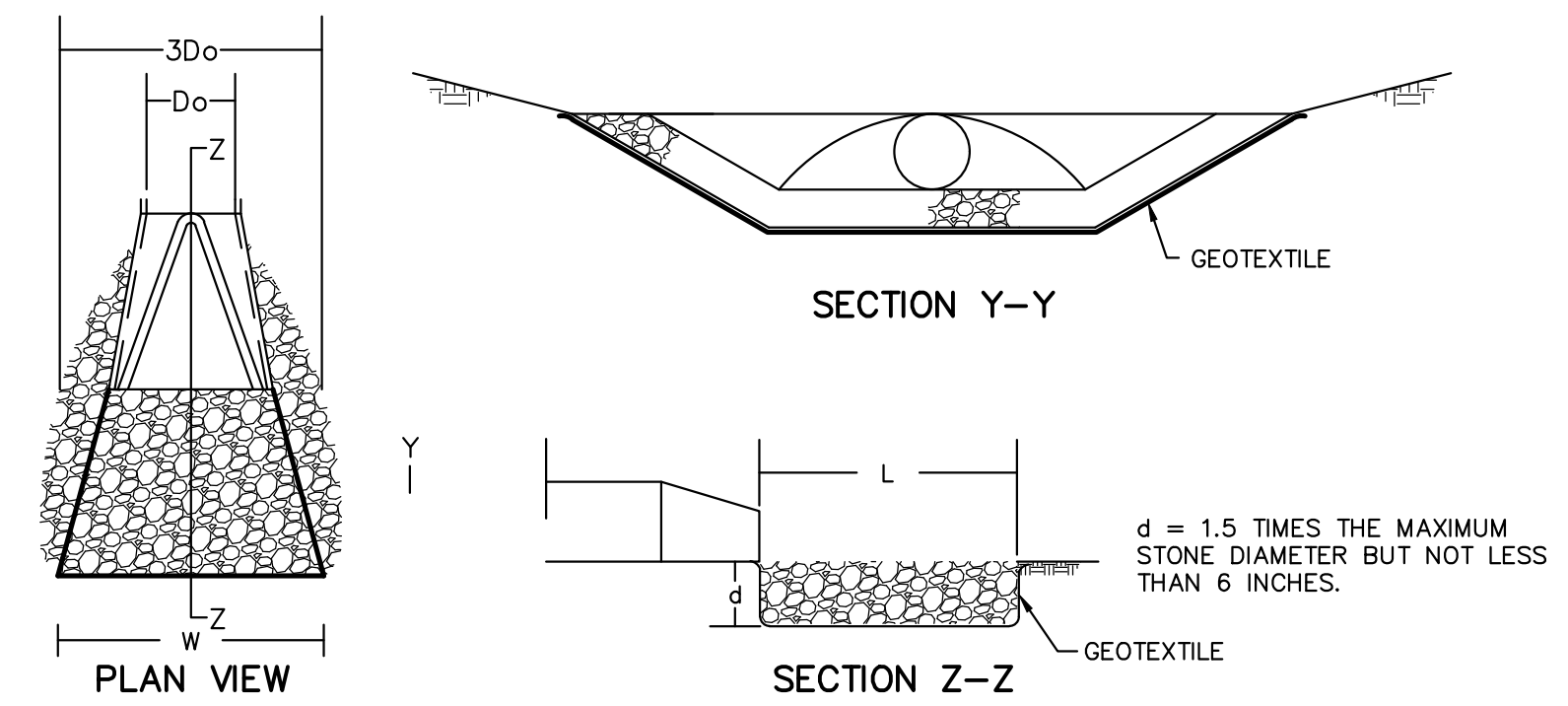
\*TRM SHALL BE RATED FOR A MAXIMUM VELOCITY OF 15 FT/S WITH VEGETATION USE LANDLOK 450 TRM OR ENGINEER APPROVED EQUIVALENT.



