

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ABANDONED MINE LAND RECLAMATION PROJECT

PENGROVE COAL COMPANY - HANEY SITE

MINING PERMIT NO. 10820115

VENANGO TOWNSHIP

BUTLER COUNTY

CONTRACT NO. BF 406-101.1

DRAWING INDEX

TITLE	DWG. NO.
TITLE SHEET	1 of 7
LOCATION AND VICINITY MAPS	2 of 7
PLAN	3 of 7
PLAN - SOILS INFORMATION	4 of 7
DETAILS	5 of 7
DETAILS	6 of 7
DETAILS	7 of 7

MARK S. SCHWEIKER

GOVERNOR

DAVID E. HESS

SECRETARY OF ENVIRONMENTAL PROTECTION

Prepared By

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF ABANDONED MINE RECLAMATION

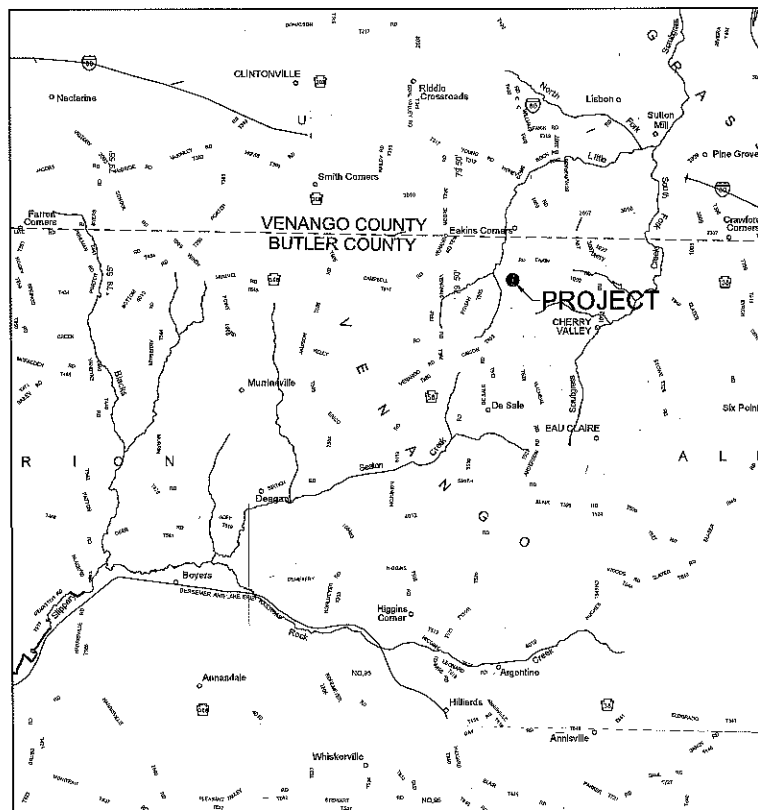
400 Market Street, Harrisburg, PA

JOSEPH H. SCHUECK, P.E., DIVISION CHIEF
DEPARTMENT OF ENVIRONMENTAL PROTECTION

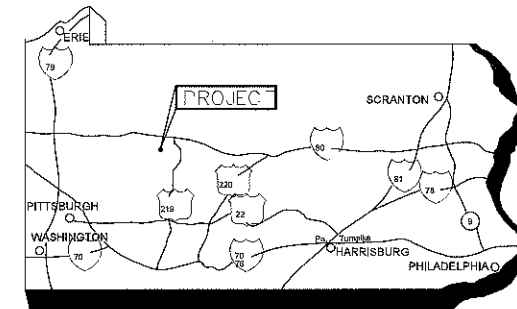
DATE

PROPERTY OWNERS

Vincent J. and Mary M. Cordan
P.O. Box F
Eau Claire, PA 16030



VICINITY MAP
SCALE: 1" = APPROXIMATELY 1 MILE

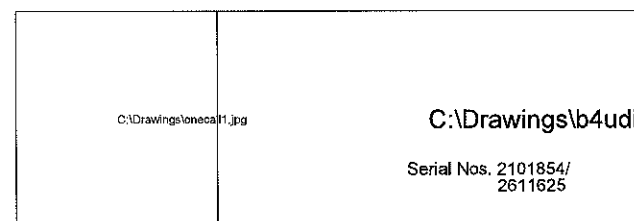


LOCATION MAP
No Scale

NOTE: The Contractor Shall comply with Act 287 of the General Assembly, which defines the procedures for notification to Public Utilities prior to excavation, drilling, or demolition work using power equipment or explosives.

UTILITY LISTINGS

COMPANY	TYPE OF FACILITY	ADDRESS	PHONE
Columbia Gas of PA	Underground Line	Route 224 West RD 2, Box 434 New Castle, PA 16101	(724)-546-2028 Mr. Don Kizak
Pennsylvania One Call	SERIAL NUMBERS: 2101854/2611625		1-800-242-1776



LEGEND

- — — — — LIMIT OF CONTRACTOR'S WORKING AREA (C.W.A.), BACKFILLING OF POND (WHERE APPLICABLE), AND SEEDING (WHERE APPLICABLE)
- — — — — LIMIT OF BACKFILLING OF POND AND SEEDING (WHERE APPLICABLE)
- 1230 — — — — — PROPOSED CONTOURS
- 1220 — — — — — EXISTING CONTOURS
- P — — — — — APPROXIMATE PROPERTY LINE
- 2+00 — — — — — 3+00 — — — — — CONSTRUCTION BASELINE
- G — — — — — UNDERGROUND GAS LINE
- X — X — X — — — — — FENCE LINE

