



August 5, 2016

Mr. Stephen Miles, P.E.
Alabama Surface Mining Commission
P. O. Box 2390
Jasper, AL 35502-2390

RE: Warrior Met Coal Mining, LLC.
Mine No. 4, P-3260, Revision No. 41

Dear Mr. Miles:

I hereby certify the enclosed detailed design plans for Sediment Basin 031 for the above referenced mine are in accordance with the Regulations of the Alabama Surface Mining Commission as adopted by Act 81-435 of December 18, 1981 and as amended to date and that the information used in the enclosed basin design plans is true and correct to the best of my knowledge and belief.

If you have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

McGehee Engineering Corp,

A handwritten signature in black ink that reads "Robert W. Usher". The signature is written in a cursive style and is positioned to the left of the circular professional seal.

Robert W. Usher, P.E.
Alabama Reg. No. 15917



**WARRIOR MET COAL MINING, LLC.
MINE NO. 4, P-3260, REVISION NO. 41**

INTRODUCTION

Sediment Basin 031 is proposed as a treatment pond for pumpage from the Warrior Met Coal Mining, LLC underground mine workings in the event the water quality from the direct discharge does not meet effluent standards. The basin is a large incised depression created by surface mining conducted in the 1980's. A channel spillway will be constructed in the low point of the facility. The spillway will be lined with Class 1 riprap.

The anticipated maximum pump rate from the underground mine is 1200 gallons per minute (2.67 cubic feet per second). Rainfall routing was performed using the 10 year, 24 hour and 25 year, 6 hour rainfall events. No disturbed area within the watershed will exist. The maximum stages (elevations) for the storm events were determined by the peak elevation of the rainfall events and then adding the 2.7 cfs pumpage and determining the stage with the combined flow.

SEDIMENT BASIN CONSTRUCTION SPECIFICATIONS

Sediment basins (temporary or permanent) will be designed and constructed using the following as minimum specifications:

1. EMBANKMENT REQUIREMENTS

- A) The minimum width of the top of the embankment will under no circumstance be less than ten (10) feet.
- B) The embankment will have a minimum front and back slope no steeper than the slopes listed on the detailed design sheet.
- C) The foundation area of the embankment will be cleared and grubbed of all organic matter with no surface slope steeper than 1 horizontal to 1 vertical. The entire wet area, as measured from the upstream toe of the embankment to the normal pool level, will be cleared of trees and large brush.
- D) A core will be constructed in a cutoff trench along the centerline of the embankment. The cutoff trench will be of suitable depth and width to attain relatively impervious material.
- E) The embankment construction material will be free of sod, roots, stumps, rocks, etc., which exceed six (6") inches in diameter. The embankment material will be placed in layers of twelve (12") inches or less and compacted to ninety five (95%) percent of the standard proctor density, as set forth in ASTM.
- F) The embankment, foundation and abutments will be designed and constructed to be stable under normal construction and operating conditions, with a minimum static safety factor of 1.3 at normal pool level with steady seepage saturation conditions.
- G) The actual constructed height of the embankment will be a minimum of five (5%) percent higher than the design height to allow for settling over the life of the embankment.
- H) The design embankment height for temporary impoundments will be a minimum of one (1) foot above the maximum water level anticipated from a 10 Year - 24 Hour or a 25 Year - 6 Hour precipitation event (whichever is greater). The design embankment height for permanent impoundments will be a minimum of one (1) foot above the maximum water level anticipated from a 10 Year - 24 Hour or a 25 Year - 6 Hour precipitation event (whichever is greater).
- I) For embankments constructed as point source discharges, the embankment will be constructed and abutments keyed into undisturbed, virgin, ground if at all possible. In the event that this can not be achieved, additional design and construction specifications will be submitted in the detailed design plans.

**WARRIOR MET COAL MINING, LLC.
MINE NO. 4, P-3260, REVISION NO. 41**

- J) The embankment and all areas disturbed in the construction of the embankment will be seeded with a mixture of perennial and annual grasses, fertilized and mulched to prevent erosion and ensure restabilization. Hay dams, silt fences, rock check dams, etc. will be installed, where deemed necessary, as additional erosion prevention methods.

