

**U.S. Army Corps
of Engineers**
Pittsburgh District

Public Notice

In Reply Refer to
Notice No. below

US Army Corps of Engineers, Pittsburgh District
1000 Liberty Avenue
Pittsburgh, PA 15222-4186

Application No. 2012-327

Date: April 29, 2014

Notice No. 14-21

Closing Date: May 29, 2014

1. TO ALL WHOM IT MAY CONCERN: The following application has been submitted for a Department of the Army Permit under the provisions Section 404 of the Clean Water Act.
2. APPLICANT: Allegheny Mineral Corp.
One Glade Park East
PO Box 1022
Kittanning, Pennsylvania 16201
3. AGENT: The EADS Group
15392 Route 322
Clarion, Pennsylvania 16214
4. LOCATION: Mines 24 & 34
Worth Township, Butler County, Pennsylvania
5. PURPOSE AND DESCRIPTION OF WORK: The applicant proposes to impact 6.791 acres of wetland and 3,187 linear feet of streams to extract and market Vanport limestone from Mine 34.

Wetland Mitigation will be located at the existing McCandless Mine site. The site is located 350 feet west of Crestview Road and 0.75 miles south of Slippery Rock, Pennsylvania. Approximately 10.12 acres of wetlands will be created, including 1.41 acre of emergent wetland, 4.65 acres of scrub shrub/forested, and 4.06 acres of riparian forest wetland. The second mitigation site will be at the adjacent Mine 24 site, which is southeast of Mine 34. Approximately 3.12 acres of wetlands will be created, including 2.28 acres of scrub-shrub/forested and 0.84 acre of riparian forest wetland. The McCandless Mine site will provide 10.12 acres of mitigation, while the Mine 24 site will provide 3.12 acres of mitigation, for a total of 13.24 acres of wetland.

Compensatory stream mitigation is being proposed along Slippery Rock Creek, north of the proposed Mine 34 site. This mitigation plan proposes to initiate a 35-foot wide conservation easement along the southern shore of Slippery Rock Creek. The conservation easement will begin at Barron Road and extend east (upstream) for approximately 3,757 linear feet (0.71 mi.), 2,189 linear feet of the easement will be for the Mine 34 mitigation. This

easement will provide public fishing and boating access to Slippery Rock Creek in perpetuity. In addition to the conservation easement, Allegheny Mineral Corporation (AMC) will also install three long vane structures along the south shore of Slippery Rock Creek between Barron Road and UNT #1. In addition to the conservation easement and habitat improvement structures, the riparian corridor along UNT #6 at the Mine 24 site will be planted with live stakes to establish woody vegetation along the stream between the proposed wetland mitigation area and the existing forested section of the stream. The proposed riparian buffer restoration will include approximately 0.18 acre of live stake plantings.

Drawings of the proposed impacts, mitigation and mine can be found at the following website by clicking on them just below the Public Notice number 14-21.
<http://www.lrp.usace.army.mil/Missions/Regulatory/PublicNotices.aspx>.

6. ENCROACHMENT PERMIT: The applicant must obtain a Water Obstruction and Encroachment Permit which includes 401 Water Quality Certification from the:

Pennsylvania Department of Environmental Protection
Knox District Mining Office
310 Best Avenue
Knox, Pennsylvania 16232
Telephone: (814)797-1191

7. IMPACT ON NATURAL RESOURCES: The District Engineer has consulted the most recently available information including Pennsylvania Natural Diversity Index search result 20140409446072 and has determined that the project will have no effect on endangered species or threatened species, or result in destruction or adverse modification of habitat of such species which has been determined to be critical. While concurrence with this determination is not required, 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).

8. IMPACT ON CULTURAL RESOURCES: The National Register of Historic Places has been consulted, and it has been determined that there are no properties currently listed on the register which would be directly affected by the proposed work. If we are made aware, as a result of comments received in response to this notice, or by other means, of specific archeological, scientific, prehistorical, or historical sites or structures which might be affected by the proposed work, the District Engineer will immediately take the appropriate action necessary pursuant to the National Historic Preservation Act of 1966 - Public Law 89-665 as amended (including Public Law 96-515).

9. PUBLIC INVOLVEMENT: Any person may request, in writing, within the comment period specified in the paragraph below entitled "RESPONSES," that a public hearing be held to consider this application. The requests for public hearing shall state, with particularity, the

reasons for holding a public hearing.

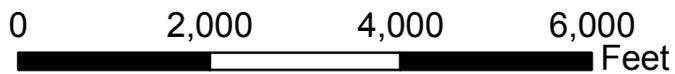
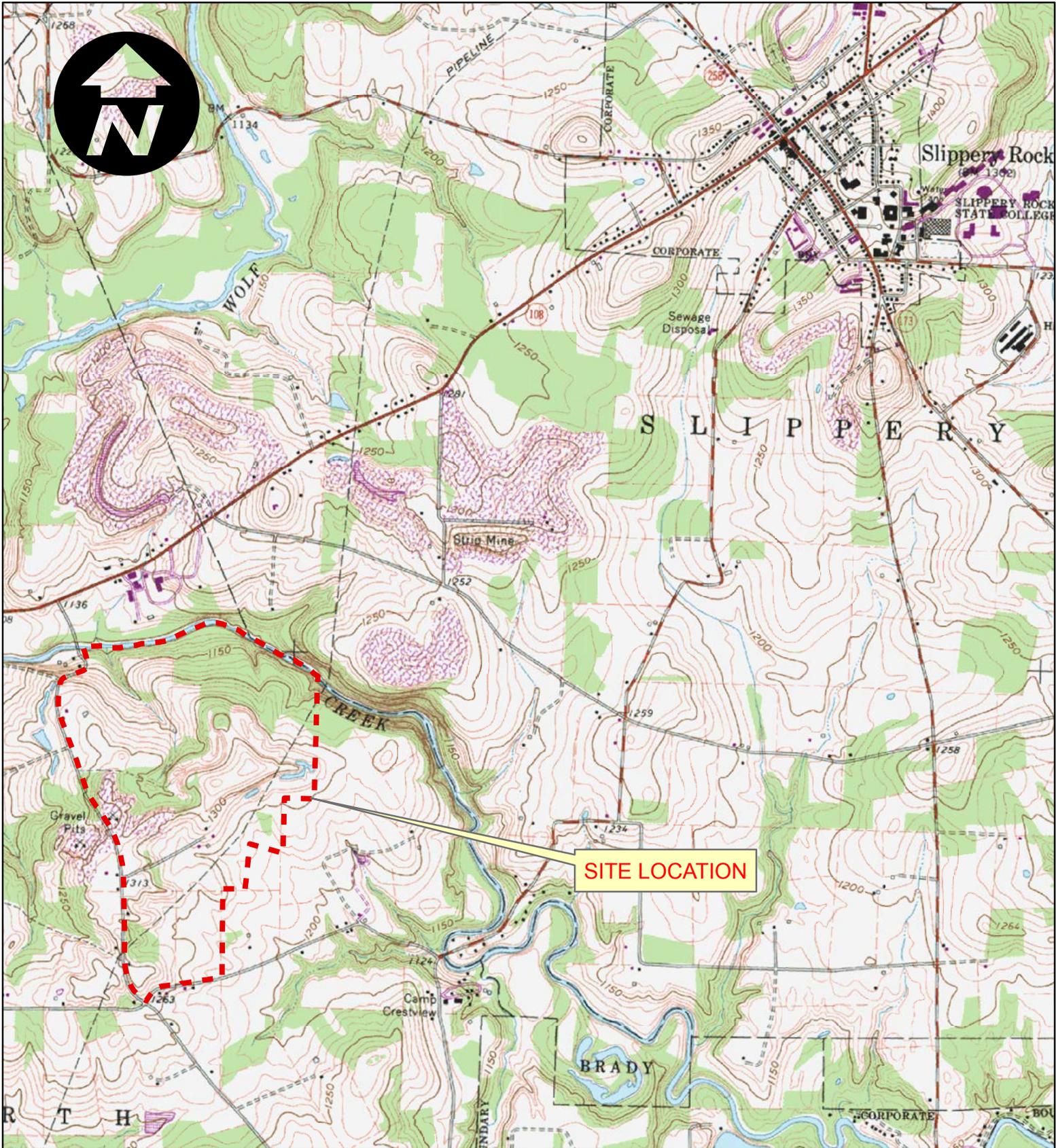
10. **EVALUATION:** Interested parties are invited to state any objections they may have to the proposed work. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposals must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain 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. 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 overall public interest of the proposed activity. 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 (40 CFR Part 230).

