

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MINE DRAINAGE CONTROL PROJECT
DOVERSPIKE BROTHERS COAL CO. - DORA #6

PERRY TOWNSHIP

JEFFERSON COUNTY

CONTRACT NO. DMF 013-239.1 (RE-BID)

DRAWING INDEX

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“AS-BUILT”
4/09/2012



Prepared By

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF ABANDONED MINE RECLAMATION

400 Market Street, Harrisburg, PA

EDWARD G. RENDELL

GOVERNOR

JOSEPH R. POWERS

ACTING SECRETARY OF ENVIRONMENTAL PROTECTION

GEORGE M. STEINER, P.E., PROJECT COORDINATOR DATE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PROPERTY OWNERS

- 111 Wilbur L. Sheesley, ET UX
111M c/o Nellie Sheesley Estate
Charles Sheesley, executor
117 Hamilton Markton Rd
Hamilton, PA 15744
814-938-8767
- 115 Kunselman, Bernard D. &
Kunselman, George L.
P. O. Box 18
Hamilton, PA 15744
814-938-4006
- 404 Shaffer, Alice June
345 Lisbon Road
Beaver Falls, PA 15010
724-495-7305
- 403 Fisher, Lloyd E. & Barbara L.
403A P. O. Box 36
Hamilton, PA 15744
814-938-8336
- 401 Maruca, Michael C. & Leslie J.
P. O. Box 33
Hamilton, PA 15744
814-939-5745
- 400 Foose, Norman E.
Main Street
Hamilton, PA 15744
814-938-9175
- Vine St. Perry Township
P. O. Box 50
Hamilton, PA 15744
814-938-2480

Commonwealth of Pennsylvania
Department of Transportation
2550 Oakland Ave.
Indiana, PA 15701
(724) 357-2800

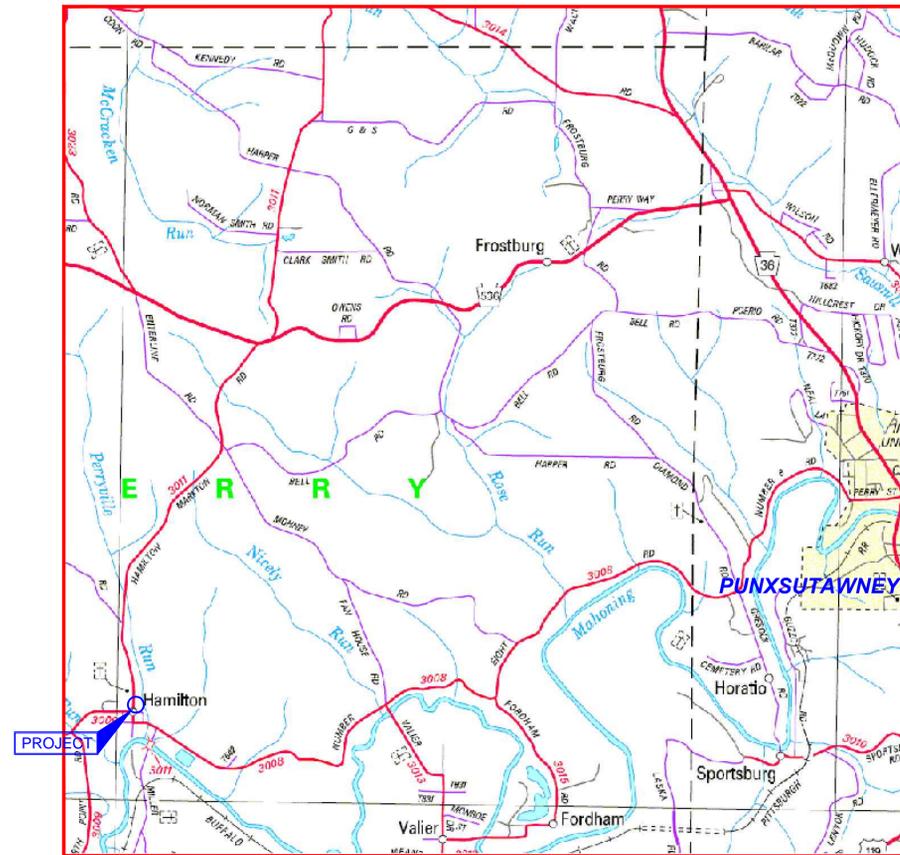
UTILITY LISTINGS

COMPANY	TYPE OF FACILITY	ADDRESS	PHONE
T.W. Phillips Gas & Oil Co.	Underground Gas Lines	205 N. Main Street Butler, PA 16001	Larry George 800-222-5101
Penelec, Inc.	Overhead Electric Service	DuBois, PA 15801	Bill Wilt 814-372-4004

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE - STOP CALL:
1-800-242-1776
Design Serial No. 0496345

NOTE: The Contractor shall comply with Act 287 of the General Assembly, as amended which defines the procedures for notification to Public Utilities prior to excavation, drilling, or demolition work, using power equipment or explosives.
02/18/05 Design Phase PA One-Call Serial No. 0496345.



VICINITY MAP

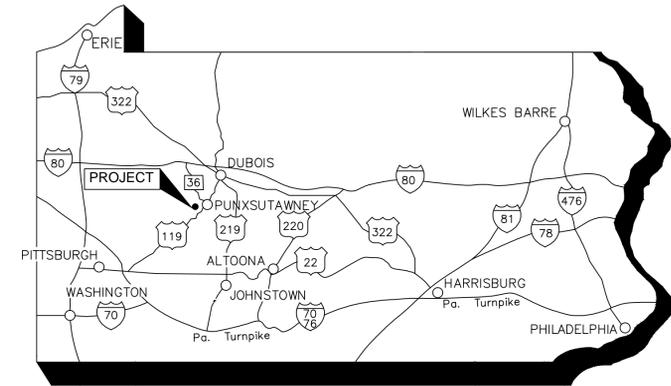
SCALE: 1 in. = ~ 1/2 MILE

LEGEND

- -- --- LIMIT OF CONTRACTOR'S WORKING AREA (C.W.A.)
- ==== LIMIT OF GRADING AND SEEDING
- 1120 --- PROPOSED CONTOURS
- 1120 --- EXISTING CONTOURS
- 2+00 --- CONSTRUCTION BASELINE
- PE --- APPROXIMATE PROPERTY LINE
- ⊕ UTILITY POLE
- ···· --- SUBSURFACE DRAIN
- GAS --- GAS LINE

GENERAL NOTES:

1. Elevations of the features are to be taken from the bench marks shown on the Drawing(s).
2. Limits of grading and seeding as shown on the Drawing(s) 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 or better than 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 the grade may be made by the Department's Representative to suit field conditions.
6. Location(s) of the utilities shown on the Drawing(s) are based on information provided by the Pennsylvania One-Call System. The accuracy of this information is not guaranteed. The Contractor shall contact the PENNSYLVANIA ONE-CALL SYSTEM at 1-800-242-1776, not less than three (3) working days prior to any excavation.
7. The Contractor shall dewater all impoundments existing within the grading limits at the time of construction of the Project.
8. The property lines as shown on the Drawing(s) are approximate.