GENERAL NOTES

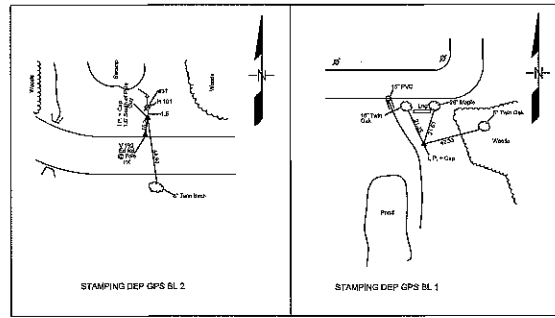
- 1) Elevations of the features are to be taken from the Bench Marks shown on the drawing.
- 2) Limits of Backfilling of Pond and Seeding as shown on the plan are approximate. Minor deviations may be permitted subject to the approval of the Department's Representative.
- 3) All areas outside of the seeding limits that are disturbed by the Contractor must be restored to as good as or better than the existing conditions.
- 4) All areas where 2 ft. contours are not shown shall be graded at a uniform slope between 10 ft. contour intervals.
- 5) Minor adjustments in grade may be made by the Department's Representative to suit field conditions.
- 6) The Contractor shall dewater all impoundments existing, within the C.W.A. limits, at the time of construction of the project.
- 7) The property lines as shown on the drawing are approximate.
- 8) Locations of the utilities shown on the Drawings are based on the information provided by the utility companies. The accuracy of this information is not guaranteed. The Contractor shall contact the utility companies listed on this drawing prior to any construction activity.

NO.	DATE	REVISION	APPR.
SUBMITTED			
PROJECT ENGINEER			
RECOMMENDED			
PROJECT COORDINATOR			
APPROVED			
CHIEF - DIVISION OF ABANDONED MINE DRAINAGE ABATEMENT			
COMMONWEALTH OF PENNSYLVANIA			
DEPARTMENT OF ENVIRONMENTAL PROTECTION			
CONTRACT NO. BF 406-101.1			
ABANDONED MINE LAND RECLAMATION PROJECT			
PENGROVE COAL COMPANY - HANEY SITE			
MINING PERMIT NO. 10820115			
VENANGO TOWNSHIP		BUTLER COUNTY	
LOCATION MAP AND VICINITY MAPS			
DRAWN BY	DATE	DRAWING NO.	
GRJ			
CHECKED BY	SCALE		
	As shown		2 of 7

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY CONTRACTOR AT THE SITE.

BENCH MARK DATA					
BM NO.	BASILINE STA.	ELEVATION	DESCRIPTION	N. COORDINATE	E. COORDINATE
DEP GPS BL2	00+00.00	1340.34	IRON PIN AND CAP	674160.32	1397494.11
DEP GPS BL1	12+28.59	1425.22	IRON PIN AND CAP	674216.07	1398721.37

CONSTRUCTION BASELINE DATA



Begin 2 ft. wide Ditch "D" with AASHTO No. 1 Limestone Rock. Invert Elev. 1404±. See Detail.

Limit of Contractor's Working Area (C.W.A.) and Seeding (where applicable)

Begin 2 ft. wide Ditch "A" with HVECMB. Invert Elev. 1426±. See Detail.

Begin 2 ft. wide Ditch "B" with AASHTO No. 1 Limestone Rock. Invert Elev. 1426±. See Detail.

Begin 2 ft. wide Ditch "C" with AASHTO No. 1 Limestone Rock. Invert Elev. 1412±. See Detail.

Install H-Flume. See Detail, Dwg. No. 7.

Provide Spillway

Limit of Backfilling of Pond.

Begin 2 ft. wide Ditch "E". See Detail.

Install H-Flume. See Detail, Dwg. No. 7.

Begin 10 ft. wide Ditch "F" with AASHTO No. 1 Limestone Rock. Invert Elev. 1394±. See Detail.

Install H-Flume. See Detail, Dwg. No. 7.

Provide Spillway

Begin 2 ft. wide Ditch "G" with AASHTO No. 1 Limestone Rock. Invert Elev. 1386±. See Detail.

VINCENT J. and MARY M. CORDAN

PROPOSED FACILITIES:

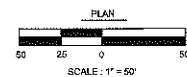
VFR POND: 2:1 SIDE SLOPES; 104' X 144' TOP

DRINK. POND: 5:1 SIDE SLOPES; 100' X 200' TOP

← ← DITCH

== == ACCESS ROAD

— — — CHAIN-LINK FENCE



TOPOGRAPHY BY:
BARTON AERIAL TECHNOLOGIES, INC.
COLUMBUS, OHIO 43229
USING AERIAL PHOTOGRAPHY
DATED 04-29-01.
HORIZONTAL CONTROL IS BASED ON
NAD83 DATUM
ALL ELEVATIONS SHOWN ARE BASED
ON NAVD83 DATUM
RELATIVE ERROR OF CLOSURE FOR
TRAVERSE
TRAVERSE ADJUSTMENT BY COMPASS
RULE METHOD.
ALL DIMENSIONS AND EXISTING
CONDITIONS SHALL BE CHECKED
AND VERIFIED BY CONTRACTOR
AT THE SITE.

NO.	DATE	REVISION	APPR.

SUBMITTED: _____
PROJECT ENGINEER
RECOMMENDED: _____
PROJECT COORDINATOR
APPROVED: _____
CHIEF - DIVISION OF ACID MINE DRAINAGE ABATEMENT

