



**US Army Corps
of Engineers**
Huntington District

Public Notice

In reply refer to:	Issuance Date:
Public Notice No. 200400796	June 27, 2004
Stream:	Expiration Date:
Bridge Fork	July 27, 2004
Address comments to:	US Army Corps of Engineers, Huntington District 502 Eighth Street ATTN: CELRHE Huntington, West Virginia 25701-2070

PUBLIC NOTICE

TO WHOM IT MAY CONCERN: The following application has been submitted for a Department of the Army Permit under the provisions of Section 404 of the Clean Water Act. This notice serves as the Corps of Engineers' request to the West Virginia Department of Environmental Protection to act on Section 401 Water Quality Certification for the following application.

APPLICANT: Powellton Coal Company, LLC
Post Office Box 158
Bickmore, West Virginia 25019

LOCATION: The proposed project is located in Bridge Fork, Softwood Hollow, Grassy Lot Hollow and three unnamed tributaries of Bridge Fork of Rich Creek of the Gauley River, at Jodie, approximately 2.8 miles southwest of the Swiss United States Post Office in Fayette County, West Virginia as depicted on the attached **Drawing 1** titled "Powellton Coal Company, LLC Bridge Fork West Mitigation Vicinity Map."

DESCRIPTION OF THE PROPOSED WORK: The applicant proposes to place fill material into waters of the U.S. in conjunction with the construction of five valley fills and five associated sediment ponds associated with the Bridge Fork West Surface Mine. The applicant's proposed operation would affect 485 acres of surface area, including 302 acres of mineral removal to facilitate the recovery of approximately 6.5 million tons of coal reserves. This operation would generate approximately 43 million cubic yards of overburden, of which roughly 25 million cubic yards would be placed on the mined areas as backfill and to reclaim 24,460 linear feet of unreclaimed and exposed highwall on the No. 2 Gas seam horizon to meet the Approximate Original Contour (AOC) plus requirements as specified in the "AOC and Excess Spoil Disposal Optimization Model" in the WVDEP's AOC guidance document. The remaining 18 million cubic yards of excess overburden would be placed in the proposed valley fills. All of the proposed valley fills would drain watersheds of less than 250 acres and range from 142 acres to 213 acres. The construction of the proposed valley fills would result in the discharge of fill material into approximately 11,790 linear feet or 1.776 acres of waters of the U.S. Of this total, 11,560 linear feet is intermittent stream impacts and 230 linear feet is ephemeral stream impacts. Further, approximately 2,320 linear feet or 0.386 acre of waters of the U.S. would be temporarily impacted by the construction of the proposed sediment ponds and associated drainage corridors. In total, approximately 14,110 linear feet or 2.16 acres of waters of the U.S. would be impacted by the proposed project. **Table A** (attached) details the proposed mining activities and corresponding information with respect to the proposed impact locations and stream loss (linear feet and acres). **Table B** (attached) details the drainage areas to be affected by the proposed valley fills.

The West Virginia Department of Environmental Protection (WVDEP) approved the applicant's Surface Mining Permit application (S-S-3003-01) on January 21, 2004 pursuant to the Surface Mining Control and Reclamation Act of 1977.

The mineral removal area on the permit is to be mined via contour, highwall and auger mining methods using front endloaders (Cat 992 or equivalent) with 85-ton trucks and hydraulic shovel/ excavators (18 to 30 CY) with 85 to 150 ton overburden trucks.

Mining and reclamation activities would take place over the course of five phases during a 54-month period. The No. 2 Gas seam and the Powellton seam constitute the primary reserves. In durable rock fill areas, the Eagle seam would be contour mined and the Alma and splits of the Cedar Grove seams may be intersected by the No. 2 Gas highwall cut and would be recovered. Throughout the project area, extensive unreclaimed pre-law surface mining in the area has left approximately 24,460 linear feet of exposed highwall on the No. 2 Gas seam horizon. During mining operations, the applicant would re-establish cuts on the No. 2 Gas bench areas and would fully reclaim these previously unreclaimed areas during the progression of mining.

Drainage control would be provided in each active phase by sediment structures installed and maintained in accordance with Section P of the applicant's SMCRA permit. In order to reduce the size of in-stream sediment control structures at the valley fills, extensive on-bench temporary structures are designed to provide adequate volume for as much of the disturbed area as practical within the particular watersheds.

Specific sediment control structures would be installed as needed prior to disturbance in each watershed during each mining phase but those particular structures may not be in place at the very beginning of that phase. However, full-factor sediment storage volume for the current disturbed area would be provided by certified permanent sediment control or temporary sediment control at any given time. Additional storage volume would be added prior to the disturbance of acreage in excess of that covered by existing structures. At no time shall the disturbed area exceed the area defined by the installed and certified sediment volume divided by 0.125 acre-feet per acre.

The applicant is proposing to utilize one haulroad for the proposed surface mine. This proposed haulroad would intersect with the haulage route provided by the Bridge Fork No. 1 (S-3004-00), which provides access to state route 60/3.

Contour mining would begin in the Eagle seam then proceed to the Powellton seam and then move up to the No. 2 Gas seam. Highwall mining or augering would closely follow the active Powellton pit. Overburden from the initial Powellton cut would be placed in the valley fills until adequate bench volume is created to accommodate the remaining spoil material. Contour mining would then proceed on the No. 2 Gas seam with initial spoil material used to reclaim the Powellton bench. All incidental coal removal from the Alma and Cedar Grove Seams would be recovered from the No. 2 Gas Contour Cut. Highwall mining or augering would follow on the No. 2 Gas once the Powellton bench is backfilled. Highwall mining would progress on the backfilled material for the No. 2 Gas seam until pre-stripping and stripping progress on the Powellton. Subsequently, backfilling would begin on the bench and approach the active pits at the end of the contour segment. Adequate volume on the Powellton bench would be maintained through each stage for disposal of the identified potentially acidic or toxic overburden material. The proposed operation would comply with the contemporaneous reclamation standards regarding disturbed but unreclaimed area for multiple seam contour mining with highwall or augering, which is the lesser of 200 acres or 50% of the total permitted area. In this case, the limit is 50% of the permitted area (485 acres), or approximately 242 acres, so 200 acres would be the maximum disturbance allowed by the subject SMCRA permit (Regardless of these limits, any disturbed area other than those specified in 38CSR2-14.15.c must complete backfilling and rough grading within 180 days of final mineral removal). Additionally, a maximum pit length of 3,000 linear feet would apply. A discussion of each phase is below.

Phase 1: As discussed above, the applicant would construct a new haul road beginning on the Bridge Fork Surface Mine #1 (S-3004-00) on the ridge between Currycamp Fork and Bridge Fork. This road would gradually progress up the backfill from S-3004-00 until it is approximately at the top of the proposed highwall of the No. 2 Gas seam contour cut.

During the construction of the haulroad all excess spoil would be hauled initially to the potential isolation zones established on the Bridge Fork #1 Surface Mine. As the road progresses in the southeast direction, the excess spoil generated by road cut would be taken to the proposed Valley Fill A in Softwood Hollow.

Prior to the main mining operation, the applicant plans to utilize an initial cut within the Eagle Seam. Access to the Eagle seam reserves would be via access from the Powellton seam across the fill footprint. This internal haulroad would be at the most moderate grade possible and of sufficient width to accommodate the equipment utilized. Actual location and profile would vary in response to actual field conditions.

Coal extraction and haulage would progress within the footprint of the fill area and would be hauled back on the haulroad that has been established prior to the commencement of mineral extraction. This Eagle seam cut would be established for two (2) main reasons: 1) to economically remove recoverable reserves and 2) to aid in the hydrologic retention of the “during mining” area as based on the surface water runoff analysis.

Once the eastern ridge has been contoured, highwall mined and augered, additional mining would progress from Valley Fill A southwestward along the western side of Softwood Hollow Branch in both primary seams. Sufficient spoil would be hauled to and placed in Valley Fill A to allow contouring to proceed a predetermined distance until backfilling begins on the No. 2 Gas and Powellton Bench.

Valley Fill A would be used to contain all excess overburden material generated in Phase 1. Sediment control would be established progressively as mining extends along the outcrop.

Pond 1 would be installed and certified prior to disturbance within its coverage area. At the end of Phase 1, Valley Fill A would be in active use and Pond 1 would be in place along with the on-bench sediment control on the Powellton level. Reclamation would be done progressively as the mining advances in the area.

Phase 2: Phase 2 mining would begin were Phase 1 left off. The majority of the mining focus would be in Grassy Lot Hollow and at the head of Bridge Fork. Prior to the disturbance of the reserves in the No. 2 Gas Seam and the Powellton Seam, a cut within Valley Fills B and C would be completed to recover the Eagle Seam after the construction of Ponds 2 and 3. All coal extracted from the area would be taken up the fill areas to the haulroad.

During the progression of the mining in the area, the area that was disturbed within Phase 1 of the mine sequencing would be reclaimed and revegetated.

Valley Fills B and C would be used to contain all excess overburden material generated in Phase 2. Sediment control would be established progressively as mining extends along the Powellton seam. Mining during the phase would continue toward the north near the point removal between the head of Bridge Fork and the second unknown right tributary to Bridge Fork.

Ponds 2 and 3 would be installed and certified prior to disturbance within each coverage area. At the end of Phase 2, Valley Fill B would be in active use and Pond 2 and 3 would be in place along with the on-bench sediment control on the Powellton seam.

At the end of Phase 2, Ponds 1, 2 and 3 would be in place. Valley Fill A would be reclaimed and Valley Fills B and C would actively be receiving excess spoil.

Phase 3: Phase 3 would involve contour mining between Valley Fills C and D, with the reclamation of Valley Fill B and the outslope of Valley Fill C. Both Valley Fills C and D would continue to receive spoil from the active mining in the No.2 Gas and Powellton Coal Seams.

Prior to the construction of Valley Fill D, the Eagle seam would be extracted after the construction of Pond 4. Coal haulage from the Eagle Seam would take place within the footprint of Valley Fill D.

At the end of Phase 3, reclamation of Valley Fills B and C would be underway. Ponds 1, 2, 3 and 4 would be in place along with the network of on-bench sediment cells.

Phase 4: In Phase 4, mining would continue between Valley Fills D and E in a northerly direction. Pond 5 and Eagle seam extraction would take place prior to spoil placement within Valley Fill E. The end of Phase 4 would complete all mining and Ponds 1, 2, 3, 4 and 5 would be in place as well as all sediment cells for the project area.

Phase 5: During Phase 5 final reclamation of the surface mine would be underway. Hydroseeding, tree planting and finalizing conveyance channels and other permanent drainage structures would be underway.

According to the applicant, the purpose of the project is to construct valley fills to dispose of excess overburden spoil generated by surface mining operations into waters of the United States in order to achieve optimal recovery of available coal reserves within the project area and to provide the mandatory sediment control and access.

Drawings 2 through 16 included the plans of the proposed valley fills and sediment ponds.

MITIGATION PLAN: The applicant has submitted a compensatory mitigation plan (CMP) to compensate for permanent and temporary impacts to waters of the U.S. regulated by the Department of the Army, Corps of Engineers. **Drawing 17** (attached) depicts the geographic relationship between the proposed impact site(s) and the proposed mitigation site(s).

To compensate for permanent impacts to waters of the U.S., the applicant proposes to mitigate on- and off-site through in- and out-of-kind restoration and enhancement respectively of aquatic resources. The proposed off-site mitigation area is located in Rich Creek (upstream of its confluence with Bridge Fork) upstream of and contiguous with (less than 500 feet apart) the mitigation area approved for an active mining operation (Bridge Fork Surface Mine No. 1- WVDEP Permit No. S-3004-00 and NWP 21 Currycamp Fork 200100640-1). The proposed on-site mitigation is located within the stream segments that would be temporarily impacted by sediment pond construction and associated drainage corridors. The applicant also proposes to restore approximately 232 linear feet of Rich Creek to offset the temporal losses associated with sediment pond construction.

The primary reason for the selection of the Rich Creek site as an appropriate mitigation area was the solicitation by the West Virginia Chapter of Trout Unlimited (WVTU) for support in restoring and or enhancing certain impaired stream segments of Rich Creek. Much of the impairment can be attributed to the streambank structure and stability and the lack of an adequate riparian zone. WVTU has offered its assistance in implementing the project and they have provided the applicant with stream improvement measures that they believe will promote stream stability and enhancement of fisheries. The creation, restoration and enhancement of the habitat in this area of Rich Creek is expected to result in the

improvement of Rich Creek's benthic communities and to have both recreational and economical benefits for the residents of the Rich Creek watershed and the nearby community of Jodie, West Virginia. Another consideration for selecting this area of Rich Creek for mitigation is its proximity (adjacent to and in the same watershed) to the applicant's proposed mining operation. Also, the mitigation area's property owner (Imperial Colliery, Co.) owns the mining operation's property as well, and has agreed to grant permission for the use of the property as a mitigation site and to protect the mitigation area through the use of Restrictive Covenants.