2. DISCHARGE STRUCTURE REQUIREMENTS

- A) The primary spillway will be designed to adequately carry the anticipated peak runoff from a 10 Year - 24 Hour precipitation event. The combination primary and secondary (emergency) spillway system will be designed to safely carry the anticipated peak runoff from a 25 Year - 6 Hour precipitation event. When sediment basins are proposed in the drainage course of a public water supply, the spillway system will be designed and constructed to adequately carry the runoff from a 50 Year - 24 Hour precipitation event.
- B) Channel linings, for secondary (emergency) spillways will be a trapezoidal open channel constructed in natural ground and planted with a mixture of both annual and perennial grasses being predominantly fescue and bermuda. In the event that the spillway can not be constructed in natural ground the spillway will be lined with riprap, concrete, asphalt or durable rock (See Detailed Design Plans for Spillway Lining).
- C) When consisting of pipe, the primary spillway will be installed according to Class "C" pipe installation for embankment bedding.
- D) Sediment basins with a single spillway system, such as a skimmer board, will be a trapezoidal open channel constructed in consolidated, nonerodible material and lined with rip-rap, concrete, asphalt or durable rock (See Detailed Design Plans for Spillway Lining).
- E) The primary spillway will be designed and constructed with device to eliminate floating solids from leaving the impoundment. This device will consist of a turned down elbow when using pipe or a skimmer system when using an open channel spillway.
- F) When necessary, to prevent erosion of the embankment or discharge area, a splash pad of rip-rap, durable rock, sacrete, etc. will be installed at the discharge end of the primary spillway.
- G) The combined spillway systems, for sediment basins constructed in series, will be designed to adequately accommodate the entire drainage area.

3. INSPECTION, MAINTENANCE AND CERTIFICATION REQUIREMENTS

**WARRIOR MET COAL MINING, LLC.
MINE NO. 4, P-3260, REVISION NO. 41**

- A) Inspections will be conducted regularly during construction of the sediment basin by a qualified registered professional engineer or other qualified person under the direction of a professional engineer. Upon completion of construction, the sediment basin will be certified, by a qualified registered professional engineer, to the Regulatory Authority as having been constructed in accordance with the approved detailed design plans.
- B) Sediment basins will be inspected semi-monthly for erosion, instability, etc., with maintenance performed as necessary, until the removal of the structure or until a Phase III Bond Release is granted.
- C) Sediment basins will be examined quarterly for structural weakness, instability, erosion, slope failure, or other hazardous conditions with maintenance performed as necessary.
- D) Formal inspections will be made annually, by a qualified registered professional engineer or other qualified person under the direction of a professional engineer, including any reports or modifications, in accordance with 880-X- 10C- .20[1(j)] of the Alabama Surface Mining Regulations.
- E) Retained sediment will be removed from each sediment basin when the accumulated sediment reaches the maximum allowable sediment volume as set forth in the detailed design plans.

4. BASIN REMOVAL REQUIREMENTS

- A) Upon completion of mining, reclamation, restabilization and effluent standards being met, each sediment basin not proposed as a permanent water impoundment will be dewatered in a controlled manner by either pumping or siphoning. Upon successful dewatering, a determination will be made as to the retained sediment level in the basin. After determining the retained sediment level, a channel will be cut into the embankment down to the retained sediment level on the side of the embankment deemed most suitable to reach natural ground without encountering prohibiting rock. The embankment material removed from this newly constructed channel will be spread and compacted over the previous impoundment (wet area) area to prevent erosion and ensure restabilization. The newly constructed channel will be of adequate width (minimum 30 feet) and sloped to a grade (approximately 1% to 3%) which will cause all surface drainage to travel across this area in sheet flow, minimizing the possibility of erosion. Also, where necessary, hay dams will be installed in strategic locations across the width of the channel to retain sediment and slow the water velocity to a favorable rate. Upon removal of the embankment section, all disturbed areas will be graded in such a manner to ensure slope stability, successful restabilization and to minimize erosion. All disturbed areas will be seeded with a mixture of annual and perennial grasses, fertilized and mulched. No slope, existing or created in the removal of the sediment basin, will be left on a grade that will slip or slough.

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5. PERMANENT WATER IMPOUNDMENT REQUIREMENTS

- A) Prior to a request for a Phase II Bond Release, all sediment basins being left as permanent water impoundments will have supplemental data submitted to the Regulatory Authority concerning water quality, water quantity, size, depth, configuration, postmining land use, etc.

- B) Final grading slopes of the entire permanent water impoundment area will not exceed a slope of 2 Horizontal to 1 Vertical to provide for safety and access for future water users.