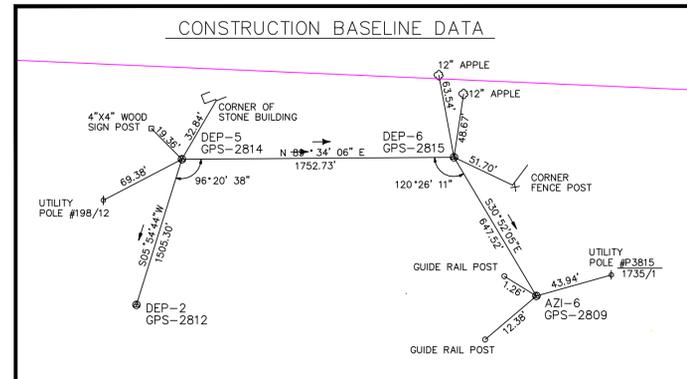


LOCATION MAP

No Scale

NO.	DATE	REVISION	APPR.
1	4/9/12	"AS-BUILT" NO CHANGE	J.R.S.
SUBMITTED			
PROJECT ENGINEER			
RECOMMENDED			
PROJECT COORDINATOR			
APPROVED			
CHIEF - DIVISION OF ACID MINE DRAINAGE ABATEMENT			
COMMONWEALTH OF PENNSYLVANIA			
DEPARTMENT OF ENVIRONMENTAL PROTECTION			
CONTRACT NO. DMF 013 - 239.1 (RE-BID)			
MINE DRAINAGE CONTROL PROJECT			
DOVERSPIKE BROTHERS COAL CO. DORA #6			
PERRY TOWNSHIP		JEFFERSON COUNTY	
LOCATION AND VICINITY MAPS			
DRAWN BY	CMV	DATE	06/30/2008
CHECKED BY		SCALE	AS SHOWN
			DRAWING NO. 2 of 9

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

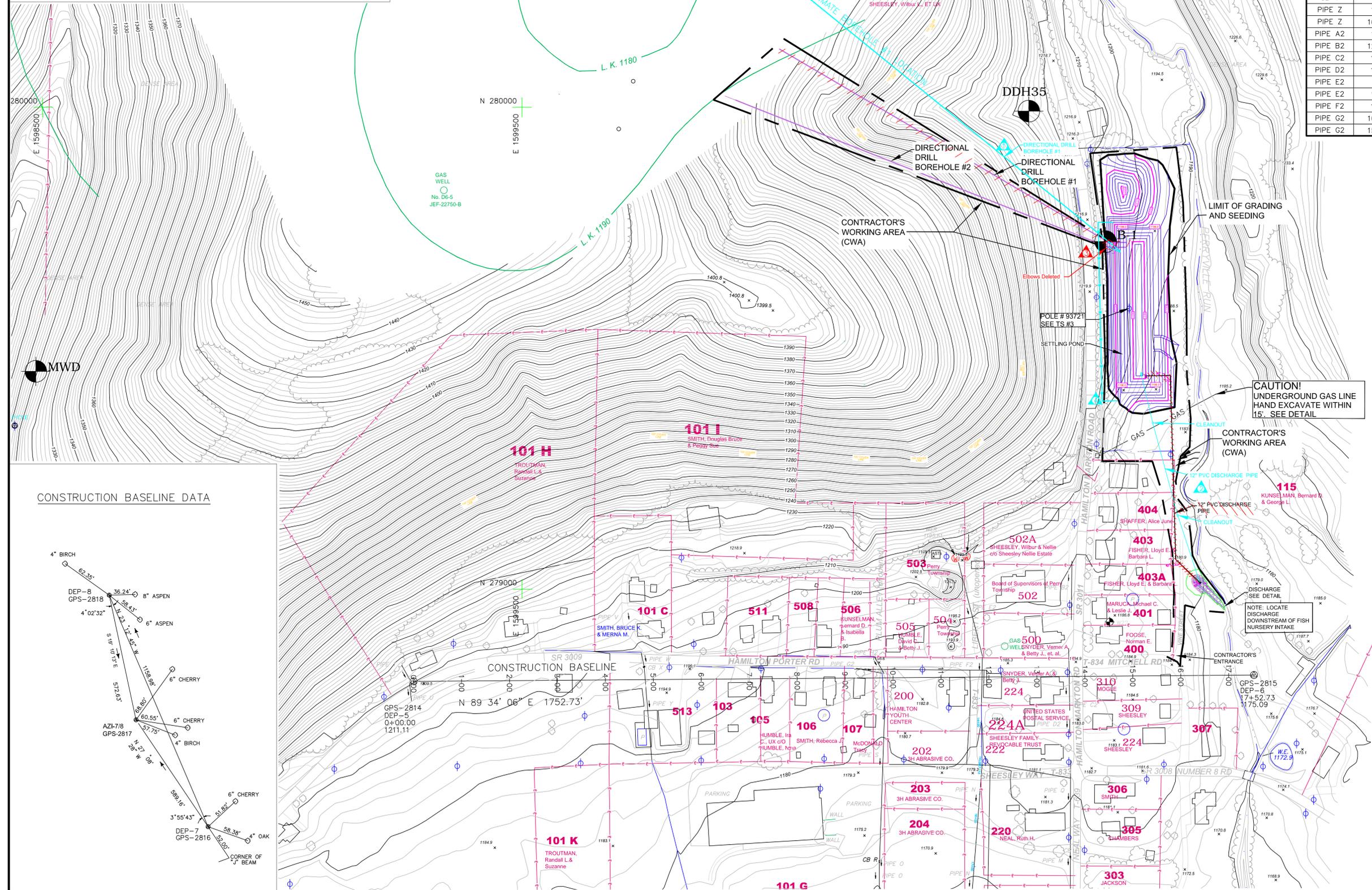


BENCH MARK DATA

BM NO.	BASLINE STA.	ELEVATION	DESCRIPTION	N. COORDINATE	E. COORDINATE
DEP-1	0+00.00	1196.28	5/8" REBAR WITH CAP	276506.44	1599212.09
DEP-2	8+10.40	1191.93	5/8" REBAR WITH CAP	277311.45	1599118.80
DEP-3	0+00.00	1195.31	5/8" REBAR WITH CAP	278506.15	1598393.76
DEP-4	11+75.22	1216.41	5/8" REBAR WITH CAP	279260.77	1597492.82
DEP-5	0+00.00	1211.11	5/8" REBAR WITH CAP	278808.75	1599273.86
DEP-6	17+52.73	1175.09	5/8" REBAR WITH CAP	278821.96	1601026.54

PIPE DATA

PIPE	DESCRIPTION	TOP OF GRATE	INVERT IN	INVERT OUT
PIPE M	15" PVC			1167.73
PIPE N	12" RCP		1177.06	
PIPE N	15" PVC			1168.37
PIPE O	24" CMP			1167.94
CB P	15" RCP	1173.61	1172.46	
CB P	15" PVC	1173.61		1172.46
PIPE Q	15" RCP		1180.09	
CB R	24" CMP	1171.69	1168.66	1168.74
PIPE S	18" CMP		1177.61	
PIPE T	15" CMP		1214.58	1210.70
PIPE U	18" CMP		1208.54	1206.83
PIPE V	10" STEEL		1211.64	1197.51
PIPE W	18" CMP		1194.81	
CB X	18" CMP	1197.03	1193.83	1193.33
CB Y	15" PVC			1187.45
PIPE Z	18" RCP		1212.60	
PIPE Z	16" STEEL		1203.82	
PIPE A2	18" RCP		1200.98	1199.45
PIPE B2	12" STEEL		1187.97	1185.25
PIPE C2	15" CMP		1183.30	1181.30
PIPE D2	10" CMP		1182.00	1181.79
PIPE E2	8" PVC		1192.76	
PIPE E2	12" PVC			1182.25
PIPE F2	18" CMP		1181.70	1179.10
PIPE G2	10" STEEL		1185.56	
PIPE G2	15" STEEL			1182.63



NOTES:

TOPOGRAPHY BY:
THE EADS GROUP, INC.
ALTOONA, PA 16602

USING AERIAL PHOTOGRAPHY DATED 11-01-01.

COORDINATES ARE ON THE NSRS DATA BASE, NAD83, PA SPC NORTH ZONE.

ALL ELEVATIONS SHOWN ARE BASED ON NAVD88 DATUM

RELATIVE ERROR OF CLOSURE FOR TRAVERSE:

TRAVERSE ADJUSTMENT BY LEAST SQUARES METHOD.

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

LOCATION OF MINE WORKINGS AND GAS WELLS FROM DOVERSPIKE BROS. COAL CO. DORA #6 MINE, FINAL MINE MAP, CMP# NO 33841303, SHEET 17 OF 24, DATED 4-14-99.

