



U S Army Corps  
of Engineers  
Huntington District

# Public Notice

---

In reply refer to Public Notice No. 200501198 Issuance Date:  
November 7, 2005

---

Stream: Marrowbone Creek Closing Date:  
December 7, 2005

---

Please address all comments and inquiries to:

U.S. Army USACE of Engineers, Huntington District

ATTN: CELRH-OR-F Public Notice No. (*reference above*)

502 Eighth Street

Huntington, West Virginia 25701-2070

Phone: (304) 399-5710

---

**PUBLIC NOTICE:** The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

**REGULATORY PROGRAM:** Since its early history, the U.S. Army Corps of Engineers (USACE) has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the USACE Regulatory Program.

**SECTION 10:** The USACE is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate all work or structures in or affecting the course, condition or capacity of navigable waters of the United States (U.S.). The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

**SECTION 404:** The USACE is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the discharge of dredged and fill material into all waters of the United States, including wetlands. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

**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 USACE request to the West Virginia Department of Environmental Protection to act on Section 401 Water Quality Certification for the following application.

**APPLICANT:** Southern West Virginia Resources, LLC.  
Post Office Box 76  
Naugatuck, West Virginia 25685

**LOCATION:** The proposed project would be located in the in Harvey and Kermit Districts of Mingo County, West Virginia at Latitude 37°53'24" and Longitude 82°17'40" on the United States Geological Survey 7.5-minute Naugatuck and Wilsondale Quadrangles. The proposed project would result in disturbances to Dan Branch and unnamed tributaries to the following streams: Jennie Creek, Breeden Creek, Antley Branch, Left Fork of Dan Branch, Right Fork of Dan Branch, and Trace Fork. The unnamed tributaries of Jennie Creek, Antley Branch and Dan Branch ultimately exhibit surface water connections to the Tug Fork, a navigable (Section 10) waterway. The unnamed tributaries of Breeden Creek exhibit surface water connections to East Fork of Twelvepole Creek of Twelvepole Creek, which ultimately flows into the Ohio River, a navigable water of the U.S.

**DESCRIPTION OF THE PROPOSED WORK:** The applicant proposes to place dredged and fill material into approximately 2.43 acres of waters of the U.S., including 19,957 linear feet (2.14 acres) of intermittent streams and 5,068 linear feet (0.29 acre) of ephemeral streams, in conjunction with the continued construction, operation and reclamation of the Taywood West and Marrowbone Trace Surface Mines [Surface Mining Control and Reclamation Act (SMCRA) Permits S-5008-02 and S-5021-01 respectively]. The proposed permit area would result in a total surface disturbance of nearly 602 acres of land, of which nearly 379 acres would consist of the mineral extraction areas, over a 7-year life of the mine. The proposed project would involve the construction of 12 valley fills, 12 drainage control structures and one road fill in waters of the U.S. The proposed mineral extraction operations would generate 49.6 million cubic yards of spoil material. Nearly 42.8 million cubic yards of this material would be placed on the mined area with the remaining excess 10.3 million cubic yards stored in the proposed 12 valley fills. Construction of the proposed valley fills would result in the permanent placement of approximately 2,084.62 cubic yards of dredged and fill material into 14,021 linear feet of intermittent streams and 2,491 linear feet of ephemeral streams. The proposed valley fills would affect contributing watershed areas of 20.85 acres to 140.75 acres. Construction of the proposed drainage control structures would result in the temporary placement of approximately 378 cubic yards of dredged and fill material into 5,936 linear feet of intermittent streams and 2,397 linear feet of ephemeral streams. Construction of the proposed road fill would impact 180 linear feet of ephemeral stream. Table 1 and Table 2 attached to this public notice summarize the proposed activities and corresponding impacts.

According to the applicant, the purpose of the project is to recover the bituminous coal reserves from the No. 5 Block, Clarion, Upper Mercer, Lower Mercer, Stockton A, Stockton and Coalburg coal seams. To accomplish this, the applicant proposes to construct, operate and reclaim the Taywood West and Marrowbone Trace Surface Mines. Reserves from the project site would be sold on the market to satisfy a currently high demand for coal. Plans for the proposed Taywood West and Marrowbone Trace Surface Mines are attached to this public notice. The Surface Mine Applications (SMAs) for Permits S-5008-02 and Permit N. S-5021-01 were approved by the WVDEP on August 9, 2005 and October 22, 2003 respectively. The proposed mining plan can be referenced in Section N of the SMAs on file with the WVDEP.

**ALTERNATIVE ANALYSIS:** This project is not considered to be water dependent; therefore, the applicant is required to show that other less damaging practicable alternatives are not available that would achieve the overall project purpose. No permit will be issued until our review of the alternative analysis clearly shows that upland alternatives are not available to achieve the overall project purpose.

**MITIGATION PLAN:** The applicant will be required to provide a compensatory mitigation plan to adequately offset all proposed impacts to waters of the U.S.

**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 WVDEP.

**HISTORIC AND CULTURAL RESOURCES:** The National Register of Historic Places (NRHP) 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 SHPO for their review. Additional comments concerning archeological sensitivity of a project area should be based upon collected data.

**ENDANGERED/THREATENED SPECIES REVIEW:** Two federally listed endangered species, the Indiana bat (*Myotis sodalis*) and Virginia big-eared bat (*Corynorhinus townsendii virginianus*) may occur within the project area. Two options are available to the applicant in order to address Indiana bat concerns. The applicant may conduct a mist net survey from May 15 to August 15 using the mist net protocol outlined in the draft Indiana bat Recovery Plan. If this option is chosen, the applicant must provide the United States Fish and Wildlife Service (Service) with their survey plan for review and approval prior to conducting the survey. Another option is to presume Indiana bats are present and conduct all timber removal on the project area from November 15 to March 31. If this option is chosen, an analysis of the post-project Indiana bat summer habitat must be performed within a two-mile radius of the center point of the project area. If the Service determines the extent of disturbance is not significant to affect the Indiana bat, the project may proceed with seasonal restrictions. Conversely, if the Service determines the extent of disturbance is significant and would likely adversely affect the Indiana bat, a mist net survey will be conducted to determine if the Indiana bats are present. Additionally, abandoned mine portals could support summer or winter colonies of the endangered Virginia big-eared bat or provide hibernaculum for the Indiana bat. The applicant must survey the project area for old, abandoned mine portals. If portals appear to have suitable bat habitat characteristics, a Phase I Portal Survey must be prepared for each portal by a qualified mammalogist. At this time, the USACE cannot make a determination regarding the effect the proposed project could potentially have on the aforementioned endangered species. This public notice serves as a request to the 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 ESA (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. This application will be reviewed in accordance with 33 CFR 320-331, the Regulatory Program of the USACE, and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines published by the U. S. Environmental Protection Agency pursuant to Section 404(b)(1) of the CWA. 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. 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.

**SOLICITATION OF COMMENTS:** The USACE 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. For accuracy and completeness of the administrative record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. Any comments received will be considered by the USACE 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.

**CLOSE OF COMMENT PERIOD:** All comments pertaining to this Public Notice must reach this office on or before the close of the comment period listed on page one of this Public Notice. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to Mrs. Teresa Spagna, Project Manager, South Regulatory Section, CELRH-OR-FS, USACE Huntington District, 502 Eighth Street, Huntington, West Virginia 25701-2070. Please note names and addresses of those who submit comments in response to this public notice become part of our administrative record and, as such, are available to the public under provisions of the Freedom of Information Act. Thank you for your interest in our nation's water resources.

  
Ginger Mullins, Chief  
Regulatory Branch

(W)

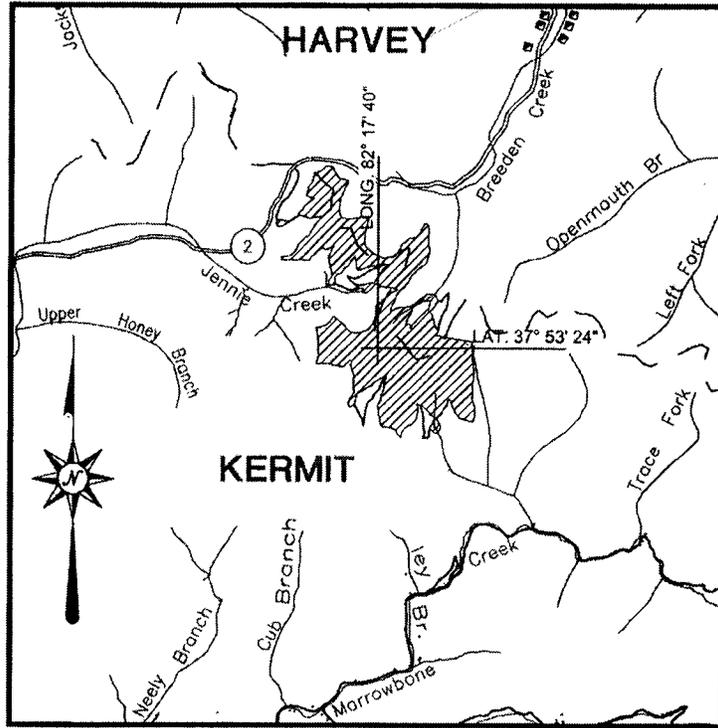
**Table 1**  
**Taywood West and Marrowbone Trace Surface Mine**  
**Summary of Activities in Waters of the United States**