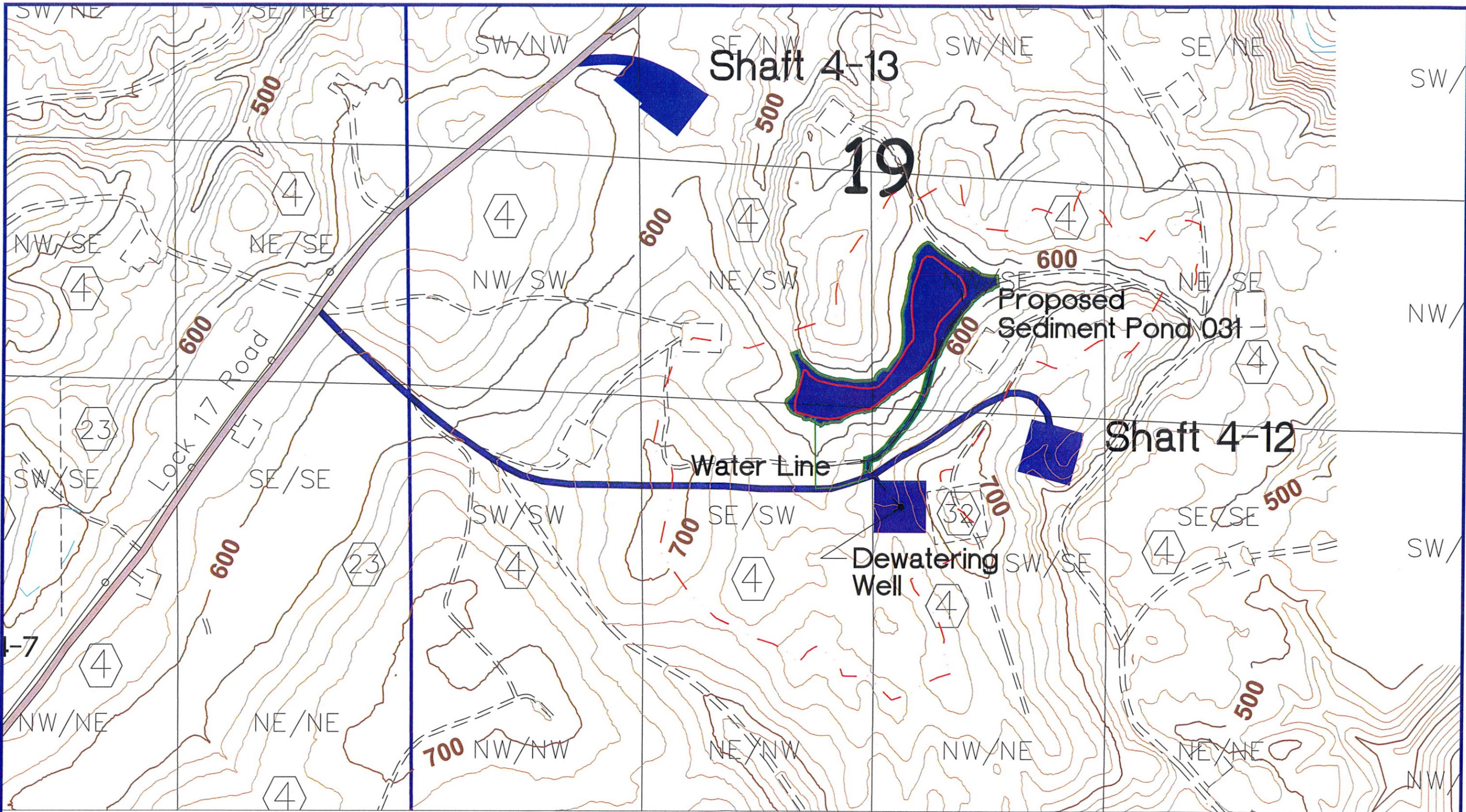
**WARRIOR MET COAL MINING, LLC.
MINE NO. 4, P-3260, REVISION NO. 41**

**DETAILED DESIGN PLANS
SEDIMENT BASIN 031**

BASIN 031

Elevation-Area-Capacity Table

Elevation (ft)	Area (ac)	Capacity (ac-ft)
566.00	0.015	0.000
567.00	0.206	0.092
568.00	0.615	0.484
569.00	1.154	1.354
570.00	1.860	2.847
571.00	2.467	5.004
572.00	3.160	7.810
573.00	3.694	11.234
574.00	4.270	15.212
575.00	4.884	19.786
576.00	5.540	24.995
577.00	6.092	30.808
578.00	6.670	37.187



THE ENTIRE WATERSHED IS RECLAIMED SURFACE MINE AREAS WITH TREES - CN 72, WITH THE EXCEPTION OF THE POOL AREA - CN 100, AND ROADS - CN 81.