APPROXIMATE PROPERTY LINES FROM PERRY TOWNSHIP, JEFFERSON COUNTY, PENNSYLVANIA TAX MAPS SHEETS 17-563 AND 17-02.



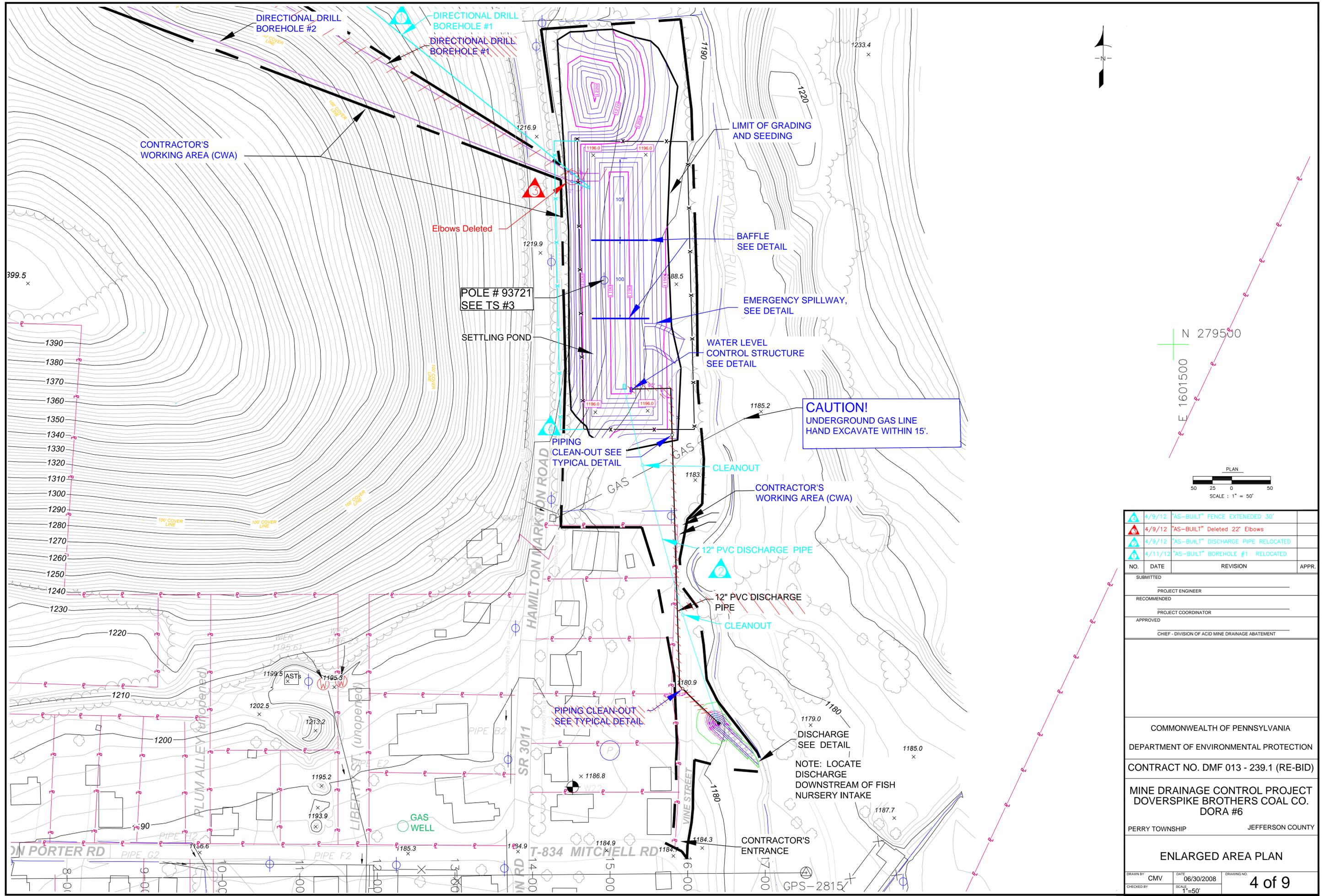
4/9/12	AS-BUILT FENCE EXTENDED 30'		
4/9/12	AS-BUILT DELETED ELBOWS		
4/9/12	AS-BUILT DISCHARGE PIPE RELOCATED		
4/11/12	AS-BUILT BOREHOLE #1 RELOCATED		

NO.	DATE	REVISION	APPR.
SUBMITTED			
PROJECT ENGINEER			
RECOMMENDED			
PROJECT COORDINATOR			
APPROVED			
CHIEF - DIVISION OF ACID MINE DRAINAGE ABATEMENT			

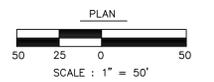
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CONTRACT NO. DMF 013 - 239.1 (RE-BID)
MINE DRAINAGE CONTROL PROJECT
DOVERSPIKE BROTHERS COAL CO.
DORA #6
PERRY TOWNSHIP JEFFERSON COUNTY

PLAN

DRAWN BY: CMV DATE: 06/30/2008 DRAWING NO.: 3 of 9
CHECKED BY: SCALE: 1"=100'



N 279500
E 1601500



NO.	DATE	REVISION	APPR.
4/9/12		"AS-BUILT" FENCE EXTENDED 30'	
4/9/12		"AS-BUILT" Deleted 22' Elbows	
4/9/12		"AS-BUILT" DISCHARGE PIPE RELOCATED	
4/11/12		"AS-BUILT" BOREHOLE #1 RELOCATED	

