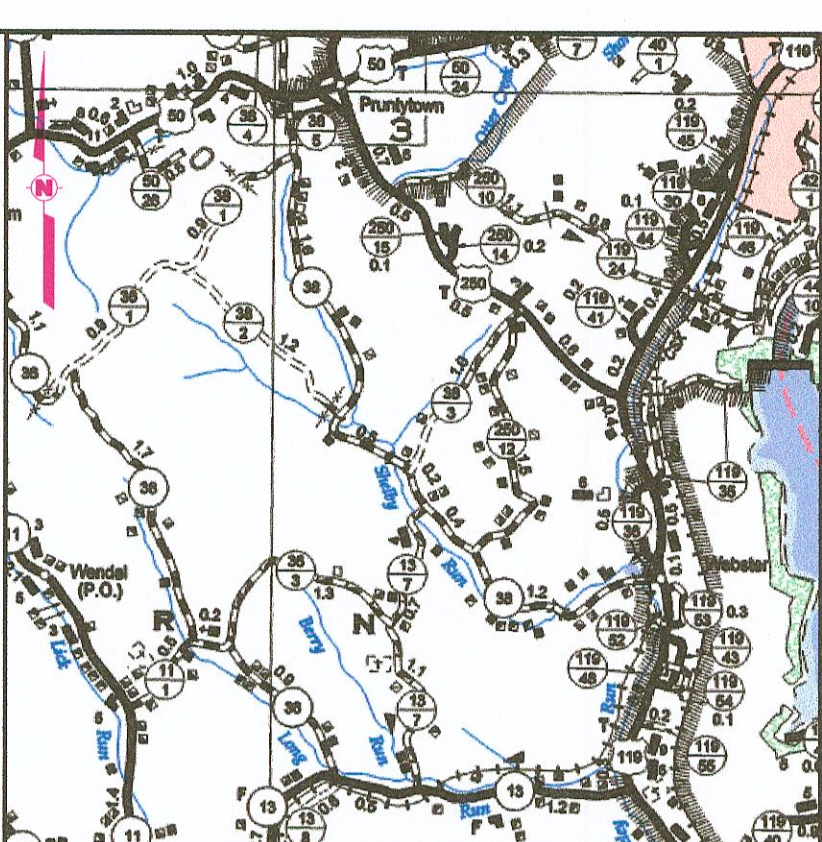
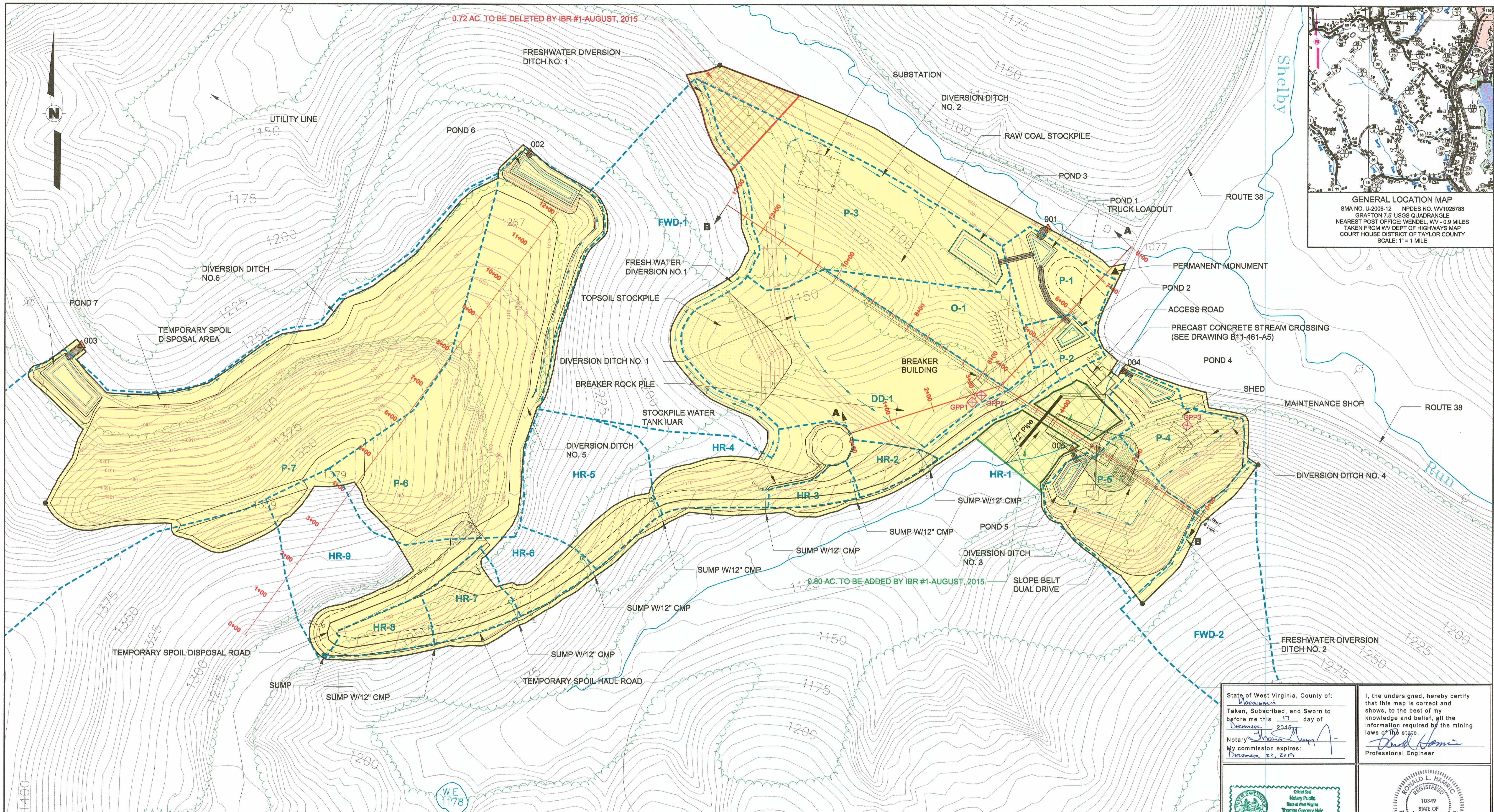