WARRIOR MET COAL MINING, LLC.

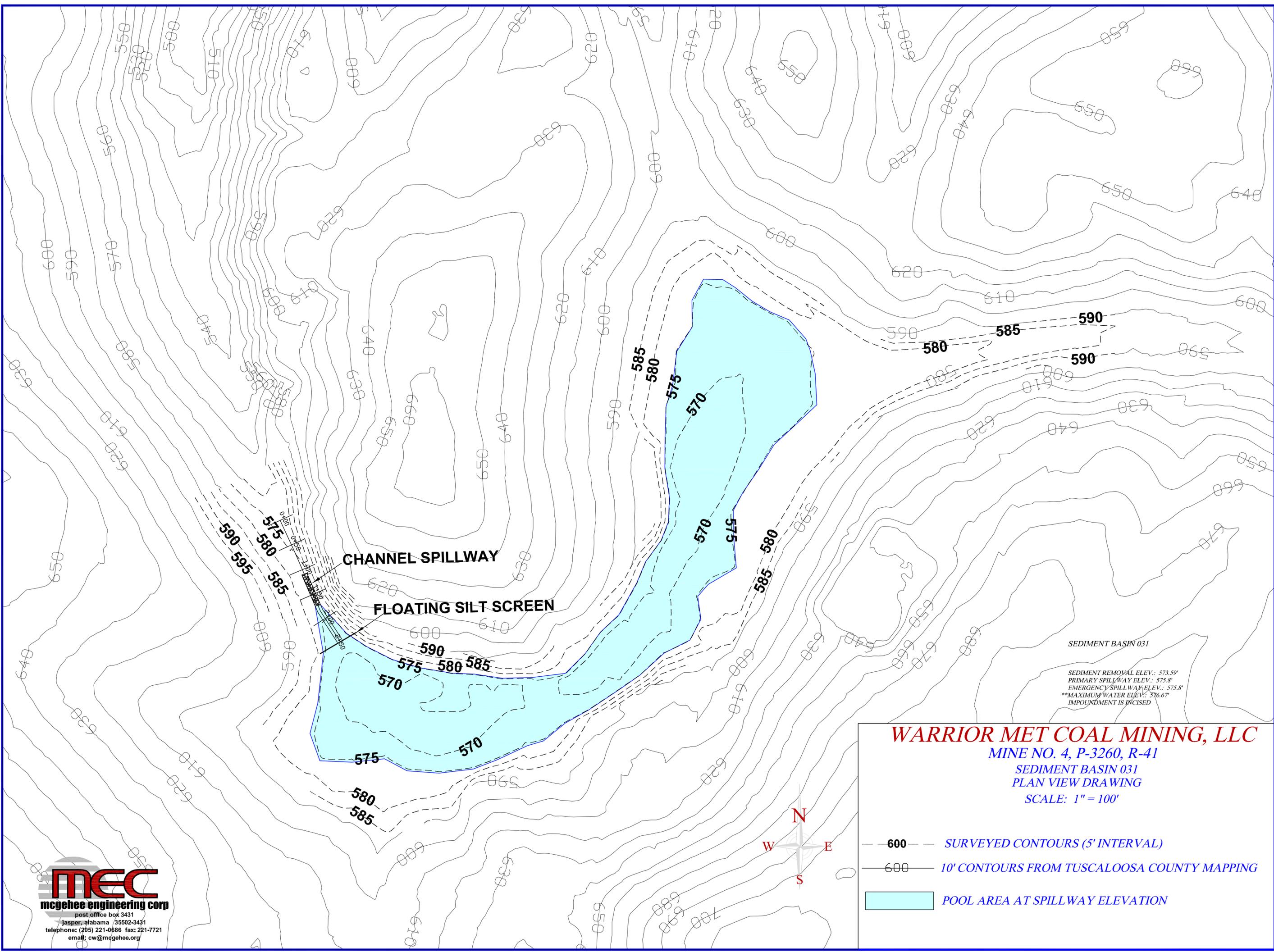
MINE NO. 4, P-3260, R-41
 WATERSHED MAP
 SEDIMENT POND 031