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CONTRACT NO. BF 406-101.1

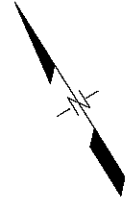
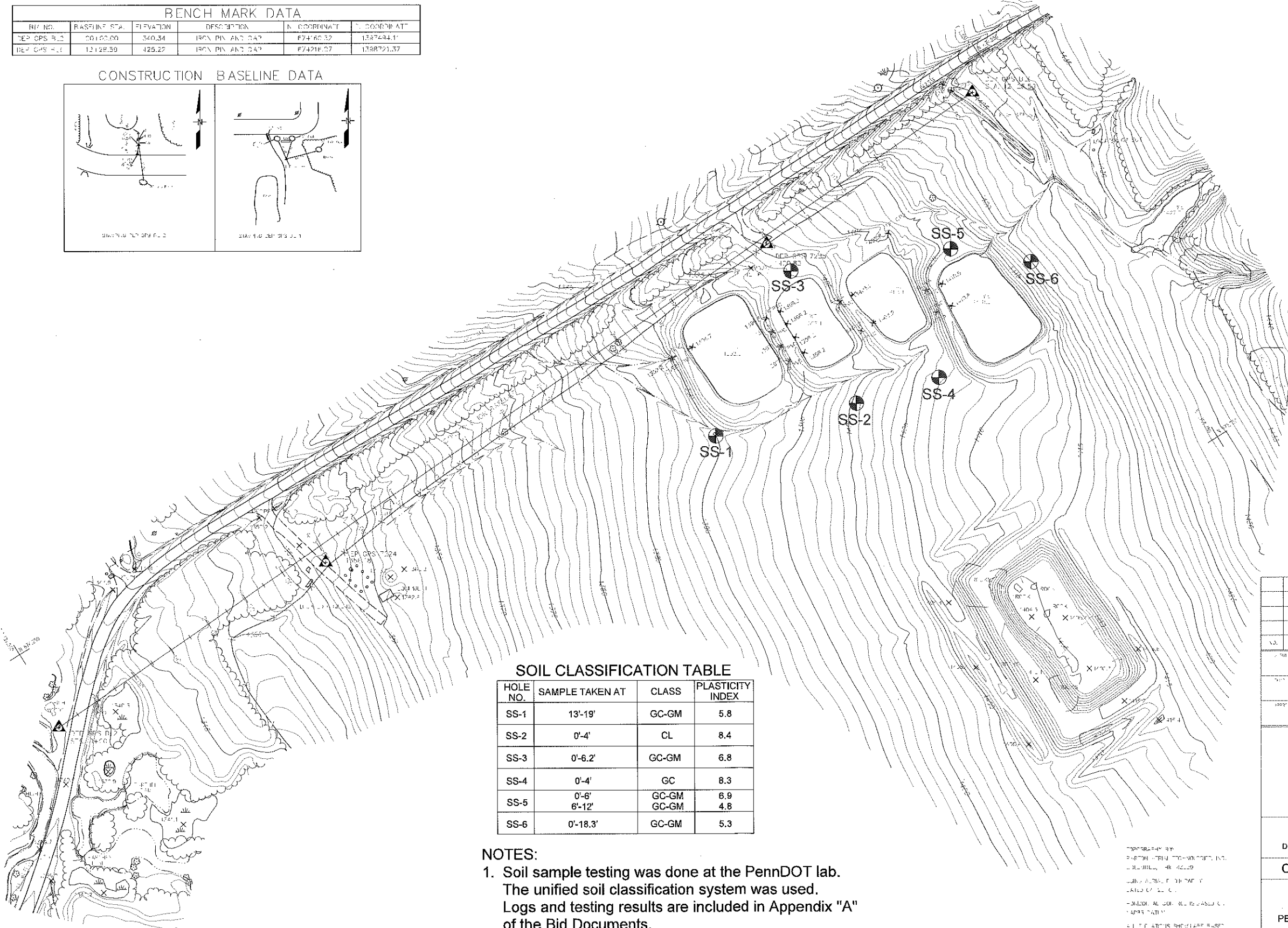
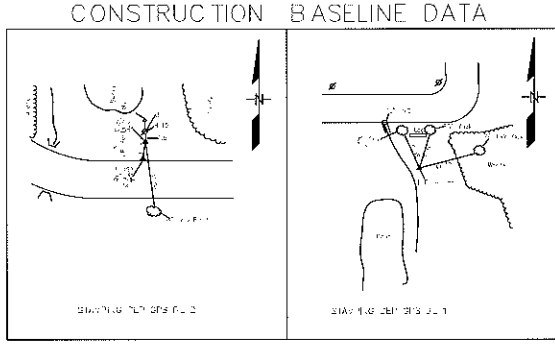
ABANDONED MINE LAND
RECLAMATION PROJECT
PENGROVE COAL COMPANY - HANEY SITE
MINING PERMIT NO. 10820115

VENANGO TOWNSHIP BUTLER COUNTY

PLAN

DRAWN BY: GRJ	DATE:	DRAWING NO.:
CHECKED BY:	SCALE: 1"=50'	3 of 7

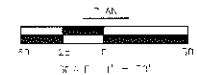
BENCH MARK DATA					
REF. NO.	BENCHMARK STA.	ELEVATION	DESCRIPTION	N. COORDINATE	E. COORDINATE
REF. OPS. 4.1	00100.00	340.34	IRON PIN AND DIAL	674160.32	1337644.11
REF. OPS. 4.1	12128.30	429.27	IRON PIN AND DIAL	674216.07	1338791.37



SOIL CLASSIFICATION TABLE

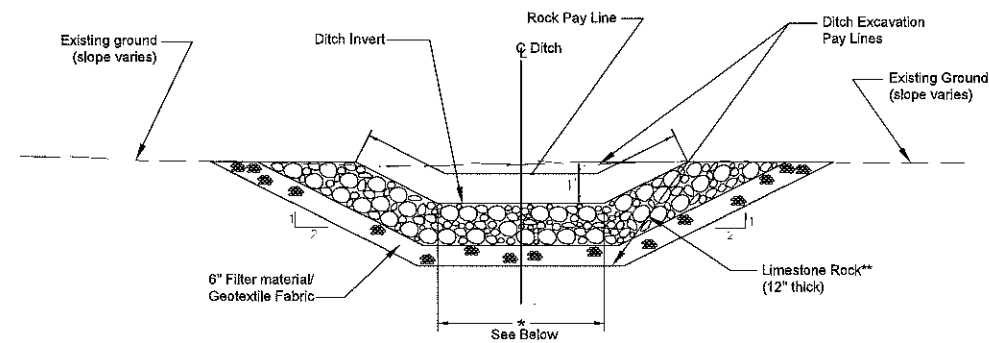
HOLE NO.	SAMPLE TAKEN AT	CLASS	PLASTICITY INDEX
SS-1	13'-19'	GC-GM	5.8
SS-2	0'-4'	CL	8.4
SS-3	0'-6.2'	GC-GM	6.8
SS-4	0'-4'	GC	8.3
SS-5	0'-6'	GC-GM	6.9
SS-6	0'-18.3'	GC-GM	5.3

NOTES:
 1. Soil sample testing was done at the PennDOT lab. The unified soil classification system was used. Logs and testing results are included in Appendix "A" of the Bid Documents.