CHANNEL CROSS-SECTION

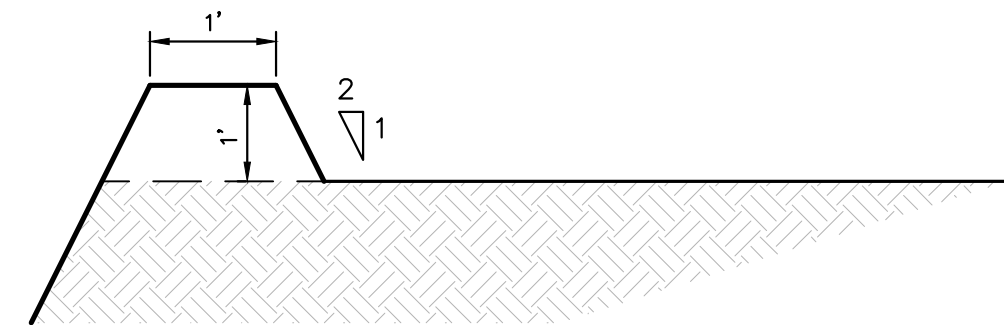
CHANNEL NO.	BOTTOM WIDTH B (FT)	DEPTH D (FT)	Z1 (FT)	Z2 (FT)	* LINING	** GCL REQUIRED (Y/N)
A	3	1	2	2	GRASS+TRM	Y
B	2	1	2	2	GRASS+TRM	Y
C	2	2	2	2	GRASS+TRM	Y
D	2	2	2	2	GRASS+TRM	Y
E	2	2	2	2	GRASS+TRM	Y
F	2	2	2	2	GRASS+TRM	N
G	2	1	2	2	GRASS+TRM	Y