<b>Structure I.D.</b>	<b>Size of Fill (Acres)</b>	<b>Jurisdictional Volume of Fill (Cubic Yards)</b>	<b>Total Volume of Fill (Million Cubic Yards)</b>	<b>Contributing Drainage Area (Acres)</b>
Taywood West Valley Fill No. 1	6.98	11.69	0.53	25.33
Taywood West Valley Fill No. 2	9.10	12.80	0.61	30.08
Taywood West Valley Fill No. 3	9.30	15.42	0.76	24.56
Taywood West Valley Fill No. 4	7.67	46.03	0.72	23.05
Taywood West Valley Fill No. 5	10.50	41.98	1.10	40.59
Taywood West Valley Fill No. 6	18.01	51.91	2.10	61.90
Taywood West Valley Fill No. 7	11.19	39.76	1.04	48.94
Marrowbone Trace Valley Fill No. 1	8.89	53.73	0.71	60.69
Marrowbone Trace Valley Fill No. 2	11.64	319.45	0.71	129.87
Marrowbone Trace Valley Fill No. 3	6.66	686.61	0.30	62.79
Marrowbone Trace Valley Fill No. 4	16.99	675.55	1.16	143.23
Marrowbone Trace Valley Fill No. 5	14.44	129.69	1.17	104.39
<b>Total</b>		<b>2,084.62</b>	<b>10.91</b>	<b>755.42</b>

**Table 2**  
**Taywood West and Marrowbone Trace Surface Mine**  
**Summary of Permanent and Temporary Impacts to Streams**

Structure ID	Impact Area	Intermittent Streams (feet/acres)		Ephemeral Streams (feet/acres)		Total Impacts (feet/acres)	
Taywood West Valley Fill No. 1	Unnamed tributary of Jennie Creek	366	0.01	748	0.02	1114	0.03
Taywood West Valley Fill No. 2	Unnamed tributary of Jennie Creek	1044	0.03	102	0	1146	0.03
Taywood West Valley Fill No. 3	Unnamed tributary of Jennie Creek	630	0.02	100	0	730	0.02
Taywood West Valley Fill No. 4	Unnamed tributary of Breeden Creek	685	0.05	358	0.02	1043	0.07
Taywood West Valley Fill No. 5	Unnamed tributary of Breeden Creek	1106	0.07	0	0	1106	0.07
Taywood West Valley Fill No. 6	Unnamed tributary of Antley Branch	978	0.1	30	0	1008	0.1
Taywood West Valley Fill No. 7	Unnamed tributary of Left Fork of Dan Branch	605	0.07	175	0.01	780	0.08
Taywood West Pond No. 1	Unnamed tributary of Jennie Creek	668	0.04	112	0	780	0.04
Taywood West Pond No. 2	Unnamed tributary of Jennie Creek	216	0.02	8	0	224	0.02
Taywood West Pond No. 3	Unnamed tributary of Jennie Creek	350	0.03	0	0	350	0.03
Taywood West Pond No. 4	Unnamed tributary of Breeden Creek	600	0.04	92	0	692	0.04
Taywood West Pond No. 5	Unnamed tributary of Breeden Creek	429	0.03	150	0	579	0.03
Taywood West Pond No. 6	Unnamed tributary of Antley Branch	372	0.07	0	0	372	0.07
Taywood West Pond No. 7	Unnamed tributary of Left Fork of Dan Branch	350	0.05	0	0	350	0.05
Marrowbone Trace Valley Fill No. 1	Unnamed tributary of Dan Branch	372	0.07	404	0.04	776	0.11
Marrowbone Trace Valley Fill No. 2	Right Fork of Dan Branch	2201	0.31	87	0.01	2288	0.32
Marrowbone Trace Valley Fill No. 3	Unnamed tributary of Marrowbone Trace	1468	0.33	0	0	1468	0.33
Marrowbone Trace Valley Fill No. 4	Marrowbone Trace	2664	0.03	487	0.01	3151	0.04
Marrowbone Trace Valley Fill No. 5	Dan Branch	1902	0.24	0	0	1902	0.24

Structure ID	Impact Area	Intermittent Streams (feet/acres)		Ephemeral Streams (feet/acres)		Total Impacts (feet/acres)	
Marrowbone Trace Pond No. 1	Dan Branch	519	0.09	0	0	519	0.09
Marrowbone Trace Pond No. 2	Unnamed tributary of Dan Branch	335	0.03	317	0.02	652	0.05
Marrowbone Trace Pond No. 3	Right Fork of Dan Branch	614	0.13	308	0.03	922	0.16
Marrowbone Trace Pond No. 4	Unnamed tributary of Marrowbone Trace	1065	0.2	181	0.02	1246	0.22
Marrowbone Trace Pond No. 5	Marrowbone Trace	418	0.08	1229	0.11	1647	0.19
Marrowbone Trace Road No. 2	Marrowbone Trace	0	0	180	0	180	0
	<b>Total</b>	<b>19,957</b>	<b>2.14</b>	<b>5,068</b>	<b>0.29</b>	<b>25,025</b>	<b>2.43</b>



**LOCATION MAP**

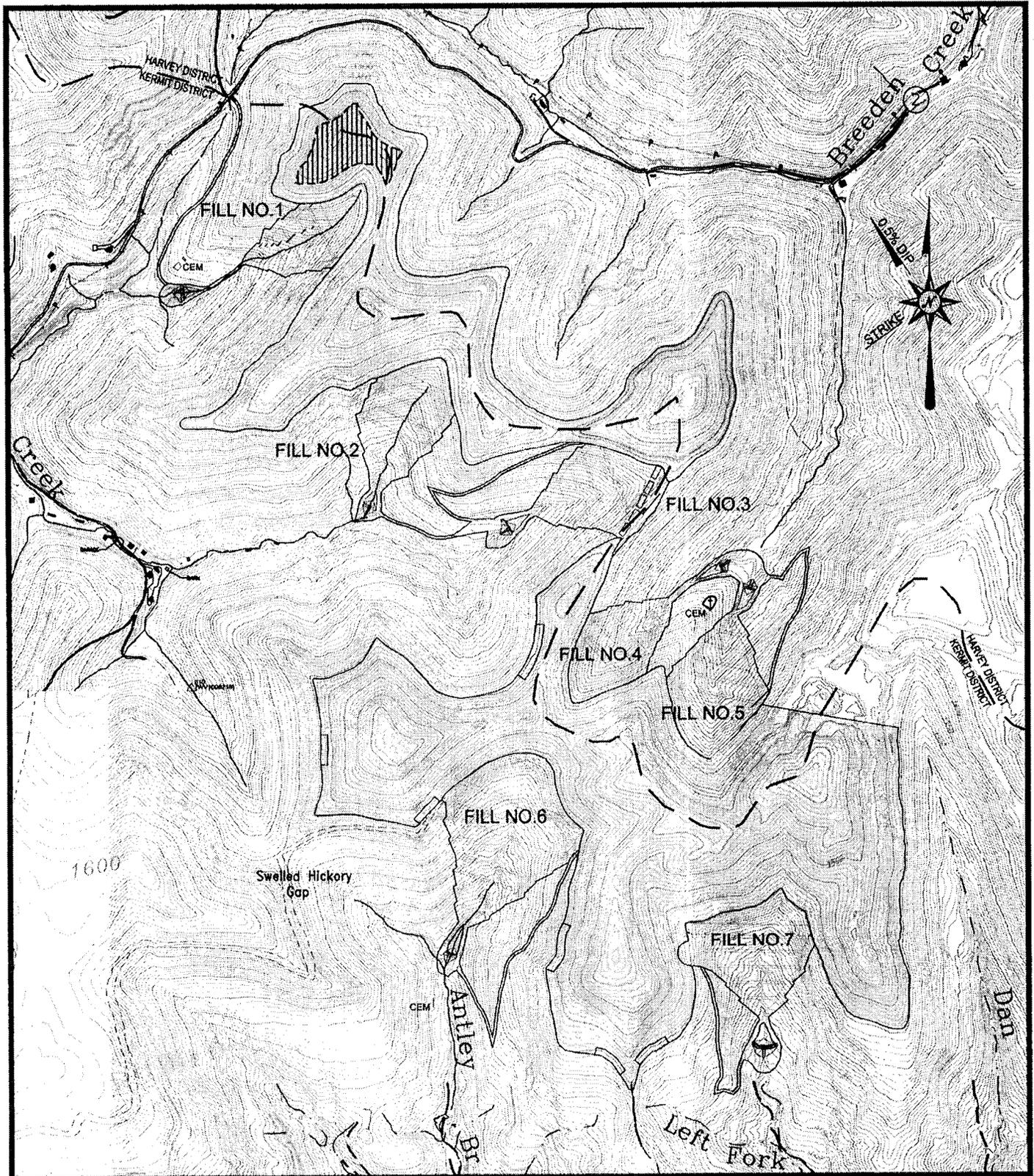
Receiving Streams: Unnamed tributaries of Breeden Creek of the West Fork of Twelvepole Creek of Twelvepole Creek. Unnamed tributaries of Jennie Creek of the Tug Fork River. Antley Branch, Left Fork of Dan Branch and unnamed tributaries of the Left Fork of Dan Branch of Marrowbone Creek of the Tug Fork River of the Big Sandy River all of the Ohio River.