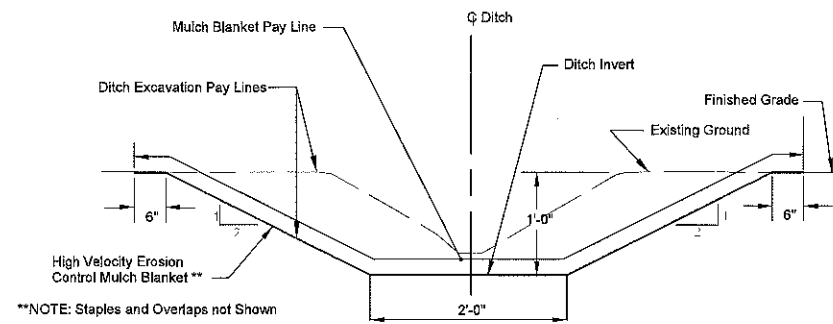
TOPOGRAPHY BY:
 PENTON TECHNICAL SERVICES, INC.
 1412 W. 14th St., Erie, PA 16590
 DATE OF SURVEY: 12/11/08
 PROJECT: ABANDONED MINE LAND RECLAMATION
 HANLEY SITE
 ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE.
 ANY AND ALL RIGHTS ARE RESERVED BY THE SURVEYOR.
 THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF THE SURVEYOR AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE SURVEYOR.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION		
CONTRACT NO. BF 406-101.1		
ABANDONED MINE LAND RECLAMATION PROJECT		
PENGROVE COAL COMPANY - HANEY SITE		
MINING PERMIT NO. 10820115		
VENANGO TOWNSHIP	BUTLER COUNTY	
PLAN - SOILS INFORMATION		
DRAWN BY: GRJ	DATE: 1/13/09	SCALE: 1"=50'