SCALE: 1" = 500' CONTOUR INTERVAL 20 FEET

 AREA ADDED BY R-41

-  EXISTING PERMIT AREA
-  DRAINAGE BOUNDARY
-  SEDIMENT POND 031

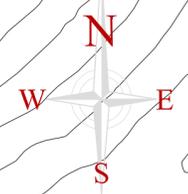




CHANNEL SPILLWAY
FLOATING SILT SCREEN

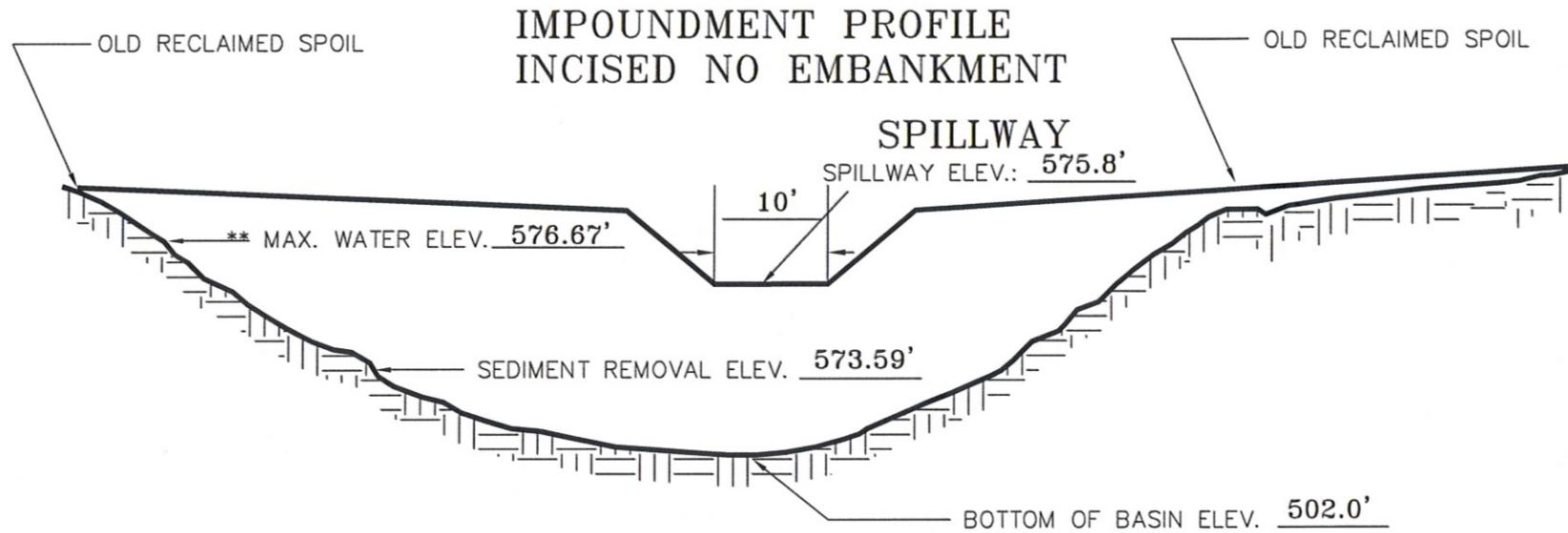
SEDIMENT BASIN 031
 SEDIMENT REMOVAL ELEV.: 573.59'
 PRIMARY SPILLWAY ELEV.: 575.8'
 EMERGENCY SPILLWAY ELEV.: 575.8'
 **MAXIMUM WATER ELEV.: 576.67'
 IMPOUNDMENT IS INCISED

WARRIOR MET COAL MINING, LLC
 MINE NO. 4, P-3260, R-41
 SEDIMENT BASIN 031
 PLAN VIEW DRAWING
 SCALE: 1" = 100'



- 600 --- SURVEYED CONTOURS (5' INTERVAL)
- 600 --- 10' CONTOURS FROM TUSCALOOSA COUNTY MAPPING
- POOL AREA AT SPILLWAY ELEVATION

COMPANY: WALTER MET COAL MINING, LLC
 MINE NAME: MINE NO. 4
 PERMIT #: P-3260, REVISION NO. 41
 BASIN I.D. #: SEDIMENT BASIN 031