11. **RESPONSES:** A permit will be granted unless its issuance is found to be contrary to the public interest. Written statements concerning the proposed activity should be received in this office on or before the closing date of this Public Notice in order to become a part of the record and to be considered in the final determination. Any objections which are received during this period may be forwarded to the applicant for possible resolution before the determination is made whether to issue or deny the requested DA Permit. All responses to this notice should be directed to the Regulatory Branch, attn Michael Fodse at the above address, by telephoning (412) 395-7575, or by e-mail at Michael.M.Fodse@usace.army.mil. Please refer to CELRP-OP-F 2012-327 in all responses.

FOR THE DISTRICT ENGINEER:

//signed//

Nancy Mullen
North Section Chief, Regulatory Branch



THE EADS GROUP
 ENGINEERING ARCHITECTURE AND DESIGN SERVICES

15392 ROUTE 322
 CLARION, PA. 16214
 Phone: 814-764-5050
 Fax: 814-764-5055
 www.eadsgroup.com

WITH OFFICES IN:
 ALTOONA, PA.
 CLARION, PA.
 JOHNSTOWN, PA.
 PITTSBURGH, PA.
 SOMERSET, PA.
 CUMBERLAND, MD.

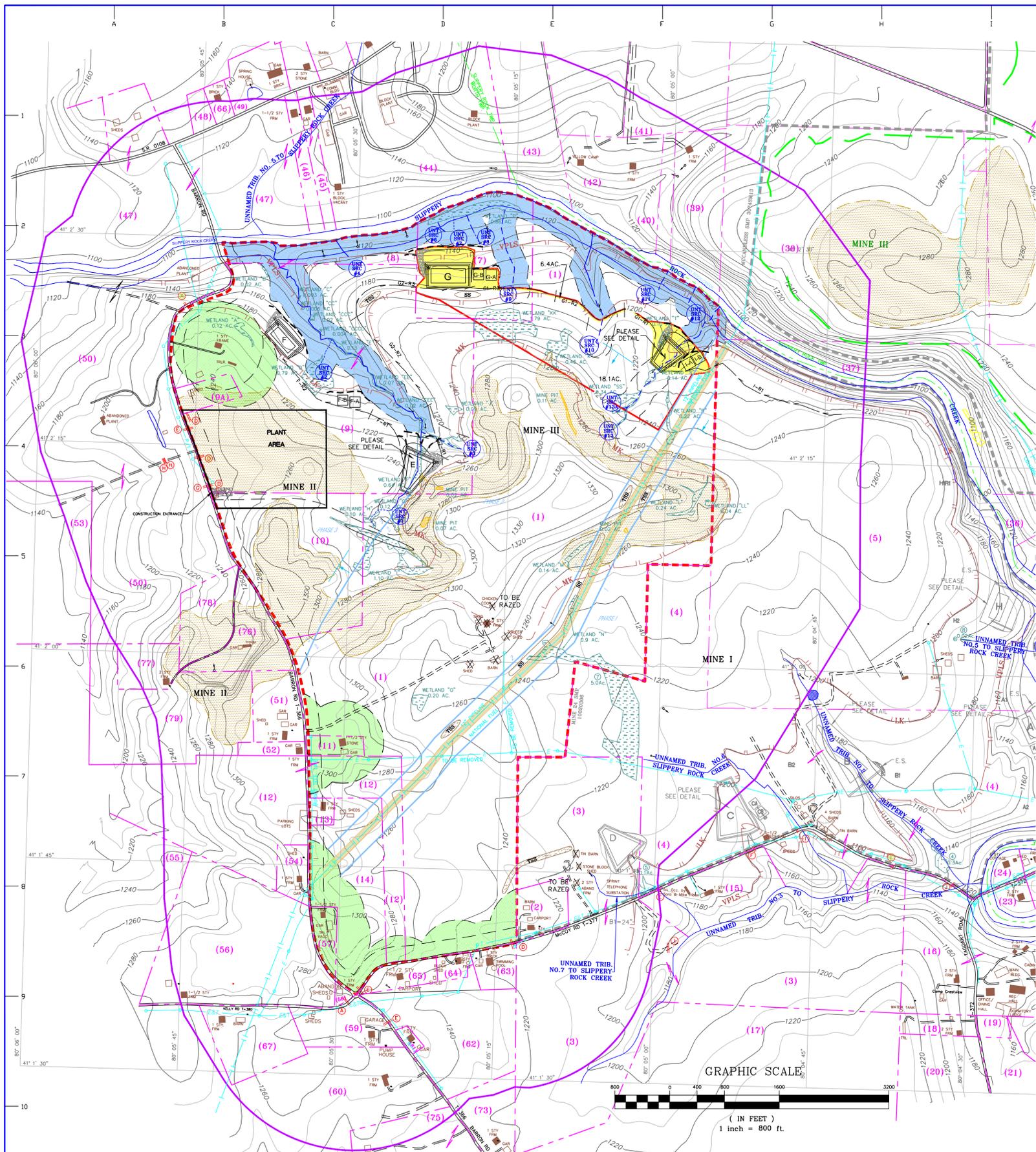
ALLEGHENY MINERAL CORPORATION

Scale: 1"=2000'
 Date: 4-10-2014
 Drawn By: MVF
 Checked By: KTS
 Project No. 0270-12-124
 Drawing No. 1 of 1

**MINE 34
 SITE LOCATION MAP**

WORTH TOWNSHIP

BUTLER COUNTY



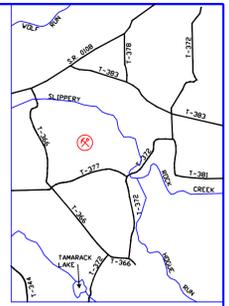
INDEX TO PROPERTY OWNERS

- (1.10) BARRON FAMILY LTD. PARTNERSHIP
- (2.) GLADYS M. & MARTIN W. McCOY
- (3) CHARLE W. McCOY
- (4,5,7,8,37,41) ALLEGHENY MINERAL CORP.
- (9) DALE T. & MARIE A. LUNN
- (9A) THREE RIVERS AGGREGATES, LLC.
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- (79) CODY BARKLEY

PROPERTY LINES SHOWN ON THIS MAP ARE TAKEN FROM COUNTY TAX ASSESSMENT MAPS AND SHOULD NOT BE USED TO ESTABLISH ACCURATE INTEREST IN THE FIELD.