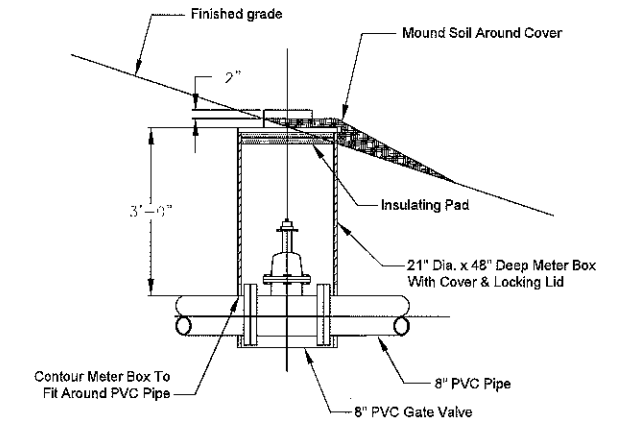
DITCH WITH LIMESTONE ROCK LINING

No Scale



DITCH "A" WITH HIGH VELOCITY EROSION CONTROL MULCH BLANKET

No Scale

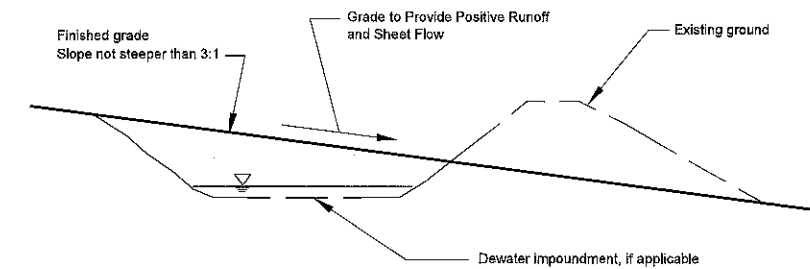


8" PVC GATE VALVE AND METER BOX

No Scale

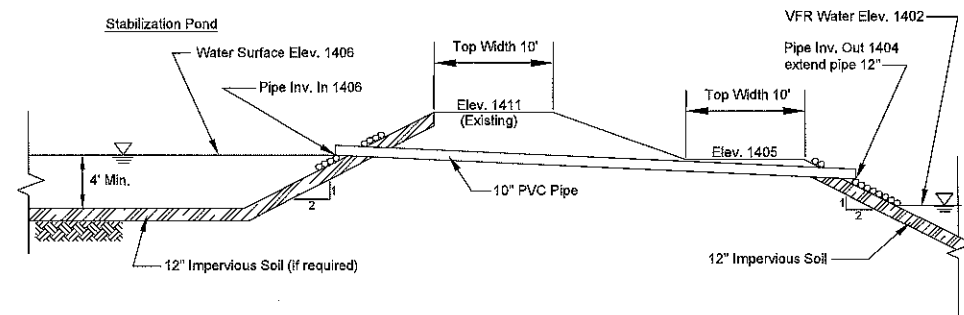
INFORMATION FOR DITCHES

DITCH	*BOTTOM WIDTH	**LINING
B,C,D,G	2'	AASHTO No. 1
E	2'	R-3
F	10'	AASHTO No. 1



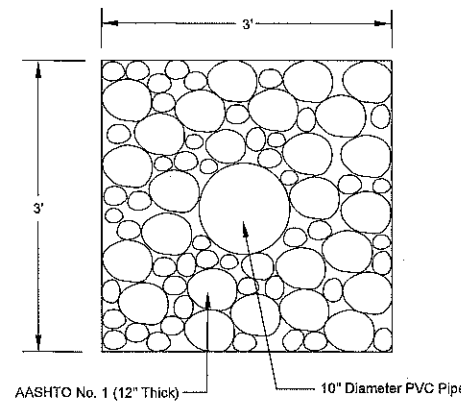
TYPICAL POND BACKFILL

No Scale



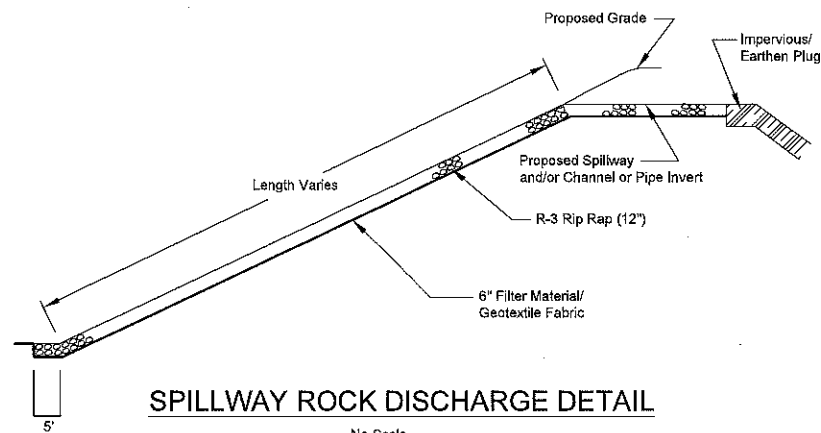
STABILIZATION POND TO VFR PROFILE

No Scale



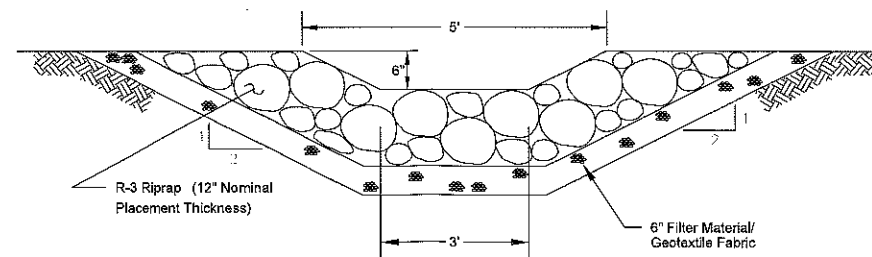
STABILIZATION POND OUTLET/ VFR POND INLET

No Scale



SPILLWAY ROCK DISCHARGE DETAIL

No Scale



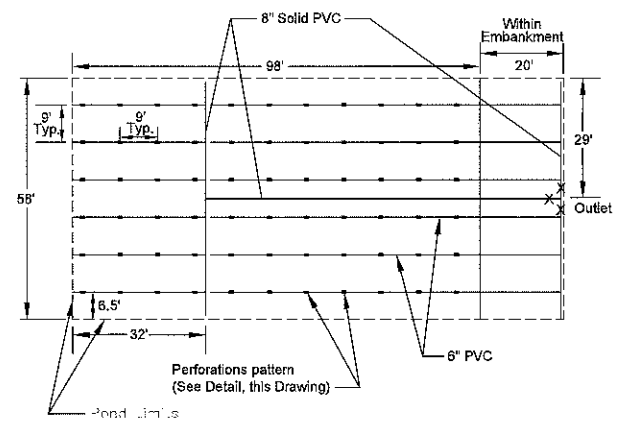
RIPRAP DETAIL FOR SPILLWAY

No Scale

INFORMATION FOR SPILLWAY CONSTRUCTION

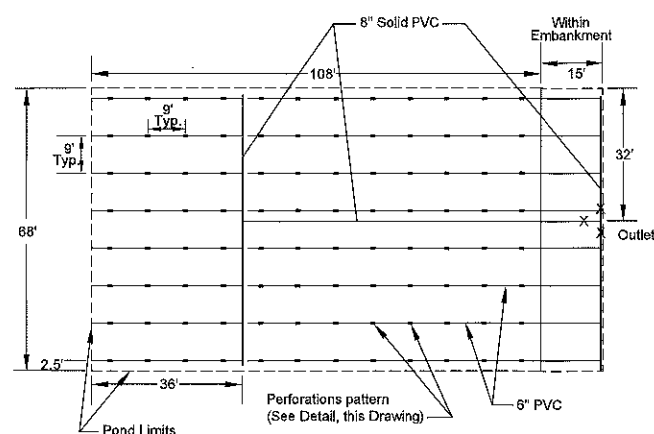
POND	BEGINNING INVERT
STABILIZATION POND	1410.5
VFR	1404.5
FLUSHING POND	1393.5
WETLAND	1395.5
DRINKING WATER POND	1378

NO.	DATE	BY	APP.
<p>COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION CONTRACT NO. BF 406-101.1 ABANDONED MINE LAND RECLAMATION PROJECT PENGROVE COAL COMPANY - HANEY SITE MINING PERMIT NO. 10820115 VENANGO TOWNSHIP BUTLER COUNTY</p>			
DETAILS			
DESIGNED BY GRJ	DATE 	CHECKED BY 	SCALE
No scale			5 of 7



VFR PIPE LAYOUT-LOWER LEVEL

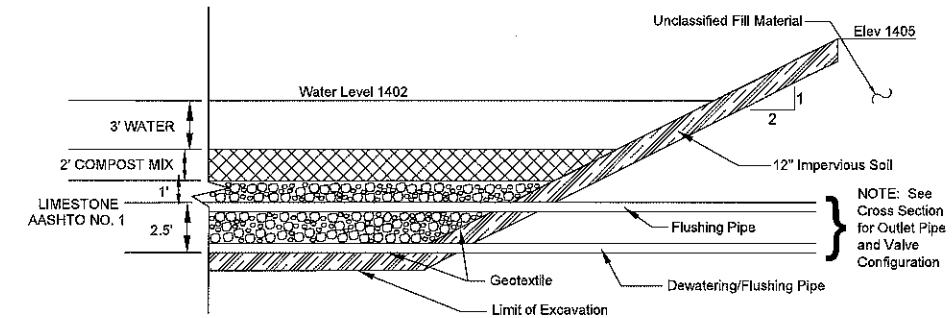
No Scale



VFR PIPE LAYOUT-UPPER LEVEL

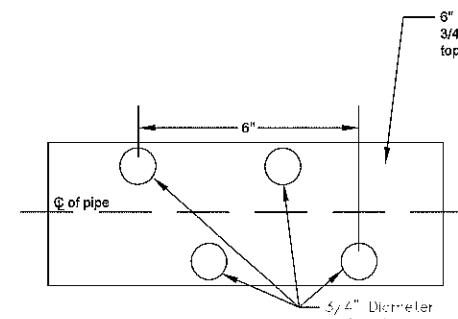
No Scale

NOTES: 1. Provide cleanout for each 8" diameter pipe, as directed by the Department's Representative.
2. 6" diameter pipes shall be perforated with a set of (4) 3/4" perforations every 9' of length, as shown on the details and as directed by the Department's Representative.