KEY BASIN PARAMETERS

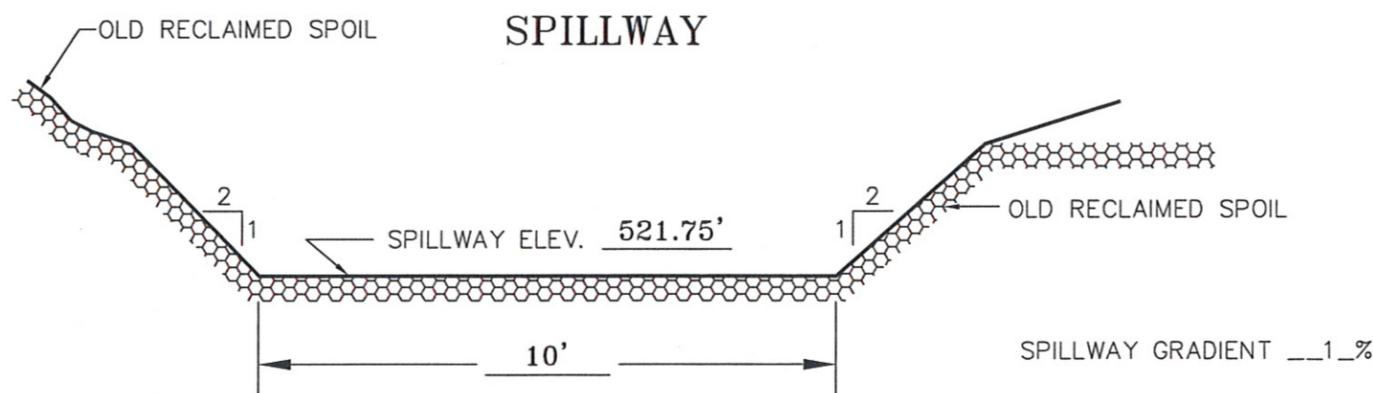
DRAINAGE AREA	<u>100.2</u>	ACRES
DISTURBED AREA	<u>N/A</u>	ACRES
SEDIMENT STORAGE	<u>13.51</u>	AC.FT.
DETENTION STORAGE	<u>10.4</u>	AC.FT.
PERMANENT POOL CAPACITY	<u>23.91</u>	AC.FT.
* TOTAL BASIN STORAGE CAPACITY	<u>27.99</u>	AC.FT.
* PEAK INFLOW	<u>42.88</u>	C.F.S.
* PEAK OUTFLOW	<u>20.44</u>	C.F.S.

THIS IS ADDING 2.7 CFS FOR POTENTIAL UNDERGROUND PUMPAGE.(1200 GPM)

NOTE: ALL ELEVATIONS ASSUMED.

* 10 YEAR – 24 HOUR PRECIPITATION EVENT.

** 25 YEAR – 6 HOUR PRECIPITATION EVENT.



SEE SPILLWAY CONTROL SECTION AND TAIL DITCH DESIGN FOR CHANNEL LINING REQUIREMENTS.

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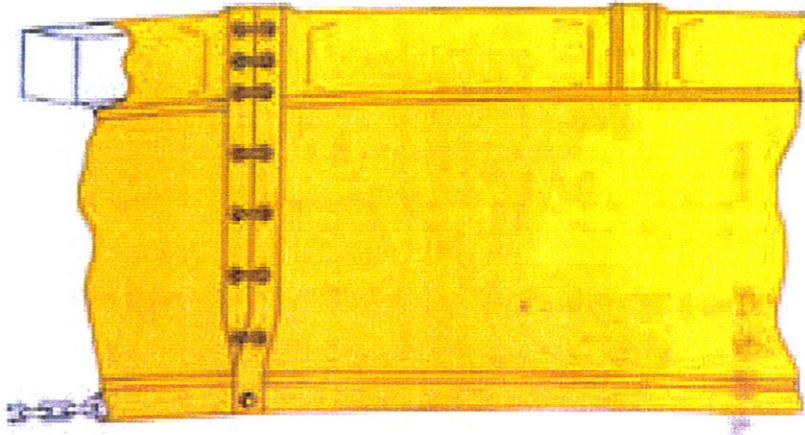
**SPILLWAY CHANNEL SPECIFICATIONS
SEDIMENT BASIN 031**

The spillway system for the basin will be constructed in the low point (drain) existing on the eastern side of the pond. A 10 foot minimum trapezoidal channel lined with riprap will be constructed. A floating silt screen will be installed to provide subsurface withdrawal.

SUBSURFACE WITHDRAWAL DEVICE AND FLOATING SILT BOOM

Lightweight Turbidity Curtain

Application: Calm waters with little current, such as lakes, ponds, canals and shoreline areas.



Specifications

- Curtain to be anchored at the maximum anticipated peak stage elevation (10 Year – 24 Hour Precipitation Event).
- PVC coated floatations - ultraviolet resistant
- Geotextile fabric screens
- Chain ballast with connectors
- Double sewn seams with grommets
- Depths per requirements ' 50' sections = Minimum 24” deep
- Fabric - Polyester reinforced vinyl high visibility yellow
- Connector - Sections are laced together through grommets and load lines are bolted together.
- Flotation - 6" expanded polystyrene over 9 lbs./ft. buoyancy.
- Ballast - 1/4" galvanized chain (.7 lbs/ft).