VEGETATED CHANNELS NOT TO SCALE

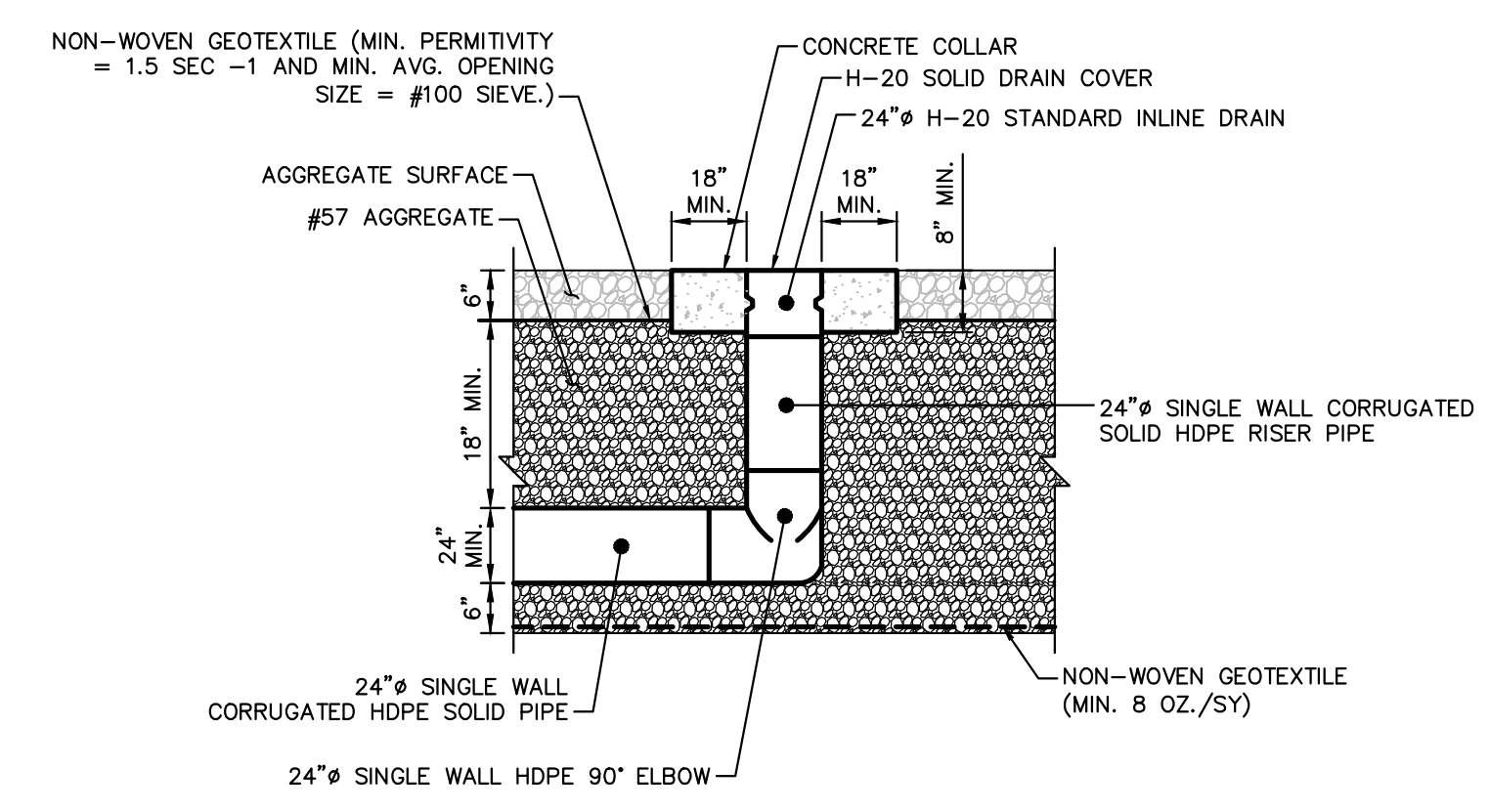


OUTLET NO.	PIPE DIA Do (IN)	RIPRAP			APRON	
		SIZE	THICKNESS RT (IN)	LENGTH AI (FT)	INITIAL WIDTH AIW (FT)	TERMINAL WIDTH ATW (FT)
RA-01	18	R-5	27	11	4.5	15.5
RA-02	18	R-5	27	16	4.5	20.5
RA-03	18	R-5	27	11	4.5	15.5
RA-04	N/A	R-5	27	35	2	10