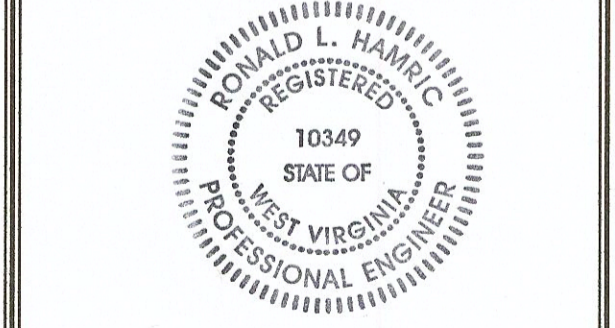
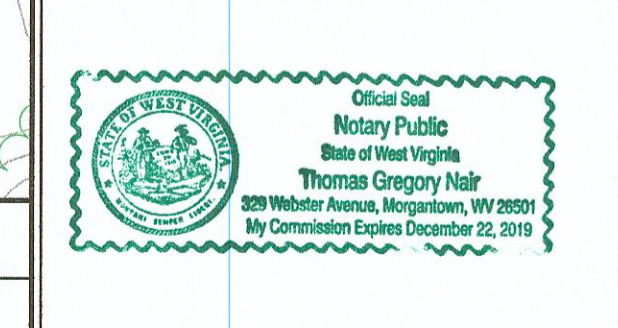


Shelby Run Mining Company, LLC
Shelby Run Deep Mine
Slope and Shaft Projects
WVDEP Permit No. U-2006-12, IBR No. 1
Grafton, WV 7.5' USGS Quadrangle
Scale: 1" = 2000'



State of West Virginia, County of: Wayne
 Taken, Subscribed, and Sworn to before me this 27 day of December, 2015.
 Notary Thomas Gregory Hair
 My commission expires: December 22, 2019

I, the undersigned, hereby certify that this map is correct and known, to the best of my knowledge and belief, all the information required by the mining laws of the state.
David Homic
 Professional Engineer



Shelby Run Mining Company, LLC.
 A Subsidiary of Arch Coal, Inc.
 114 Shelby Drive, Suite B
 St. Albans, WV 25177

SITE PLAN NO. 1
IBR #1 - SEPTEMBER, 2015

Article 3 Permit No.: U-2006-12
 Associated NPDES Permit No.: WV1025783
 Shelby Run Deep Mine