The proposed mitigation site of Rich Creek, as well as other areas in the watershed, has been extensively impacted by allochthonous inputs resulting from human activities (such as the adjacent public road and historic pre-law mining). With extensive restoration and enhancement activities, the proposed mitigation area is expected to be capable of supporting a diverse aquatic community, including good sport fisheries. Qualities that make the proposed mitigation area an ideal candidate for restoration is the existing quality and quantity of water, as well as its location to adjacent areas of Rich Creek that have been previously restored. Field surveys indicate the existing impairment to Rich Creek (in the proposed mitigation area) can be attributed to significant habitat impairment associated with previous and current disturbance activities, such as timbering, pre-law mining, and the existing adjacent public road and railway.

As part of this CMP, portions of County Route 60/3 (Rich Creek Road) would be re-aligned. The road realignment is necessary in some areas to allow for the establishment of an adequate riparian cover for the restored stream (Rich Creek). Road realignment would consist of adjusting road lanes, and drainage ditches, installing sumps and culverts, establishing safety berms, and surfacing with gravel. Road realignment may necessitate localized adjustment to the existing roadway right-of-way. Design of the roadway would be in accordance with applicable West Virginia Department of Transportation - Division of Highways (DOH) design standards. Sediment control structures, placed prior to outlet culverts, would be designed and placed within the road's ditch-line. Use of these structures is expected to help reduce sediment loading in Rich Creek. Over time, it is expected these structures may develop into wetland-like characteristics that are expected to provide an additional source of aquatic habitat.

Riparian zones, where practical, would be established or restored in the floodplain between the stabilized streambank and realigned roadway along Rich Creek. The floodplain, which begins at the bankfull point extending outward from the bank, would be a maximum of 25 feet. The riparian zone may be less than 25 feet in certain areas where geologic conditions make it impractical (existing rock banks along the road or railroad right-of-way) to relocate the county road. There are also existing locations where the maximum 25 feet is inhibited by current land use, such as gas wells and the railroad. In the temporarily impacted areas, the riparian zone would be restored within the footprint of the sediment control structures as well as the associated drainage corridors.

Stream restoration activities in Rich Creek would incorporate in-stream enhancement measures to provide habitat for future aquatic diversity. Bioengineering materials would be used to construct in-stream structures. Enhancement measures would include, but not be limited to, cross vanes and placement of clean, non-toxic shot rock for development of riffle:pool complexes and meanders, placement of eddy rocks, and installation of aquatic habitat structures. Appropriate bank protection measures, including both in-stream structures such as root wads and cross vanes, and bank treatments, such as riprap and vegetation, would be employed in areas that require erosion control.

Restoration activities in the Bridge Fork watershed would incorporate some of the same stream enhancement measures, but those used would be limited to structures that would help restore proper pattern and profile in these smaller streams. It is likely in-stream structures would be limited to step-

structures or modified hooks. Boulders and other larger structures would not be utilized in the temporarily impacted stream segments. Like Rich Creek, the temporarily impacted stream channels may require placement of small root wads for bank protection. Additionally, the traditional bank treatments discussed in the preceding above may be utilized. Restoration measures are provided in **Attachment A** of this public notice.

The CMP presents a range of measures that may be utilized to enhance approximately 12,000 feet of Rich Creek where practical so as to achieve functional Rosgen type “C or E” stream (as applicable) and to restore the temporarily impacted areas in Bridge Fork to Rosgen B type streams (as applicable). One purpose for the enhancement of streams is to allow for water flow to be handled in a similar manner as an unimpacted stream and improve the stream’s ability to transport sediment through the system. Approximately 2,320 feet of stream channel (stream channel temporarily interrupted by the placement of sediment control structures) would also be restored (rehabilitated) in the proposed project.

Much of the 12,000 feet reach of Rich Creek mitigation area would be restored and/or enhanced by reconfiguring (increasing) the pool to run/riffle ratio. This would be accomplished by increasing the size of existing pools and creating new pools to interrupt the long run/riffle reaches that is occurring in the mitigation area. Another adjustment to the stream’s physical characteristic would be the creation of more meanders and bends in the flow path. This is expected to reduce the velocity of the stream and may help reduce potential flooding downstream in the event of heavy precipitation. Redirection of water flow to eliminate mid-channel bars is expected to aid in the reduction of erosion by creating a single channel for the stream to flow through rather than two parallel channels. Stream enhancements would include the elimination of major logjams and other debris blocking the stream’s channel (i.e. fallen trees), which not only aids in the improvement of the habitat for aquatic and terrestrial life, but also helps prevent impediments to stream flow. Also, the establishment of a well stratified canopy and diversity in groundcover composition, achieved by planting species conducive to the site’s environment, is expected to assist in the site’s restoration and/or enhancement.

As discussed, riparian zones on both sides of Rich Creek (within the mitigation area) would be established, restored, and/or enhanced, where practicable and/or feasible. The riparian zones would be restored in a manner so as to mimic conditions similar to Rosgen “C or E” type stream (as practicable). Riparian vegetation would consist of native shrub and tree species including a minimum of 60 percent woody tree stems and no more than 40 percent soft mast producers (such as ash, maple, and sycamore) planted in a random/scattered pattern. The planting density outlined below is a suggested spacing of individual plants within a random/scattered pattern and would provide for an overall vegetation density of 30 to 100 trees per acre and 20 to 50 shrubs per acre. Existing plant material would determine the density of the revegetation plans. Revegetation would be performed so as to encourage succession of at least 80 percent of the planted native species. Invasive species would not be utilized in the revegetation efforts.

Approximately 13.77 acres of protected riparian zones would be restored, established, and/or enhanced along Rich Creek and additional acreage would be established along the temporarily impacted stream segments to be restored.

The applicant has developed an accounting plan, which requires initiation of the implementation mitigation plan in order to develop credits before or concurrent with stream impacts. This credit/debit accounting plan is summarized in the table below.

Phases – Filling Mitigation	Ephemeral	Intermittent	Perennial Restoration	Balance
	Debit	Debit	Credit	
1 – Currycamp Fork-200100641 Mitigation Credit			782	782
2 – Mitigation Proposal			12000	12782
3 – Fill Activity	140	2860		9782
4 – Fill Activity		2700		7082
5 – Fill Activity		3040		4042
6 – Fill Activity		3300		260
7 – Fill Activity	90	2180		-2010
9 – Mitigation-Temporal Loss Credit		232	2320	542

The goal of this mitigation proposal is to establish, restore and/or enhance the values of each of these habitat parameters, in order to promote a more robust sport fisheries and a general improvement in the area's existing benthic conditions.

WATER QUALITY CERTIFICATION: A Section 401 Water Quality Certification is required for this project. It is the applicant's responsibility to obtain certification from the West Virginia Department of Environmental Protection.

HISTORIC AND CULTURAL RESOURCES: The National Register of Historic Places has been consulted and it has been determined there are no properties currently listed on the register that are in the area affected by the project. A copy of this public notice will be sent to the State Historic Preservation Office for their review. Comments concerning archeological sensitivity of a project area should be based upon collected data.

ENDANGERED/THREATENED SPECIES REVIEW: The Huntington District has consulted the most recently available information and has determined the project is not likely to affect the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat of such species, which has been determined to be critical. This public notice serves as a request to the U.S. Fish and Wildlife Service for any additional information they may have on whether any listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1972 (as amended).

PUBLIC INTEREST REVIEW AND COMMENT: Any person who has an interest that may be adversely affected by the issuance of a permit may request a public hearing. The request must be submitted in writing to the District Engineer on or before the expiration date of this notice and must clearly set forth the interest which may be adversely affected and the manner in which the interest may be adversely affected by the activity.

Interested parties are invited to state any objections they may have to the proposed work. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered including the cumulative effects thereof; of those are

conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act. Written statements on these factors received in this office on or before the expiration date of this public notice will become a part of the record and will be considered in the final determination. A permit will be granted unless its issuance is found to be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

If you have any questions concerning this public notice, please call Mrs. Teresa Spagna of the South Regulatory Section at 304-399-5710.


Ginger Mullins, Chief
Regulatory Branch

(W)

TABLE A

Stream Measurements

Impact Summary for Bridge Fork West										
Stream Length Impacted					Volume of US waters Filled					Surface Water Impacted (Acres)
Fill	Intermittent (ft)	Ephemeral (ft)	Total (ft)	Intermittent (ft ³)	Ephemeral (ft ³)	Total (ft ³)	Acres			
A	2070	140	2210	4992.65	59.80	5052.45	0.35			
B	2280	0	2280	14932.48	0	14932.48	0.39			
C	2590	0	2590	11550.40	0	11550.40	0.38			
D	2900	0	2900	7298.75	0	7298.75	0.43			
E	1720	90	1810	4329.10	8.10	4337.20	0.21			
Total	11560	230	11790	43103.38	67.90	43171.28	1.78			
Pond										
Pond 1	590	0	590				0.10			
Pond 2	420	0	420				0.07			
Pond 3	450	0	450				0.07			
Pond 4	400	0	400				0.08			
Pond 5	460	0	460				0.08			
Total	2320	0	2320				0.40			
GRAND TOTAL	13880	230	14110				2.18			

Table B
Contributing Drainage Areas

Structure Identification	Contributing Drainage Area Measured at the toe of the Proposed Valley Fill (acres)
Valley Fill A	155
Valley Fill B	172
Valley Fill C	205
Valley Fill D	213
Valley Fill E	142

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B	2280	0	2280	14932.48	0	14932.48	0.39		
C	2590	0	2590	11550.40	0	11550.40	0.38		
D	2900	0	2900	7298.75	0	7298.75	0.43		
E	1720	90	1810	4329.10	8.10	4337.20	0.21		
Total	11560	230	11790	43103.38	67.90	43171.28	1.78		
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Total	2320	0	2320					0.40	
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Table B

Contributing Drainage Areas

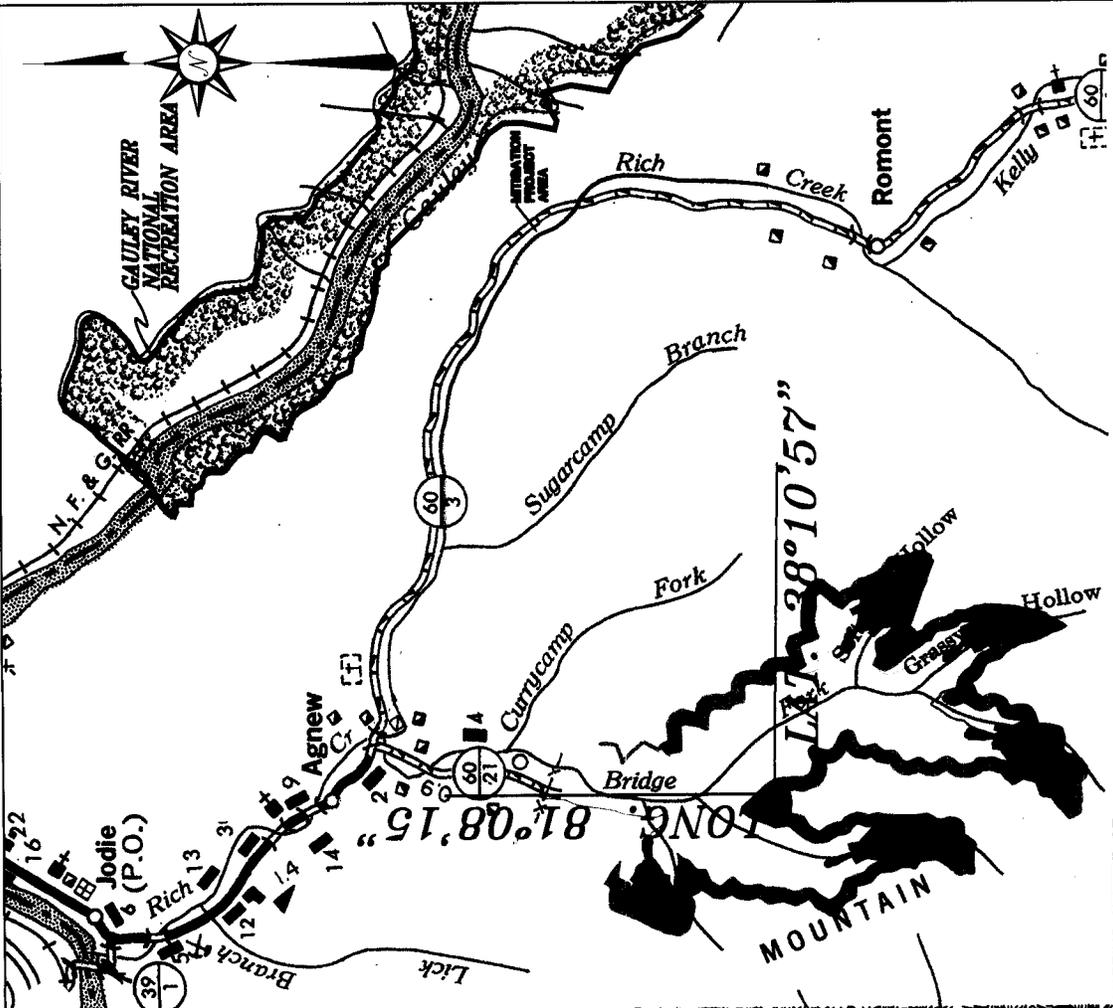
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USGS QUADRANGLE MAP

SCALE: 1" = 4000'