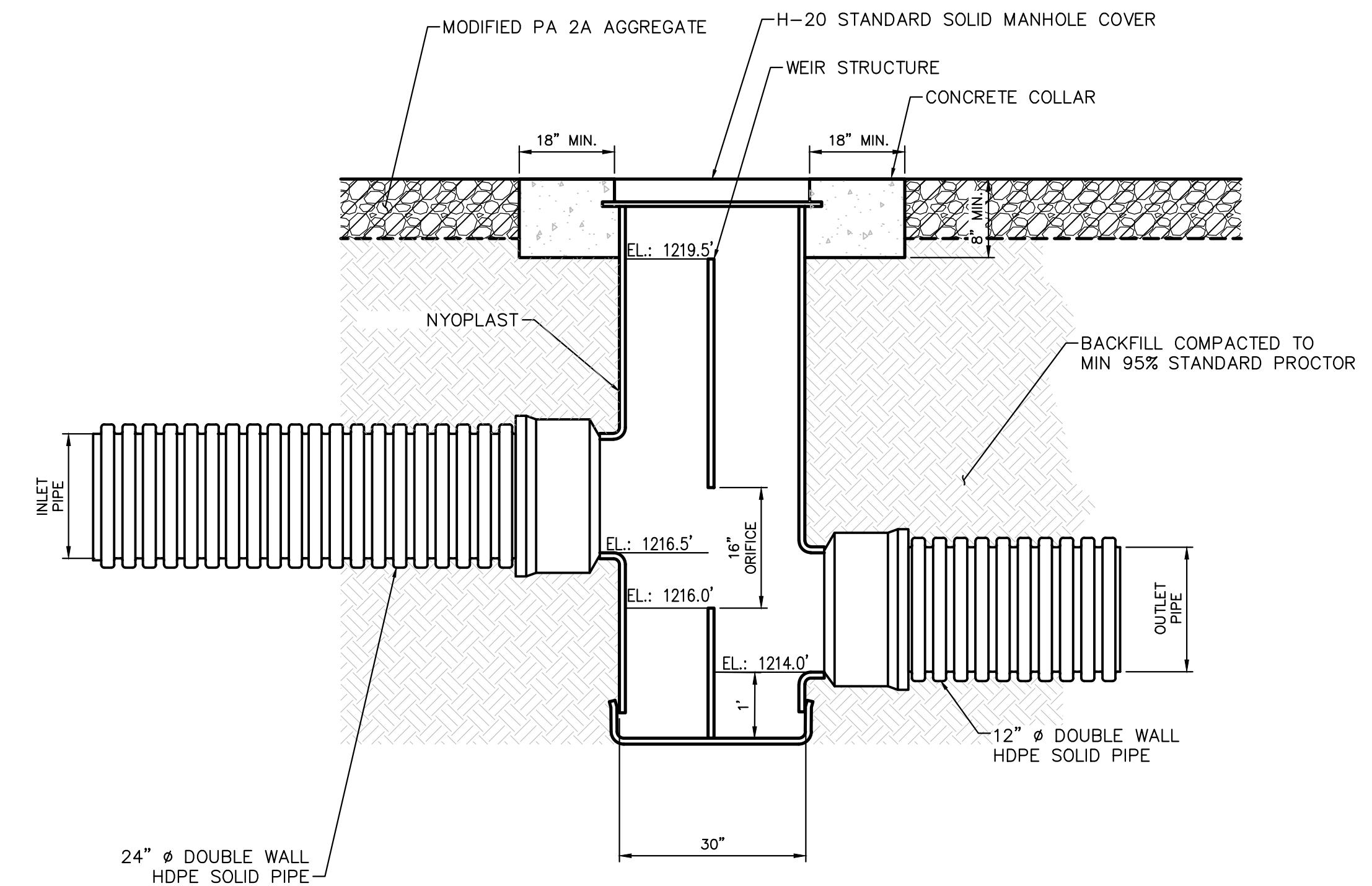
RIPRAP OUTLET PROTECTION DETAIL NOT TO SCALE



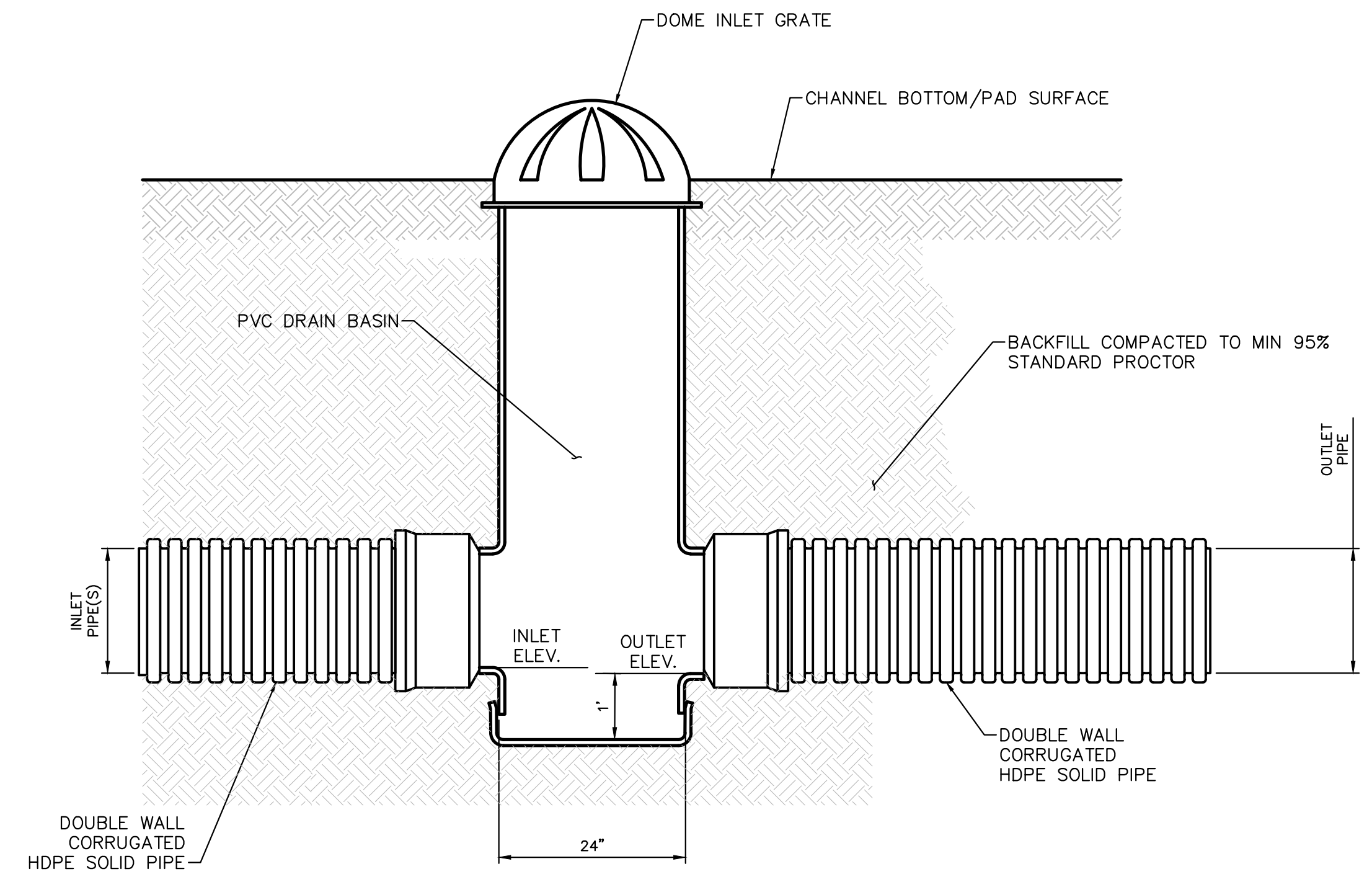
BERM DETAIL NOT TO SCALE