Warrior Met Coal Mining, LLC - Basin 031, Spillway

Material: Riprap

Trapezoidal Channel

Bottom Width (ft)	Left Sideslope Ratio	Right Sideslope Ratio	Slope (%)	Freeboard Depth (ft)	Freeboard % of Depth	Freeboard Mult. x (VxD)
10.00	2.0:1	2.0:1	1.0	1.00		

Simons/OSM Method - Mild Slope Design

	w/o Freeboard	w/ Freeboard
Design Discharge:	20.44 cfs	
Depth:	0.66 ft	1.66 ft
Top Width:	12.64 ft	16.64 ft
Velocity:	2.74 fps	
X-Section Area:	7.46 sq ft	
Hydraulic Radius:	0.576 ft	
Froude Number:	0.63	
Manning's n:	0.0377	
Dmin:	2.00 in	
D50:	9.00 in	
Dmax:	12.00 in	

**WARRIOR MET COAL MINING, LLC.
MINE NO. 4, P-3260, REVISION NO. 41**

**HYDROLOGY AND SEDIMENTOLOGY PREDICTION
10 YEAR - 24 HOUR PRECIPITATION EVENT
SEDIMENT BASIN 031**

Warrior Met Coal Mining, LLC
Mine no. 4, P-3260, Revision No. 4
Basin 031

10 Year 24 Hour Event

Robert W. Usher, P.E.

General Information

Storm Information:

Storm Type:	DRN 58
Design Storm:	10 yr - 24 hr
Rainfall Depth:	6.100 inches

Particle Size Distribution:

Size (mm)	Topsoil	Spoil
3.0000	96.000%	89.000%
2.0000	95.000%	74.000%
1.0000	92.000%	73.000%
0.5000	90.000%	60.000%
0.3000	88.000%	48.000%
0.2000	85.000%	40.000%
0.1000	74.000%	32.000%
0.0500	55.000%	26.000%
0.0300	44.000%	22.000%
0.0200	37.000%	18.000%
0.0100	28.000%	14.000%
0.0050	21.000%	10.000%
0.0030	15.000%	7.000%
0.0010	6.000%	2.000%
0.0001	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Basin 031

#1
Pond

Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In			41.10	13.10	12.5	1,340	0.84	0.44
	Out	100.200	100.200	13.86	13.10	0.7	51	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
3.0000	100.000%	100.000%
2.0000	100.000%	100.000%
1.0000	100.000%	100.000%
0.5000	89.205%	100.000%
0.3000	71.392%	100.000%
0.2000	59.514%	100.000%
0.1000	47.622%	100.000%
0.0500	38.684%	100.000%
0.0300	32.728%	100.000%
0.0200	26.779%	100.000%
0.0100	20.827%	100.000%
0.0050	14.878%	100.000%
0.0030	10.415%	100.000%
0.0010	2.979%	51.279%
0.0001	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Basin 031

Pond Inputs:

Initial Pool Elev:	575.80 ft
Initial Pool:	10.40 ac-ft
*Sediment Storage:	13.51 ac-ft
Dead Space:	20.00 %

**Sediment capacity was entered by user*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
575.80	20.00	2.00:1	2.00:1	10.00

Pond Results:

Peak Elevation:	576.52 ft
H'graph Detention Time:	3.68 hrs
Pond Model:	CSTRS
Dewater Time:	0.68 days
Trap Efficiency:	94.19 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)
573.59	4.028	0.000	0.000	Top of Sed. Storage
574.00	4.270	1.713	0.000	
574.50	4.573	3.923	0.000	
575.00	4.886	6.287	0.000	
575.50	5.209	8.811	0.000	
575.80	5.407	10.403	0.000	Spillway #1
576.00	5.540	11.497	3.649	3.63*
576.50	5.813	14.335	12.769	11.45
576.52	5.829	14.477	13.864	1.15 Peak Stage
577.00	6.092	17.311	35.770	
577.50	6.378	20.428	68.392	
578.00	6.670	23.690	111.421	

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
573.59	0.000	0.000
574.00	0.000	0.000
574.50	0.000	0.000
575.00	0.000	0.000
575.50	0.000	0.000
575.80	0.000	0.000
576.00	3.649	3.649
576.50	12.769	12.769
577.00	35.770	35.770
577.50	68.392	68.392
578.00	111.421	111.421

