

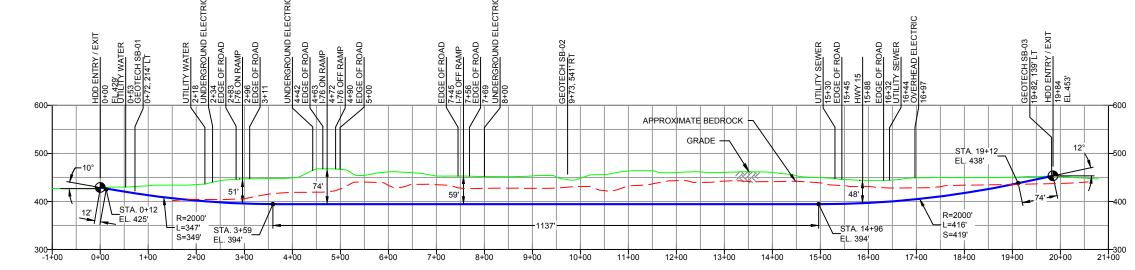


-TOPSOIL (0' - 0.3') -CL (0.3' - 13.5')

-WEATHERED LIMESTONE (13.5' - 13.9') -FRACTURED LIMESTONE (14.0' - 21.4') -WEATHERED LIMESTONE -COMPLETION DEPTH EL. 437'

GEOTECH SB-03

-NG EL. 445' -TOPSOIL (0' - 0.3')
-CLAY / LIMESTONE
FRAGMENTS (USCS:CH)
(0.3' - 12.0')
-LIMESTONE FRAGMENTS
(12.0' - 12.1') (12.0' - 12.1') COMPLETION DEPTH EL. 433'



DESIGN AND CONSTRUCTION:

- CONTRACTOR SHALL FIELD VERIFY DEPTH OF ALL EXITING UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING
- THE MINIM IM SEPARATION DISTANCE FROM EXISTING SUBSURFACE LITH THES SHALL NOT BE LESS. THE MINIMUM SEPARATION DISTANCE FROM EXISTING SUBSURFACE UTILITIES SHALL NOT BE LESS
 THAN 10 FEET AS MEASURED FROM THE OUTSIDE EDGE OF THE UTILITY TO OUTSIDE OF PROPOSED
 PIPELINE
 DESIGNED IN ACCORDANCE WITH CFR 49 195 & ASME B31.4
 CROSSING PIPE SPECIFICATION:
 HDD HORZ. LENGTH (L=):1984'
 HDD PIPE LENGTH (S=):1991'
 20" x 0.456" W.T., X-65, APISL, PSL2, ERW, BFW
 COATING: 14.16 MIS SEPE WITH 20.35 MIII, ARD (POWERCRETE R95)

- 5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0. DESIGN FACTOR 0.50).
- INTERNAL DESIGN PRESSURE 1400 PSIG (SERIP PACTOR 1), DESIGN FACTOR (33), INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD).
 PIPELINE WARNING MARKERS SHALL BE INSTALLED ON BOTH SIDES OF ALL ROAD, RAILWAY, AND STREAM GROSSINGS.
- STREAM CROSSINGS.

 8. CARRIER PIPE NOT ENCASED.

 9. PIPE / AMBIENT TEMPERATURE MUST BE NO LESS THAN 30°F DURING PULLBACK WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER.

 10. CONDUCT 4-HOUR PRE-INSTALLATION HYDROTEST OF HDD PIPE STRING TO MINIMUM 1850 PSIG.

 11. SEE SUNOCO PENNSYLVANIA PIPELINE PROJECT ESRI WEBMAP FOR ACCESS ROAD ALIGNMENT.
- 12. SUNOCO PIPELINE, L.P.'S HORIZONTAL DIRECTIONAL DRILL INADVERTENT RETURN CONTINGENCY PLAN
- WILL BE IMPLEMENTED AT ALL TIMES.
 SUNOCO PIPELINE, L.P.'S EROSION AND SEDIMENTATION CONTROL PLAN WILL BE IMPLEMENTED AT ALL

COATING: 14-16 MILS FBE WITH 30-35 MIL ARO (POWERCRETE R95)													
NOTES		REF. DRAWING				REVISIONS							
2. STATIONING IS BASED ON HORIZONTAL DISTANCES.	ES-4.89	то	ES-4.90	EROSION & SEDIMENT PLAN									
	SHEET 54	то	SHEET 54	AERIAL SITE PLAN	EP1	REVISED PER PADEP COMMENTS	MRS	05/11/16	RMB	05/11/16	AAW 05/11	/16	
					EP		JTW	11/23/15	RMB	11/23/15	AAW 11/23	/15	
					С	ADDED GEOTECH INFO	MRS	09/16/15	RMB	09/16/15	AAW 09/16	/15	
					В	ISSUED FOR BID	SAF	07/31/15	RMB	07/31/15	AAW 07/31	/15	
					Α	ISSUED FOR REVIEW	JAM	03/24/15	RMB	03/24/15	AAW 03/24	/15	
	DWG NO		DWG NO	DESCRIPTION	NO.	DESCRIPTION	BY	DATE	СНК	DATE	APP DAT	ΓE	



20-INCH HORIZONTAL DIRECTIONAL DRILL HWY 15 PENNSYLVANIA PIPELINE PROJECT

SUNOCO PIPELINE, L.P.

TETRA TECH ROONEY (303) 792-5911 SCALE: 1"=200'

DWG. NO: PA-CU-0176.0019-RD