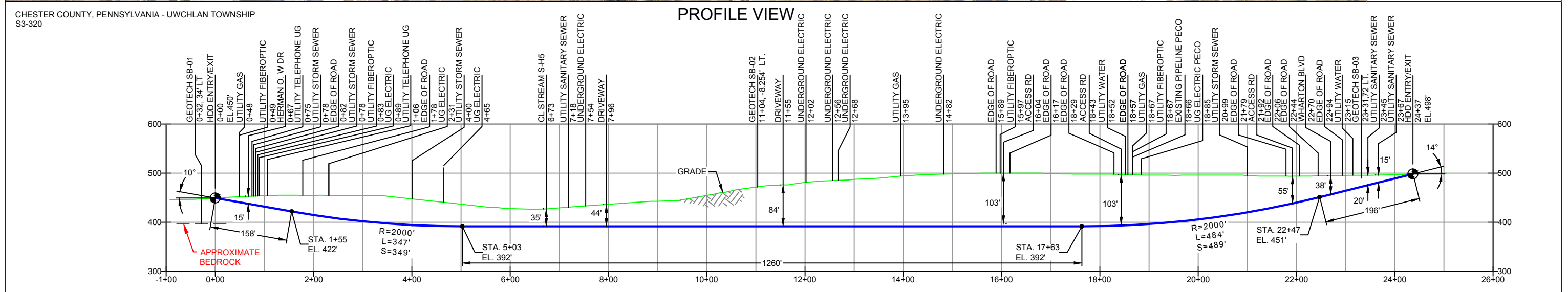


PLAN VIEW



PROFILE VIEW

CHESTER COUNTY, PENNSYLVANIA - UWCHLAN TOWNSHIP
S3-320

GEOTECH SB-01	GEOTECH SB-02	GEOTECH SB-03
<ul style="list-style-type: none"> NG EL. 450' -TOPSOIL (0' - 0.2') -ML (0.2' - 9.0') -GROUNDWATER (25.0') -SM (9.0' - 53.0') -WEATHERED GNEISS (53.0' - 61.3') -COMPLETION DEPTH EL. 389' 	<ul style="list-style-type: none"> NG EL. 472' -TOPSOIL (0' - 0.2') -SM (0.2' - 24.0') -AUGER REFUSAL WEATHERED GNEISS-24.0') -COMPLETION DEPTH EL. 448' 	<ul style="list-style-type: none"> NG EL. 502' -TOPSOIL (0' - 0.3') -ML (0.3' - 6.5') -SM (6.5' - 18.5') -WEATHERED GNEISS GRAVEL (18.5' - 19.0') -COMPLETION DEPTH EL. 483'

DESIGN AND CONSTRUCTION:
 1. CONTRACTOR SHALL FIELD VERIFY DEPTH OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING.
 2. 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.
 3. DESIGNED IN ACCORDANCE WITH CFR 49 195 & ASME B31.4
 CROSSING PIPE SPECIFICATION:
 HDD HORZ. LENGTH (L-):2437'
 HDD PIPE LENGTH (S-):2452'
 20" x 0.456" W.T., X-65, API5L, PSL2, ERW, BFW
 COATING: 14-16 MILS FBE WITH 30-35 MIL ARO (POWERCRETE R95)

- INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.50).
- INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD).
- PIPELINE WARNING MARKERS SHALL BE INSTALLED ON BOTH SIDES OF ALL ROAD, RAILWAY, AND STREAM CROSSINGS.
- CARRIER PIPE NOT ENCASED.
- PIPE / AMBIENT TEMPERATURE MUST BE NO LESS THAN 30°F DURING PULLBACK WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER.
- CONDUCT 4-HOUR PRE-INSTALLATION HYDROTEST OF HDD PIPE STRING TO MINIMUM 1850 PSIG.
- SEE SUNOCO PENNSYLVANIA PIPELINE PROJECT ESRI WEBMAP FOR ACCESS ROAD ALIGNMENT.

- 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 TIMES.

NOTE: REFER TO TEST BORING LOG S3-0320 FOR COMPLETE SOIL MATERIAL DESCRIPTION

NOTES	
1.	ALL COORDINATES SHOWN ARE IN LATITUDE AND LONGITUDE. ALL MSL ELEVATIONS ARE NAD83
2.	STATIONING IS BASED ON HORIZONTAL DISTANCES
3.	ROONEY ENGINEERING, INC. AND SUNOCO PIPELINE, L.P. ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND SUNOCO PIPELINE, L.P. FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
4.	CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES. CONTACT ONE CALL AT 811 PRIOR TO DIGGING.
5.	SUNOCO EMERGENCY HOTLINE NUMBER IS #1-800-786-7440.

REF. DRAWING				REVISIONS			
ES-6.35	TO	ES-6.36	EROSION & SEDIMENT PLAN	EP2	REVISED PER PADEP COMMENTS RECEIVED 09-06-16	MRS	10/21/16
SHEET 20	TO	SHEET 21	AERIAL SITE PLAN	EP1	REVISED PER PADEP COMMENTS	MRS	05/18/16
				EP		MRS	11/13/15
				D	ADDED GEOTECH INFO	MRS	10/02/15
				C	ISSUED FOR BID	DLM	08/21/15
				B	ISSUED FOR BID	DLM	07/31/15
DWG NO		DWG NO	DESCRIPTION	NO.	DESCRIPTION	BY	DATE

**Sunoco Logistics
Partners L.P.**

SUNOCO PIPELINE, L.P.

20-INCH HORIZONTAL DIRECTIONAL DRILL
HERMAN O. W DRIVE
PENNSYLVANIA PIPELINE PROJECT

TETRA TECH ROONEY
(303) 792-5911

SCALE: 1"=200'

DWG. NO: PA-CH-0127.0000-RD