LEGEND

- TOWNSHIP BOUNDARIES
- EXISTING ROADS
- PROPERTY LINES
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- DELINEATED WETLAND AREAS
- EXISTING CULVERTS
- EXISTING STREAMS PERENNIAL
- INTERMITTENT
- STREAM BARRIER AREA
- HOUSE BARRIER AREA
- GAS LINE BARRIER AREA
- ROAD BARRIER AREA
- STREAM VARIANCE AREA
- HOUSE VARIANCE AREA
- GAS LINE VARIANCE AREA
- ROAD VARIANCE AREA
- ABOVE GROUND UTILITY LINES
- ELEC. = CENTRAL ELEC. CO. POWER LINES
- TELE. = UNITED TELEPHONE OF PA LINES
- IN GROUND GAS LINES
- PREVIOUSLY MINED SITES
- UNOCCUPIED DWELLING
- OCCUPIED DWELLING
- ACCESS ENTRANCE
- TOP SOIL STORAGE BERM
- SILT SOCK OR COMPOST FILTER SOCK
- PHASE LIMITS
- SEDIMENT PONDS
- TREATMENT PONDS
- INTERCEPTOR/DIVERSION DITCH
- TOPSOIL STORAGE AREAS (To be Field Determined if Necessary)
- TEMPORARY SPOIL STORAGE AREA
- FINAL HIGHWAY LIMITS
- INITIAL CUT AND DIRECTION OF MINING
- APPROXIMATE OUTCROP LOCATION
- INFERRED OUTCROP LOCATION
- 1000' PERMIT BOUNDARY
- PROPOSED SMP # 10020306
- AREA 335.9 ACRES
- BONDING INCREMENT 01 --- 24.5 AC
- 18.1 AC. MINING
- 6.4 AC. SUPPORT



UTILITY LISTINGS

- SPRINT
218 S. Washington St.
Butler, PA 16001
(724) 284-7100
- NATIONAL FUEL
3505 Valley View Road
Clark, PA 16113
(800) 365-3234
- WEST PENN POWER (ALLEGHENY POWER)
501 Hansen Ave.
Butler, PA 16001
(800) 255-3443
- COLUMBIA GAS OF PA
315 Shady Rest Road
Elwood City, PA 16117
(724) 758-5507
(888) 460-4332

CULVERT TABLE

(A)	12" CMP	(F)	24" CMP
(B)	12" CPP	(G)	30" CMP
(C)	12" RCP	(H)	30" CPP
(D)	15" CMP	(I)	36" CMP
(E)	18" CMP	(J)	72" CMP
		(K)	OBSTRUCTED

APPROVED:	DATE
PROJECT ENGINEER	DATE
APPROVED:	DATE
PROJECT GEOLOGIST	DATE
APPROVED:	DATE
DEP REVIEW RESPONSE	TJB
REV. DATE DESCRIPTION	BY
1 MARCH 2013	

APPROVED: _____ DATE _____
 PROJECT ENGINEER _____ DATE _____
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 PROJECT GEOLOGIST _____ DATE _____
 APPROVED: _____ DATE _____



SEAL

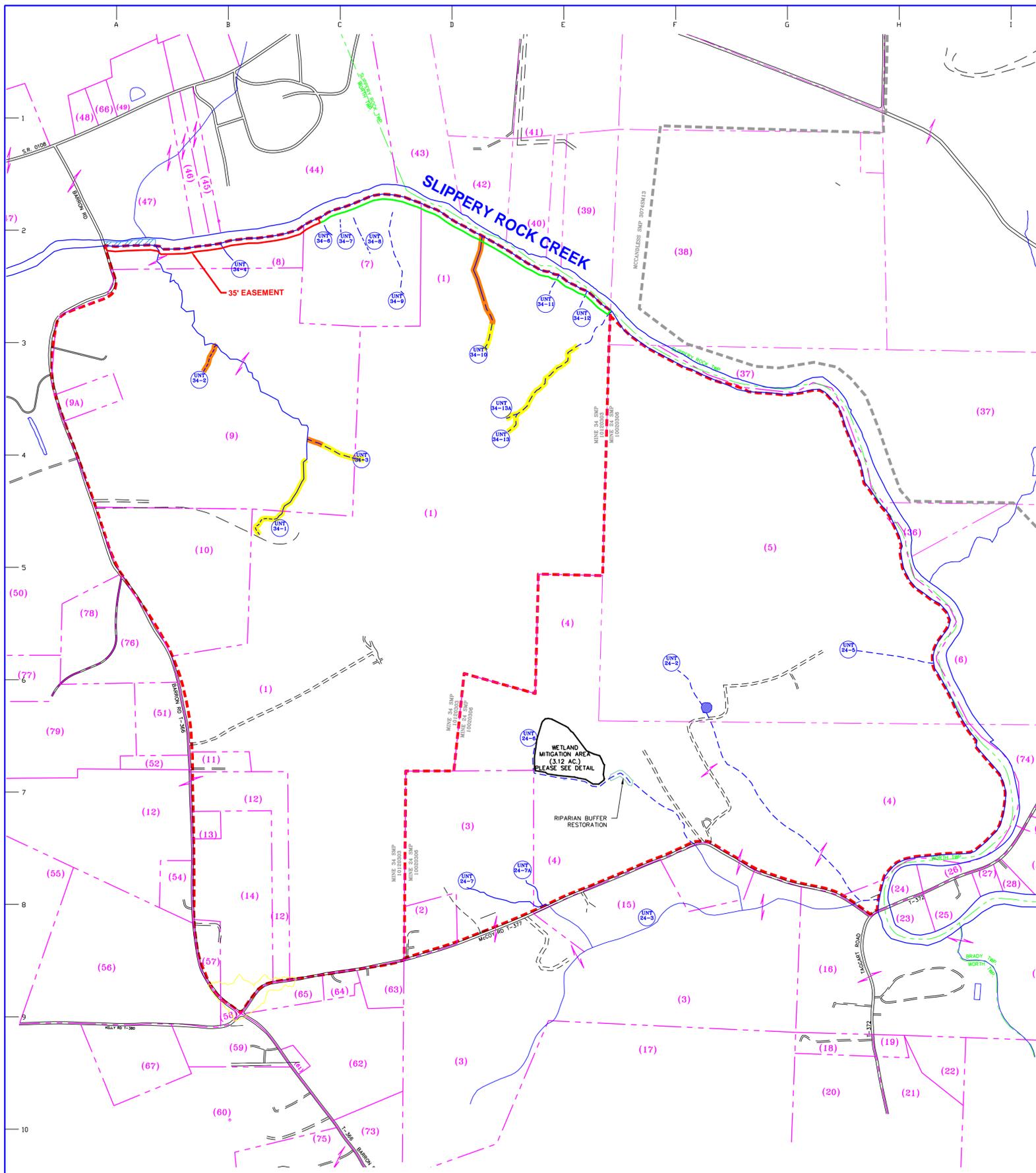


CLARION OFFICE
15392 ROUTE 322
P.O. BOX 684
CLARION PA, 16214
(814) 764-5050
(814) 764-5055 FAX
EMAIL: clarion@eadsgroup.com