WILSONDALE QUADRANGLE  
 HARVEY AND KERMIT DISTRICT  
 MINGO COUNTY

Permit No. S-5008-02

NPDES No. WV1020765

Scale: 1"= 1 Mile



Date: 09/09/05	
Drawn By: JAP	Checked By: EW
File Name or Drawer: PD.DWG	Contour Interval: 10'/40'
Scale: 1" = 1000'	Sheet No.: 1 of 1
Quad: WILSONDALE	
District: HARVEY AND KERMIT	
County: MINCO	

Prepared by:

**ENGINEERS & CONSULTANTS**

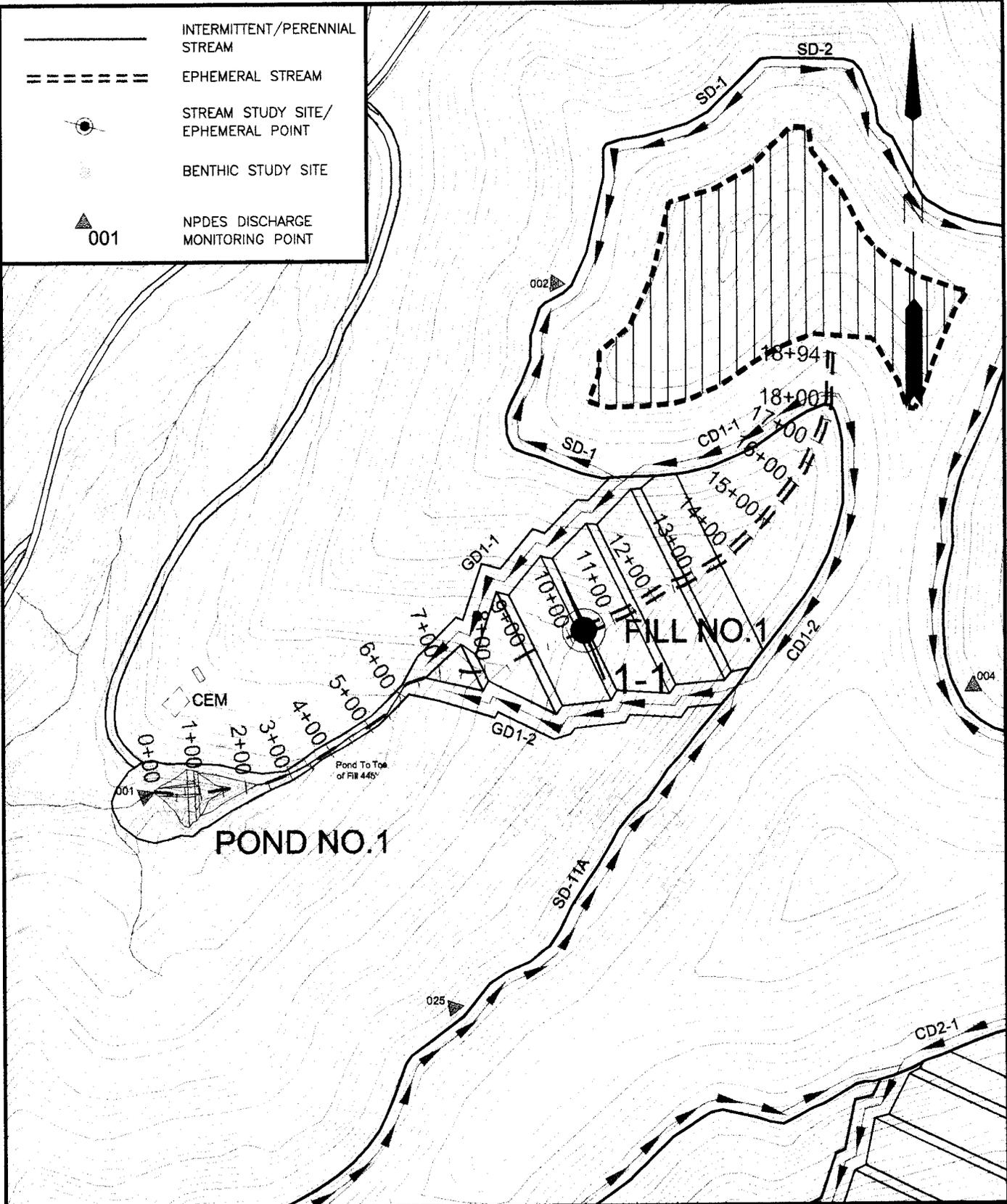
P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

**SOUTHERN WEST VIRGINIA RESOURCES, LLC**  
 P.O. BOX 76  
 NAUGATUCK, WEST VIRGINIA 25685  
 TAYWOOD WEST SURFACE MINE  
 PERMIT No. S-5008-02  
 NPDES No. WV1020765

---

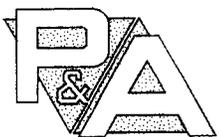
**PROPOSAL AND DRAINAGE MAP**

Exhibit I-IV-A / Attachment S-1 / Attachment X



File Name: STREAM-VF1.dwg		Date: 01/24/05
Scale: 1" = 300'		Contour Interval: 10'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:



**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

**MARROWBONE DEVELOPMENT COMPANY**

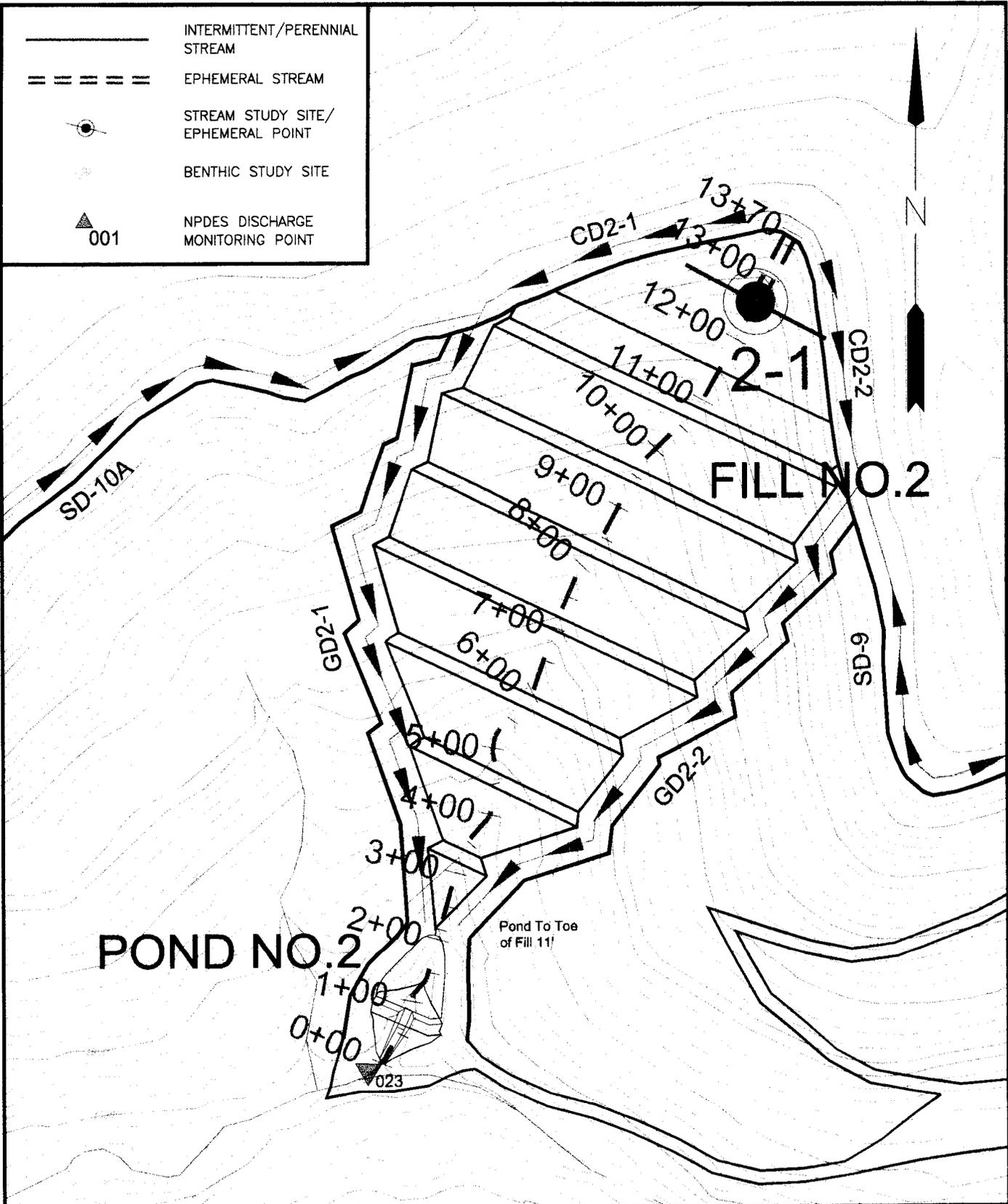
**TAYWOOD WEST SURFACE MINE**  
PERMIT No. S-5008-02  
NPDES NO. WV1020765

---

**VALLEY FILL 1, POND No. 1**

---

**Appendix B, Map 1**



File Name: STREAM-VF2.dwg		Date: 01/24/05
Scale: 1" = 200'		Contour Interval: 10'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:

**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

**MARROWBONE DEVELOPMENT COMPANY**

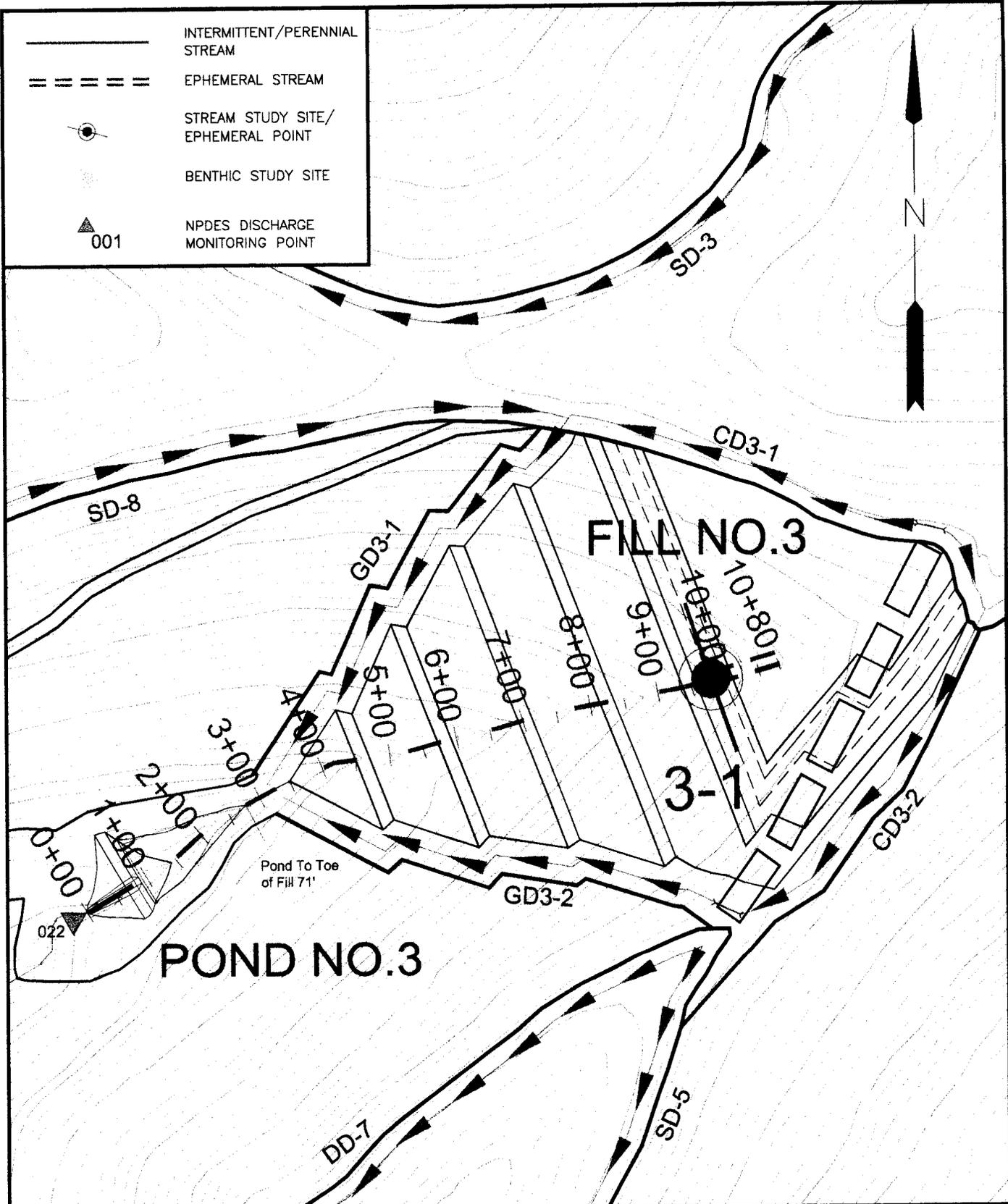
**TAYWOOD WEST SURFACE MINE**  
PERMIT No. S-5008-02  
NPDES NO. WV1020765