APPROVED: _____ DATE: _____ BY: _____
 DATE: 9/15 BY: TAN

TOPOGRAPHIC CONTOUR INTERVAL = 5'

Scale: 1"=100'

File No.: SITE PLAN NO. 1.dgn

Sheet No.: 1 of 1

Path Name: DWG:\Shelby Run\Shelby Run Permits\IBR #1

Drainage Structure	Drainage Area	Total Drainage Area (Ac.)	Disturbed Area (Ac.)	Required Volume Ac-ft.	Available Volume Ac-ft.
Pond No. 1	P-1, P-2, P-3, DD-1 AND O-1	10.6	0.8	0.10	0.22
Pond No. 2	P-2 AND DD-1	4.9	0.6	0.10	0.33
Pond No. 3	P-3 AND O-1	4.9	3.4	0.43	0.71
DIVERSION DITCH NO. 1	DD-1	4.1	2.8	0.35	-
DIVERSION DITCH NO. 2	PIO P-3	3.1	1.3	0.16	-
TOTAL	-	-	8.1	1.14	1.26
POND NO. 4	P-4	1.4	1.3	0.16	0.22
POND NO. 5	P-5	1.7	1.6	0.20	0.28
POND NO. 6	P-6	5.8	5.3	0.66	0.66
POND NO. 7	P-7	15.0	7.4	0.93	1.16
POND NO. 8	P-8	6.2	6.2	0.65	0.89

NOTES:
 1. FOR CROSS SECTION SEE DRAWING NO. B11-461-E16, B11-461-E18, B11-461-E31, B11-461-E37, AND B11-461-E38.
 2. MAPPING BASED ON NAD 27 NORTH, WEST VIRGINIA STATE PLANE COORDINATE SYSTEM.

LEGEND

PERMIT AREA 40.78 AC.

DRAINAGE DIVISION LINE

NPDES OUTLET

END OF PERMIT MARKER

PERMANENT MONUMENT

GPP1 GROUNDWATER PROTECTION PLAN ITEM

BWQ SITES (BASELINE WATER QUALITY) (SEE DRAWING NO. B11-461-E3)

PHC SITES (PROBABLE HYDROLOGICAL SAMPLING SITES) (SEE DRAWING NO. B11-461-E3)

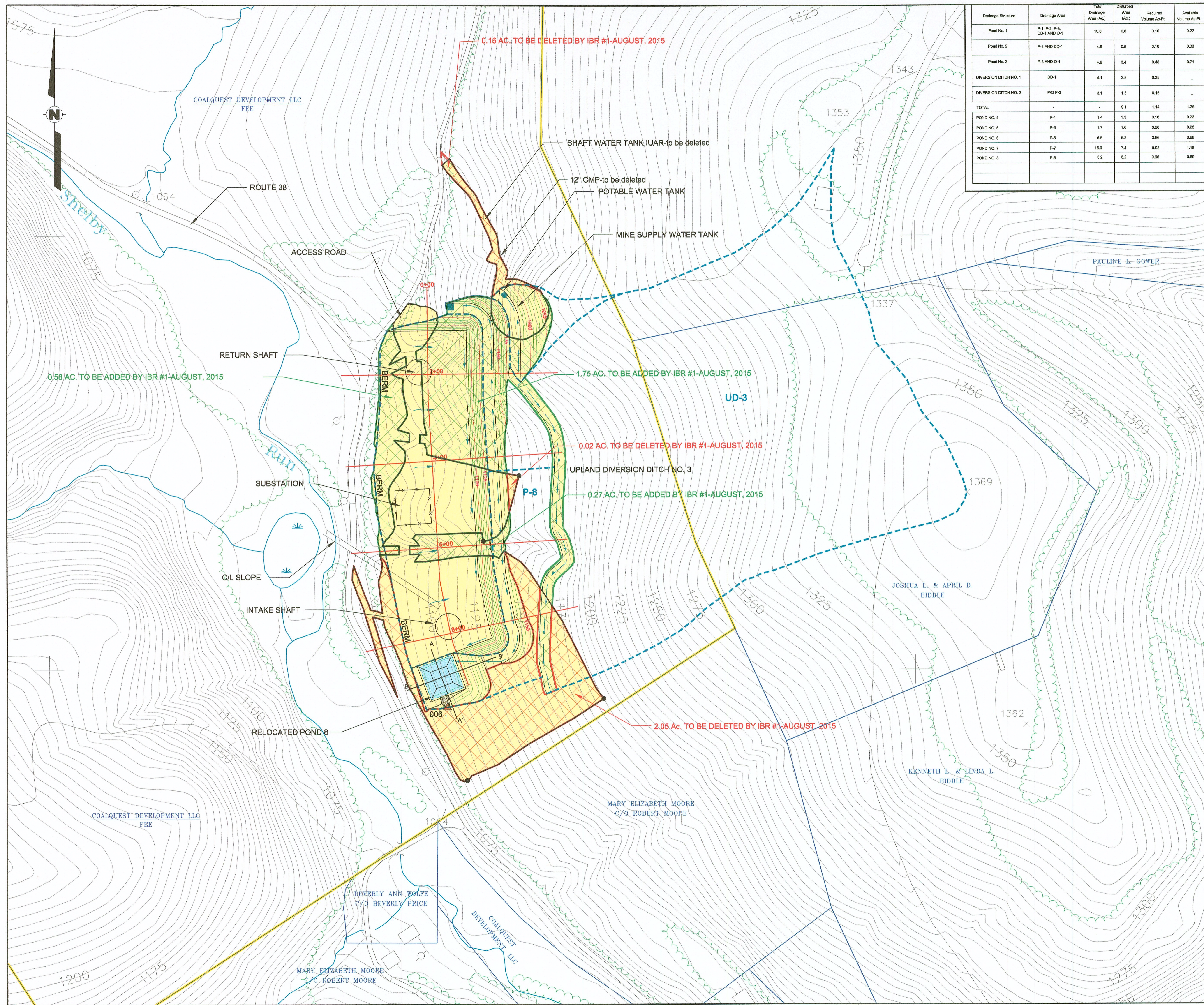
TMP WATER SAMPLING STATION (THRESHOLD MONITORING POINT) (SEE DRAWING NO. B11-461-E3)