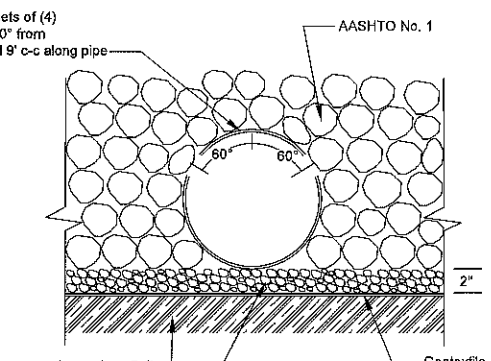


VFR TYPICAL EMBANKMENT SECTION

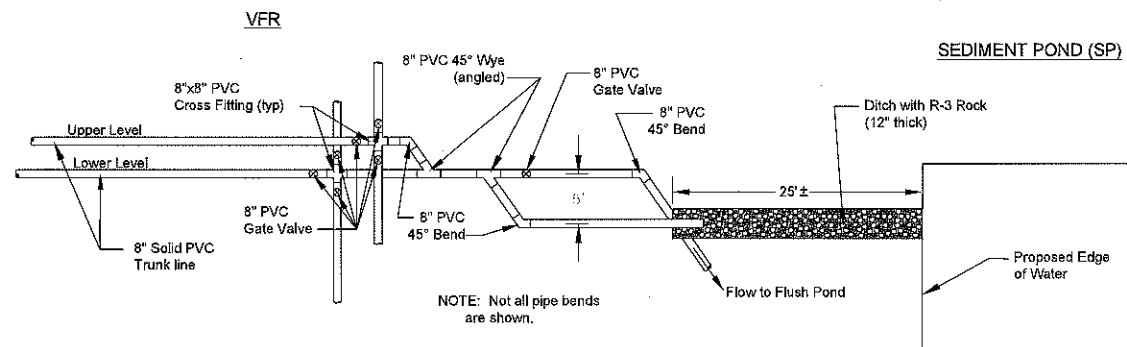
No Scale



PLAN VIEW



TYPICAL SECTION

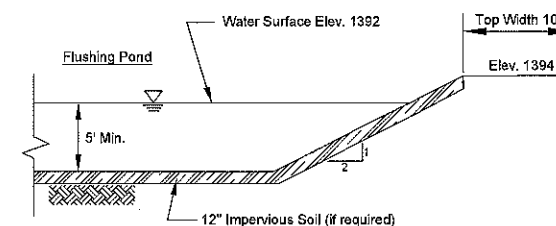


VFR TO SEDIMENT POND FLOW PLAN

No Scale

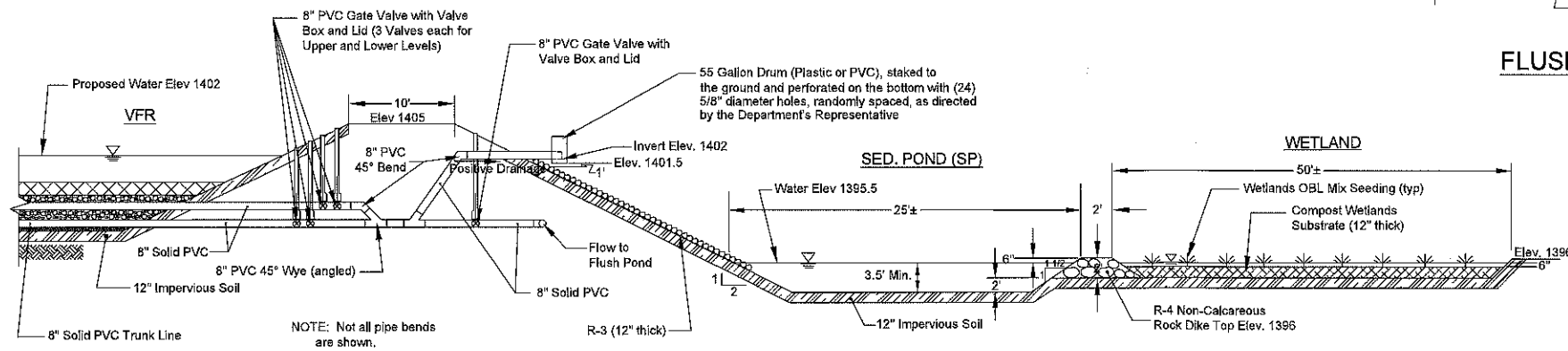
PERFORATIONS DETAIL

No Scale



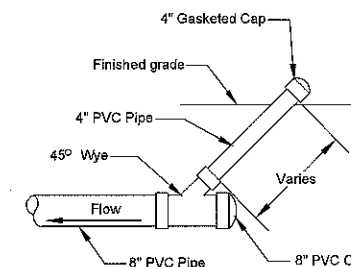
FLUSHING POND SECTION

No Scale



VFR TO SEDIMENT POND TO COMPOST WETLAND FLOW CROSS SECTION

No Scale

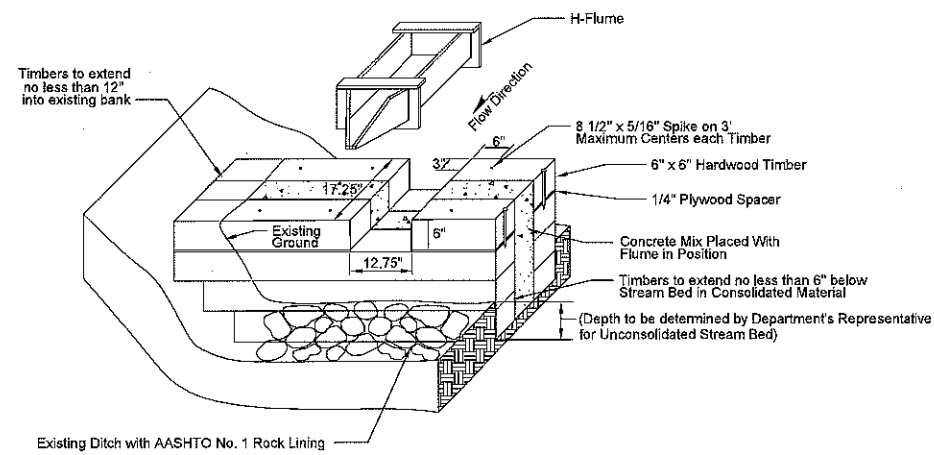


PIPE CLEANOUT DETAIL (Typ.)

No Scale

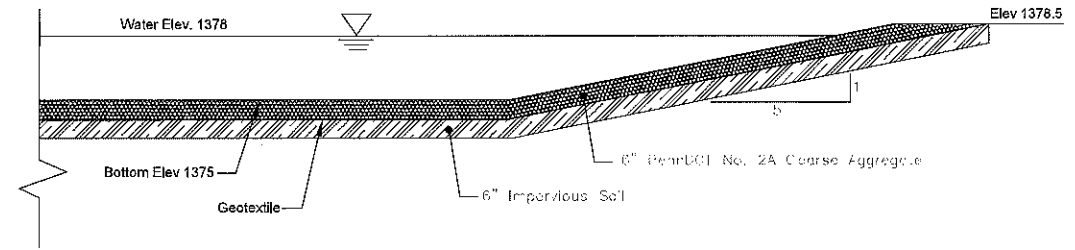