OPERATIONS MAP

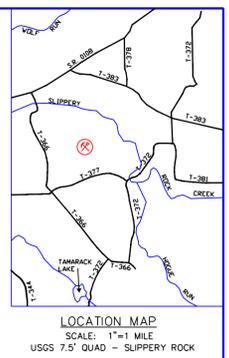
ALLEGHENY MINERAL CORP.
MINE NO. 34
EXHIBIT 9
 WORTH TOWNSHIP, BUTLER COUNTY

DRAWN BY: KAL
 PERMIT NO:
 DATE: 10/2012 SCALE: 1"=400'
 PROJECT NO: 270-10-53.01
 DRAWING NAME: 2434MINE.DWG
 SHEET NO: 6 of 10



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- | | |
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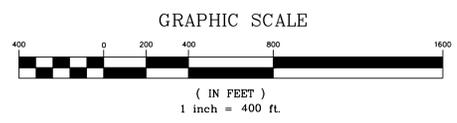


Allegheny Mineral - Stream Mitigation Summary For Direct Impacts

Stream	Proposed Mitigation (ft)			Total
	Ephemeral	Intermittent	Perennial	
UNT 2		760	583	1,343
UNT2B			225	225
Total		760	808	1,568

Stream	Proposed Mitigation (ft)			Total
	Ephemeral	Intermittent	Perennial	
UNT 34-1	247		497	744
UNT 34-3	115	204		319
UNT 34-9				
UNT 34-10		196		196
UNT 34-13		840		840
UNT 34-13A		90		90
Total	362	1330	497	2,189

Combined Mitigation			
Proposed Mitigation (ft)			
Ephemeral	Intermittent	Perennial	Total
362	2,090	1,305	3,757
10%	56%	35%	



- LEGEND**
- TOWNSHIP BOUNDARIES
 - EXISTING ROADS
 - PROPERTY LINES
 - 1200--- EXISTING MAJOR CONTOURS
 - 1210--- EXISTING MINOR CONTOURS
 - EXISTING STREAMS
 - PERENNIAL
 - INTERMITTENT
 - EPHEMERAL
 - PROPOSED DIRECT STREAM IMPACT - 2,189'
 - PROPOSED REDUCED HYDROLOGY STREAM IMPACT - 998'
 - PROPOSED BOULDER HABITAT (SEE DETAIL)
 - HARRISVILLE COAL MINE STREAM MITIGATION
 - 35' WIDE CONSERVATION EASEMENT
 - 1,568 LINEAR FEET
 - AREA 54,880 SF. / 1.26 AC.
 - MINE 34 STREAM MITIGATION
 - 35' WIDE CONSERVATION EASEMENT
 - 2,189 LINEAR FEET
 - AREA 76,615 SF. / 1.76 AC.
 - TOTAL STREAM MITIGATION
 - 3,757' LINEAR FEET
 - AREA 131,495 SF. / 3.02 AC.

REV.	DATE	DESCRIPTION	BY
2	April 2014	ADDED REDUCED HYDROLOGY SECTIONS TO STREAM IMPACTS	MVF
1	Dec. 2013	REVISED EASEMENT WIDTH (35')	TJB

APPROVED: _____
 PROJECT ENGINEER _____ DATE _____
 APPROVED: _____
 PROJECT GEOLOGIST _____ DATE _____
 APPROVED: _____



SEAL

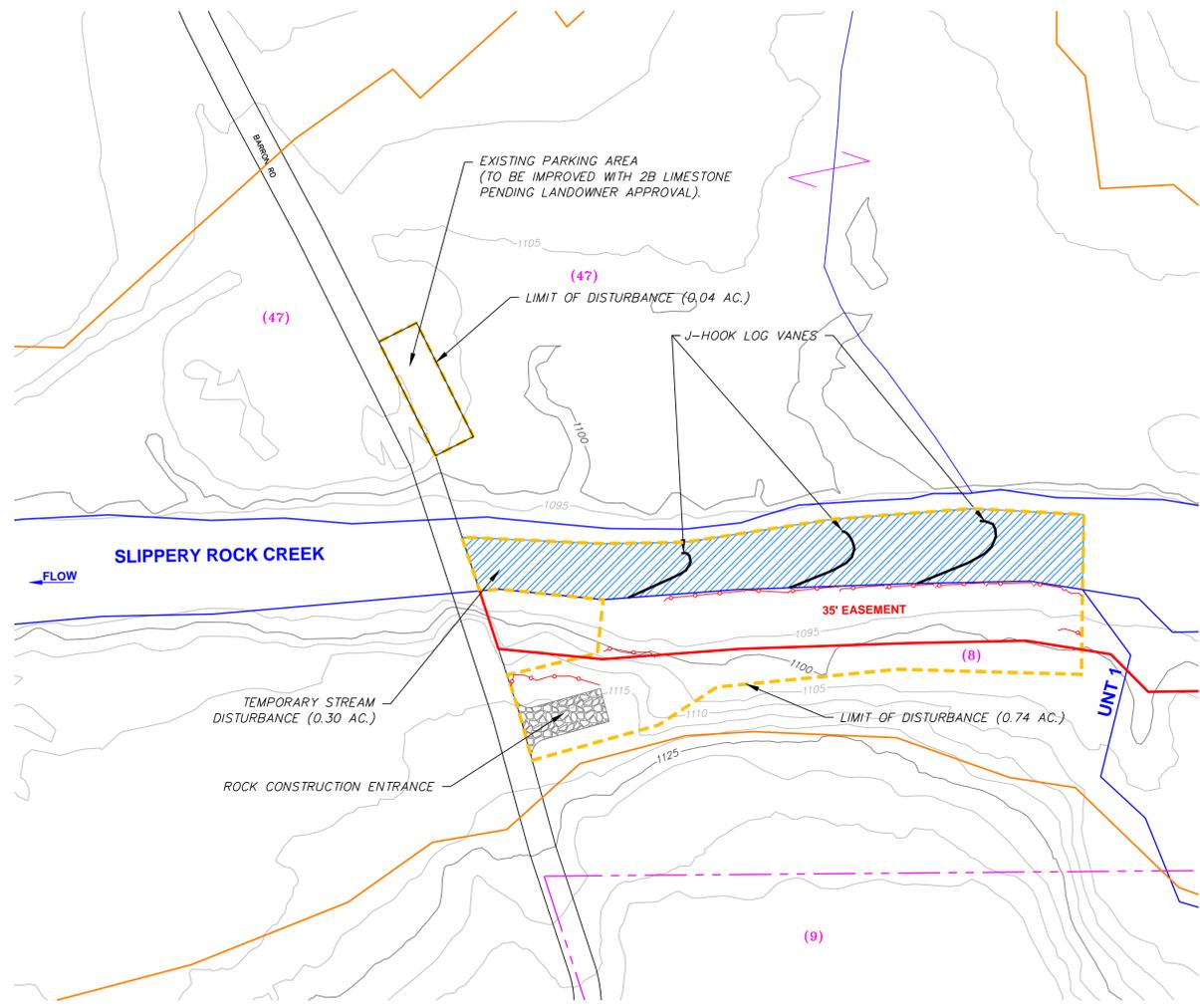


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MINE 34 AND HARRISVILLE COAL