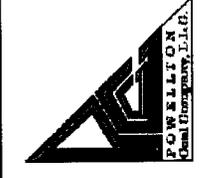
MAPPING REFERENCE:
USGS 7.5 MINUTE QUADRANGLE
GAULEY BRIDGE AND ANSTED



HIGHWAY MAP

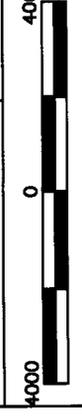
SCALE: 1" = 1 MILE

MAPPING REFERENCE:
FAYETTE COUNTY
WEST VIRGINIA
GENERAL HIGHWAY MAP



POWELLTON COAL COMPANY, LLC
BRIDGE FORK WEST MITIGATION
VICINITY MAP

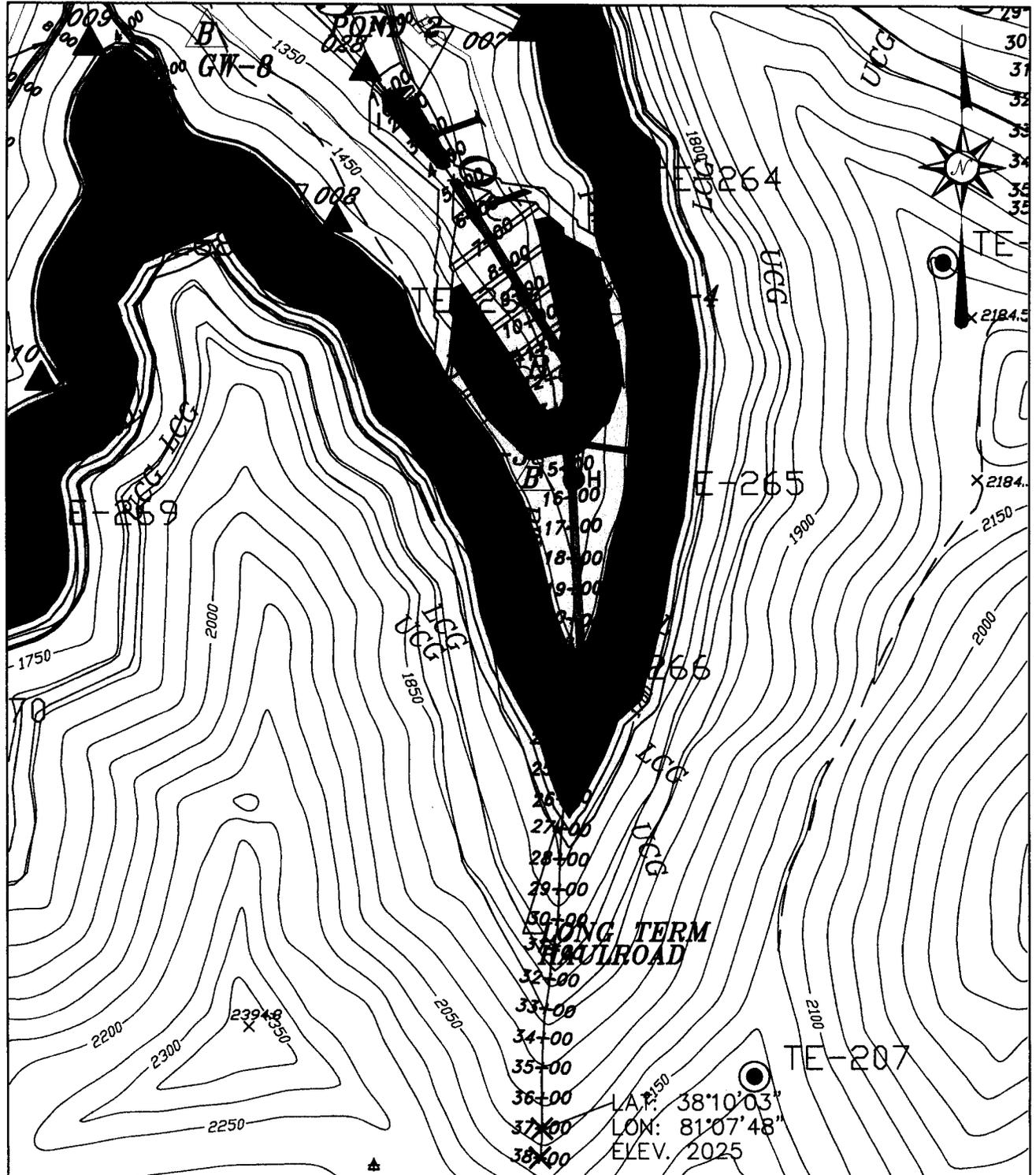
Powellton Coal Co., LLC.
P.O. Box 158
Bickmore, West Virginia 25019
Office: (304) 872-2266 Fax (304) 587-2469



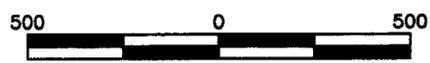
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Scale: As Noted Drawn By: JBM Date: 6-21-04 Sheet - of -

CAD FILE: \Mitigation\Bridge_Fork_West_Pond_Map.Dwg 6-21-04

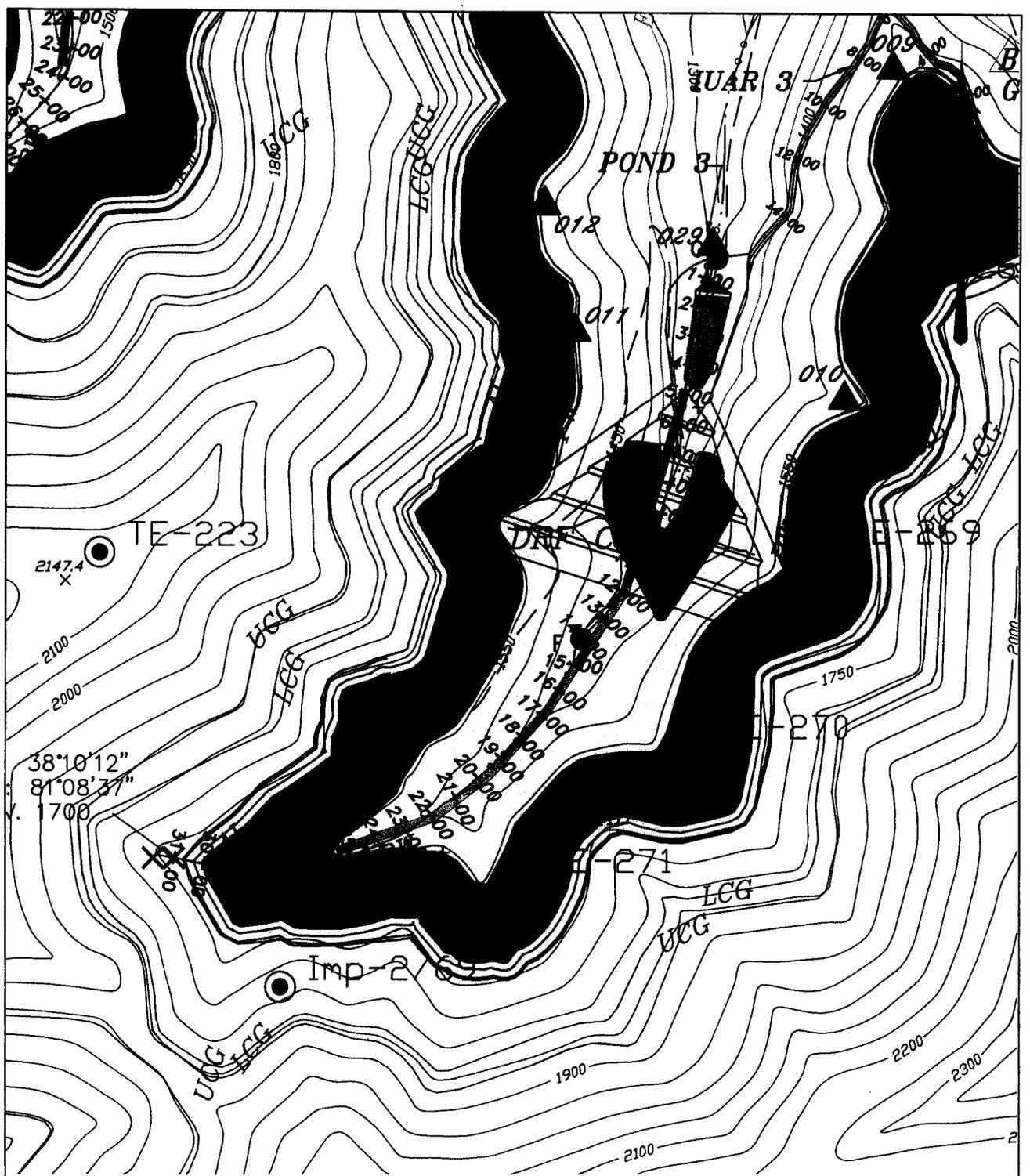


DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.

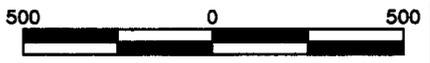


POWELLTON COAL COMPNY, LLC BRIDGE FORK WEST STREAM DELINEATION VALLEY FILL DRF B	DWN. <u>JBM</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	APPD. <u>MI</u>	
	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO. <u>3cft1</u>  REV

CAD FILE: \Mitigation\Bridge Fork West Pond Map.Dwg 6-21-04

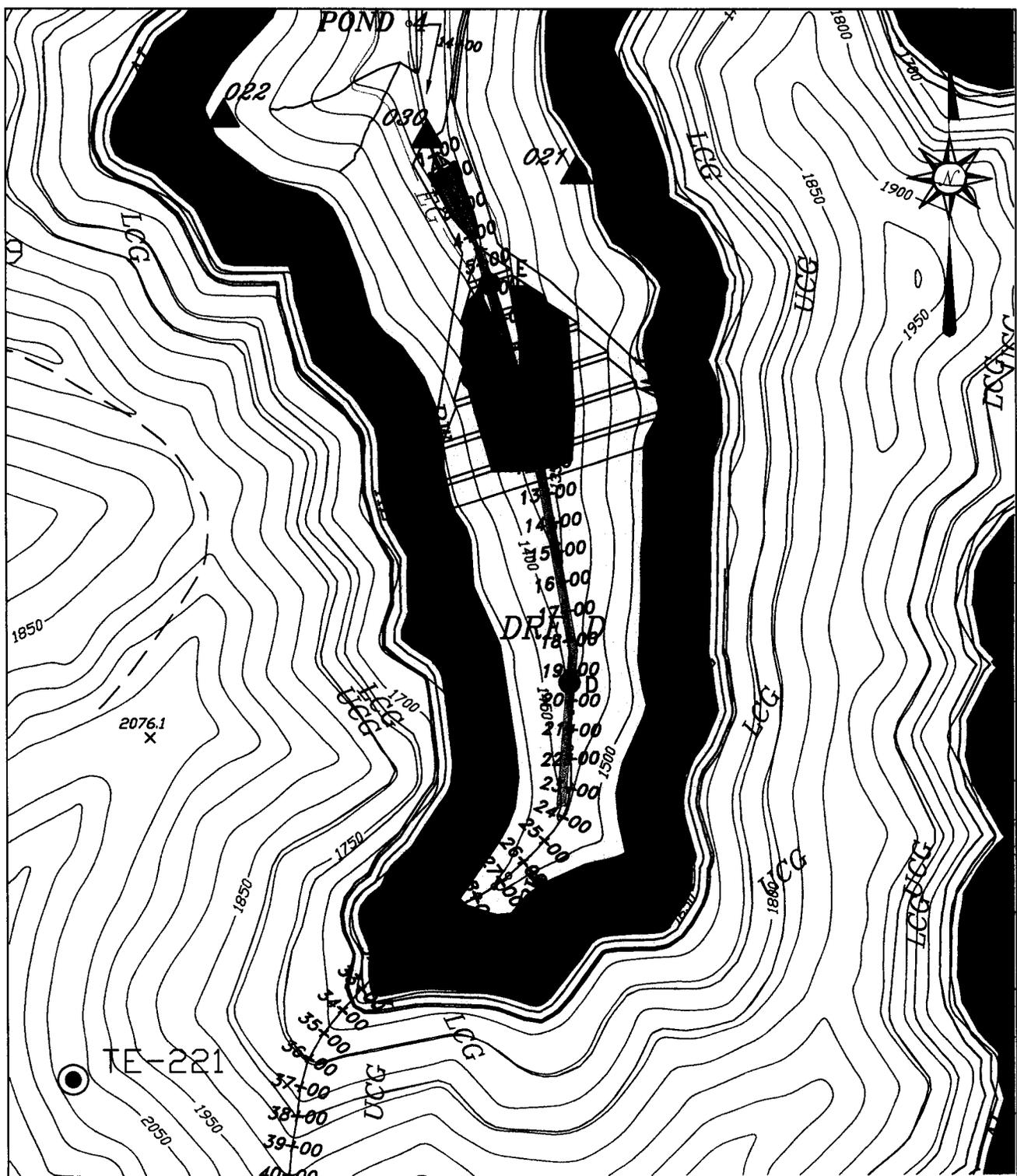


DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.