NOTE: Cleanouts (6) shall be located as directed by the Department's Representative.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION			
CONTRACT NO. BF 406-101.1			
ABANDONED MINE LAND RECLAMATION PROJECT			
PENGROVE COAL COMPANY - HANEY SITE MINING PERMIT NO. 10820115			
VENANGO TOWNSHIP		BUTLER COUNTY	
DETAILS			
Drawn by GRJ	Scale No scale	Page No. 6 of 7	



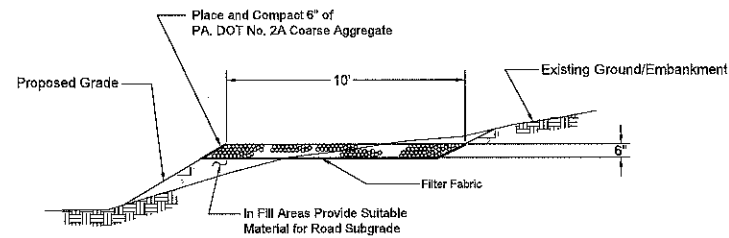
H-FLUME (ISOMETRIC VIEW)

No Scale



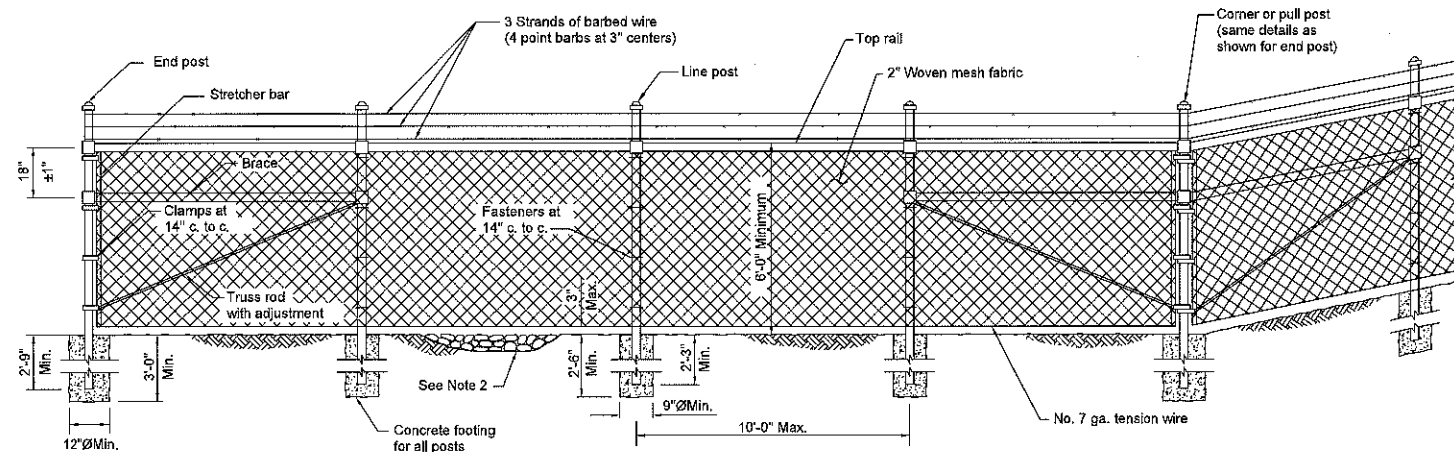
DRINKING WATER POND TYPICAL EMBANKMENT SECTION

No Scale



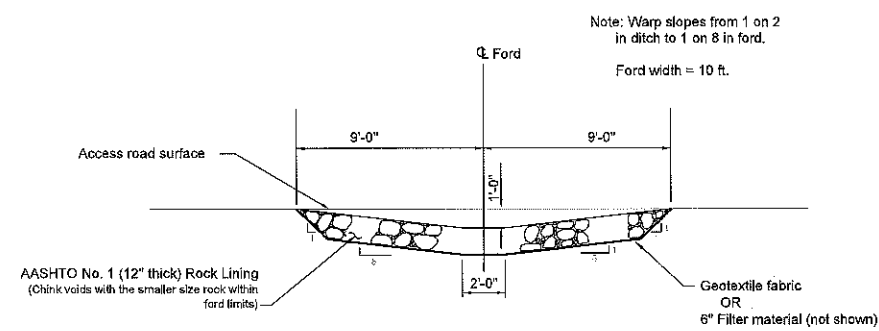
ACCESS ROAD (typ.)