STREAM MITIGATION PLAN FOR ALLEGHENY MINERAL CORP.
 WORTH TOWNSHIP, BUTLER COUNTY

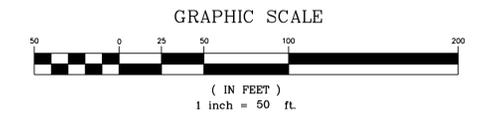
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 DATE: 10/2013 SCALE: 1"=400'
 PROJECT NO: _____
 DRAWING NAME: 2434mine.dwg
 SHEET NO: 8 OF 9



RIPARIAN BUFFER SEED MIX			
ERNST CONSERVATION SEEDS - ERNMX - 178			
Plant Species	Common Name	Seed Mix Composition	Seeding Rate
<i>Elymus virginicus</i>	Virginia Wildrye	30%	30lbs/acre
<i>Carex vulpinoidea</i>	Fox Sedge	16%	
<i>Andropogon gerardi</i>	Big Bluestem	15%	
<i>Panicum virgatum</i>	Switchgrass	9%	
<i>Chamaecrista fasciculata</i>	Partridge Pea	6%	
<i>Verbena hastata</i>	Blue Vervain	4%	
<i>Agrostis perennans</i>	Autumn Bentgrass	4%	
<i>Helopsis helianthoides</i>	Oxeye Sunflower	3%	
<i>Eupatorium perfoliatum</i>	Boneset	2%	
<i>Juncus effusus</i>	Soft Rush	2%	
<i>Baptisia australis</i>	Blue False Indigo	2%	
<i>Vernonia gigantea</i>	Giant Ironweed	2%	
<i>Rudbeckia hirta</i>	Blackeyed Susan	2%	
<i>Eupatorium fistulosum</i>	Joe Pye Weed	1%	
<i>Lobelia siphilitica</i>	Great Blue Lobelia	1%	
<i>Monarda fistulosa</i>	Wild Bergamot	1%	

FALL/WINTER COVER CROP			
Plant Species	Common Name	Seed Mix Composition	Seeding Rate
<i>Secale cereale</i>	Aroostock Rye	100%	30lbs/acre

SPRING COVER CROP			
Plant Species	Common Name	Seed Mix Composition	Seeding Rate
<i>Avena sativa</i>	Oats	100%	30lbs/acre



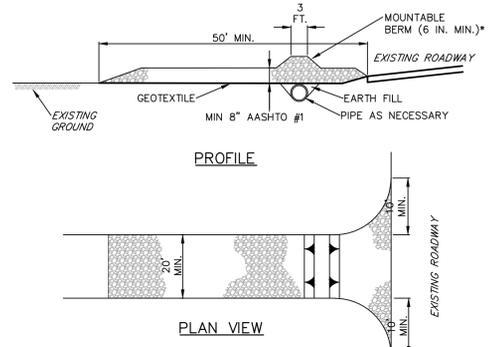
CONSTRUCTION SEQUENCE:
 There will be no earth moving activities until all equipment and materials have been assembled at the site. Staked filter socks will be installed adjacent to the stream banks in all areas where disturbance will be directly adjacent to the stream, as per the attached plans and construction details.

The filter socks will be maintained in place until the area has been stabilized with a minimum 70% permanent perennial vegetative cover. It is anticipated that construction will require less than one day and will be completed during a period of low-flow.

Restoration of the disturbed area will commence immediately upon completion of the bank restoration. Topsoils will be replaced and all disturbed areas will be seeded and mulched at the rates indicated on the attached plans.

While the temporary controls are in place, they will be inspected weekly and after every measurable runoff event. Any maintenance needed will be performed immediately by personnel authorized by Allegheny Mineral to ensure its ability to function as planned. These controls will remain in place until the permanent control measures have been established and the perennial vegetative cover has reached a minimum of 70%. Monitoring of the site will continue weekly and after each measurable runoff event through the first growing season to assure the success of the reclamation. Any inadequate or unsuccessful seeding will be re-seeded.

Staging of Earth Moving Activities
 No earth moving activities will be commenced until all materials have been assembled at the site.
 Stage I E&S Control measures will be installed
 Stage II Stream restoration/fish habitat structure installed
 Stage III Grading and planting/seeding
 Stage VI Removal of all E&S Control measures after permanent stabilization

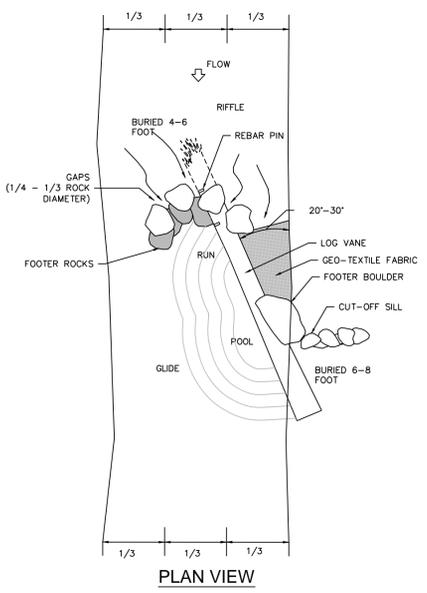


* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:
 REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
 RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
 MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
 MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK, WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



NOTES:
 1. FOR LOG VANES USE THREE STAKED 24 FOOT LONG 1 1/2" DIA. LOGS. 14-20 FEET OF LOG TO BE EXPOSED IN THE STREAM CHANNEL AND REMAINDER WEDGED AND ANCHORED INTO THE STREAM BANK.
 2. PRE DRILL HOLES IN LOG AND ANCHOR TO BANK AND STREAM BED WITH 3/8" (MIN.) REBAR; BEND TOPS OF REBAR OVER LOSS IN DOWNSTREAM DIRECTION.
 3. USE 30 INCH DIAMETER (MIN.) ROCK FOR ROCK HOOKS
 4. NAIL WOVEN GEOTEXTILE TO UPSTREAM SIDE OF THE TOP LOG IN LOG VANE AND LAY GEOTEXTILE ON THE STREAM BOTTOM BETWEEN LOG VANE AND STREAM BANK; PLACE 6 TO 12 INCHES OF ALLUVIUM (EXCAVATED FROM STREAM BED DURING LOG VANE AND ROCK HOOK INSTALLATION) ON TOP OF GEOTEXTILE TO SEAL UPSTREAM EDGE OF LOG VANE.