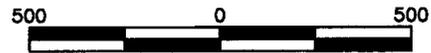


POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST STREAM DELINEATION VALLEY FILL DRF C	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO. 4 of 11

CAD FILE: \Mitigation\Bridge Fork West Pond_Map.Dwg 6-21-04



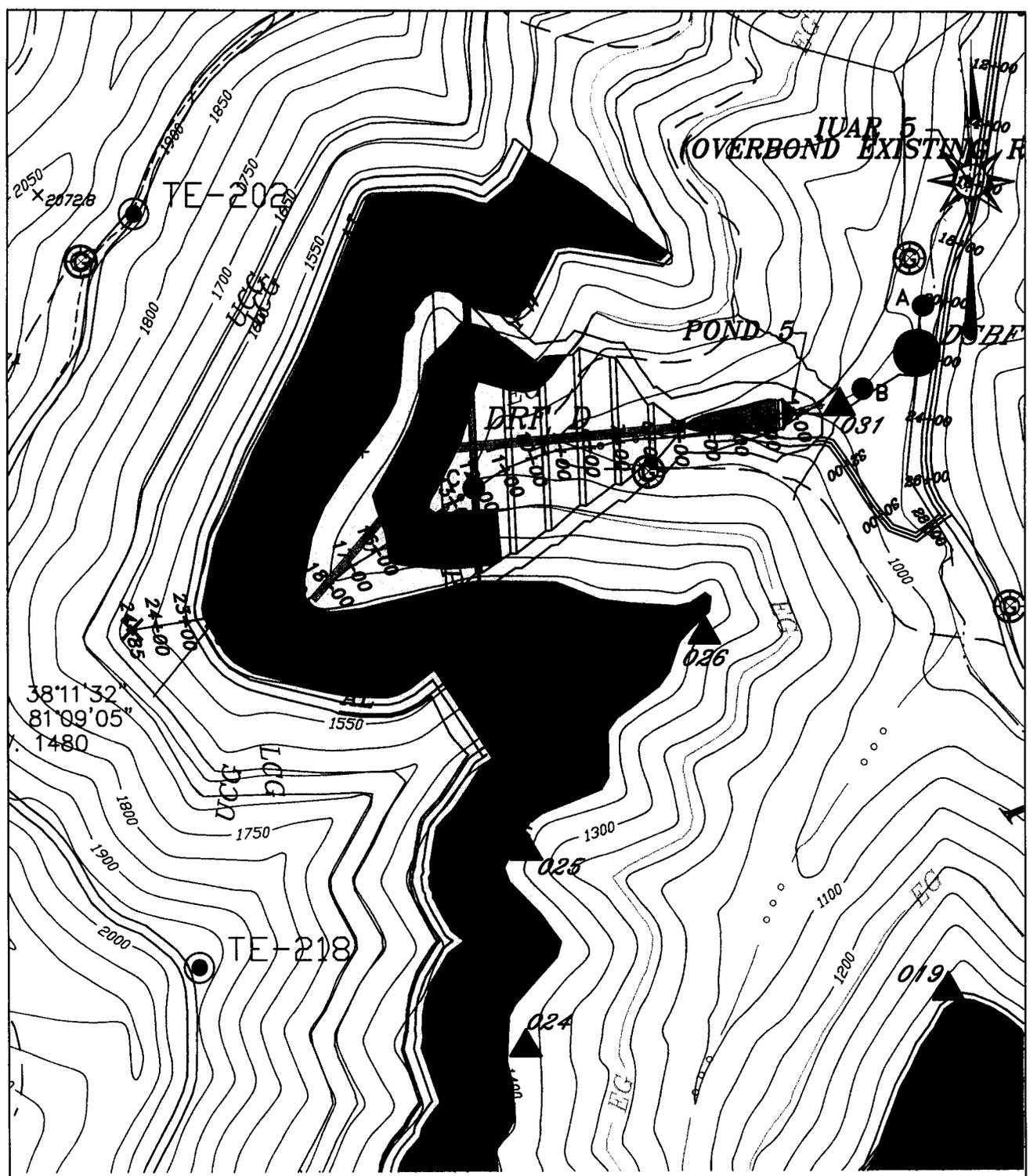
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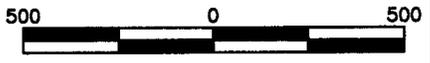
POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST STREAM DELINEATION VALLEY FILL DFR D	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: 1" = 500'	DATE 6-21-04
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO. 5.F11

REV

CAD FILE: \Mitigation\Bridge Fork West Map.Dwg 6-21-04

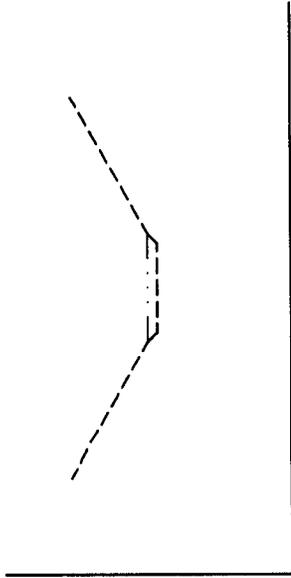


DRAWING REFERENCE:
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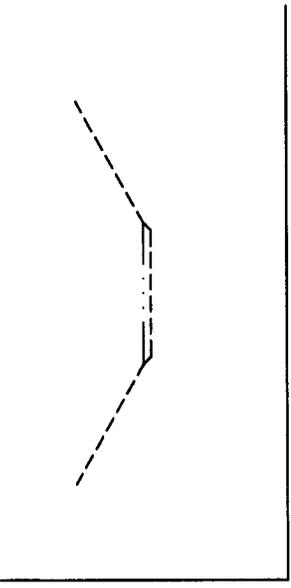


POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST STREAM DELINEATION VALLEY FILL DRF E	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powelton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO. <u>6-21-04</u>

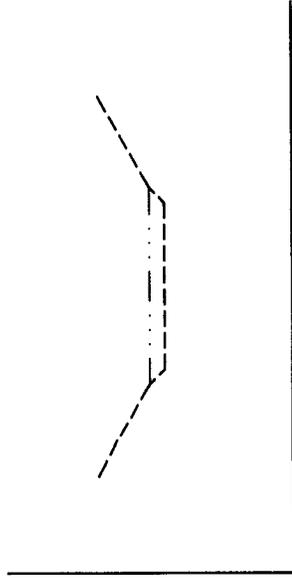
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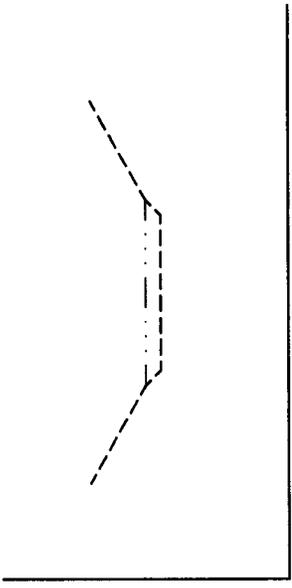
STA. 2+00



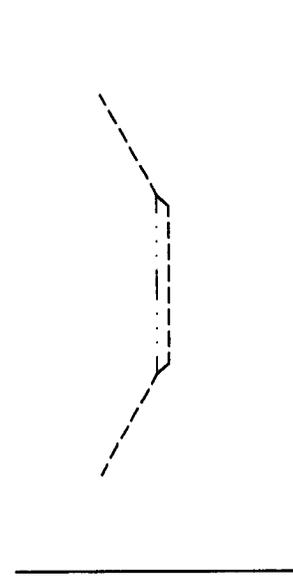
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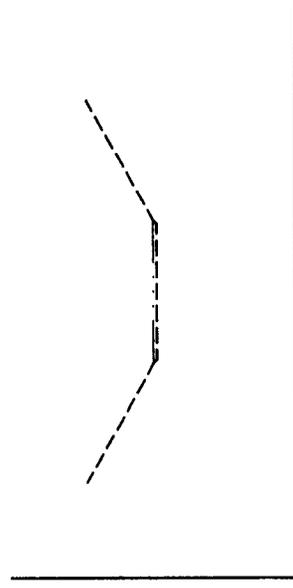
STA. 1+00



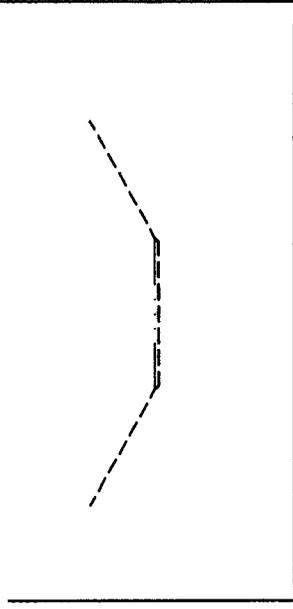
STA. 4+00



STA. 0+40 (Toe Of Pond)

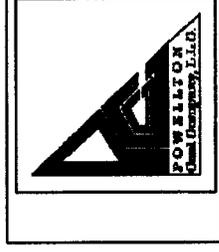


STA. 3+00



STA. 6+00

STA. 6+30 (Toe Of Fill)



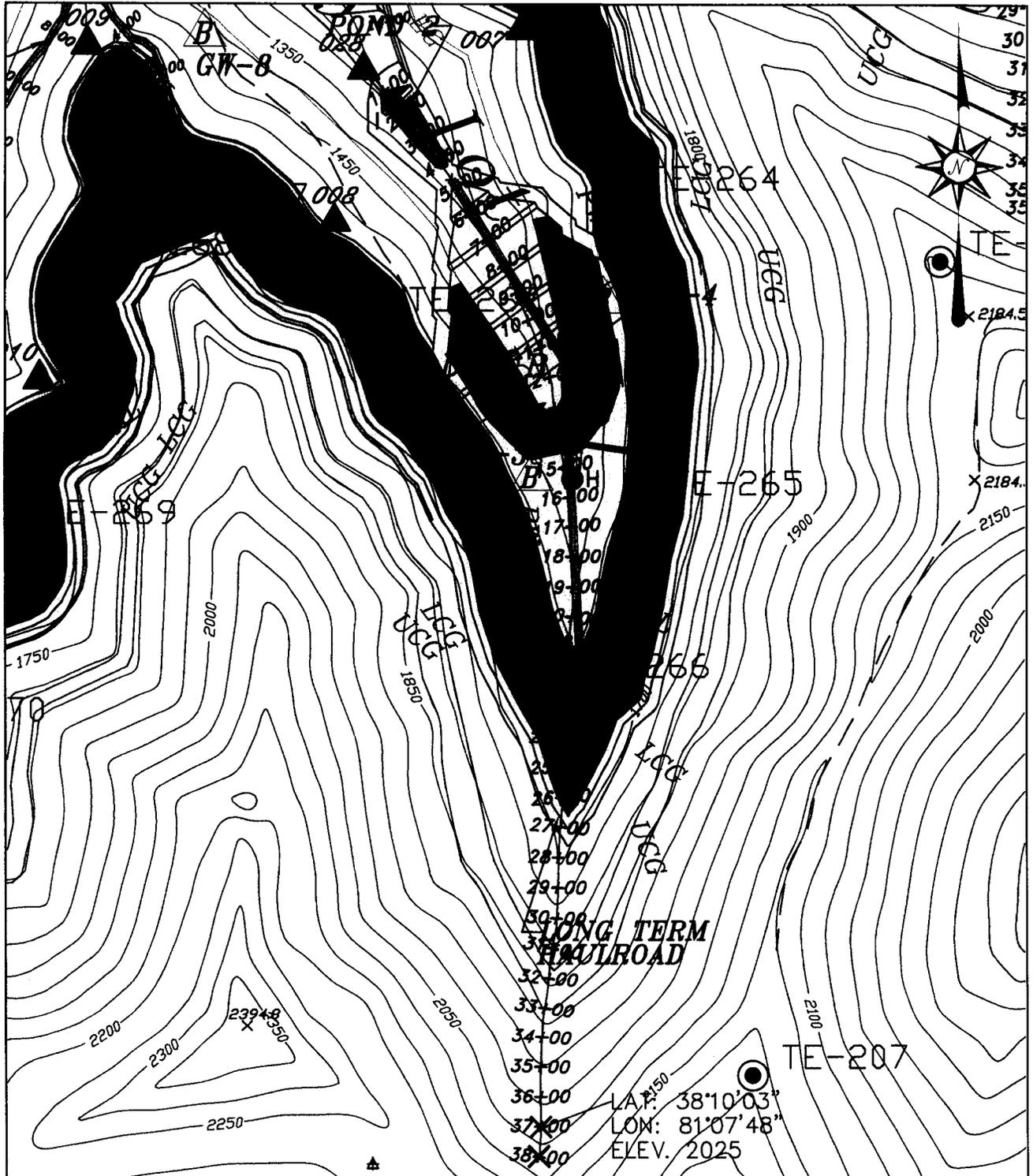
POND 1
BRIDGEFORK SURFACE MINE NO. 1
PRE-MINING CROSS SECTIONS

Powellton Coal Co., LLC.
P.O. Box 158
Bickmore, West Virginia 25019
Office: (304) 872-2266 Fax (304) 587-2469

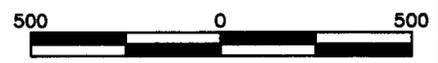


Scale 1" = 10'
Sheet 6-21-04
Drawn By: JHM
Date: 6-21-04
REV: A
IMPR-2004-

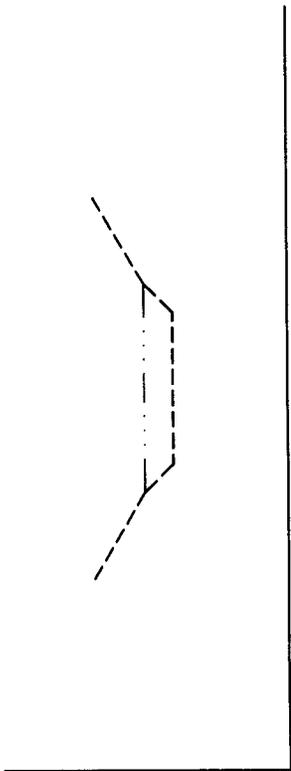
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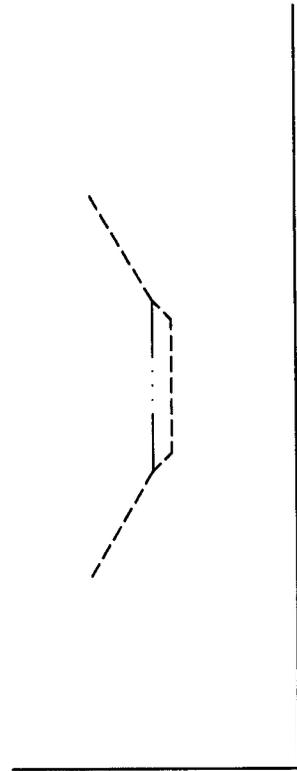
DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.



