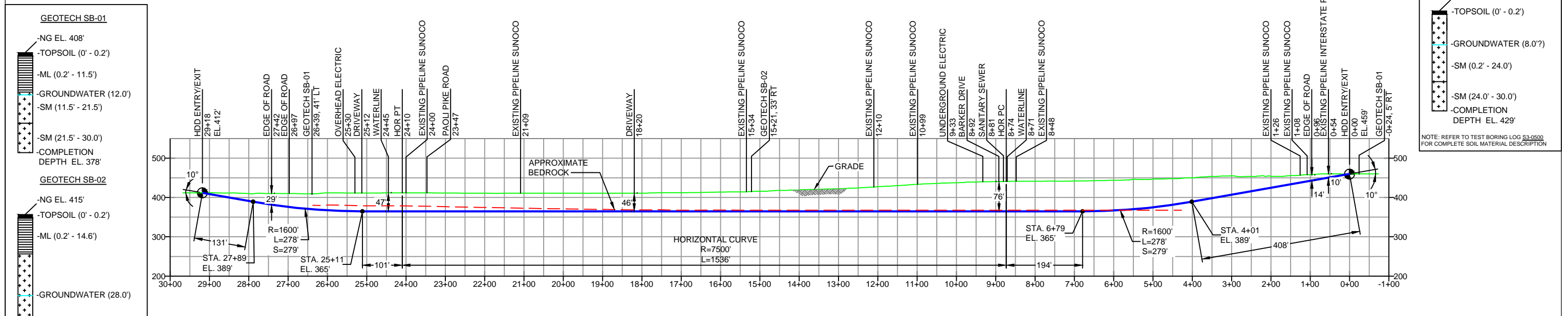


PLAN VIEW

CHESTER COUNTY, PENNSYLVANIA - EAST GOSHEN TOWNSHIP  
S3-0490-16

PROFILE VIEW



**GEOTECH SB-01**  
 -NG EL. 408'  
 -TOPSOIL (0' - 0.2')  
 -ML (0.2' - 11.5')  
 -GROUNDWATER (12.0')  
 -SM (11.5' - 21.5')  
 -SM (21.5' - 30.0')  
 -COMPLETION DEPTH EL. 378'

**GEOTECH SB-02**  
 -NG EL. 415'  
 -TOPSOIL (0' - 0.2')  
 -ML (0.2' - 14.6')  
 -GROUNDWATER (28.0')  
 -SM (14.6' - 46.0')  
 -WEATHERED SCHIST (14.6' - 46.0')  
 -COMPLETION DEPTH EL. 378'


**GEOTECH SB-01**  
 -NG EL. 459'  
 -TOPSOIL (0' - 0.2')  
 -GROUNDWATER (8.0')  
 -SM (0.2' - 24.0')  
 -SM (24.0' - 30.0')  
 -COMPLETION DEPTH EL. 429'

NOTE: REFER TO TEST BORING LOG S3-0500 FOR COMPLETE SOIL MATERIAL DESCRIPTION


- DESIGN AND CONSTRUCTION:**
- CONTRACTOR SHALL FIELD VERIFY DEPTH OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING.
  - 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=): 2918'  
 HDD PIPE LENGTH (S=): 2928'  
 16" x 0.438" WT., X-70, API 5L PSL2, ERW, BFW  
 COATING: 14-16 MILS FBE WITH 30-35 MIL ARO (POWERCRETE OR ENGINEER APPROVED EQUAL)
  - 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.

- NOTES**
- ALL COORDINATES SHOWN ARE IN LATITUDE AND LONGITUDE. ALL MSL ELEVATIONS ARE NAD83
  - STATIONING IS BASED ON HORIZONTAL DISTANCES.
  - ROONEY ENGINEERING, INC. AND SUNOCO PIPELINE, LP 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, LP, FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.
  - CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES. CONTACT ONE CALL AT 811 PRIOR TO DIGGING.
  - SUNOCO EMERGENCY HOTLINE NUMBER IS #1-800-786-7440.

REVISIONS		DESCRIPTION	BY	DATE	CHK	DATE	APP	DATE
EP								
B		ADDED GEOTECH INFO	MRS	11/13/15	RMB	11/13/15	MRS	11/13/15
A		ISSUED FOR BID	MRS	10/01/15	RMB	10/01/15	AAW	10/01/15
			MRS	08/31/15	RMB	08/31/15	AAW	08/31/15



**Sunoco Logistics  
Partners L.P.**



**TETRA TECH ROONEY**  
(303) 792-5911

**SUNOCO PIPELINE, L.P.**

HORIZONTAL DIRECTIONAL DRILL  
E BOOT RD/ PAOLI PIKE  
PENNSYLVANIA PIPELINE PROJECT

SCALE: 1"=250'    DWG. NO. PA-CH-0355-0000-RD-16