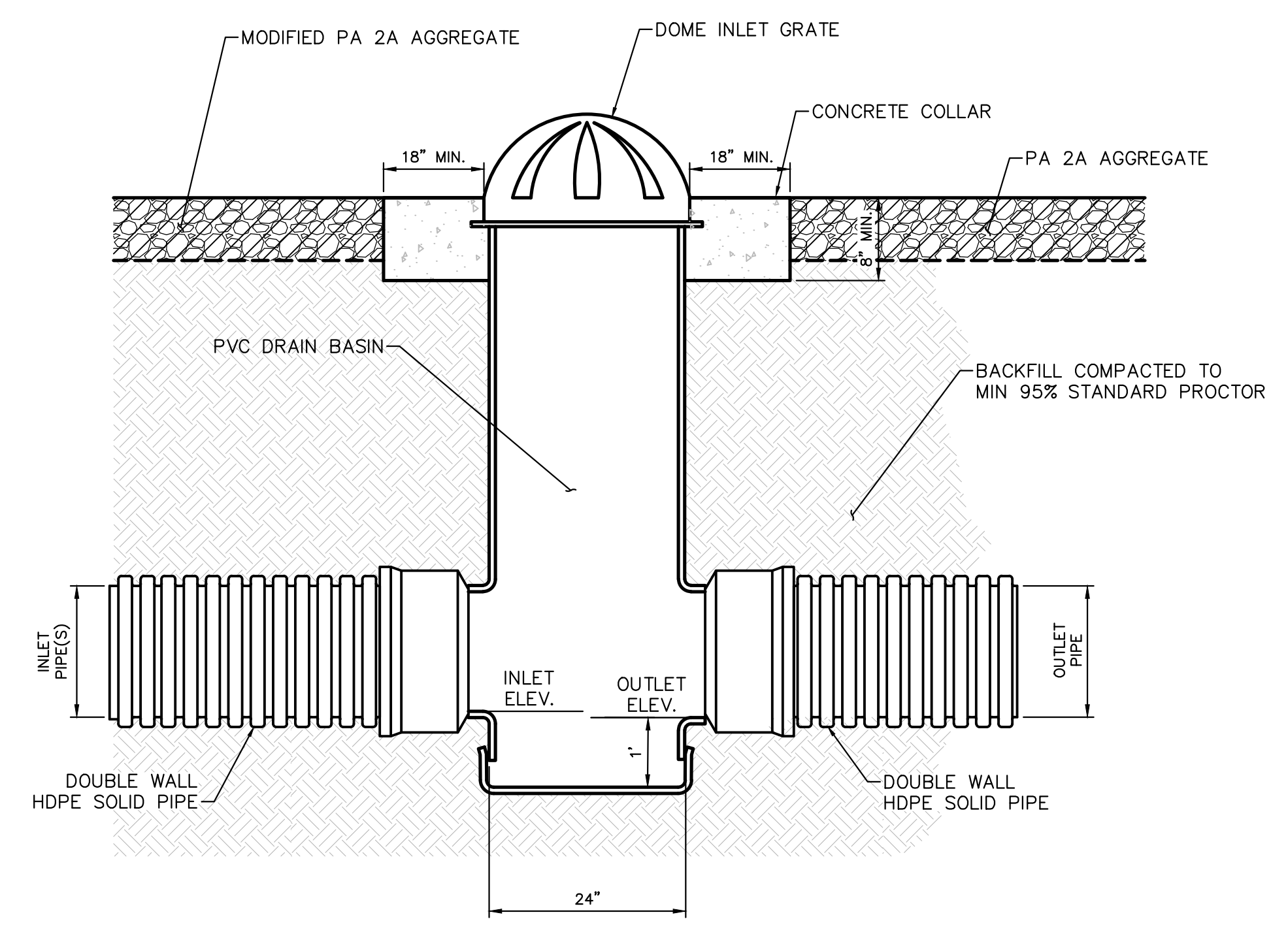
CLEANOUT DETAIL NOT TO SCALE



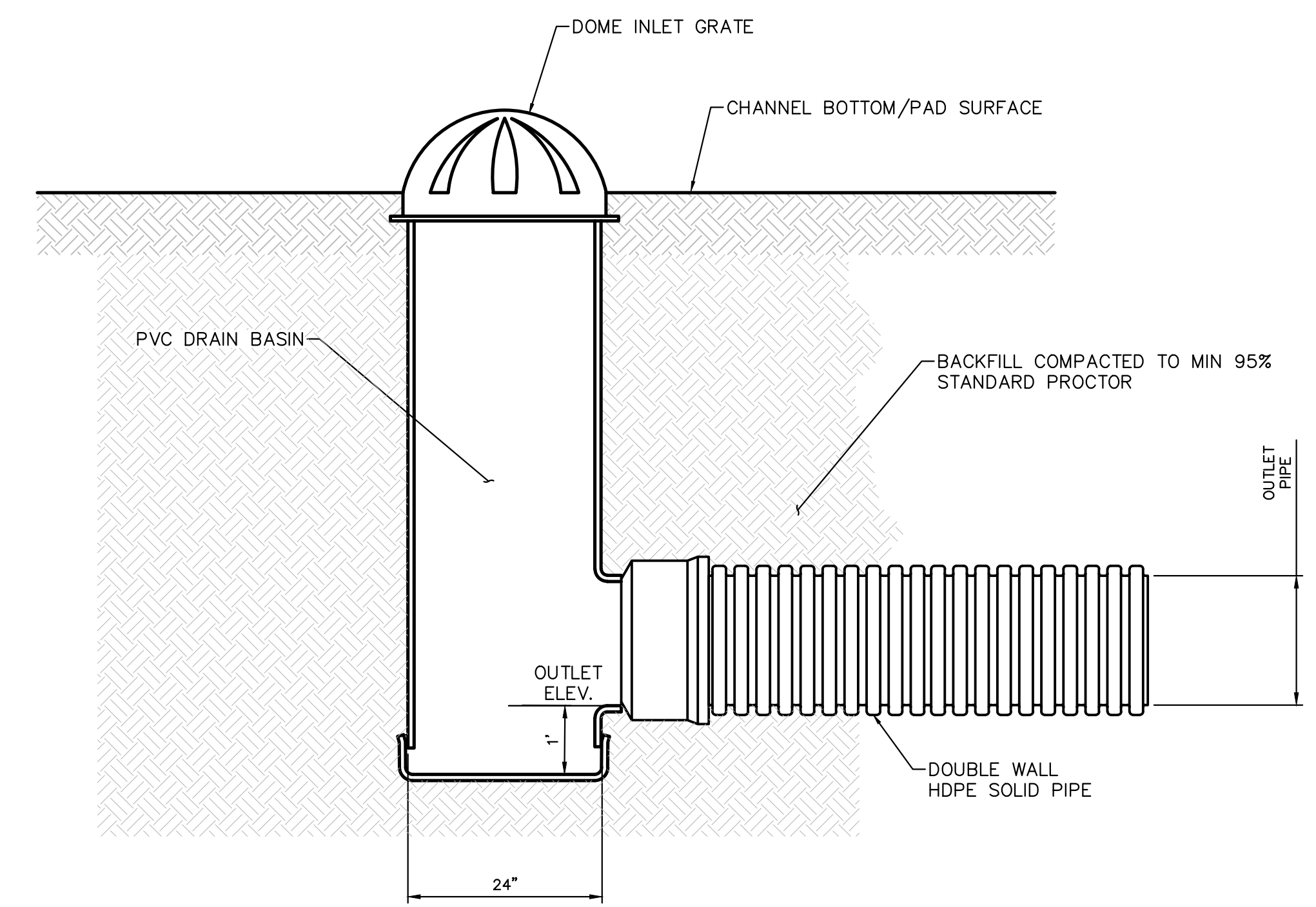
DROP INLET #1 DETAIL NOT TO SCALE



DROP INLET #5, #8, #9, & 12 DETAIL NOT TO SCALE