DURING MINING SURFACE WATER MONITORING SITES (SEE DRAWING NO. B11-461-E3)

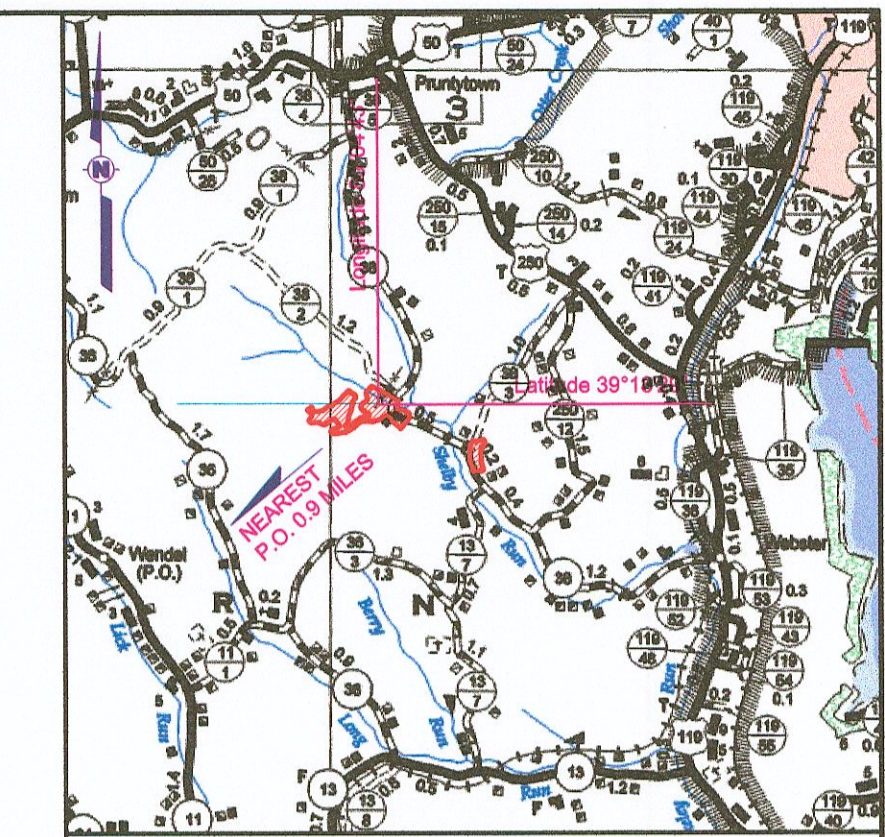
IBR NO. 1 LEGEND

3.80 AC. TO BE ADDED BY THIS IBR #1

2.85 AC. TO BE DELETED BY THIS IBR #1



Drainage Structure	Drainage Area	Total Drainage Area (Ac.)	Disturbed Area (Ac.)	Required Volume Ac-FL	Available Volume Ac-FL
Pond No. 1	P-1, P-2, P-3, DD-1 AND O-1	10.6	0.8	0.10	0.22
Pond No. 2	P-2 AND DD-1	4.9	0.8	0.10	0.33
Pond No. 3	P-3 AND O-1	4.9	3.4	0.43	0.71
DIVERSION DITCH NO. 1	DD-1	4.1	2.8	0.36	-
DIVERSION DITCH NO. 2	PIO P-3	3.1	1.3	0.16	-
TOTAL	-	-	8.1	1.14	1.26
POND NO. 4	P-4	1.4	1.3	0.16	0.22
POND NO. 5	P-5	1.7	1.6	0.20	0.28
POND NO. 6	P-6	5.6	5.3	0.66	0.68
POND NO. 7	P-7	15.0	7.4	0.83	1.16
POND NO. 8	P-8	6.2	6.2	0.65	0.69



GENERAL LOCATION MAP
 SMA NO. U-2006-12 NPDES NO. WV1025783
 GRAFTON 7.5 USGS QUADRANGLE
 NEAREST POST OFFICE: WENDEL, WV - 0.9 MILES
 TAKEN FROM WV DEPT. OF HIGHWAYS MAP
 COURT HOUSE DISTRICT OF TAYLOR COUNTY
 SCALE: 1" = 1 MILE

- LEGEND**
- PERMIT AREA 40.78 AC.
 - COALQUEST DEVELOPMENT LLC PROPERTY LINE
 - PROPERTY LINE
 - DRAINAGE DIVISION LINE
 - NPDES OUTLET
 - END OF PERMIT MARKER
 - TMP WATER SAMPLING STATION (THRESHOLD MONITORING POINT) (SEE DRAWING NO. B11-461-E3)
 - DURING MINING SURFACE WATER MONITORING SITES (SEE DRAWING NO. B11-461-E3)
 - BWQ SITES (BASELINE WATER QUALITY) (SEE DRAWING NO. B11-461-E3)