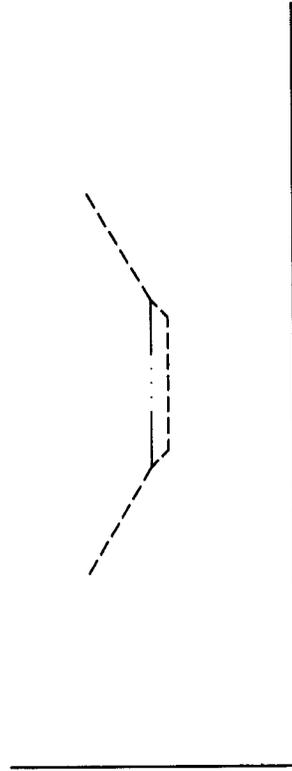
POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION POND 2	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO. <u>9.14</u>



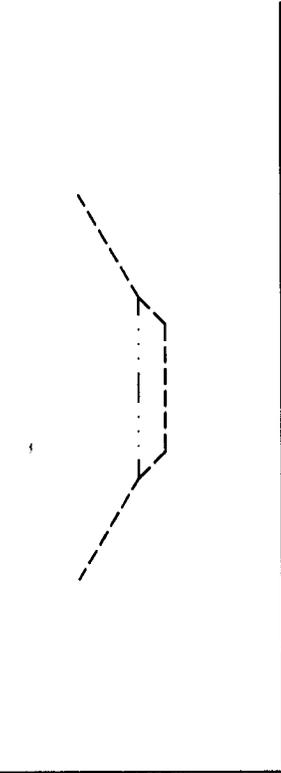
STA. 2+00



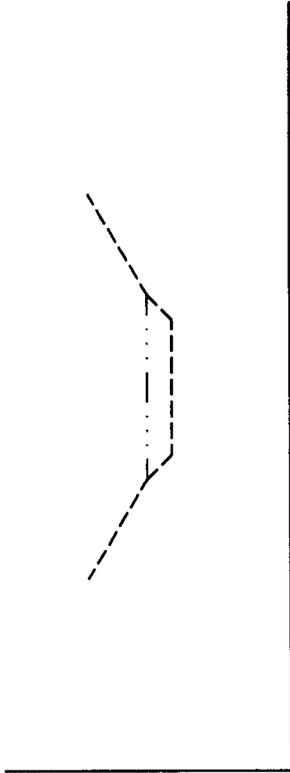
STA. 1+00



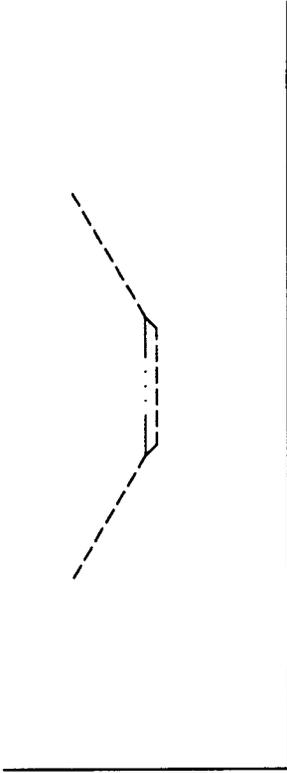
STA. 0+50 (Toe Of Pond)



STA. 4+70 (Toe Of Fill)



STA. 4+00



STA. 3+00



POND 2

BRIDGEFORK SURFACE MINE NO. 1
PRE-MINING CROSS SECTIONS

Powellton Coal Co., LLC.

P.O. Box 158

Bickmore, West Virginia 25019

Office: (304) 872-2266 Fax (304) 587-2469

Sheet No.

A

10

0

10



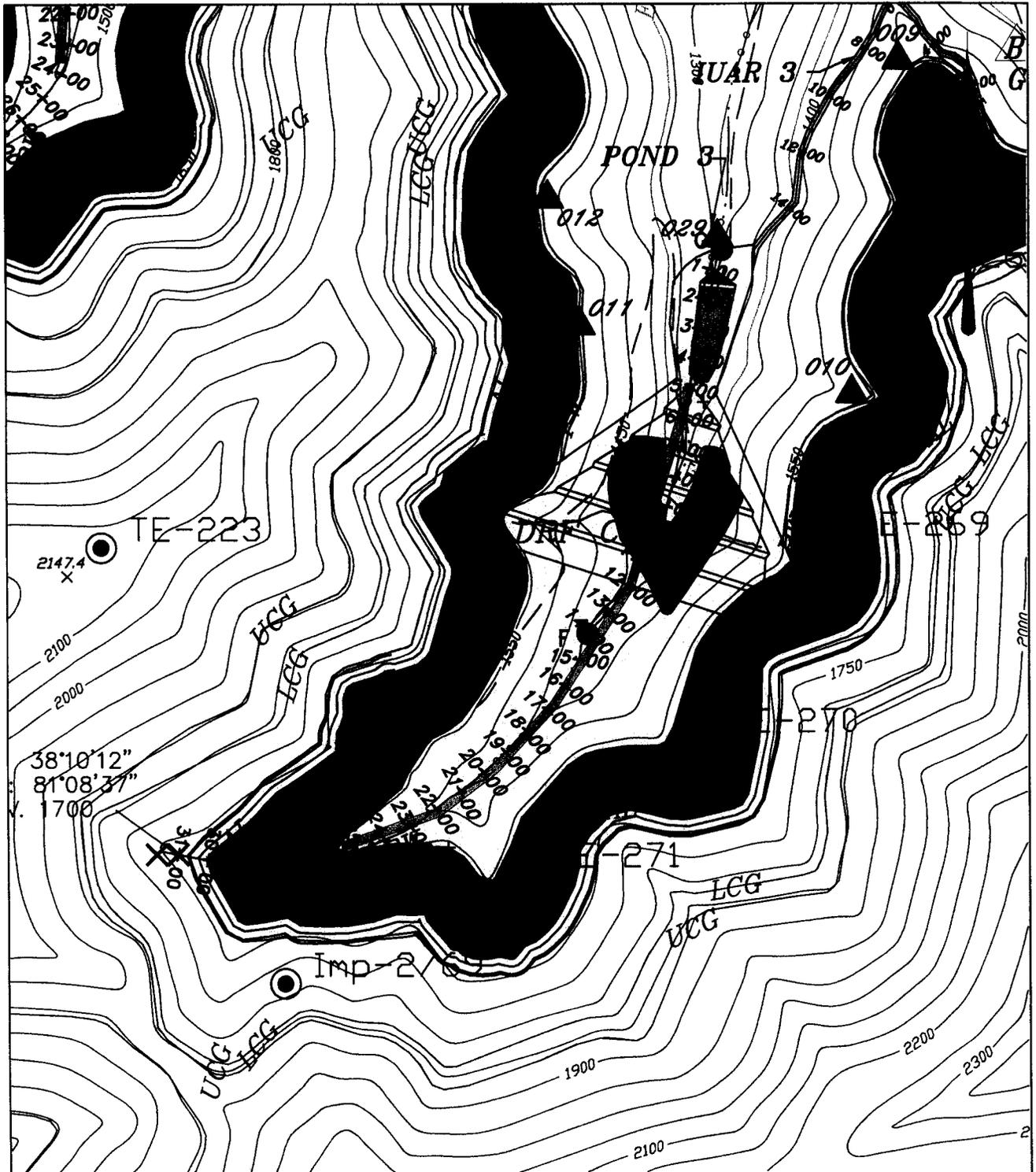
Drawn By: JSM

Scale 1" = 10'

Sheet 6-21-04

of 17

CAD FILE: \Mitigation\Bridge Fork West Pond Map.Dwg 6-21-04



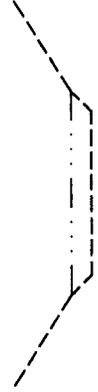
DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.



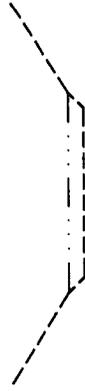
POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION POND 3	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO. 11 of 14



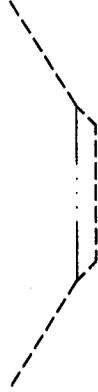
STA. 2+00



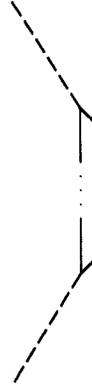
STA. 4+80 (Toe Of Fill)



STA. 1+00



STA. 4+00



STA. 0+30 (Toe Of Pond)



STA. 3+00



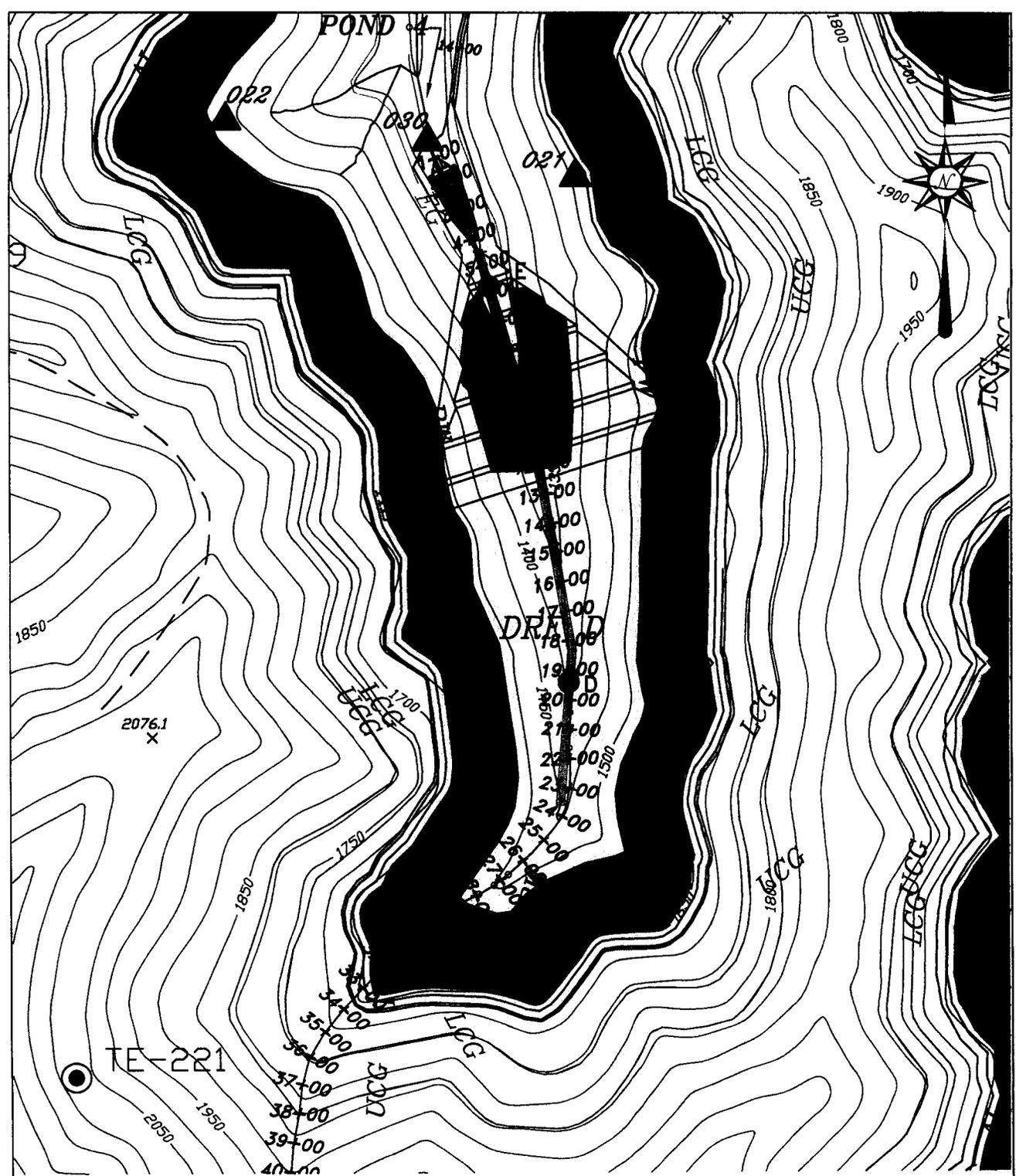
POND 3
BRIDGEFORK SURFACE MINE NO. 1
PRE-MINING CROSS SECTIONS

Powellton Coal Co., LLC.
P.O. Box 158
Bickmore, West Virginia 25019
Office: (304) 872-2266 Fax (304) 587-2469