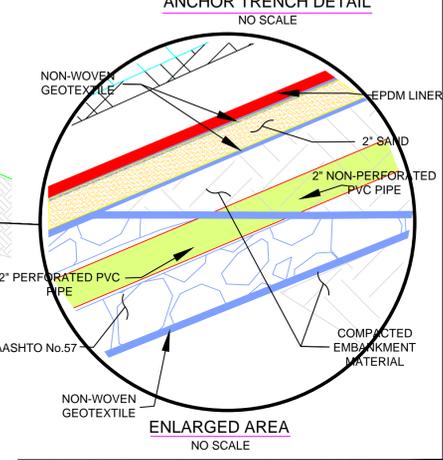
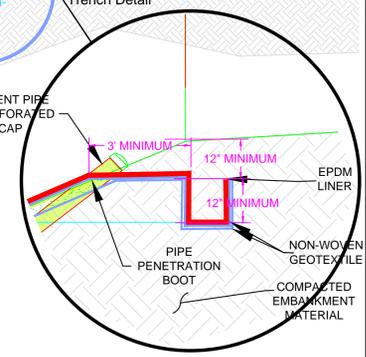
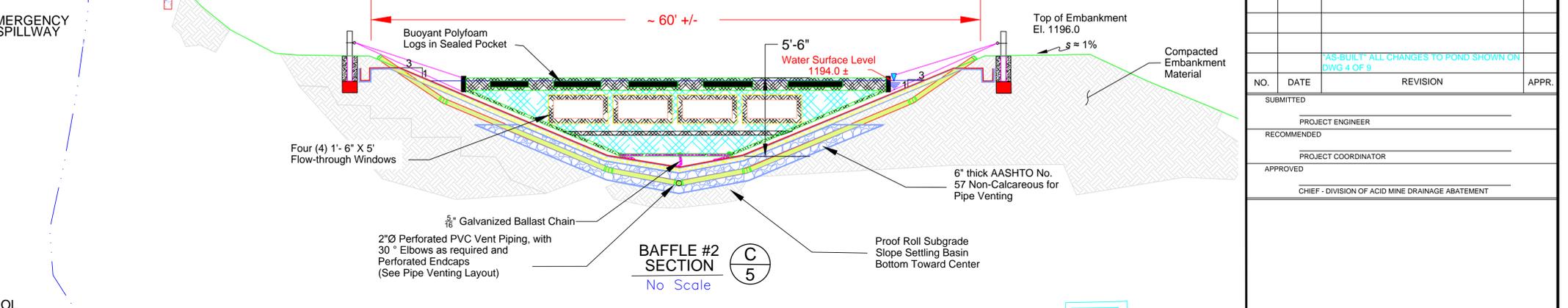
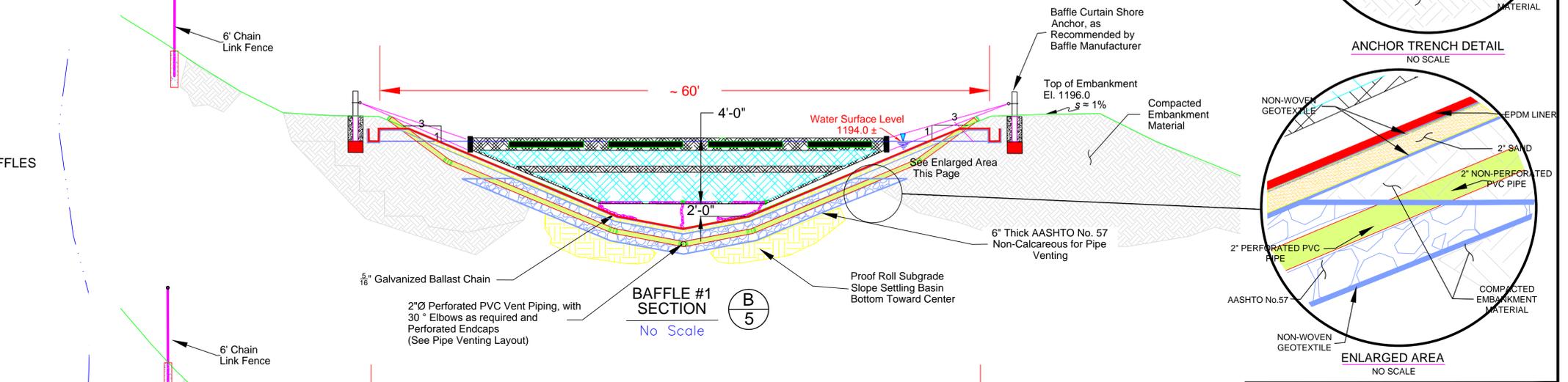
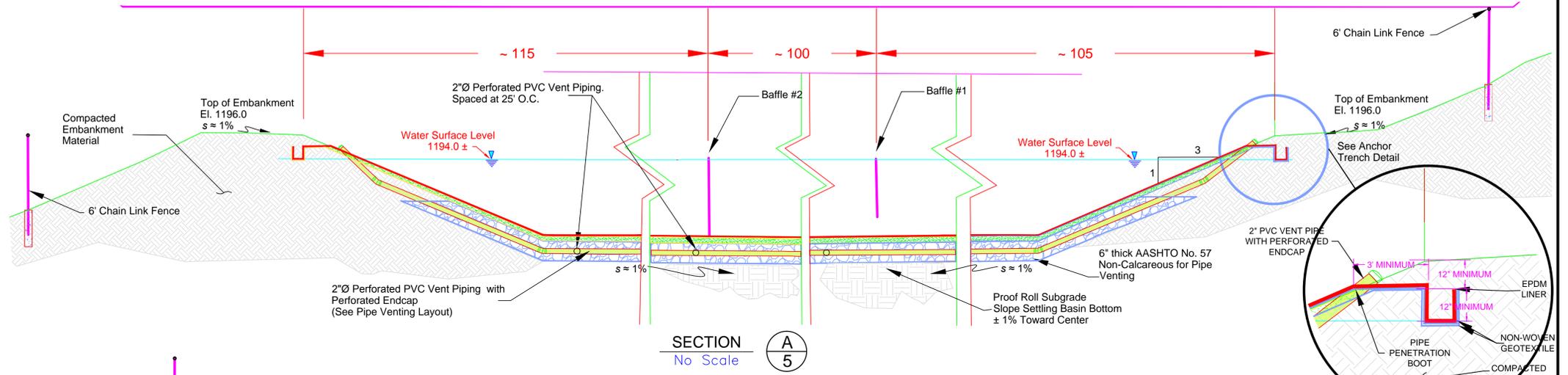
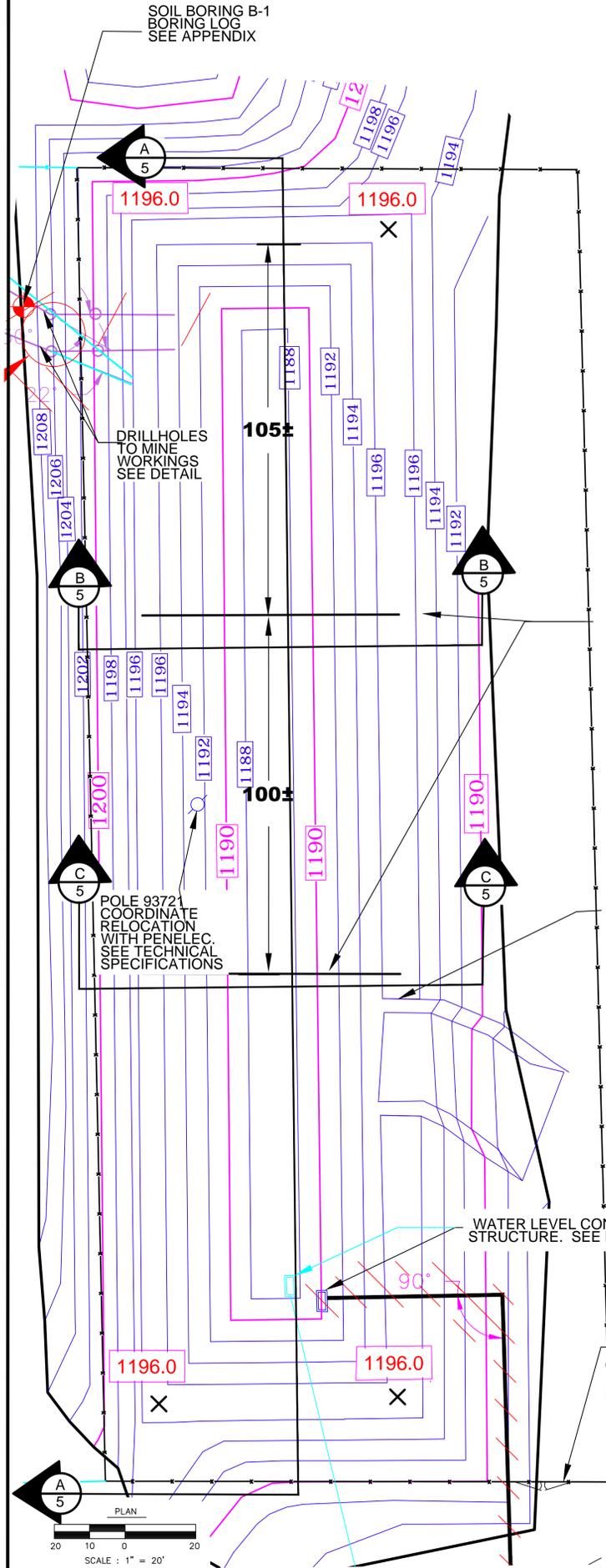
SUBMITTED			
PROJECT ENGINEER			
RECOMMENDED			
PROJECT COORDINATOR			
APPROVED			
CHIEF - DIVISION OF ACID MINE DRAINAGE ABATEMENT			

COMMONWEALTH OF PENNSYLVANIA
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DOVERSPIKE BROTHERS COAL CO.
DORA #6
PERRY TOWNSHIP JEFFERSON COUNTY