 - PHC SITES (PROBABLE HYDROLOGICAL CONSEQUENCES) (SEE DRAWING NO. B11-461-E3)
 - GPP4 GROUNDWATER PROTECTION PLAN ITEM

NOTES:
 1. FOR CROSS SECTION SEE DRAWING NO. B11-461-E17, B11-461-E34, AND B11-461-E35.
 2. MAPPING BASED ON NAD 27 NORTH, WEST VIRGINIA STATE PLANE COORDINATE SYSTEM.

IBR NO. 1 LEGEND

3.80 AC. TO BE ADDED BY THIS IBR #1	
2.85 AC. TO BE DELETED BY THIS IBR #1	

State of West Virginia, County of: Mason
 Taken, Subscribed, and Sworn to before me this 17 day of December, 2015.
 Notary Thomas Gregory
 My commission expires: December 22, 2019

I, the undersigned, hereby certify that this map is correct and shows, to the best of my knowledge and belief, all the information required by the mining laws of the state.
Ronald L. Hamric
 Professional Engineer



DATE	BY	REVISION
3/28/12	CHD	
9/15	TAN	

Shelby Run Mining Company, LLC.
 A Subsidiary of Arch Coal, Inc.
 114 Smiley Drive, Suite B
 St. Albans, WV 26177

SITE PLAN NO. 2
 IBR #1 - SEPTEMBER, 2015

Article 3 Permit No.: U-2006-12
 Associated NPDES Permit No.: WV1025783
 Shelby Run Deep Mine

APPROVED: Courthouse District Grafton 7.5 Quadrangle Taylor County West Virginia

TOPOGRAPHIC CONTOUR INTERVAL = 5'	Scale: 1"=100'	File No.: SITE PLAN NO. 2.dgn	Sheet No.: 1 of 1
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Path: Path Name: DWG\Shelby Run\Shelby Run Permits\IBR #1