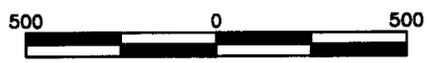


Scale	1" = 10'	Drawn By	JEM	Sheet	- of -
DWG NO.	A	IMPR-2004-			
REV					

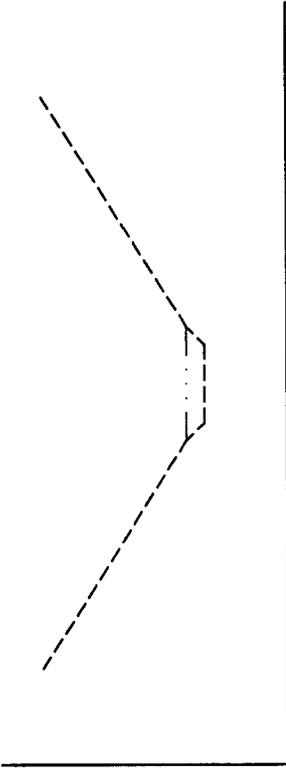
CAD FILE: \Mitigation\Bridge Fork West Pond Mgp.Dwg 6-21-04



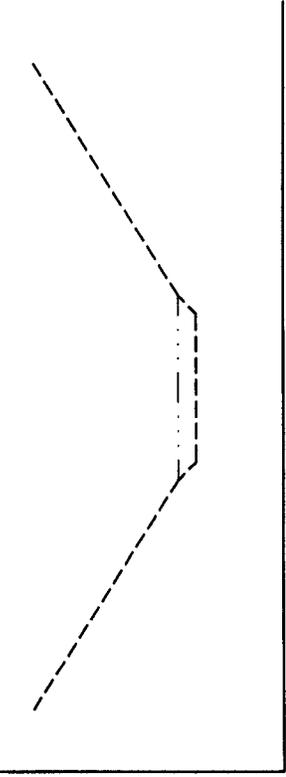
DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.



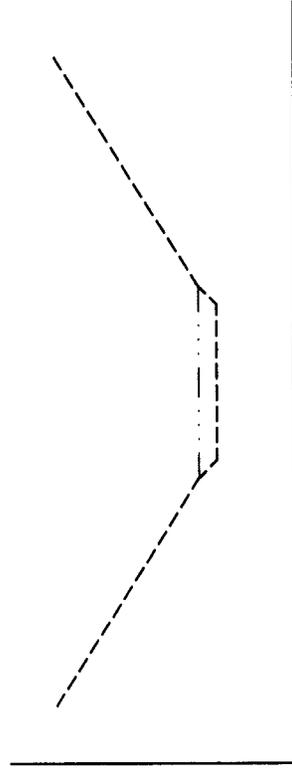
POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION POND 4	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO. 13714 



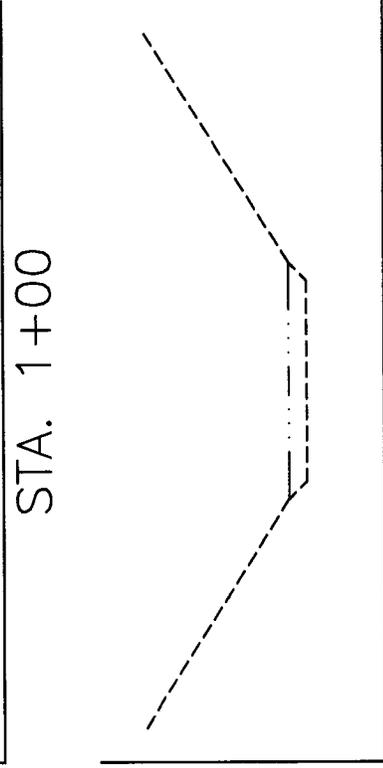
STA. 0+50 (Toe Of Pond)



STA. 1+00



STA. 2+00



STA. 3+00



STA. 4+00



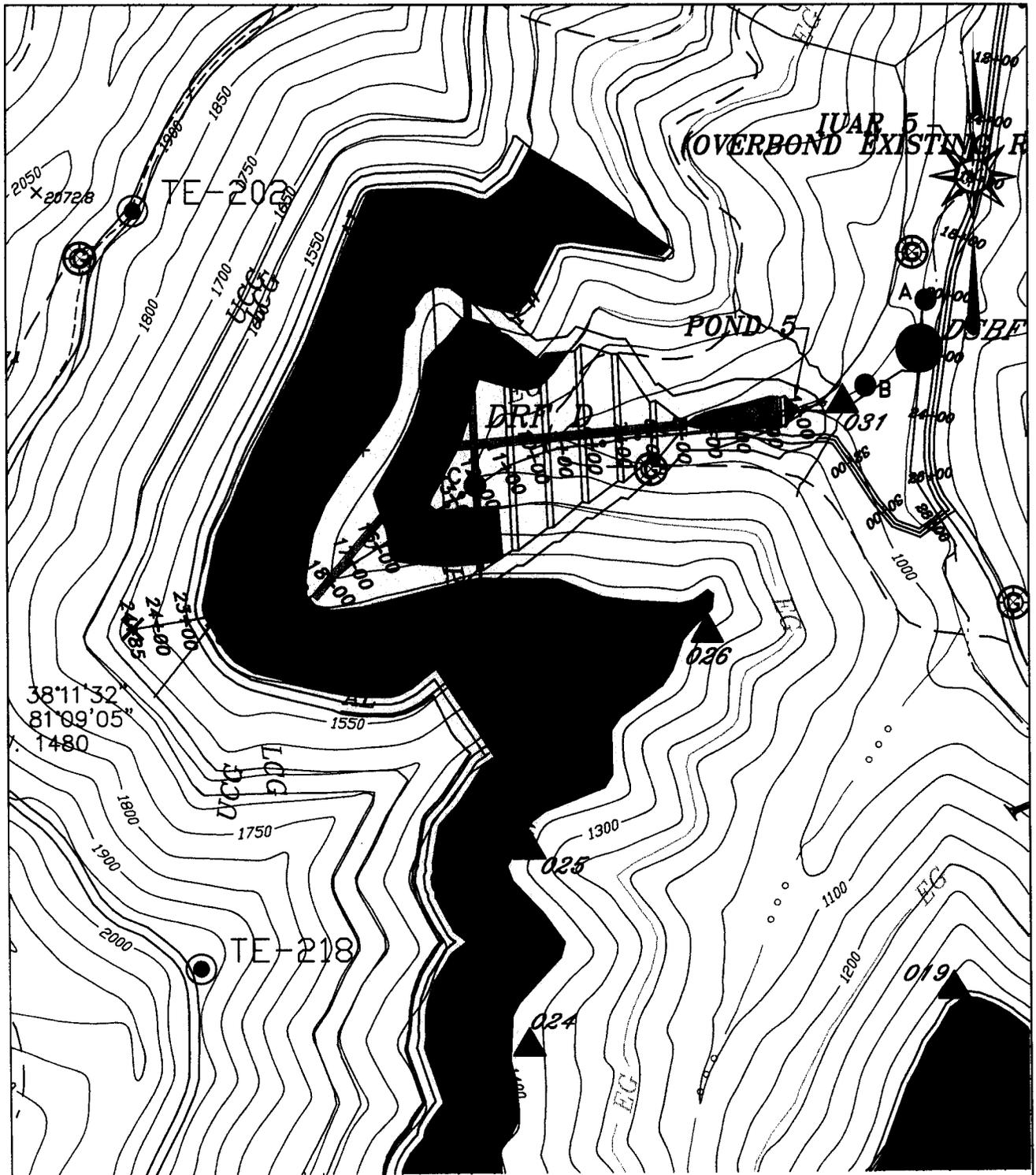
POND 4
 BRIDGEFORK SURFACE MINE NO. 1
 PRE-MINING CROSS SECTIONS

Powellton Coal Co., LLC.
 P.O. Box 158
 Bickmore, West Virginia 25019
 Office: (304) 872-2266 Fax (304) 587-2469



Scale	1" = 10'
Drawn By	JSM
Date	6-21-04
Sheet	1 of 17

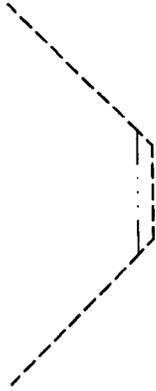
CAD FILE: \Mitigation\Bridge Fork West Map.Dwg 6-21-04



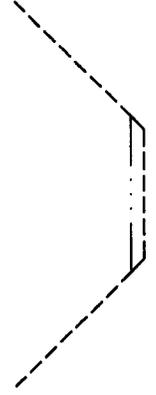
DRAWING REFERENCE:
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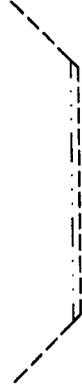
POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION POND 5	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO. 157  <u>TREV</u>



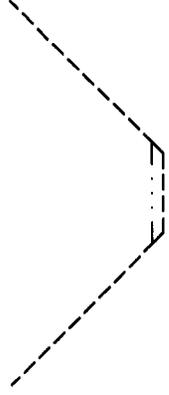
STA. 2+00



STA. 4+50 (Toe Of Fill)



STA. 1+00



STA. 4+00



STA. 0+20 (Toe Of Pond)



STA. 3+00



POND 5
BRIDGEFORK SURFACE MINE NO. 1
PRE-MINING CROSS SECTIONS

Powellton Coal Co., LLC.
P.O. Box 158
Bickmore, West Virginia 25019
Office: (304) 872-2266 Fax (304) 587-2469

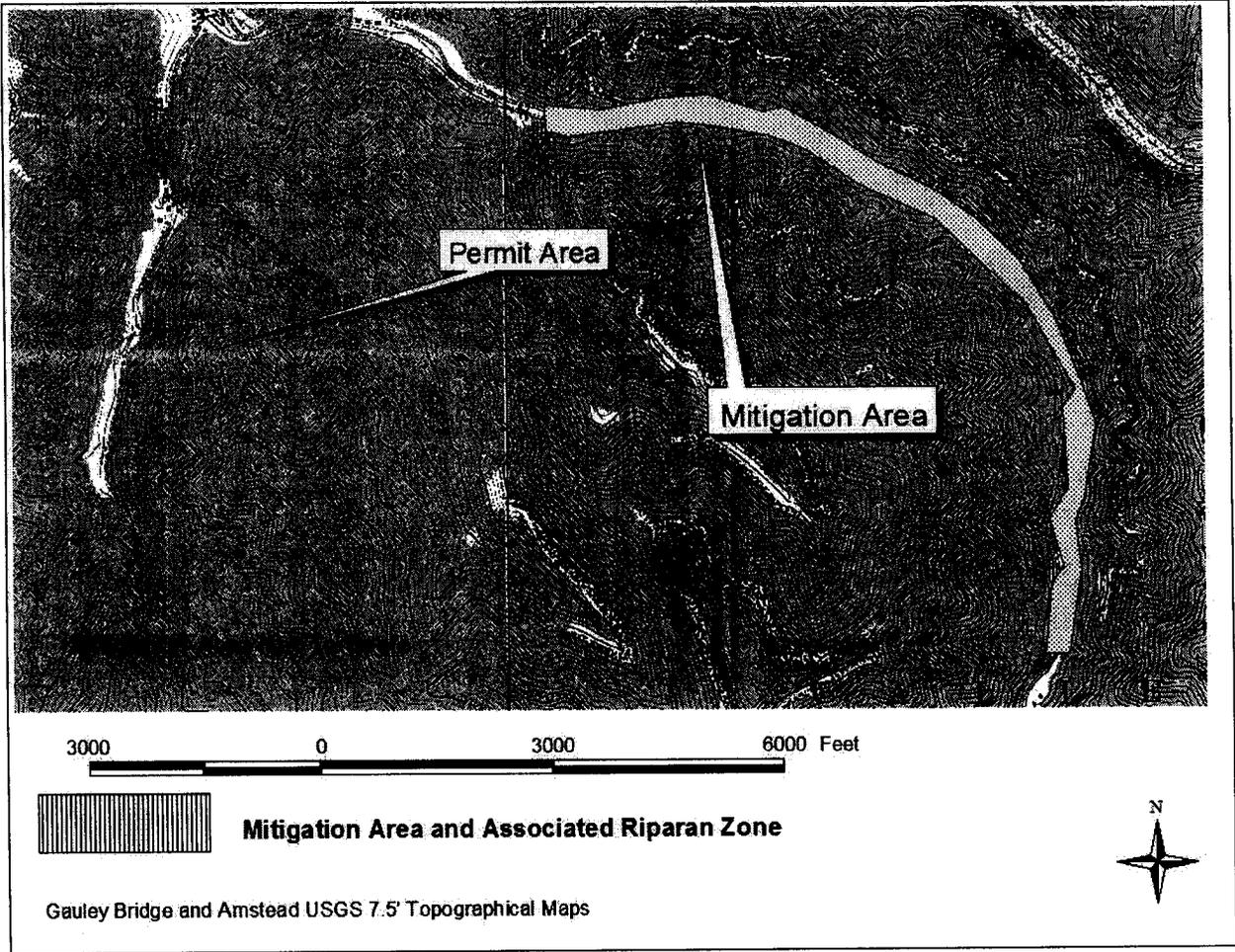


Scale	1" = 10'
Drawn By	JBM
Date	6-21-04
Sheet	17 of 17
REV	
NO.	A
DESCRIPTION	IMPR-2004-