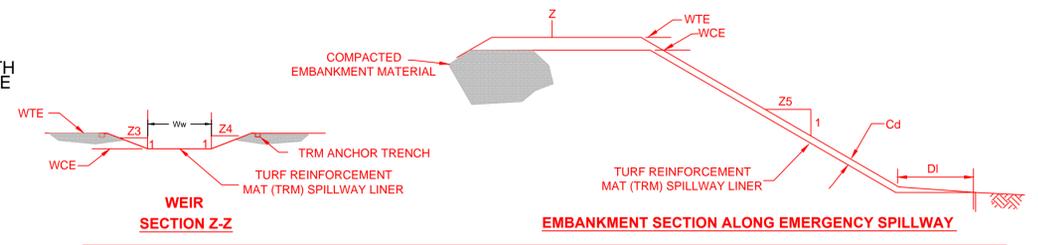
ENLARGED AREA PLAN

DRAWN BY CMV	DATE 06/30/2008	DRAWING NO. 4 of 9
CHECKED BY	SCALE 1"=50'	

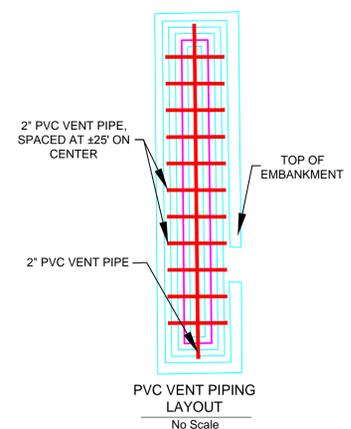
SETTLING POND SECTIONS



SETTLING POND EMERGENCY SPILLWAY



WEIR					CHANNEL			DISSIPATER	
Z3	Z4	TOP ELEV WTE (FT)	CREST ELEV WCE (FT)	WIDTH (Ww) (FT)	Z5	DEPTH Cd (FT)	LENGTH DI (FT)	WIDTH Dw (FT)	
3	3	1196.0	1195.0	25	3	1	10	30	



AS-BUILT - ALL CHANGES TO POND SHOWN ON DWG 4 OF 9

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

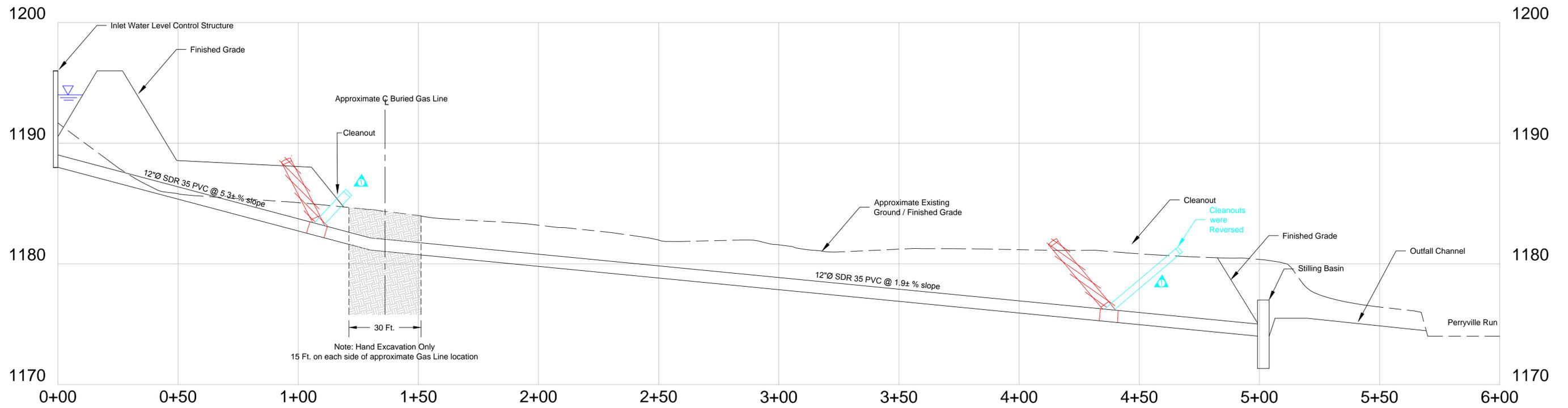
CONTRACT NO. DMF 013 - 239.1 - REBID

MINE DRAINAGE CONTROL PROJECT
DOVERSPIKE BROTHERS COAL CO. DORA #6

PERRY TOWNSHIP JEFFERSON COUNTY

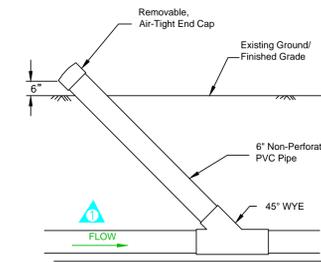
SETTLING POND DETAILS AND SECTIONS

DRAWN BY: CMV DATE: 06/30/2008 DRAWING NO. 5 of 9
CHECKED BY: SCALE: AS SHOWN

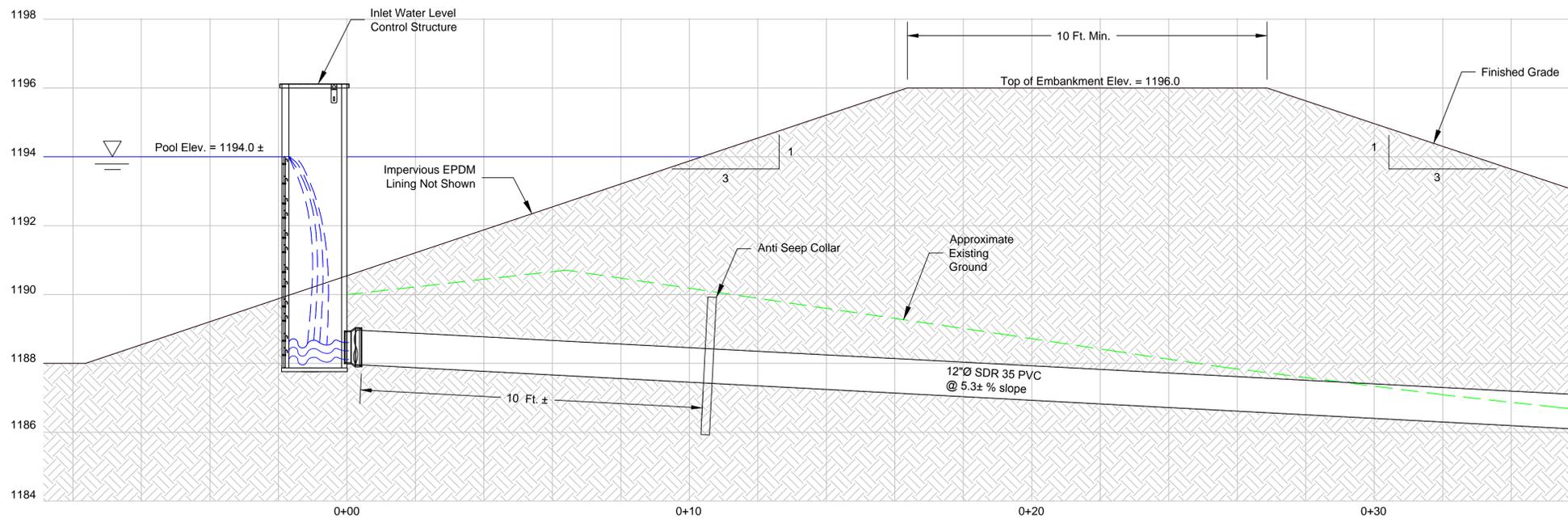


**POND OUTLET PIPE
Profile**

HORIZONTAL SCALE: 1 in. = 20 Ft.
VERTICAL SCALE: 1 in. = 4 Ft.



