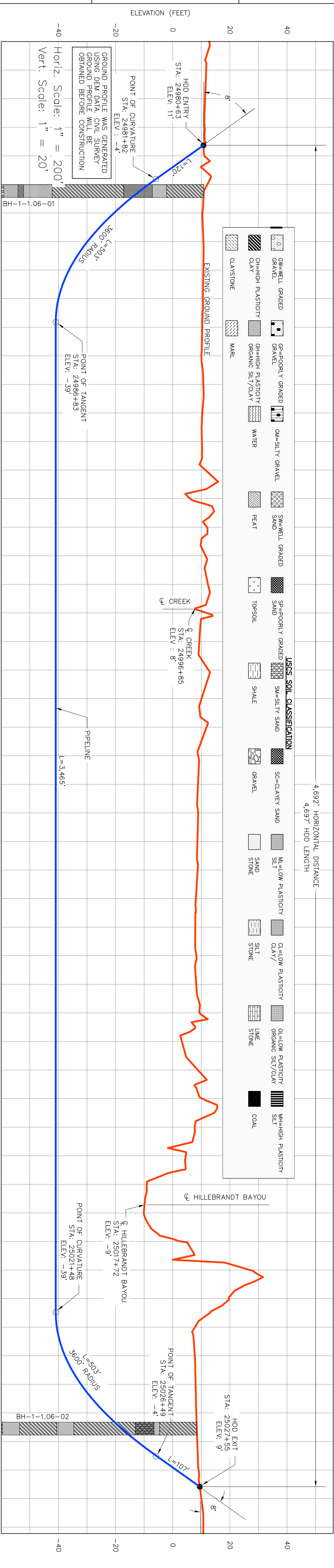
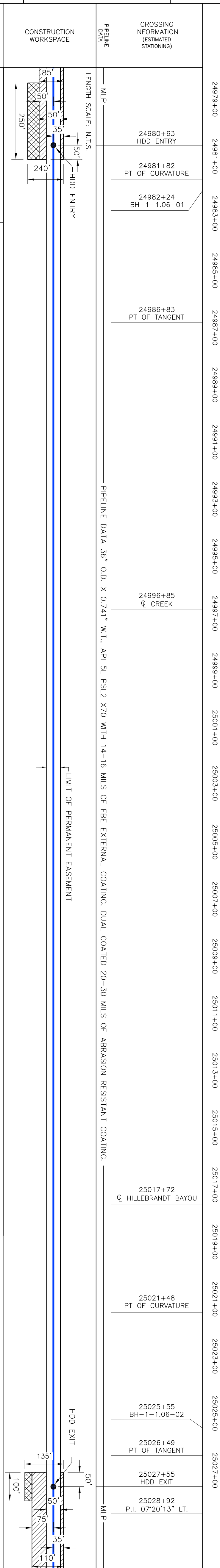


- INSTALLATION NOTES**
- 1) ACCESS TO ALL EQUIPMENT MUST BE MAINTAINED AT ALL TIMES. ACCESS TO ALL EQUIPMENT MUST BE MAINTAINED AT ALL TIMES. ACCESS TO ALL EQUIPMENT MUST BE MAINTAINED AT ALL TIMES.
 - 2) VEHICLE AND EQUIPMENT ACCESS CROSSING MAY BE INSTALLED IF APPROVED BY THE ENVIRONMENTAL INSPECTOR.
 - 3) WORK SPACE WORK SPACE LIMITS ARE DETERMINED. CLEANING WILL BE REQUIRED. WORK SPACE LIMITS ARE DETERMINED. CLEANING WILL BE REQUIRED. WORK SPACE LIMITS ARE DETERMINED. CLEANING WILL BE REQUIRED.
 - 4) WATER SOURCE: DITCH WATER AND PRE-INSTALLATION PROSPECTIVE CONSTRUCTION SHALL SCREEN THE WATER SOURCE TO DETERMINE THE PRESENCE OF FISH OR OTHERS AND IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.
 - 5) HYDROLOGIC TEST: PRE-INSTALLATION HYDROLOGIC TEST SHALL BE CONDUCTED. HYDROLOGIC TEST SHALL BE CONDUCTED. HYDROLOGIC TEST SHALL BE CONDUCTED. HYDROLOGIC TEST SHALL BE CONDUCTED.
 - 6) SOIL-DEPENDENT: ALL PIPES SHALL BE SET IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.
 - 7) SOIL-DEPENDENT: ALL PIPES SHALL BE SET IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.
 - 8) SOIL-DEPENDENT: ALL PIPES SHALL BE SET IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.
 - 9) SOIL-DEPENDENT: ALL PIPES SHALL BE SET IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.
 - 10) SOIL-DEPENDENT: ALL PIPES SHALL BE SET IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.
 - 11) SOIL-DEPENDENT: ALL PIPES SHALL BE SET IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.
 - 12) SOIL-DEPENDENT: ALL PIPES SHALL BE SET IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.
 - 13) SOIL-DEPENDENT: ALL PIPES SHALL BE SET IN ACCORDANCE WITH THE PROJECT REQUIREMENTS. THE HOSE SHALL BE KEPT OFF THE BOTTOM OF THE WATER BODY.