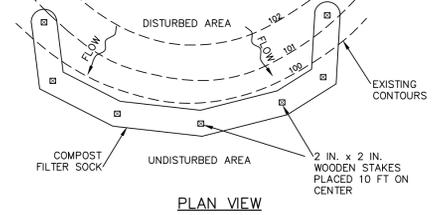
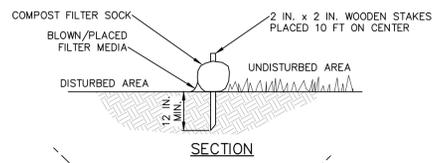
J-HOOK LOG VANE

NTS

INDEX TO PROPERTY OWNERS

- (8) ALLEGHENY MINERAL CORP.
- (9) DALE T. & MARIE A. LUNN
- (47) JOHN P. & JUDITH B. KARNES

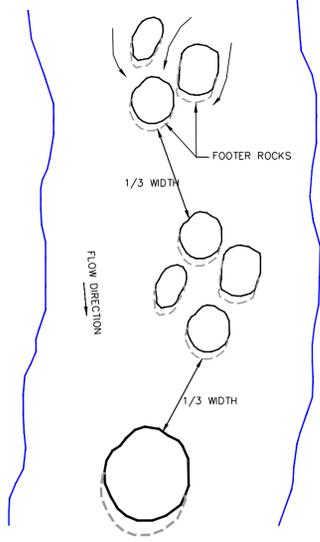
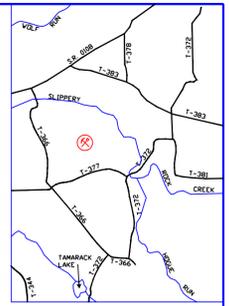
PROPERTY LINES SHOWN ON THIS MAP ARE TAKEN FROM COUNTY TAX ASSESSMENT MAPS AND SHOULD NOT BE USED TO ESTABLISH ACCURATE INTEREST IN THE FIELD.



NOTES:
 SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
 COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
 TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
 ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
 COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
 BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK

NOT TO SCALE



NOTES:
 1. COMPLETE STREAM WORK DURING PERIODS OF LOW FLOW TO ENSURE PROPER LOCATION WITHIN THE STREAM CHANNEL AND TO FACILITATE THE MOVEMENT OF HEAVY EQUIPMENT.
 2. BOULDERS SHALL BE PLACED ON TOP OF FOOTER ROCKS SO THAT THE BOULDER IS OFFSET IN THE UPSTREAM DIRECTION.
 3. PLACE CLUSTERS COMPRISED OF 3 TO 5 BOULDERS ARRANGED IN A TRIANGULAR CONFIGURATION IN THE DOWNSTREAM HALF OF LONG RUNS, AND EMBED THEM IN THE STREAM BED TO INCREASE THE CLUSTER'S STABILITY.
 4. SPACE MULTIPLE BOULDER CLUSTERS CONSTRUCTED IN THE SAME STREAM SECTION A MINIMUM OF 1/3 OF A STREAM WIDTH APART.

BOULDER HABITAT IN RUNS

NTS

LEGEND

- (9) EXISTING ROADS
- APPROXIMATE PROPERTY LINES / OWNERS
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- LIMIT OF DISTURBANCE (0.78 AC.)
- FEMA 100 YR. FLOOD PLAIN
- 35' CONSERVATION EASEMENT
- COMPOST FILTER SOCK
- EXISTING STREAMS
- PERENNIAL
- PROPOSED BOULDER HABITAT (SEE DETAIL)

APPROVED: _____
 PROJECT ENGINEER DATE _____
 APPROVED: _____
 PROJECT GEOLOGIST DATE _____
 APPROVED: _____



SEAL

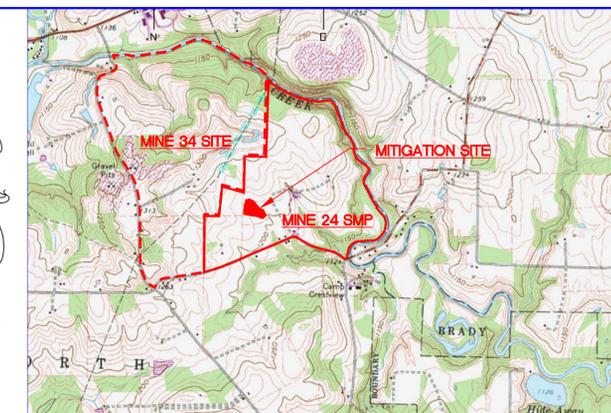
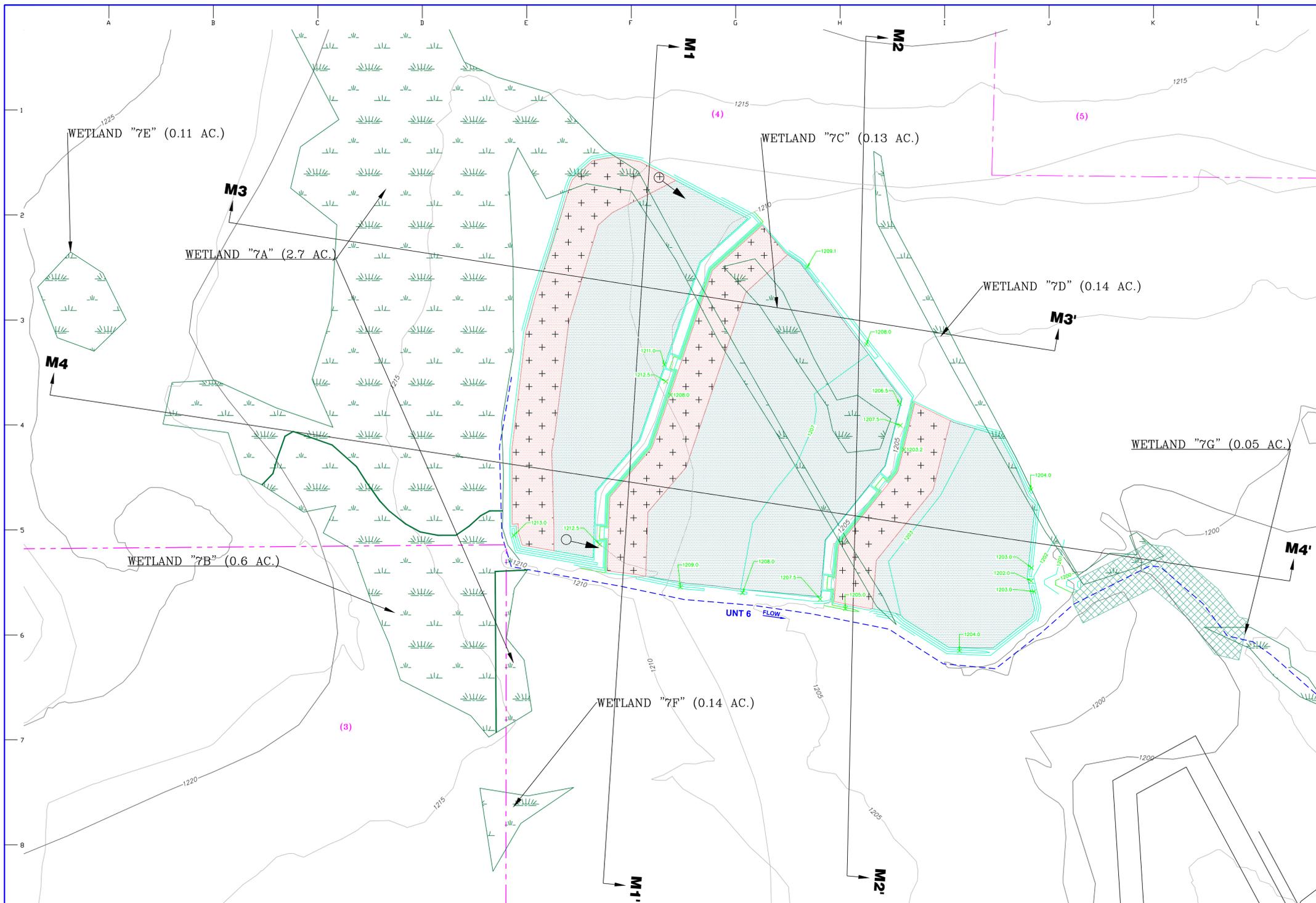