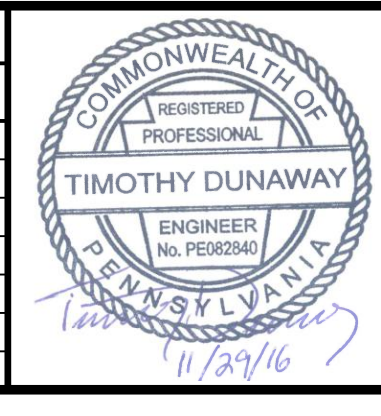


DROP INLET #2, #3, & #4 DETAIL NOT TO SCALE



DROP INLET #6, #7, #10, & 13 DETAIL NOT TO SCALE

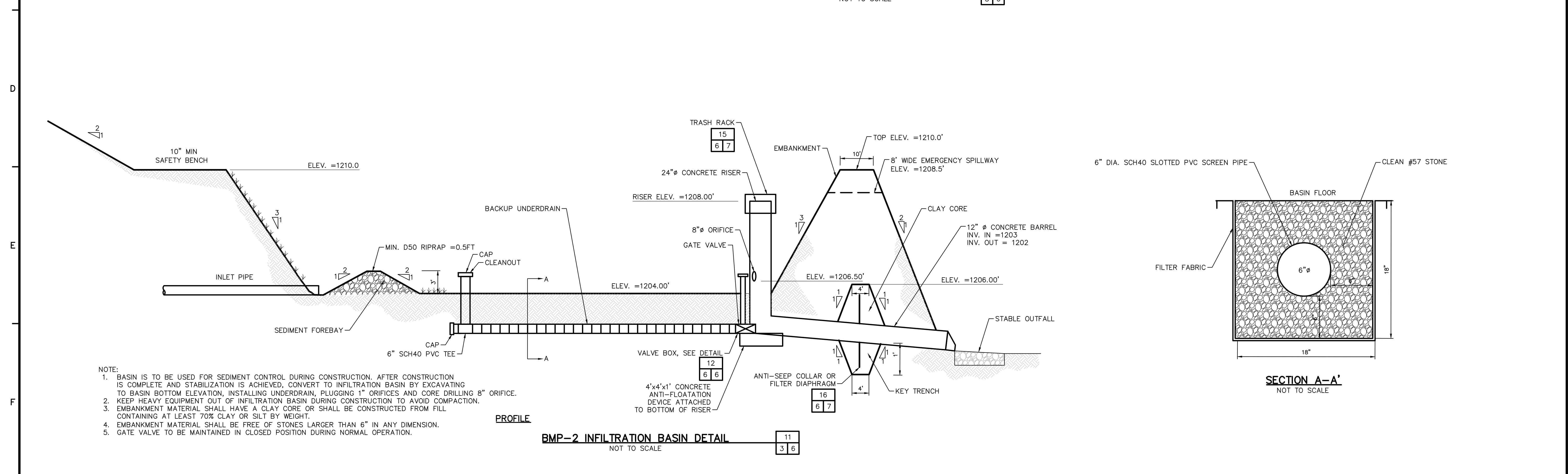
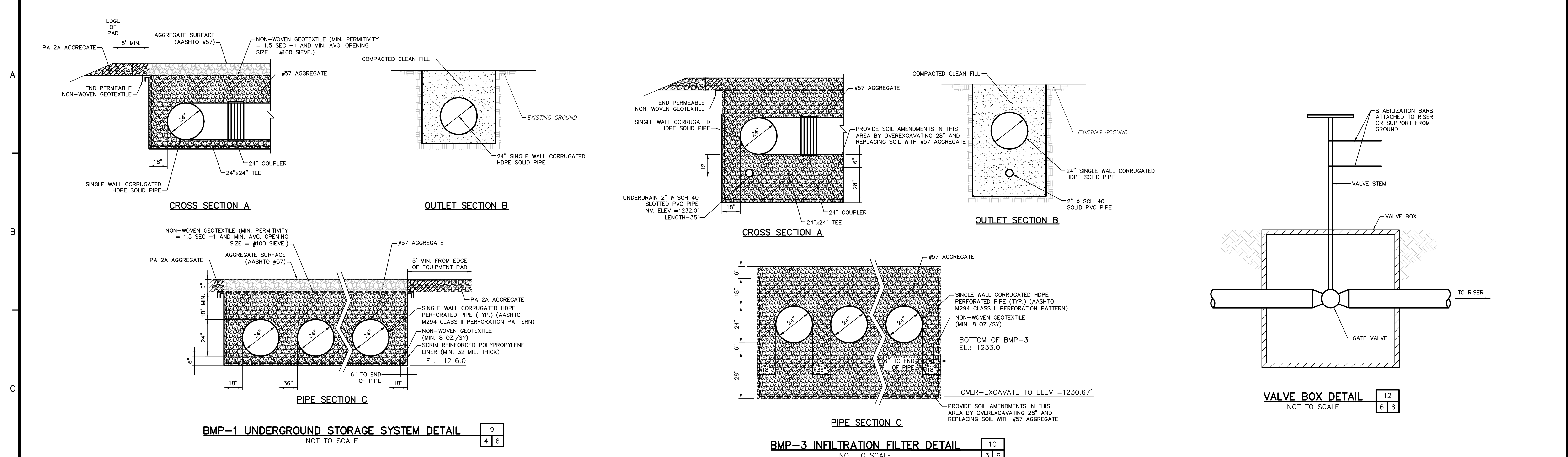
REVISIONS		
NO.	BY	DATE
1	TD	11/30/18
		REMARKS
		REVISED FOR DEP TECHNICAL COMMENTS