No Scale



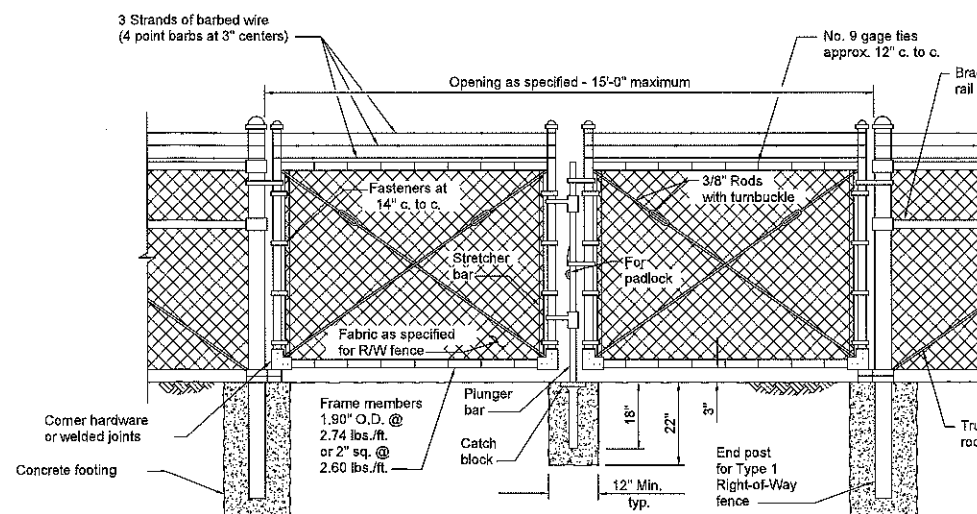
PADOT TYPE 1 RIGHT-OF-WAY FENCE WITH BARBED WIRE

No Scale



DITCH FORD CROSSING

No Scale

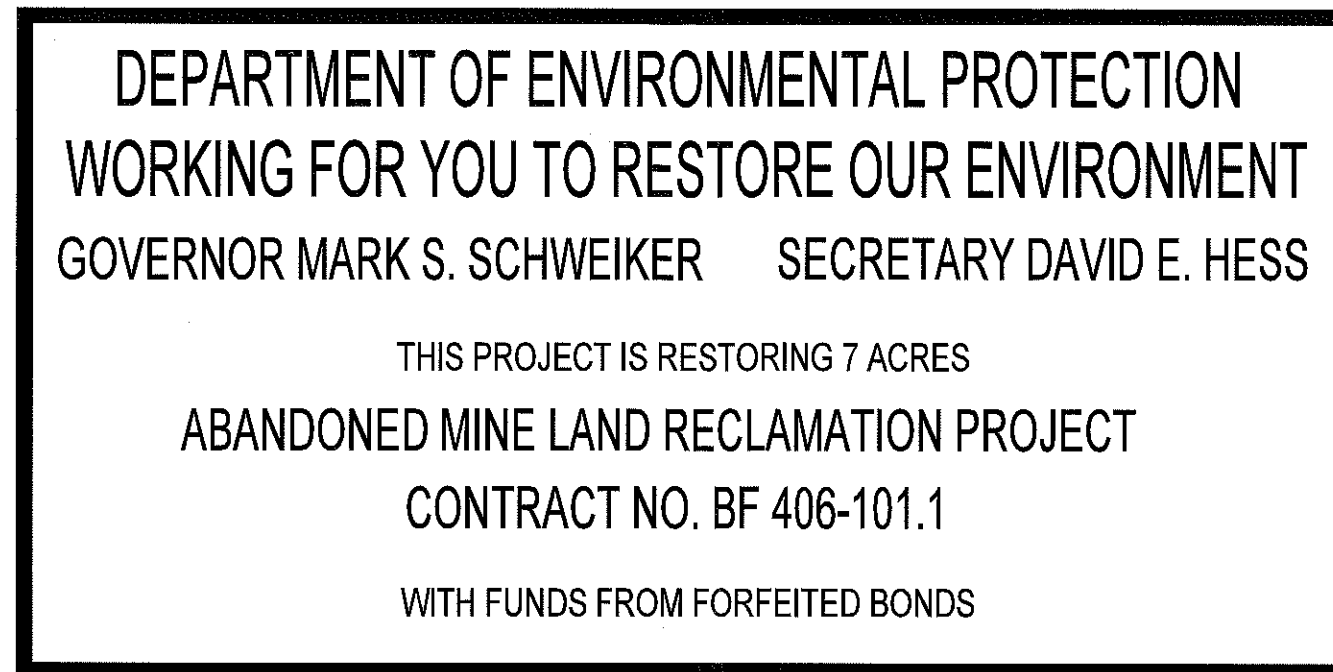


VEHICULAR GATE WITH BARBED WIRE FOR PADOT TYPE 1 RIGHT-OF-WAY FENCE (GATE TO SWING 180°)

No Scale

DATE	BY	REVISED	APPR
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION CONTRACT NO. BF 406-101.1 ABANDONED MINE LAND RECLAMATION PROJECT PENGROVE COAL COMPANY - HANEY SITE MINING PERMIT NO. 10820115 VENANGO TOWNSHIP BUTLER COUNTY			
DETAILS			
SCALE	DATE	BY	APPR
No scale			

PROJECT SIGN



Use 4' x 8' x 3/4" board on two (2) 4" x 4" posts.

Paint exterior board and posts with two (2) coats of green exterior oil base paint.

Project sign shall have a 1" wide white perimeter border.

White plain letters:

4" High capital letters, lines 1 and 2.

3" High capital letters, lines 3, 5 and 6.

2" High capital letters, lines 4 and 7.

1" Spacing between lines, minimum.