CLARION OFFICE
 15392 ROUTE 322
 P.O. BOX 684
 CLARION PA, 16214
 (814) 764-5050
 (814) 764-5055 FAX
 EMAIL: clarion@eadsgroup-clarion.com

ALLEGHENY
 MINERAL CORP.

SITE PLAN
 STREAM MITIGATION
 FOR
 MINE 34 & HARRISVILLE COAL
 WORTH TOWNSHIP, BUTLER COUNTY

DRAWN BY: TJB
 PERMIT NO: _____
 DATE: 12/2013 SCALE: 1"=50'
 PROJECT NO: _____
 DRAWING NAME: 2434mine.dwg
 SHEET NO: 9 OF 9



LOCATION MAP
SCALE: 1"=2000'
USGS 7.5' QUAD - SLIPPERY ROCK, PA

SEED MIXES

FACW Wetland Meadow Seed Mix (ERNST CONSERVATION SEEDS - ERNMX 122):

Plant Species	Common Name	Seed Mix Composition	Seeding Rate
Carex vulpinoidea	Fox Sedge	25%	20lb/acre
Elymus virginicus	Virginia Wildrye	25%	
Carex lurida	Shallow Sedge	15%	
Helopsis helianthoides	Oxeye Sunflower	6%	
Carex lupulina	Hop Sedge	6%	
Juncus effusus	Soft Rush	3%	
Carex comosa	Cosmos Sedge	3%	
Aster umbellatus	Flat Topped White Aster	3%	
Aster prenanthoides	Zigzag Aster	3%	
Scirpus atrovirens	Green Bulrush	3%	
Aster paniculatus	Purplestem Aster	2%	
Ludwigia alternifolia	Seedbox	2%	
Zizia aurea	Golden Alexander	2%	
Acletois incarnata	Swamp Milkweed	1%	
Vernonia gigantea	Giant Ironweed	1%	
Lobelia siphilitica	Great Blue Lobelia	1%	
Scirpus cespitosus	Winggrass	1%	
Eupatorium perfoliatum	Boneset	1%	

FALL/WINTER COVER CROP

Plant Species	Common Name	Seed Mix Composition	Seeding Rate
Secale cereale	Arrotock Rye	100%	30lb/acre

SPRING COVER CROP

Plant Species	Common Name	Seed Mix Composition	Seeding Rate
Annona sativa	MSR	100%	30lb/acre

Woody Planting Specifications

Plant Species	Scientific Name	Common Name	Note	Type of Plant Material	Height or Length (inches)	Unit	Planting Density (units/acre)
Salix sericea	Salix	Willow	1	live stake	24	stake	1,500
Corylus americana	Corylus	Bur	1	live stake	24	stake	1,500
Platanus occidentalis	Platanus	American Sycamore	1	live stake	24	stake	1,500
Cornus amomum	Cornus	Silky Dogwood	1	live stake	24	stake	1,500
Ulmus americana	Ulmus	Northern Elm	1	live stake	24	stake	1,500
Salix nigra	Salix	Black Willow	1	live stake	24	stake	1,500
Platanus occidentalis	Platanus	American Sycamore	2	1 gallon container	24-36	plant	1,000
Quercus bicolor	Quercus	Swamp White Oak	2	1 gallon container	24-36	plant	1,000
Cornus sericea	Cornus	Red Osier Dogwood	2	1 gallon container	24-36	plant	1,000
Nyssa sylvatica	Nyssa	Black Gum	2	1 gallon container	24-36	plant	1,000
Salix nigra	Salix	Black Willow	2	1 gallon container	24-36	plant	1,000
Acer rubrum	Acer	Red Maple	2	1 gallon container	24-36	plant	1,000

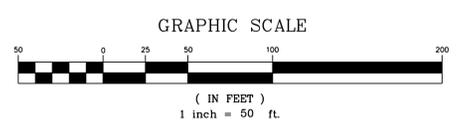
1. Total live stakes should equal 1,500 plants per acre; use mixture of species listed above based on availability.
2. Total potted plants should equal 1,000 plants per acre; use mixture of species listed above based on availability.

Planting Notes

- Plant materials will be from plant stock native or adapted to the Eastern Broadleaf Forest Ecoregions, as defined by the USDA Forest Service, and USDA plant hardiness zones 5 and 6.
- Within the riparian forest wetland planting zone, a total of 1,000 woody plants should be established per acre. Within the scrub-shrub/forest planting zone, a total of 1,500 woody plants should be established per acre. The exact number of each species will vary depending on nursery stock availability.
- Plant handling and installation should be performed by a contractor with experience in landscaping, plant propagation, planting wetland mitigation sites, reforestation, and/or ecological restoration work.
- Condition of plant materials:
 - Plant materials will be healthy and free of disease, pests, mechanical injury and stress. Plants with leaves and shoots will appear healthy, with no leaf spots, leaf discolorations, chlorosis, leaf wilting or curling, or evidence of insect infestation. Plants will exhibit normal physical and growth characteristics typical of the species.
 - Container-grown plants will be fully rooted in the soil potting medium without spiraling primary woody roots.
 - Upon receipt and following inspection, plant materials should be immediately installed in the disturbed area. If plant materials cannot be installed immediately after delivery, they will be stored appropriately for not longer than 3 days. Seed should be stored in a cool, dry, sheltered location. Live stakes and container-grown plants will be stored out of direct exposure to wind and sun and will be watered periodically to maintain soil moisture.
- Proper seed mix use will depend on environmental characteristics at the intended site. All seed mixes will be sown in conjunction with appropriate seasonal cover crop seed. Prior to seeding, seed mixes should be mixed with a minimum of an equal volume of appropriate inert carrier (clean sand, sawdust, oat groats, etc.) to provide more uniform seed distribution. Wetland seed mixes will be broadcast on moist soil with hand-held seed spreaders. Upland warm season grass seed mix will be drilled into a firm seed bed to a depth of 1/2-inch using a native grass seed drill. Much all areas that aren't inundated with clean straw (at 140 pounds per 1,000 square feet) following temporary and final seeding.
- Live stakes will be submerged in water for 24 hrs prior to installation. A planting bar or appropriate tool will be used to form a pilot hole the same diameter as the live stakes. Care must be taken to insure that each stake is planted with the angled cut pointing down. Approximately 6" of each stake should remain above the ground.
- Container-grown woody and herbaceous wetland plants will be installed in moist soil using appropriate hand tools (spade, dibble, auger, etc.). Plastic plant protectors will be installed with all rooted woody plants.