CLEANOUT DETAIL
No Scale

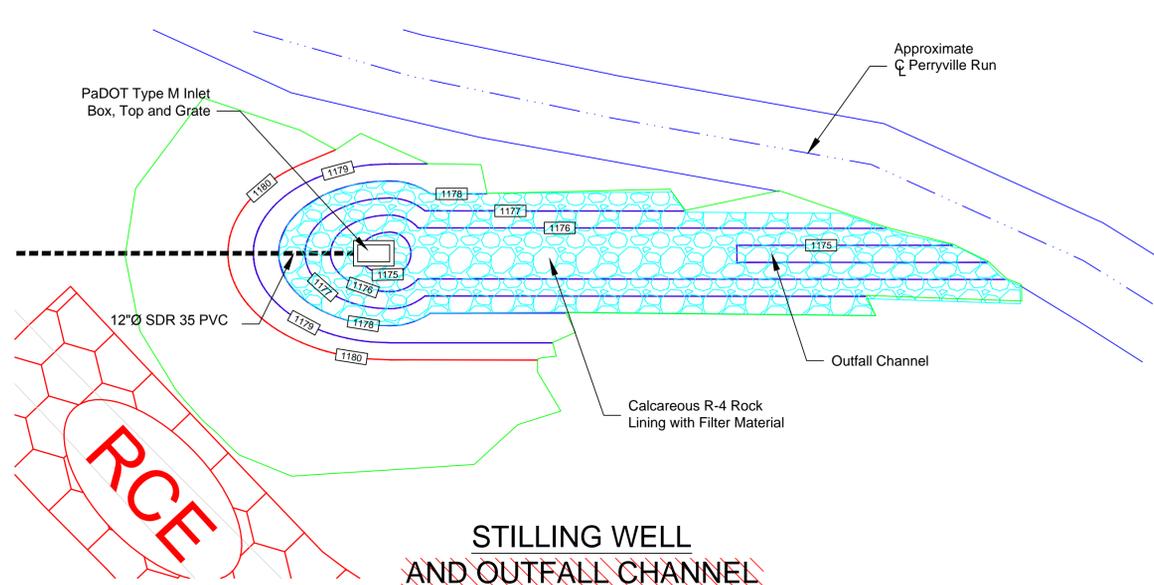


WATER LEVEL CONTROL STRUCTURE

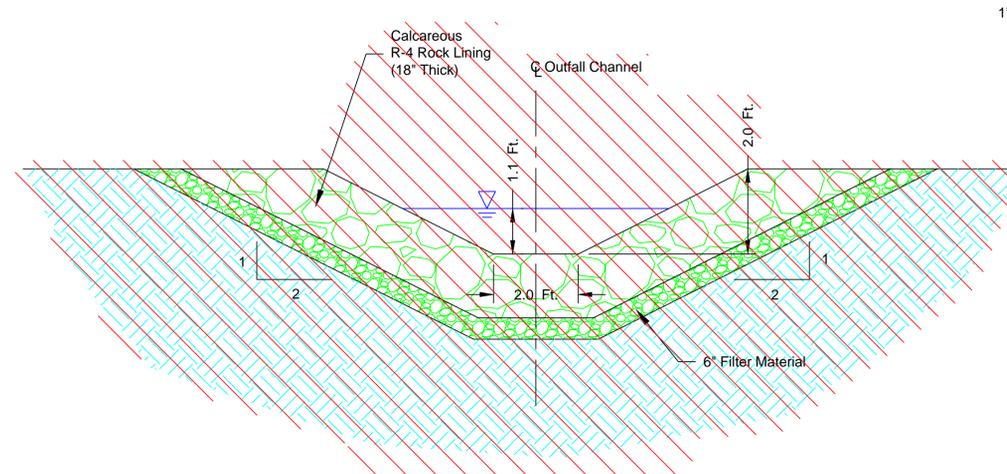
Section View

SCALE: 1 in. = 2 ft.

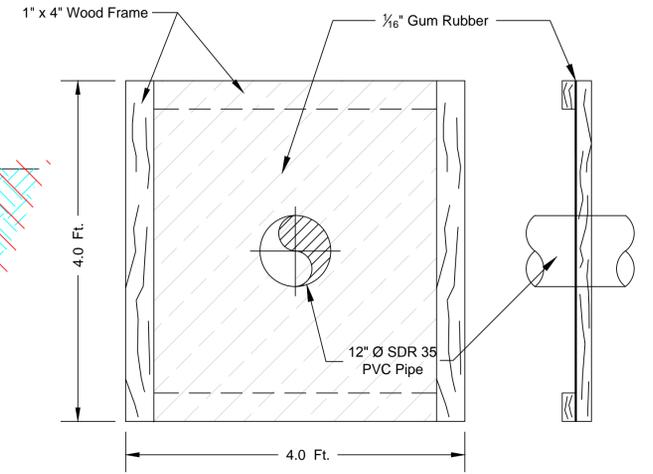
NO.	DATE	REVISION	APPR.
4	4/10/12	AS-BUILT REVERSED DIRECTION OF CLEANOUTS	
SUBMITTED: _____ PROJECT ENGINEER			
RECOMMENDED: _____ PROJECT COORDINATOR			
APPROVED: _____ CHIEF - DIVISION OF ACID MINE DRAINAGE ABATEMENT			
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION			
CONTRACT NO. DMF 013-239.1 (RE-BID)			
MINE DRAINAGE CONTROL PROJECT DOVERSPIKE BROTHERS COAL CO. DORA #6			
PERRY TOWNSHIP		JEFFERSON COUNTY	
WATER LEVEL CONTROL STRUCTURE			
DRAWN BY: CMV	DATE: 06/30/2008	DRAWING NO.	
CHECKED BY:	SCALE: AS SHOWN	6 of 9	



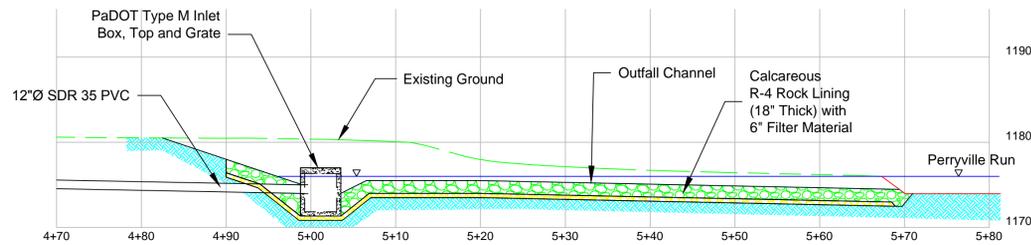
STILLING WELL AND OUTFALL CHANNEL
Plan View
SCALE: 1 in. = 10 ft.



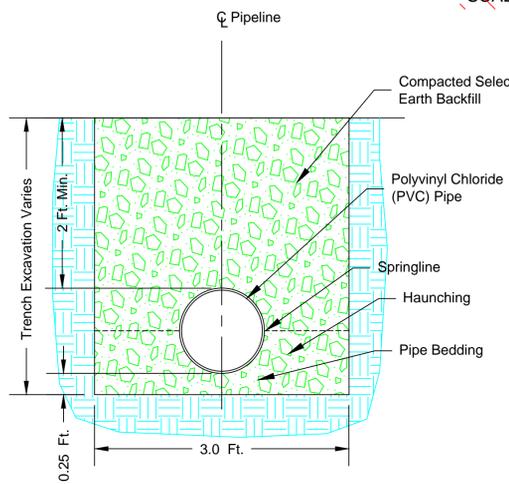
OUTFALL CHANNEL
Section View
SCALE: 1 in. = 2 ft.



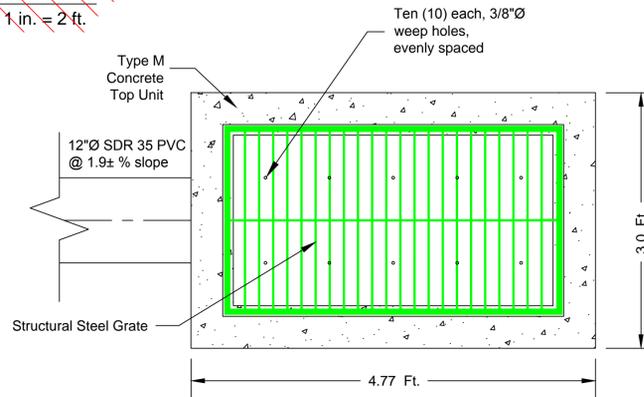
ANTI-SEEP COLLAR
Profile and Section Views
SCALE: 1 in. = 1 ft.