---

**VALLEY FILL 2, POND No. 2**

---

**Appendix B, Map 2**



File Name: STREAM-VF3.dwg		Date: 01/24/05
Scale: 1" = 200'		Contour Interval: 10'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:

**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

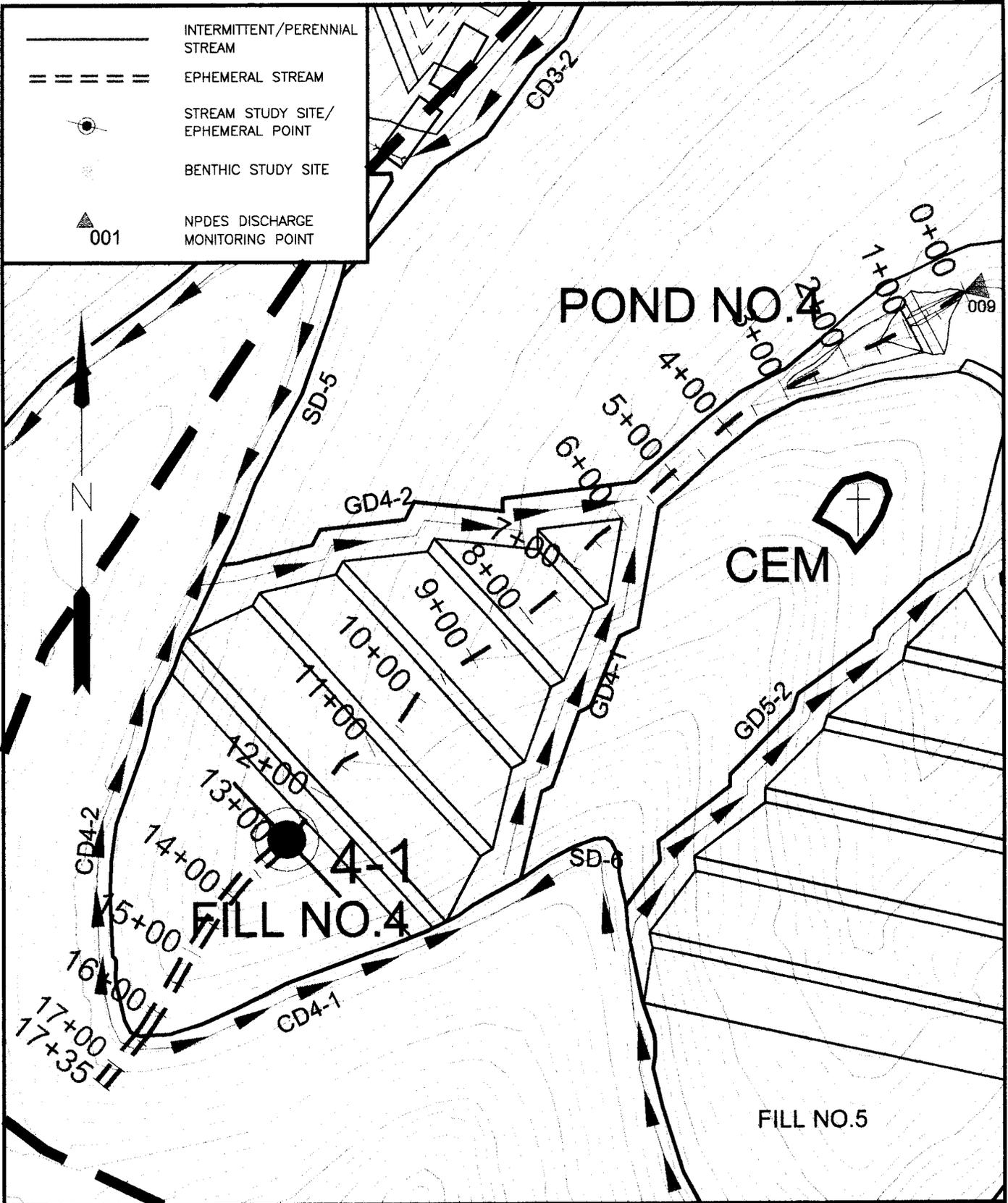
**MARROWBONE DEVELOPMENT COMPANY**

**TAYWOOD WEST SURFACE MINE**  
PERMIT No. S-5008-02  
NPDES NO. WV1020765

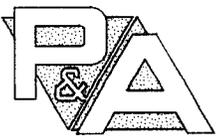
---

**VALLEY FILL 3, POND No. 3**

**Appendix B, Map 3**



File Name: STREAM-VF4.dwg		Date: 01/24/05
Scale: 1" = 200'		Contour Interval: 10'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:		
 <b>ENGINEERS &amp; CONSULTANTS</b>		
<small>P.O. Box 279 Louisa, KY 41230 (606) 673-4413</small>		

**MARROWBONE DEVELOPMENT COMPANY**

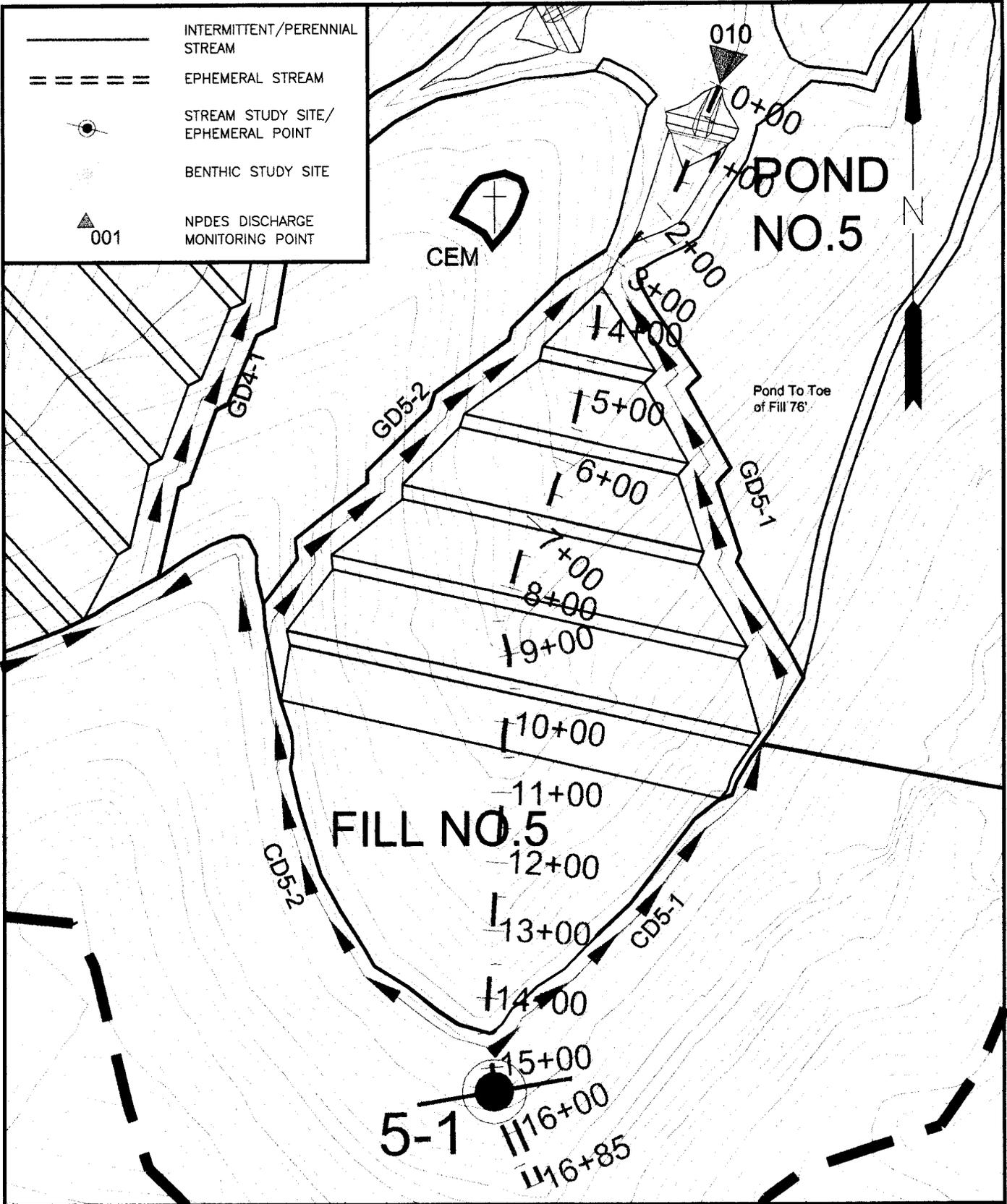
**TAYWOOD WEST SURFACE MINE**

PERMIT No. S-5008-02  
NPDES NO. WV1020765

---

**VALLEY FILL 4, POND No. 4**

**Appendix B, Map 4**



File Name: STREAM-VF5.dwg		Date: 01/24/05
Scale: 1" = 200'		Contour Interval: 10'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:

**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 873-4413

**MARROWBONE DEVELOPMENT COMPANY**

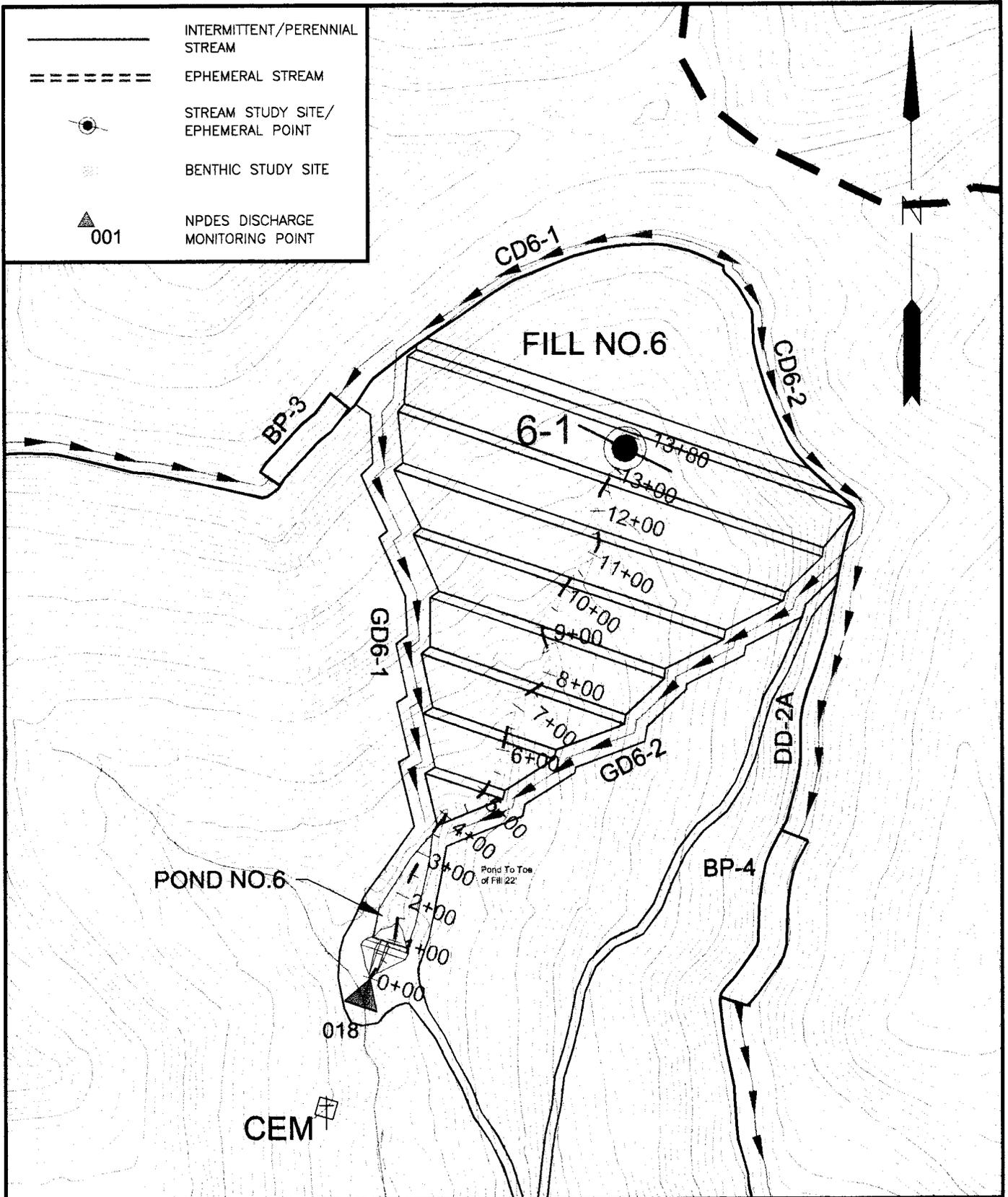
**TAYWOOD WEST SURFACE MINE**

PERMIT No. S-5008-02  
NPDES NO. WV1020765

---

**VALLEY FILL 5, POND No. 5**

**Appendix B, Map 5**



File Name: STREAM-VF6.dwg		Date: 01/24/05
Scale: 1" = 300'		Contour Interval: 10'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:

**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 873-4413

**MARROWBONE DEVELOPMENT COMPANY**

**TAYWOOD WEST SURFACE MINE**

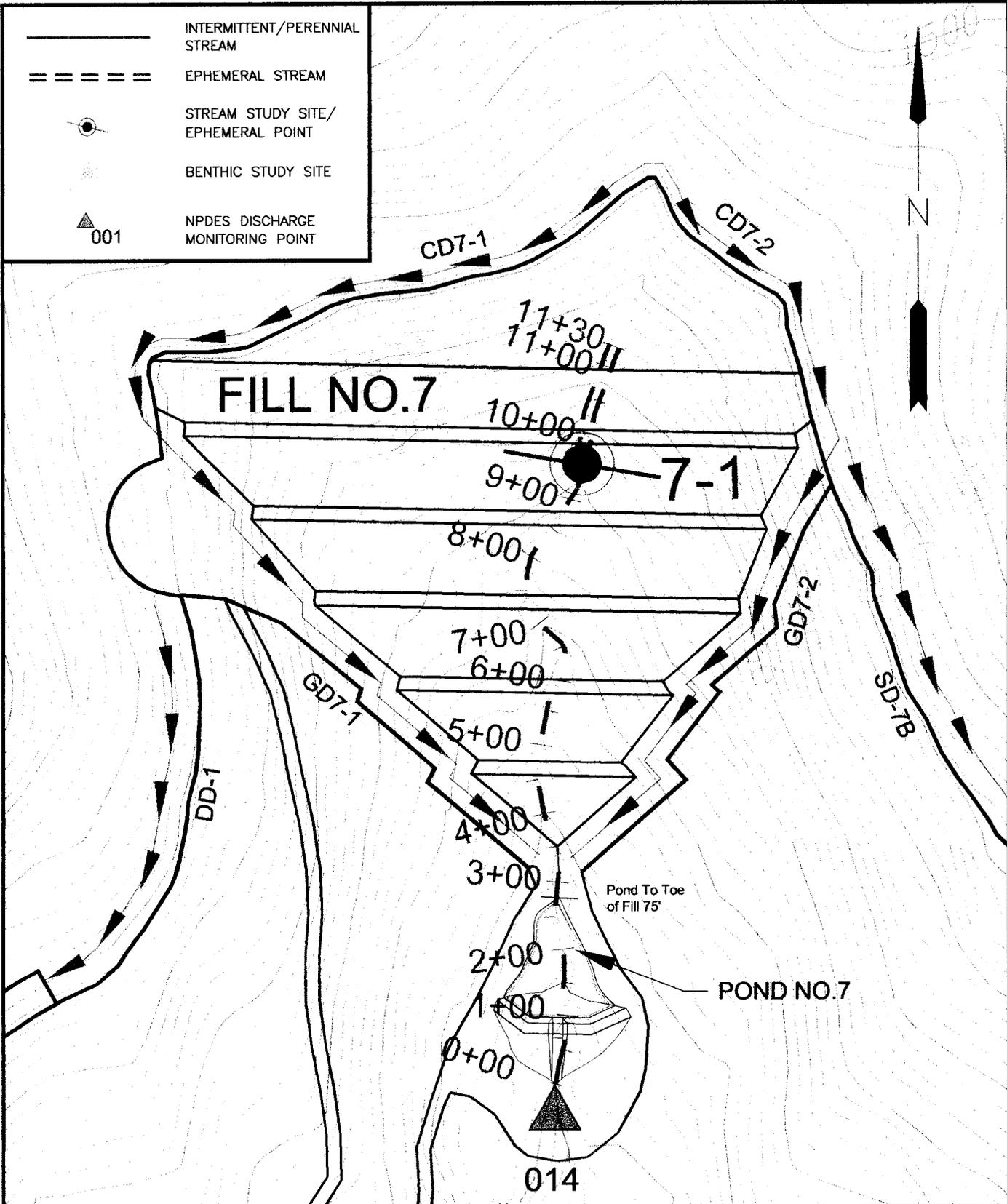
PERMIT No. S-5008-02  
NPDES NO. WV1020765

---

**VALLEY FILL 6, POND No. 6**

---

**Appendix B, Map 6**



File Name:  
STREAM-VF7.dwg

Scale:  
1" = 200'

County:  
MINGO

Date:  
01/24/05

Contour Interval:  
10'

Quad:  
NAUGATUCK &  
WILSONDALE

Prepared by:

**ENGINEERS &  
CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

**MARROWBONE DEVELOPMENT COMPANY**

**TAYWOOD WEST SURFACE MINE**

PERMIT No. S-5008-02  
NPDES NO. WV1020765

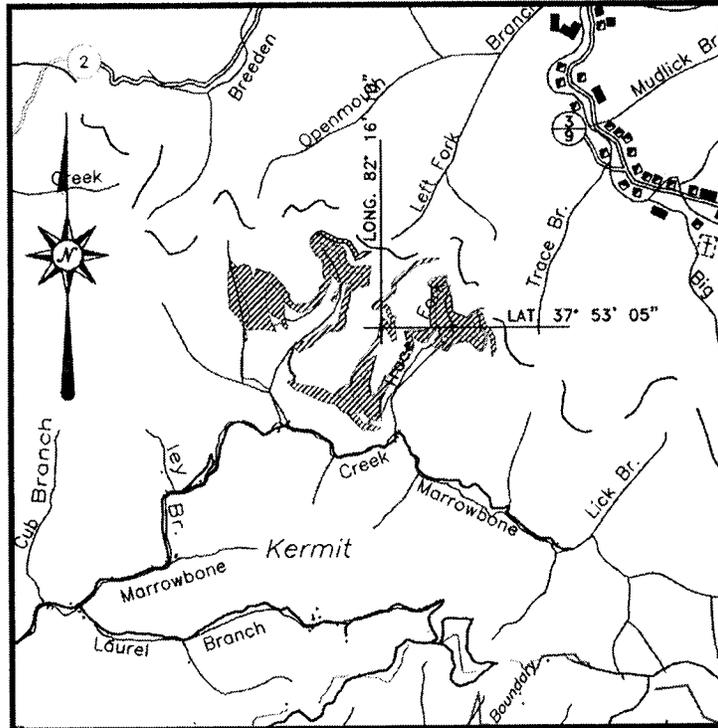
---

**VALLEY FILL 7, POND No. 7**

---

**Appendix B, Map 7**

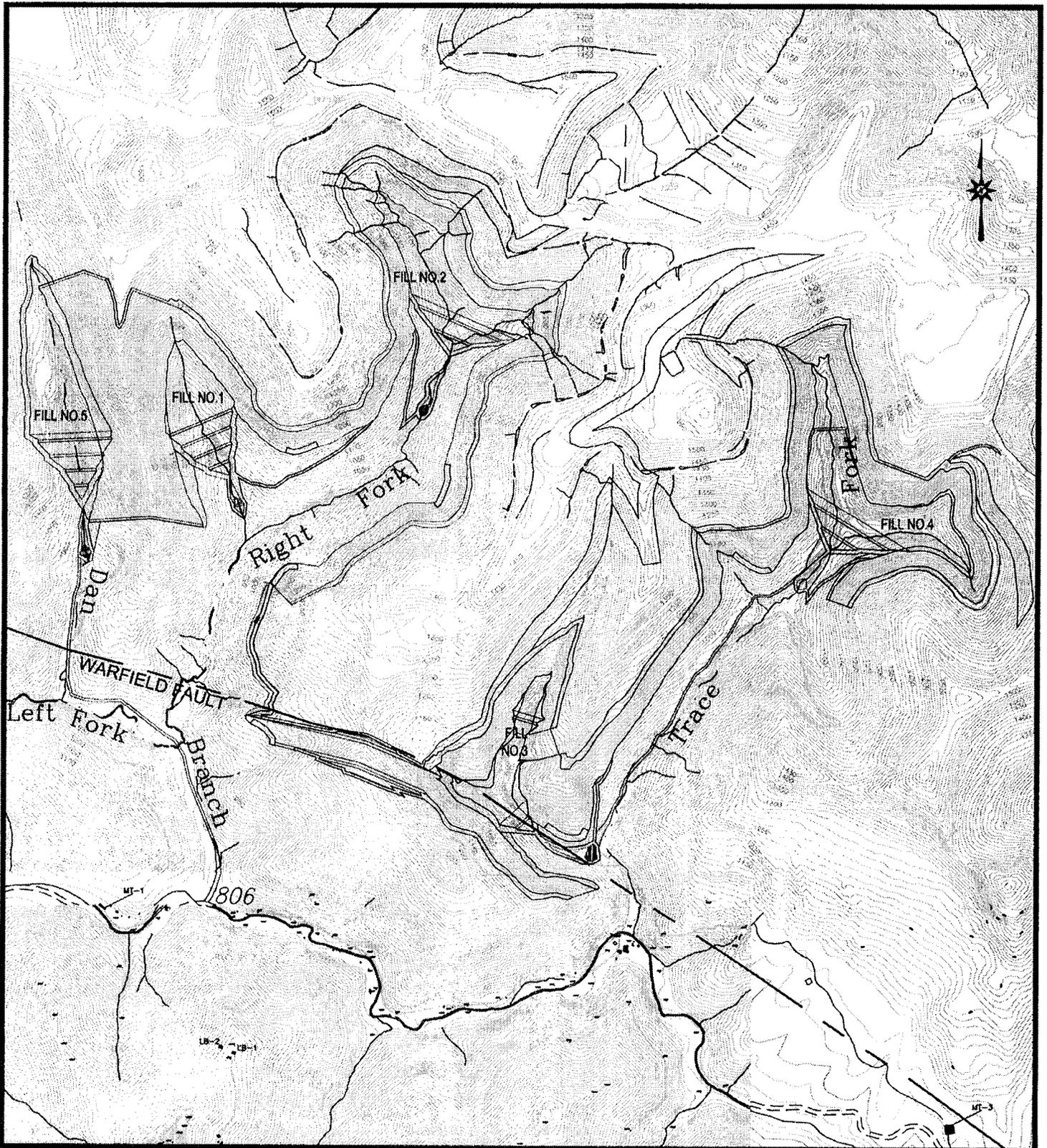
No.	Date	Revision
1		
2		
3		



LOCATION MAP

RECEIVING STREAM: Dan Branch, Right Fork of Dan Branch and Trace Fork  
all of Marrowbone Creek of the Tug Fork of Big Sandy River

NAUGATUCK AND WILSONDALE  
 KERMIT DISTRICT  
 MINGO COUNTY  
 Permit No. S-5021-01  
 NPDES No. WV1020617  
 Scale: 1"= 1 Mile



Date: 09/09/05	
Drawn By: JAP	Checked By: EW
File Name or Drawer: PD-8.5.DWG	Contour Interval: 10' / 40'
Scale: 1" = 1000'	Sheet No.: 1 of 1
Quad: NAUGATUCK & WILSONDALE	
District: KERMIT	
County: MINGO	

Prepared by:



**ENGINEERS & CONSULTANTS**

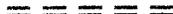
P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

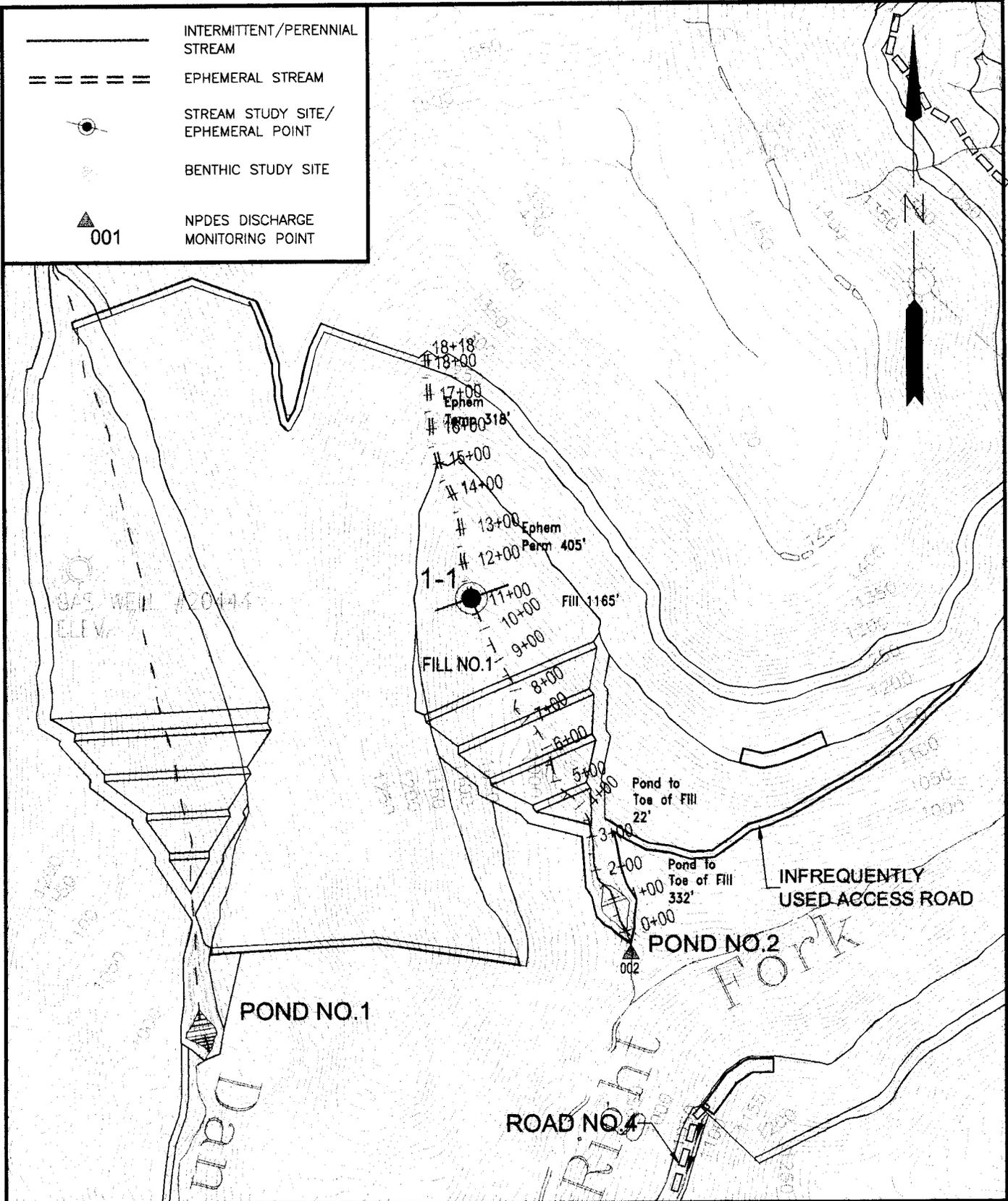
**SOUTHERN WEST VIRGINIA RESOURCES, LLC**  
P.O. BOX 76  
NAUGATUCK, WEST VIRGINIA 25685  
**MARROWBONE TRACE SURFACE MINE**  
PERMIT No. S-5021-01  
NPDES No. WV1020617