SUNOCO PIPELINE L.P.  
SINKING SPRING, PENNSYLVANIA  
  
DELMONT STATION

ESCGP-2  
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN  
DETAILS (SHEET 1 OF 3)

DATE:	3/22/16
PROJECT NO.:	PB-00136
DESIGNED BY:	RS
DRAWN BY:	BH
CHECKED BY:	RS
COPYRIGHT:	TETRA TECH INC.
<b>PCS-5</b>	
SHEET	5 OF 7

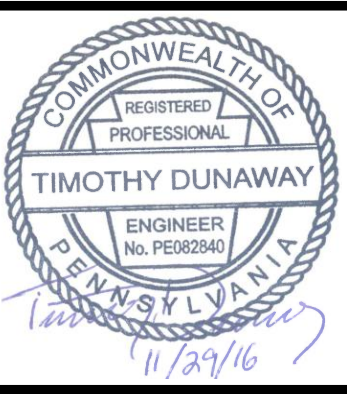


- NOTE:
1. BASIN IS TO BE USED FOR SEDIMENT CONTROL DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETE AND STABILIZATION IS ACHIEVED, CONVERT TO INFILTRATION BASIN BY EXCAVATING TO BASIN BOTTOM ELEVATION, INSTALLING UNDERDRAIN, PLUGGING 1" ORIFICES AND CORE DRILLING 8" ORIFICE.
  2. KEEP HEAVY EQUIPMENT OUT OF INFILTRATION BASIN DURING CONSTRUCTION TO AVOID COMPACTION.
  3. EMBANKMENT MATERIAL SHALL HAVE A CLAY CORE OR SHALL BE CONSTRUCTED FROM FILL CONTAINING AT LEAST 70% CLAY OR SILT BY WEIGHT.
  4. EMBANKMENT MATERIAL SHALL BE FREE OF STONES LARGER THAN 6" IN ANY DIMENSION.
  5. GATE VALVE TO BE MAINTAINED IN CLOSED POSITION DURING NORMAL OPERATION.



www.tetrattech.com  
 661 ANDERSEN DRIVE - FOSTER PLAZA 7  
 PITTSBURGH, PA 15220  
 T: (412) 921-7090 | F: (412) 921-4040

REVISIONS			
NO.	BY	DATE	REMARKS
1	TD	11/30/16	REVISED FOR DEP TECHNICAL COMMENTS



SUNOCO PIPELINE L.P.  
 SINKING SPRING, PENNSYLVANIA  
 DELMONT STATION

ESCGP-2  
 POST CONSTRUCTION STORMWATER MANAGEMENT PLAN  
 DETAILS (SHEET 2 OF 3)

DATE:	3/22/16
PROJECT NO.:	PB-00136
DESIGNED BY:	RS
DRAWN BY:	BH
CHECKED BY:	RS
COPYRIGHT	TETRA TECH INC.
<b>PCS-6</b>	
SHEET	6 OF 7