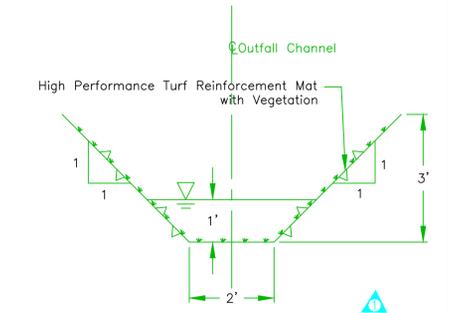
STILLING WELL AND OUTFALL CHANNEL
Profile View
SCALE: 1 in. = 10 ft.



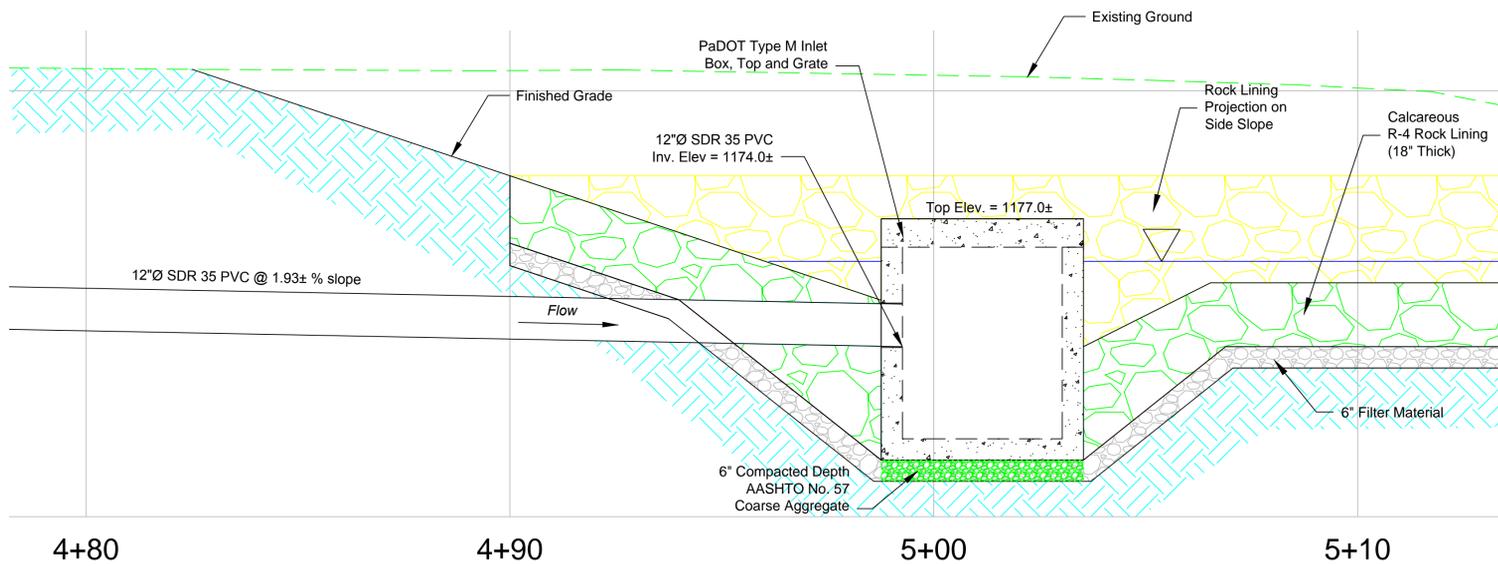
POND OUTLET PIPE
TYPICAL SECTION
SCALE: 1 in. = 1 ft.



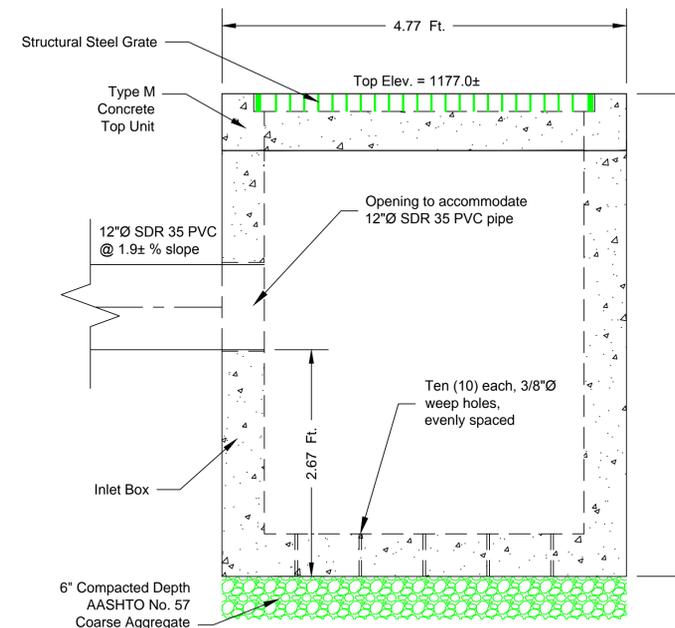
TYPE M INLET
Plan View
SCALE: 1 in. = 1 ft.



REVISED OUTFALL CHANNEL
Section View
SCALE: 1 in. = 2 ft.

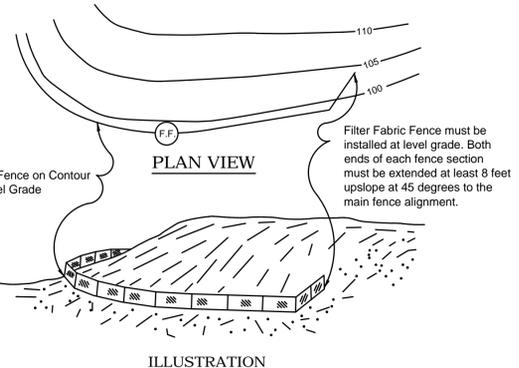
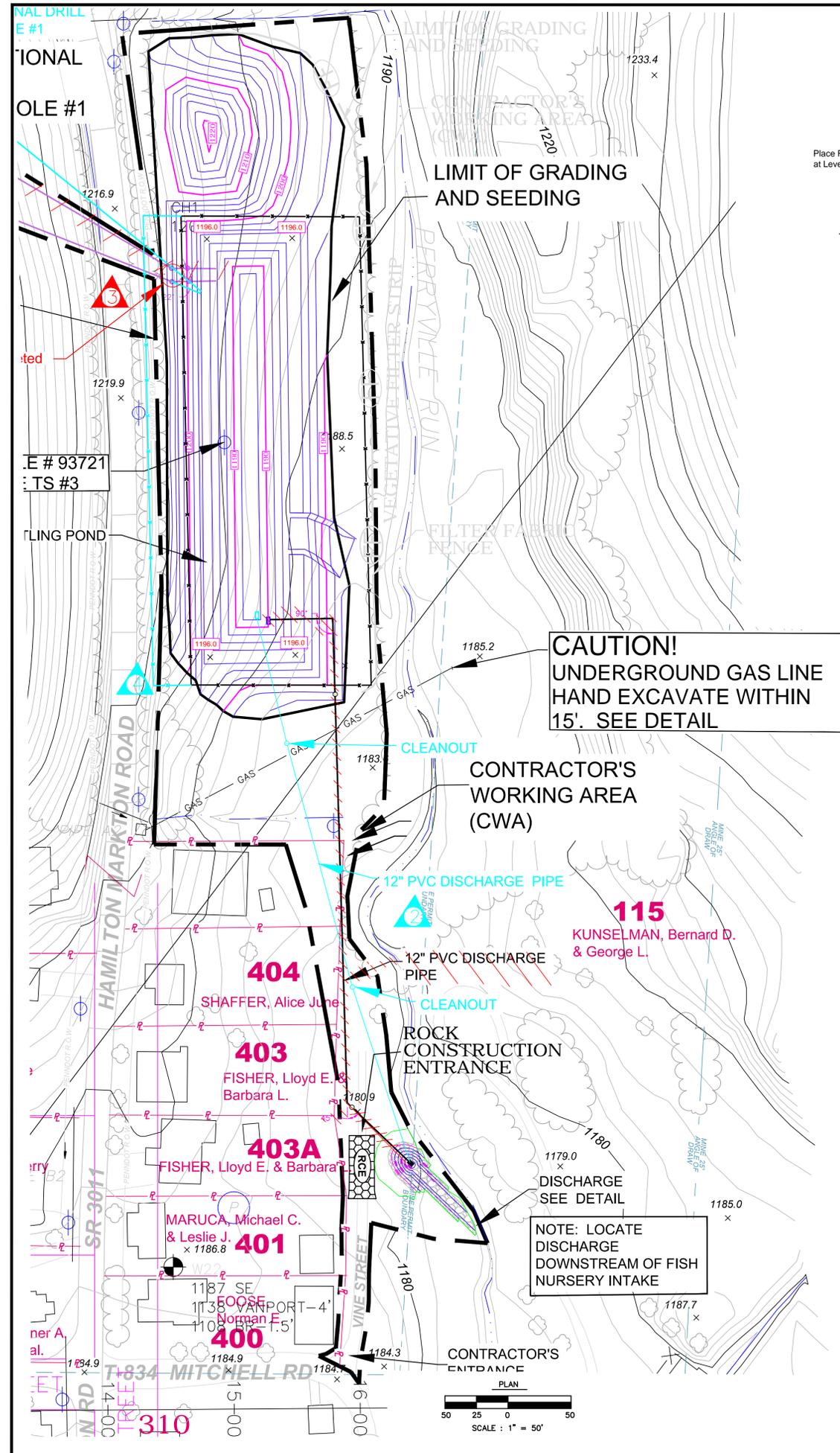