16 of 17

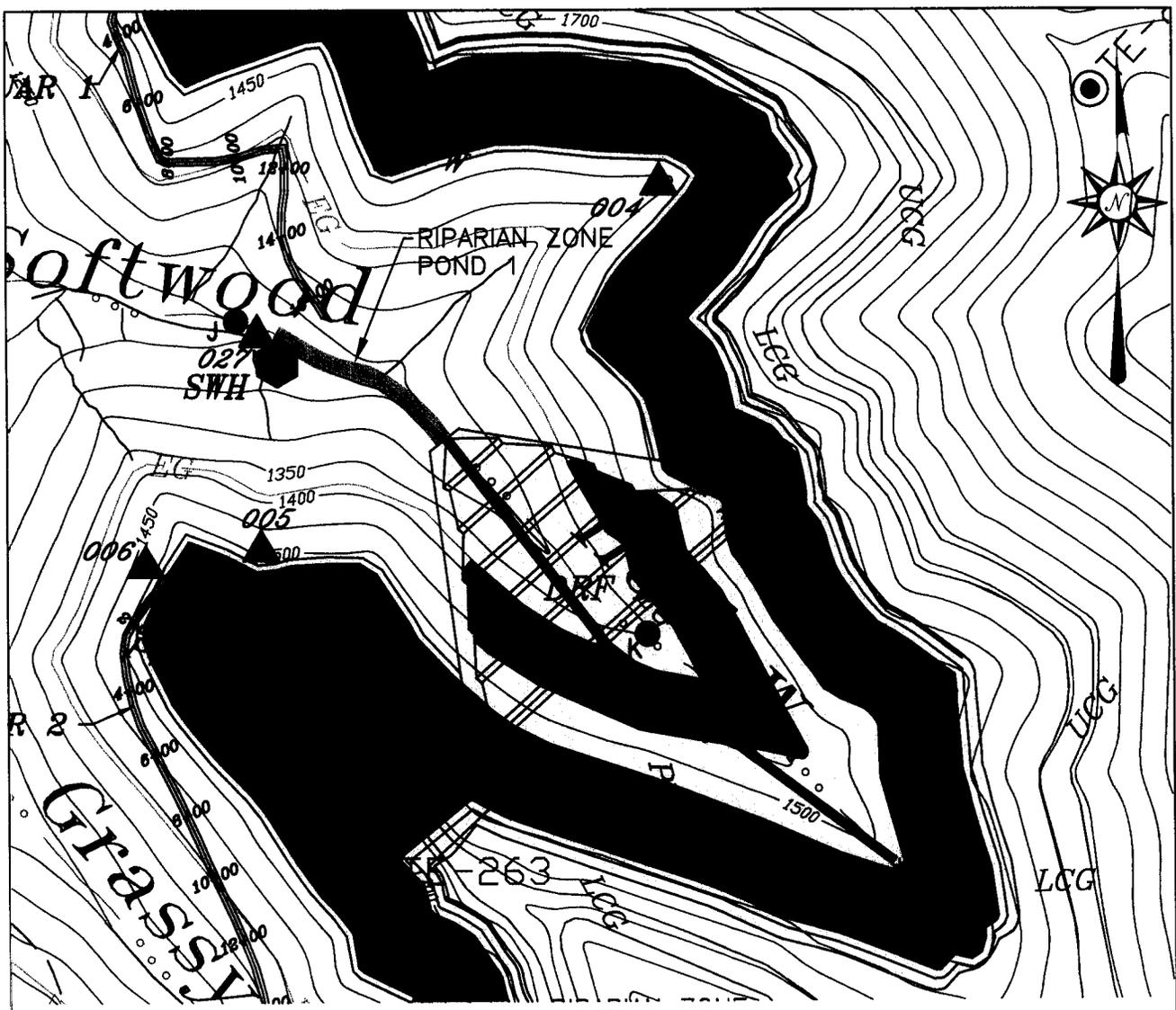
Drawing 17

Mitigation Area



Attachment A

CAD FILE: \Mitigation\Bridge Fork West Pond Map.Dwg 6-21-04

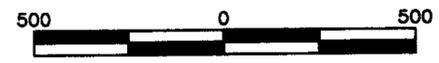


LEGEND

- | | | | |
|---|---------------------------|---|--|
|  | TEMPORARY IMPACTED AREA | I | VEGETATIVE GEOGRIDS |
| A | RIPARIAN PLANTING | J | BOULDER DOUBLE TERRACE WITH VEGETATION |
| B | JOINT PLANTINGS | K | ROOTWAD |
| C | DORMAT POST PLANTING | L | STEP STRUCTURE |
| D | BANK SHAPING AND PLANTING | | |
| E | BRANCH PACKING | | |
| F | BRUSH MATTRESSES | | |
| G | LIVE STAKES | | |
| H | LIVE FASCINES | | |

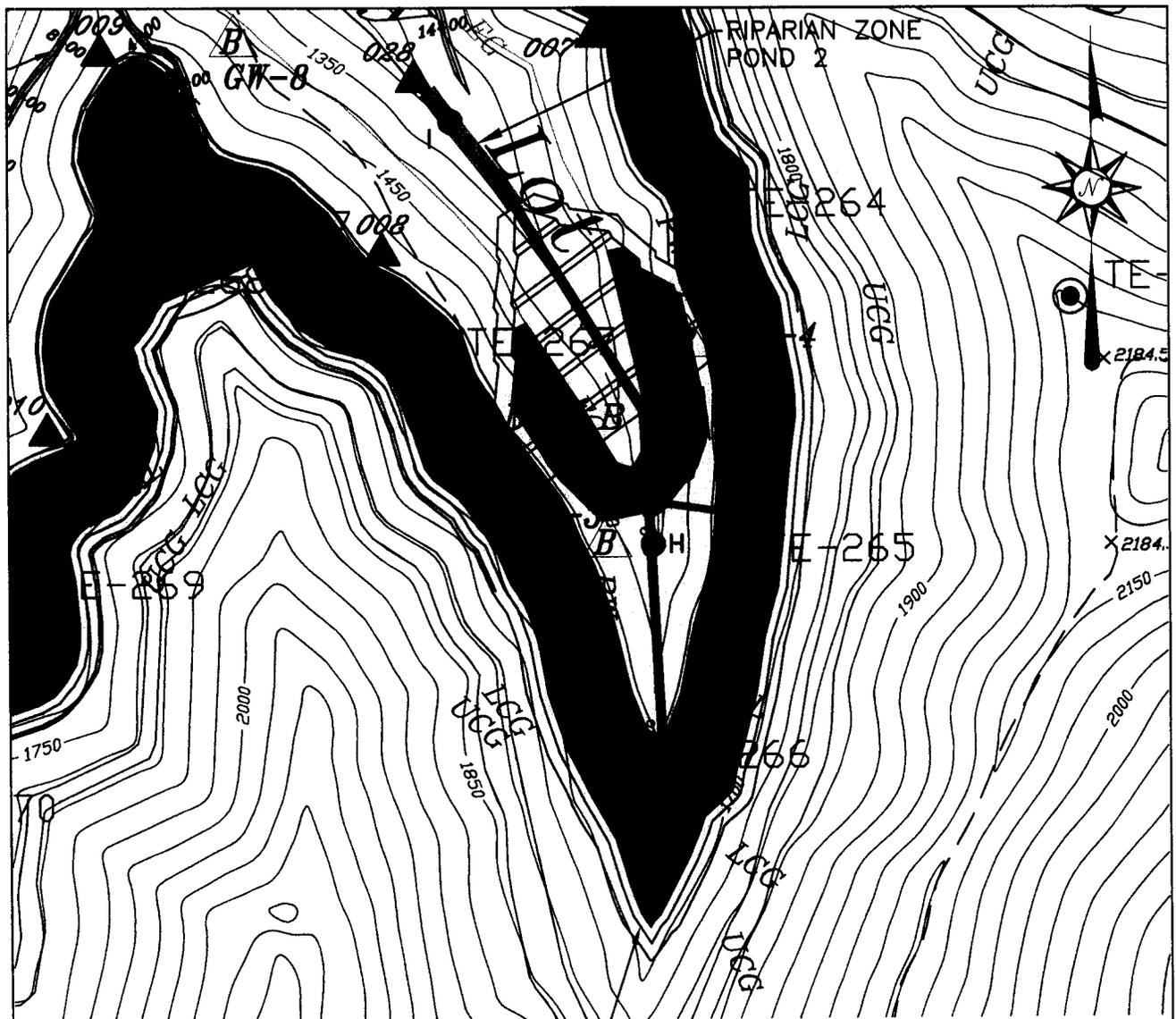
NOTE: RIPARIAN ZONE AND STRUCTURE PLACEMENT WILL BE ADJUSTED BASED ON STREAM CONDITIONS.

DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.



POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION TEMPORARY MITIGATION AND RIPARIAN ZONES TEMPORARY IMPACT AT POND 1	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO.

CAD FILE: \Mitigation\Bridge_Fork_West_Pond_Map.Dwg 6-21-04

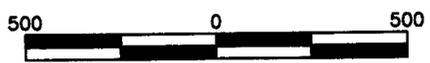


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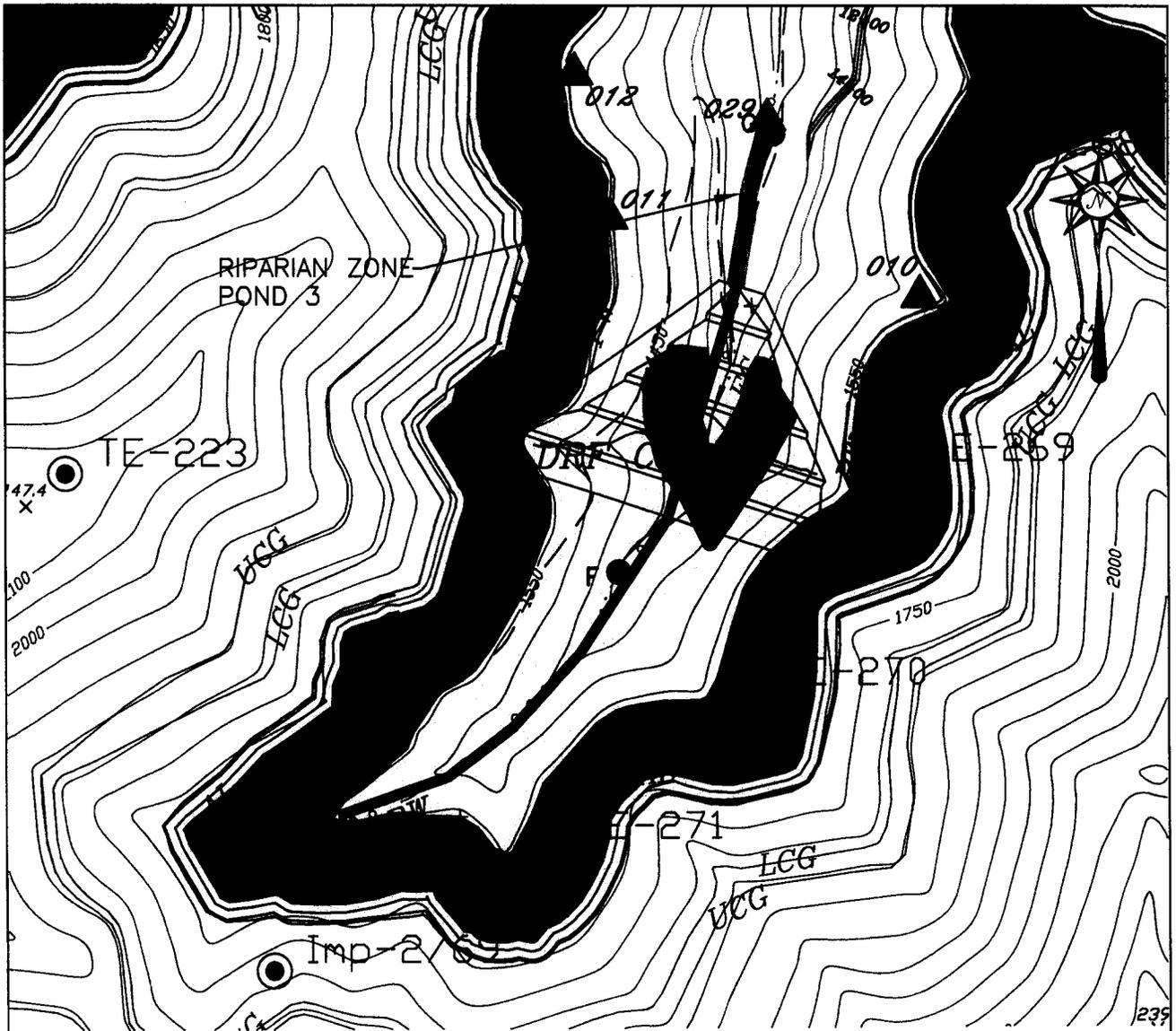
- | | | | |
|---|---------------------------|---|--|
|  | TEMPORARY IMPACTED AREA | I | VEGETATIVE GEOGRIDS |
| A | RIPARIAN PLANTING | J | BOULDER DOUBLE TERRACE WITH VEGETATION |
| B | JOINT PLANTINGS | K | ROOTWAD |
| C | DORMAT POST PLANTING | L | STEP STRUCTURE |
| D | BANK SHAPING AND PLANTING | | |
| E | BRANCH PACKING | | |
| F | BRUSH MATTRESSES | | |
| G | LIVE STAKES | | |
| H | LIVE FASCINES | | |

NOTE: RIPARIAN ZONE AND STRUCTURE PLACEMENT WILL BE ADJUSTED BASED ON STREAM CONDITIONS.

DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.



POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION TEMPORARY MITIGATION AND RIPARIAN ZONES TEMPORARY IMPACT AT POND 2	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO.



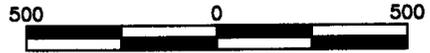
LEGEND

- | | | | |
|---|---------------------------|---|--|
|  | TEMPORARY IMPACTED AREA | I | VEGETATIVE GEOGRIDS |
| A | RIPARIAN PLANTING | J | BOULDER DOUBLE TERRACE WITH VEGETATION |
| B | JOINT PLANTINGS | K | ROOTWAD |
| C | DORMAT POST PLANTING | L | STEP STRUCTURE |
| D | BANK SHAPING AND PLANTING | | |
| E | BRANCH PACKING | | |
| F | BRUSH MATTRESSES | | |
| G | LIVE STAKES | | |
| H | LIVE FASCINES | | |

NOTE: RIPARIAN ZONE AND STRUCTURE PLACEMENT WILL BE ADJUSTED BASED ON STREAM CONDITIONS.

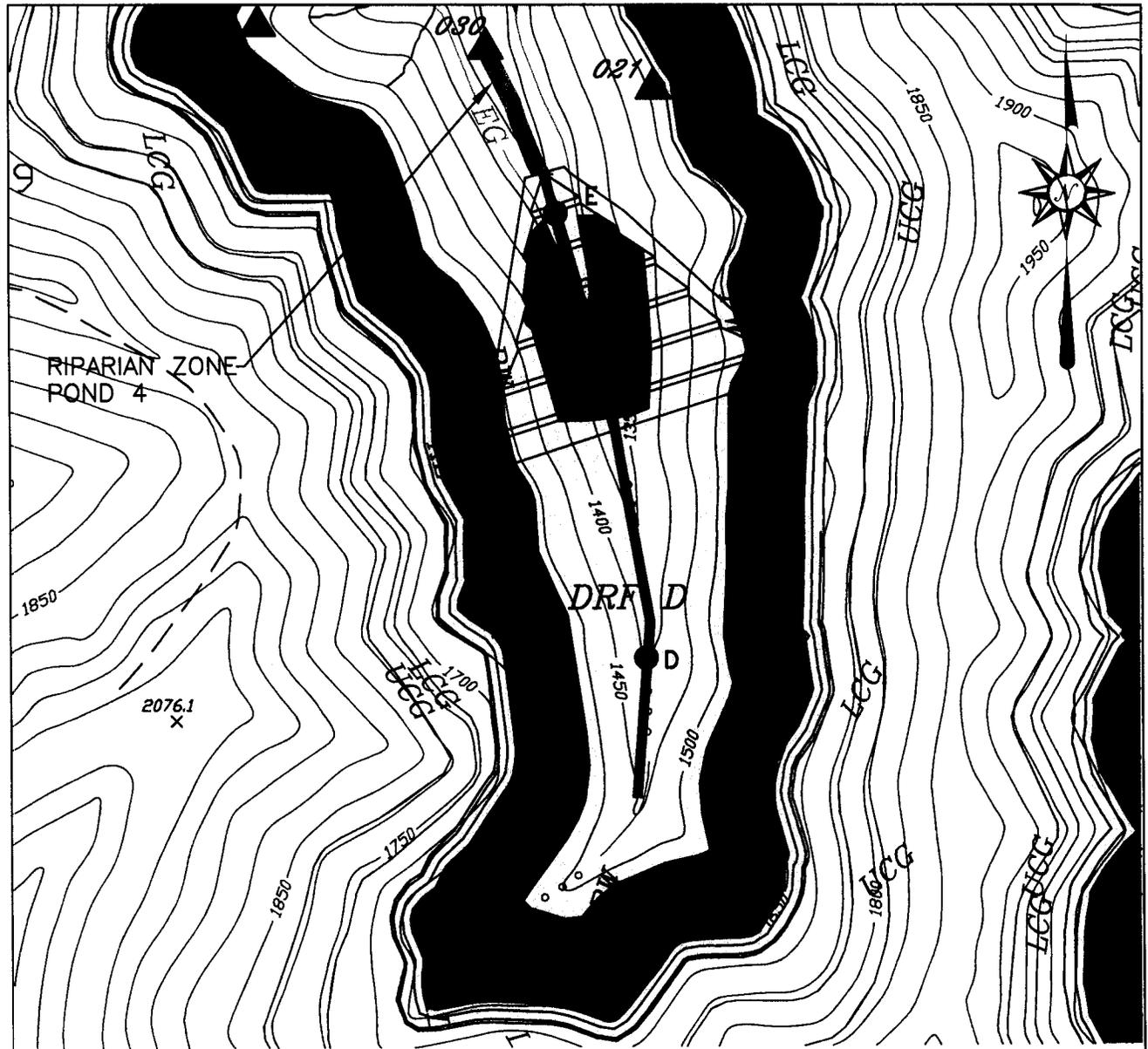
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BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.



POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION TEMPORARY MITIGATION AND RIPARIAN ZONES TEMPORARY IMPACT AT POND 3	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: <u>1" = 500'</u>	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO.

CAD FILE: \Mitigation\Bridge Fork West Pond_Map.Dwg 6-21-04

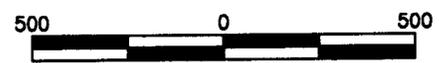


LEGEND

- | | | | |
|---|---------------------------|----------|--|
|  | TEMPORARY IMPACTED AREA | G | LIVE STAKES |
| A | RIPARIAN PLANTING | H | LIVE FASCINES |
| B | JOINT PLANTINGS | I | VEGETATIVE GEOGRIDS |
| C | DORMAT POST PLANTING | J | BOULDER DOUBLE TERRACE WITH VEGETATION |
| D | BANK SHAPING AND PLANTING | K | ROOTWAD |
| E | BRANCH PACKING | L | STEP STRUCTURE |
| F | BRUSH MATTRESSES | | |

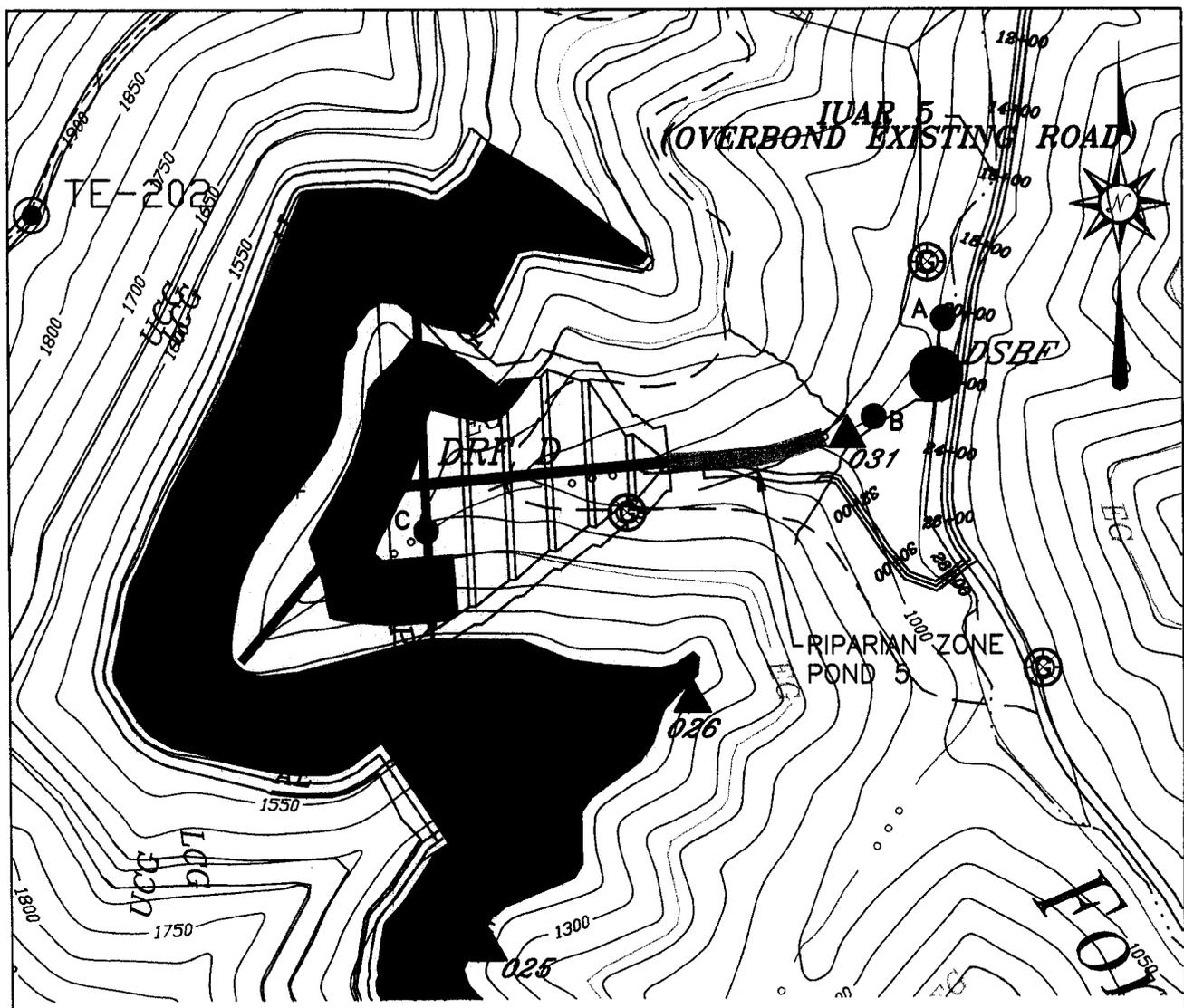
NOTE: RIPARIAN ZONE AND STRUCTURE PLACEMENT WILL BE ADJUSTED BASED ON STREAM CONDITIONS.

DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.



POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION TEMPORARY MITIGATION AND RIPARIAN ZONES TEMPORARY IMPACT AT POND 4	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: 1" = 500'	DATE <u>6-21-04</u>
	S-3003-01 PERMIT NO.	IMPR-2004- DRAWING NO.

CAD FILE: \Mitigation\Bridge Fork West Map.Dwg 6-21-04



LEGEND

- | | | | |
|---|---------------------------|---|--|
|  | TEMPORARY IMPACTED AREA | I | VEGETATIVE GEOGRIDS |
| A | RIPARIAN PLANTING | J | BOULDER DOUBLE TERRACE WITH VEGETATION |
| B | JOINT PLANTINGS | K | ROOTWAD |
| C | DORMAT POST PLANTING | L | STEP STRUCTURE |
| D | BANK SHAPING AND PLANTING | | |
| E | BRANCH PACKING | | |
| F | BRUSH MATTRESSES | | |
| G | LIVE STAKES | | |
| H | LIVE FASCINES | | |

NOTE: RIPARIAN ZONE AND STRUCTURE PLACEMENT WILL BE ADJUSTED BASED ON STREAM CONDITIONS.

DRAWING REFERENCE:
 BASE MAPPING WAS TAKEN FROM A DRAWING ENTITLED "STREAM DELINEATION AND MITIGATION MAP" DATED 3-13-01 BY SUMMIT ENGINEERING, INC. CHARLESTON WEST VIRGINIA.



POWELLTON COAL COMPANY, LLC BRIDGE FORK WEST MITIGATION TEMPORARY MITIGATION AND RIPARIAN ZONES TEMPORARY IMPACT AT POND 5	DWN. <u>JBM</u>	
	APPD. <u>MI</u>	
Powellton Coal Co., LLC. P.O. Box 158 Bickmore, West Virginia 25019 Office: (304) 872-2266 Fax (304) 587-2469	SCALE: 1" = 500'	DATE <u>6-21-04</u>
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