---

**PROPOSAL AND DRAINAGE MAP**

Exhibit I-IV-A / Attachment S-1 / Attachment X

	INTERMITTENT/PERENNIAL STREAM
	EPHEMERAL STREAM
	STREAM STUDY SITE/ EPHEMERAL POINT
	BENTHIC STUDY SITE
	NPDES DISCHARGE MONITORING POINT



File Name: STREAM-VF1.dwg		Date: 01/21/05	
Scale: 1"=400'		Contour Interval: 40'	
County: MINGO		Quad: NAUGATUCK & WILSONDALE	
No.	Date	Revision	
1			
2			
3			

Prepared by:



**ENGINEERS &  
CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

**MARROWBONE DEVELOPMENT COMPANY**

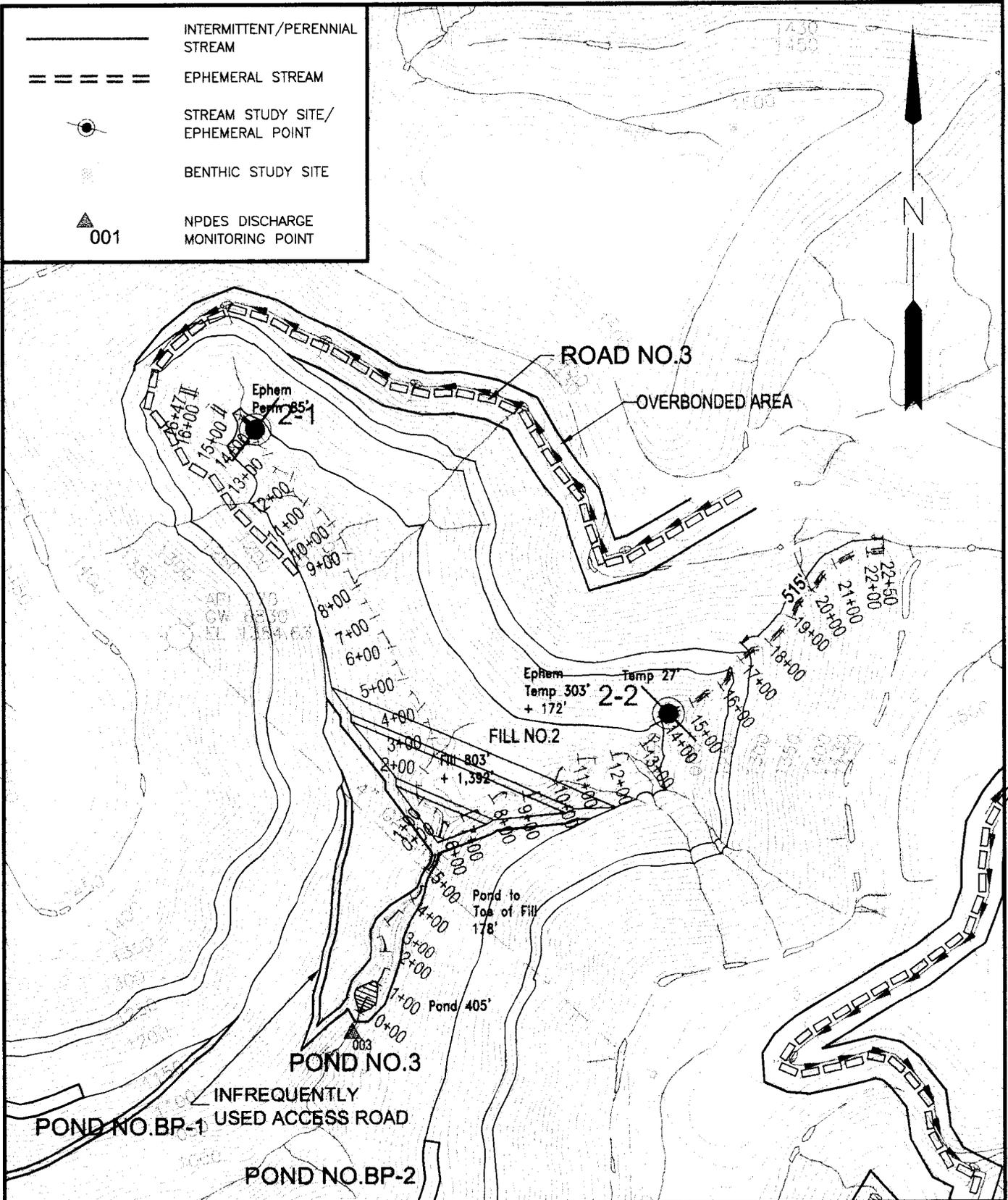
**MARROWBONE TRACE SURFACE MINE**  
PERMIT No. S-5021-01  
NPDES NO. WV1020617

---

**VALLEY FILL 1, POND No. 2**

---

**Appendix B, Map 8**



	INTERMITTENT/PERENNIAL STREAM
	EPHEMERAL STREAM
	STREAM STUDY SITE/ EPHEMERAL POINT
	BENTHIC STUDY SITE
	NPDES DISCHARGE MONITORING POINT

File Name: STREAM-VF2.dwg		Date: 01/21/05
Scale: 1"=400'		Contour Interval: 40'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:

**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

**MARROWBONE DEVELOPMENT COMPANY**

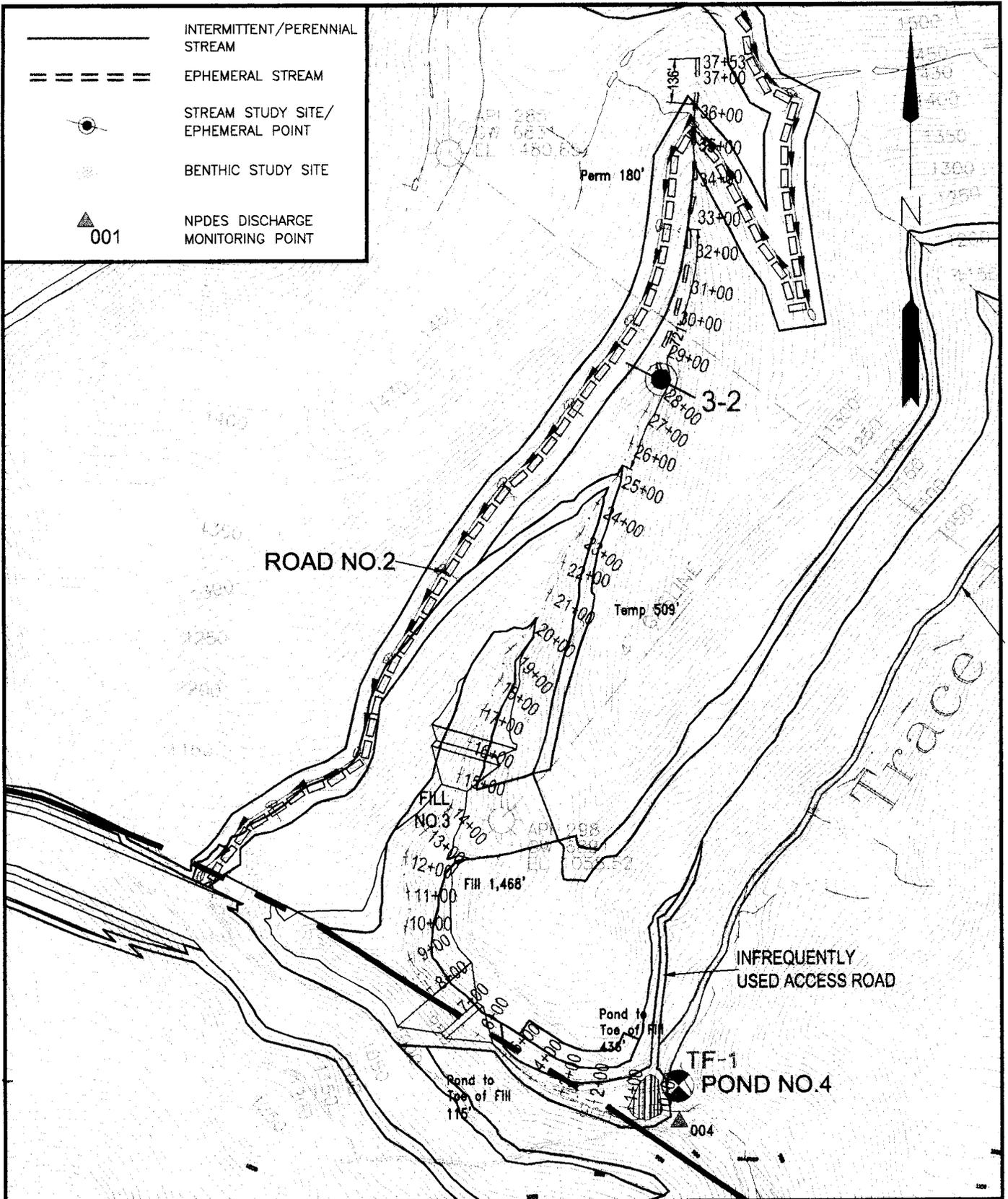
**MARROWBONE TRACE SURFACE MINE**

PERMIT No. S-5021-01  
NPDES NO. WV1020617

---

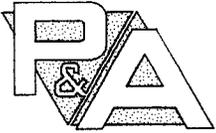
**VALLEY FILL 2, POND No. 3**

**Appendix B, Map 9**



File Name: STREAM-VF3.dwg		Date: 01/21/05
Scale: 1"=400'		Contour Interval: 40'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:



**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 673-4413

**MARROWBONE DEVELOPMENT COMPANY**

**MARROWBONE TRACE SURFACE MINE**

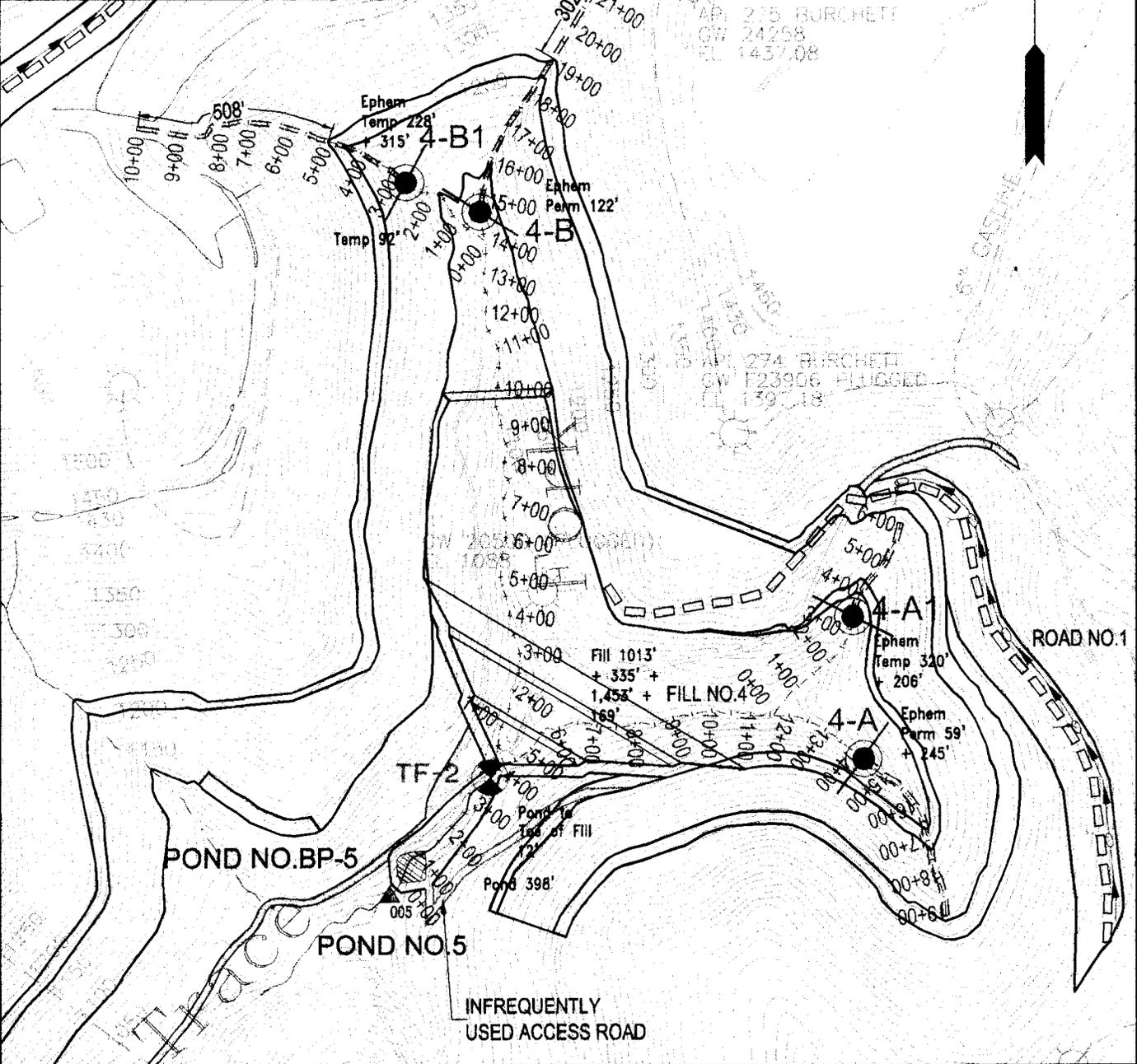
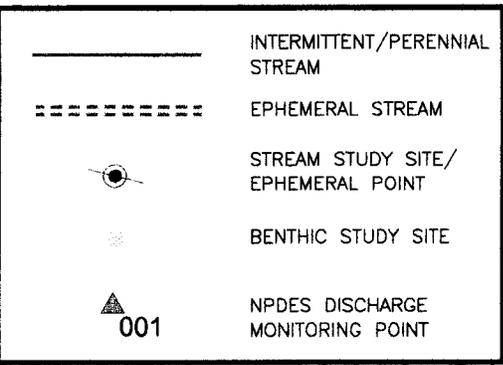
PERMIT No. S-5021-01  
NPDES NO. WV1020617

---

**VALLEY FILL 3, POND No. 4**

---

**Appendix B, Map 10**



File Name:	Date:
STREAM-VF4.dwg	01/21/05
Scale:	Contour Interval:
1"=400'	40'
County:	Quad:
MINGO	NAUGATUCK & WILSONDALE

No.	Date	Revision
1		
2		
3		

Prepared by:

**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(606) 873-4413

**MARROWBONE DEVELOPMENT COMPANY**

**MARROWBONE TRACE SURFACE MINE**

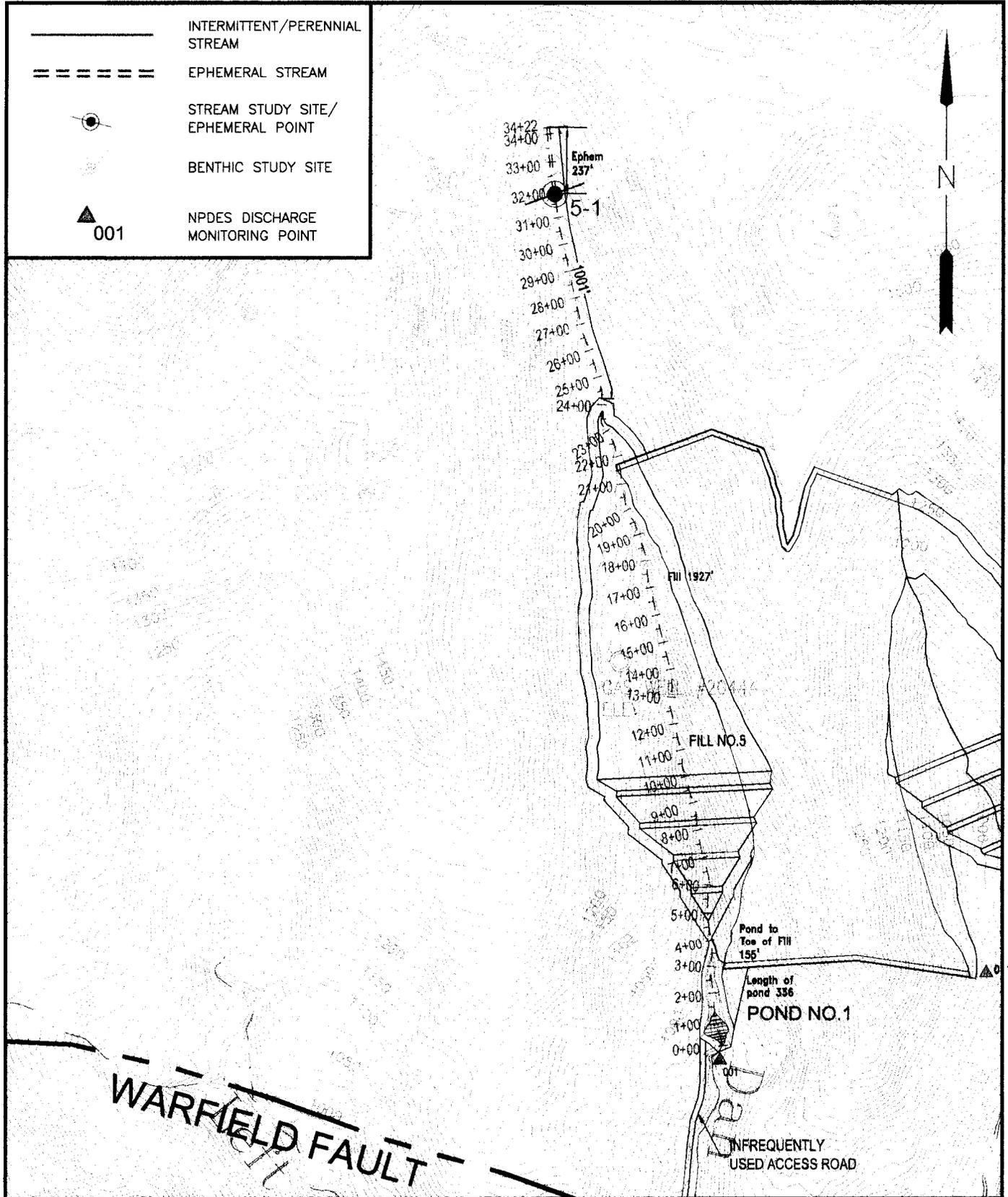
PERMIT No. S-5021-01  
NPDES NO. WV1020617

---

**VALLEY FILL 4, POND No. 5**

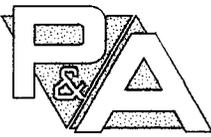
**Appendix B, Map 11**

	INTERMITTENT/PERENNIAL STREAM
	EPHEMERAL STREAM
	STREAM STUDY SITE/ EPHEMERAL POINT
	BENTHIC STUDY SITE
	NPDES DISCHARGE MONITORING POINT



File Name: STREAM-F5.dwg		Date: 01/21/05
Scale: 1"=500'		Contour Interval: 40'
County: MINGO		Quad: NAUGATUCK & WILSONDALE
No.	Date	Revision
1		
2		
3		

Prepared by:



**ENGINEERS & CONSULTANTS**

P.O. Box 279 Louisa, KY 41230  
(806) 673-4413

**MARROWBONE DEVELOPMENT COMPANY**

**MARROWBONE TRACE SURFACE MINE**  
PERMIT No. S-5021-01  
NPDES No. WV1020617

---

**VALLEY FILL 5, POND No. 1**

---

**Appendix B, Map 12**