STILLING WELL
SCALE: 1 in. = 2 ft.

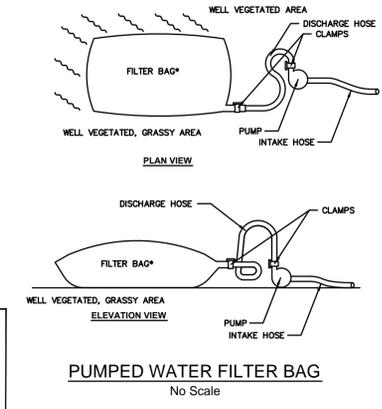


TYPE M INLET
Section View
SCALE: 1 in. = 1 ft.

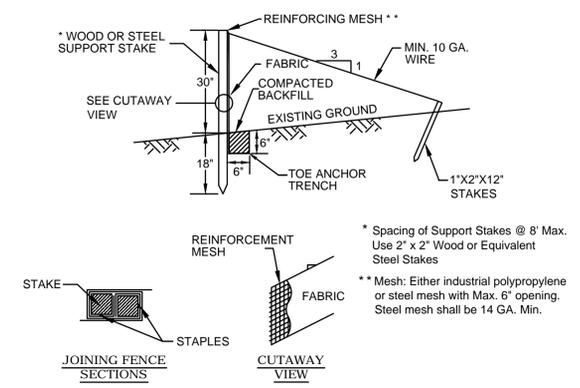
NO.	DATE	REVISION	APPR.
4/11/12		"AS-BUILT" REVISED OUTFALL CHANNEL	
SUBMITTED: _____			
PROJECT ENGINEER			
RECOMMENDED: _____			
PROJECT COORDINATOR			
APPROVED: _____			
CHIEF - DIVISION OF ACID MINE DRAINAGE ABATEMENT			
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION			
CONTRACT NO. DMF 013-239.1 (RE-BID)			
MINE DRAINAGE CONTROL PROJECT DOVERSPIKE BROTHERS COAL CO. DORA #6			
PERRY TOWNSHIP		JEFFERSON COUNTY	
STILLING WELL AND OUTFALL			
DRAWN BY: CMV	DATE: 06/30/2008	DRAWING NO. 7 of 9	
CHECKED BY:	SCALE: AS SHOWN		



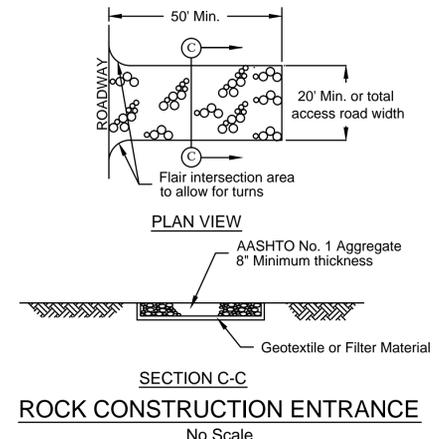
FILTER FABRIC FENCE
No Scale



PUMPED WATER FILTER BAG
No Scale



REINFORCED FILTER FABRIC FENCE
No Scale



ROCK CONSTRUCTION ENTRANCE
No Scale

EROSION AND SEDIMENT POLLUTION CONTROL LEGEND

	Limit of Contractor's Working Area (C.W.A.) and NPDES Boundary
	Reinforced Filter Fabric Fence
	Rock Construction Entrance

MAINTENANCE OF EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES

Erosion and sediment pollution controls must be constructed, stabilized and functional before performing earthwork operations within the tributary areas of those controls.

All facilities utilized in the control of erosion and sediment pollution during construction shall be maintained in good condition. The erosion and sediment pollution control measures shall be inspected following every runoff event and, at a minimum, on a weekly basis. Sediment shall be removed when the trapped sediment reaches the specified limit and, if necessary, the erosion and sediment pollution control facility shall be repaired or replaced immediately. Trapped sediment shall be removed and spread over the grading area in a layer not exceeding six (6) inches thick, then incorporated into fill areas when dried. Sediment must not be allowed to enter the waters of the Commonwealth during sediment removal or disposal operations.

Filter Bag(s) - Perform dewatering operations at a controlled rate, which will prevent downstream flooding, erosion of the existing stream channels, transportation of sediment outside the project area, and damage to aquatic life and habitat. Water shall be pumped through a non-woven geotextile filter bag prior to discharge. Filter bags shall be located on a well-vegetated (grassy) area and discharge onto stable erosion-resistant areas or into stabilized channels so that water is directed to existing natural drainageways. Filter bags shall be replaced when they become 1/2 full.

Rock Construction Entrance(s) - Maintain the specified thickness by adding rock from the on-site stockpile. At the end of each construction day, all sediment deposited on public roadways shall be removed.

Filter Fabric Fence - Accumulated sediments shall be removed as required to keep the fence functional. In all cases, remove deposits where accumulations reach 1/2 the above ground height of the fence. Any fence section which has been undermined or topped shall be repaired by replacing that section of fence with a rock filter outlet. See Rock Filter Outlet Detail. Adhere to any manufacturers recommendations for replacing filter fabric fence.

Temporary Stabilization - See the Technical Specification "Implementation of the Erosion and Sediment Pollution Control Plan" for temporary seeding requirements.

Permanent Stabilization - See the Technical Specification "Seeding" for permanent revegetation requirements.

After final site stabilization as determined by the Department's representative (uniform 70% perennial vegetative cover) has been achieved, temporary erosion and sediment pollution control measures shall be removed. Areas disturbed by the removal of the control measures shall be restored and stabilized immediately.

NO.	DATE	REVISION	APPR.
4	4/11/12	"AS-BUILT" NO E & S CHANGES	
SUBMITTED			
PROJECT ENGINEER			
RECOMMENDED			
PROJECT COORDINATOR			
APPROVED			
CHIEF - DIVISION OF ACID MINE DRAINAGE ABATEMENT			
COMMONWEALTH OF PENNSYLVANIA			
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PERRY TOWNSHIP JEFFERSON COUNTY			
EROSION AND SEDIMENT POLLUTION CONTROL PLAN AND DETAILS			
DRAWN BY	DATE	DRAWING NO.	
CMV	06/30/2008		
CHECKED BY	SCALE		
	AS SHOWN		