- LEGEND**
- POINT OF INTERSECTION (PI)
 - ENTRY OR EXIT POINT
 - GEOTECHNICAL BORING
 - POWER/PE
 - MANHOLE PIPE
 - PIPELINE
 - FOREIGN PIPELINE
 - EDGE OF WATER
 - PRIVATE ACCESS SHAD RTV ROAD
 - COUNTY BOUNDARY
 - WATER LEVEL
 - USACE CONSTRUCTION REFERENCE POINT
 - WETLANDS
 - PERMANENT DESIGN
 - TEMPORARY DESIGN
 - EXTRA WORKSPACE



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CROSSING INFORMATION (ESTIMATED STATIONING)	
24980+63 HDD ENTRY	24981+82 PT OF CURVATURE
24982+24 BH-1-1-1-06-01	24986+83 PT OF TANGENT
24983+00	24985+00
24987+00	24989+00
24991+00	24993+00
24995+00	24997+00
24999+00	25001+00
25003+00	25005+00
25007+00	25009+00
25011+00	25013+00
25015+00	25017+00
25021+00	25023+00
25025+00	25027+00

CROSSING INFORMATION (ESTIMATED STATIONING)	
25017+72 HILLEBRANDT BAYOU	25021+48 PT OF CURVATURE
25025+55 BH-1-1-1-06-02	25026+49 PT OF TANGENT
25027+55 HDD EXIT	25028+92 P.I. 0720'13" LT.

DRAWING INFORMATION	
DRAWING NO	11042 HDD XREF-15
TITLE	HILLEBRANDT BAYOU HDD INSTALLATION
NOTES-LEGEND	NOTES-LEGEND.dwg

REVISION		
REV NO	DATE	DESCRIPTION
0	11.19.08	ISSUED FOR UNITED STATES DEPARTMENT OF STATE (7.31.08 CJ)
1	03.19.09	ISSUED FOR TROW REVIEW
2	07.06.09	ISSUED FOR SUPPLEMENTAL U.S. DEPT. OF STATE PLUNG (2.19.09 CJ)
3	03.15.10	ISSUED FOR CONTRACT PRE-AWARD

APPROVAL	
DESIGNER	JW
CHECKER	JH
PROJECT MANAGER	JH
COMPANY	UEI

PROFESSIONAL ENGINEER/ART	
DATE	

PERMIT/ ENG. APPROVAL	
DATE	

UNIVERSAL ENERGY INC.	
PROJECT NO	4387
CHANGE	MP, 473.8
DISCIPLINE #	03

CONOCOPHILLIPS	
PROJECT NO	4387
CHANGE	MP, 473.8
DISCIPLINE #	03

TRANSCANADA	
PROJECT NO	4387
CHANGE	MP, 473.8
DISCIPLINE #	03

HILLEBRANDT BAYOU HDD INSTALLATION
KEYSTONE XL PROJECT
JEFFERSON COUNTY, TEXAS

SCALE: AS SHOWN
DRAWING NO: 4387-03-ME-03-006
REV: 3