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	95.200	0.350	0.000	0.000	60.000	S	35.05	10.558
	2	5.000	0.005	0.000	0.000	100.000	F	8.00	2.539
	Σ	100.200						41.10	13.097

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.320	200.00	16.00	0.0030	1.0000	2	12.5	1,457	0.91	0.54
	2	0.320	400.00	0.00	0.0030	1.0000	1	0.0	12	0.01	0.00
	Σ							12.5	1,340	0.84	0.44

**WARRIOR MET COAL MINING, LLC.
MINE NO. 4, P-3260, REVISION NO. 41**

**HYDROLOGY AND SEDIMENTOLOGY PREDICTION
25 YEAR - 6 HOUR PRECIPITATION EVENT
SEDIMENT BASIN 031**

Warrior Met Coal Mining, LLC
Mine no. 4, P-3260, Revision No. 4
Basin 031

25 Year 6 Hour Event

Robert W. Usher, P.E.

General Information

Storm Information:

Storm Type:	SCS 6 Hour
Design Storm:	25 yr - 6 hr
Rainfall Depth:	5.000 inches

Particle Size Distribution:

Size (mm)	Topsoil	Spoil
3.0000	96.000%	89.000%
2.0000	95.000%	74.000%
1.0000	92.000%	73.000%
0.5000	90.000%	60.000%
0.3000	88.000%	48.000%
0.2000	85.000%	40.000%
0.1000	74.000%	32.000%
0.0500	55.000%	26.000%
0.0300	44.000%	22.000%
0.0200	37.000%	18.000%
0.0100	28.000%	14.000%
0.0050	21.000%	10.000%
0.0030	15.000%	7.000%
0.0010	6.000%	2.000%
0.0001	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Basin 031

#1
Pond

Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	100.200	100.200	42.88	8.99	10.3	1,268	0.71	0.47
	Out			17.73	8.99	0.7	71	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
3.0000	100.000%	100.000%
2.0000	100.000%	100.000%
1.0000	100.000%	100.000%
0.5000	100.000%	100.000%
0.3000	97.755%	100.000%
0.2000	81.499%	100.000%
0.1000	65.219%	100.000%
0.0500	52.974%	100.000%
0.0300	44.816%	100.000%
0.0200	36.671%	100.000%
0.0100	28.519%	100.000%
0.0050	20.374%	100.000%
0.0030	14.263%	100.000%
0.0010	4.081%	61.052%
0.0001	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Basin 031

Pond Inputs:

Initial Pool Elev:	575.80 ft
Initial Pool:	10.40 ac-ft
*Sediment Storage:	13.51 ac-ft
Dead Space:	20.00 %

**Sediment capacity was entered by user*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
575.80	20.00	2.00:1	2.00:1	10.00

Pond Results:

Peak Elevation:	576.61 ft
H'graph Detention Time:	3.52 hrs
Pond Model:	CSTRS
Dewater Time:	1.25 days
Trap Efficiency:	93.32 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)
573.59	4.028	0.000	0.000	Top of Sed. Storage
574.00	4.270	1.713	0.000	
574.50	4.573	3.923	0.000	
575.00	4.886	6.287	0.000	
575.50	5.209	8.811	0.000	
575.80	5.407	10.403	0.000	Spillway #1
576.00	5.540	11.497	3.649	23.90
576.50	5.813	14.335	12.769	5.00
576.61	5.875	14.977	17.731	1.05 Peak Stage
577.00	6.092	17.311	35.770	
577.50	6.378	20.428	68.392	
578.00	6.670	23.690	111.421	

Detailed Discharge Table

Elevation (ft)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
573.59	0.000	0.000
574.00	0.000	0.000
574.50	0.000	0.000
575.00	0.000	0.000
575.50	0.000	0.000
575.80	0.000	0.000
576.00	3.649	3.649
576.50	12.769	12.769
577.00	35.770	35.770
577.50	68.392	68.392
578.00	111.421	111.421

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	95.200	0.350	0.000	0.000	60.000	S	37.64	6.913
	2	5.000	0.005	0.000	0.000	100.000	F	19.39	2.075
	Σ	100.200						42.88	8.988

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.320	200.00	16.00	0.0030	1.0000	2	10.2	1,444	0.81	0.61
	2	0.320	400.00	0.00	0.0030	1.0000	1	0.0	18	0.01	0.01
	Σ							10.3	1,268	0.71	0.47

**WARRIOR MET COAL MINING, LLC.
MINE NO. 4, P-3260, REVISION NO. 41**

STABILITY ANALYSIS

Due to the fact that the entire pond is incised no stability analysis is necessary.