Mine 24 - Wetland Impact Summary

Wetland	Temporary Impact (ac.)	Permanent Impact (ac.)	Mitigation (ac.)
7A	0.126	0.008	0.008
7C	0.130	0.000	0.000
7D	0.010	0.017	0.017
Total	0.266	0.025	0.025



LEGEND

- (4) APPROXIMATE PROPERTY LINES / OWNERS
- 1200 EXISTING MAJOR CONTOURS
- 1202 EXISTING MINOR CONTOURS
- EXISTING SPRING
- DELINEATED WETLAND AREAS (0.266 AC. TEMP. IMPACT; 0.025 AC. PERMANENT IMPACT)
- INTERMITTENT STREAM
- SCRUB-SHRUB / FORESTED WETLAND - LIVE STAKES & SEED MIX ERNMX-122 (2.28 AC.)
- RIPARIAN FOREST - POTTED PLANTS & SEED MIX ERNMX-122 (0.84 AC.)
- RIPARIAN BUFFER RESTORATION LIVE STAKES (0.18 AC.)

INDEX TO PROPERTY OWNERS

(3) CHARLE W. McCOY
(4,5) ALLEGHENY MINERAL CORP.

PROPERTY LINES SHOWN ON THIS MAP ARE TAKEN FROM COUNTY TAX ASSESSMENT MAPS AND SHOULD NOT BE USED TO ESTABLISH ACCURATE INTEREST IN THE FIELD.

APPROVED:		
PROJECT ENGINEER	DATE	
APPROVED:		
PROJECT GEOLOGIST	DATE	
APPROVED:		
REV. DATE	DESCRIPTION	BY
1 12-17-13	REVISED PER DEP RESPONSE	TJB

APPROVED: _____ DATE _____
 PROJECT ENGINEER
 APPROVED: _____ DATE _____
 PROJECT GEOLOGIST
 APPROVED: _____ DATE _____



SEAL

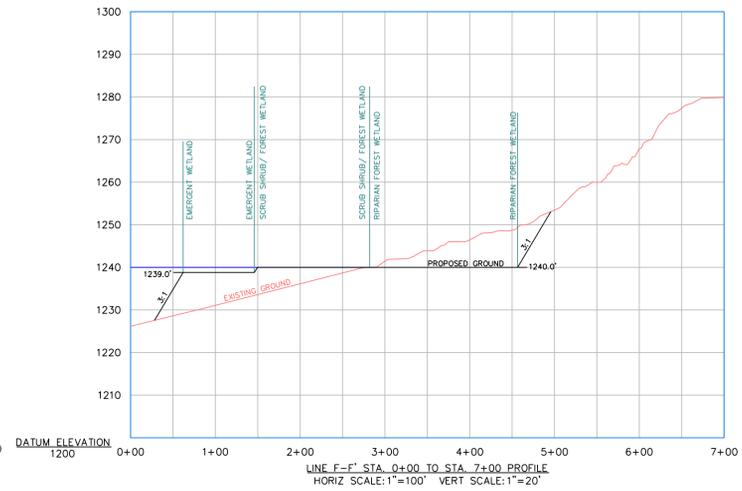
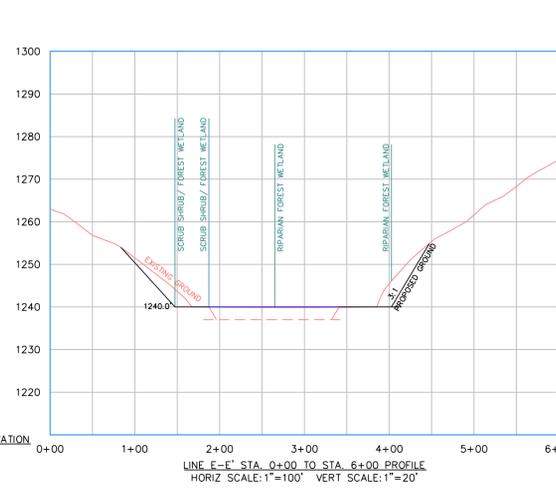
THE EADS GROUP
ENGINEERING ARCHITECTURE and DESIGN SERVICES

CLARION OFFICE
15392 ROUTE 322
P.O. BOX 684
CLARION PA, 16214
(814) 764-5050
(814) 764-5055 FAX
EMAIL: clarion@eadsgroup.com

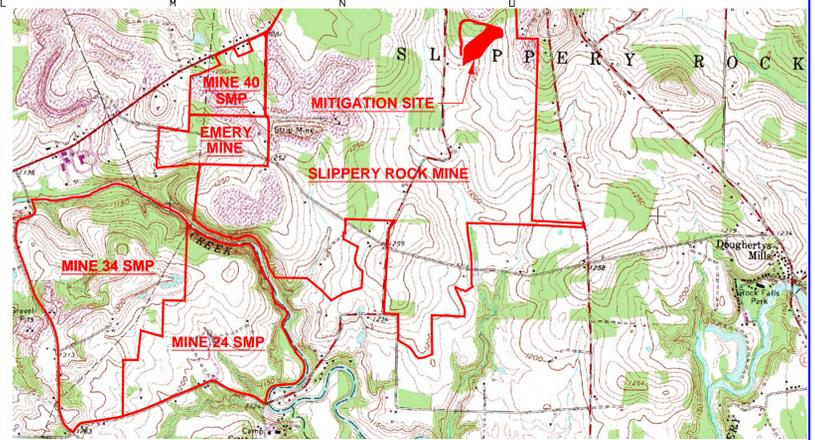
WETLAND MITIGATION PLAN

ALLEGHENY MINERAL CORP.
MINE NO. 24
WORTH TOWNSHIP, BUTLER COUNTY

DRAWN BY: TJB
 PERMIT NO:
 DATE: 10/2013 SCALE: 1"=50'
 PROJECT NO:
 DRAWING NAME: 2434MINE.DWG
 SHEET NO: 8 of 10



SEED MIXES				
FACW Wetland Meadow Seed Mix (ERNST CONSERVATION SEEDS - ERNMX 122):				
Plant Species	Common Name	Seed Mix Composition	Seeding Rate	
Carex vulpinoidea	Fox Sedge	25%	20lbs/acre	
Elymus virginicus	Virginia Wildrye	25%		
Carex lurida	Shallow Sedge	12%		
Heliopsis scabra	Oxeye Sunflower	6%		
Carex riparia	Hop Sedge	6%		
Juncus effusus	Soft Rush	3%		
Carex comosa	Cornus Sedge	3%		
Aster umbellatus	Flat Topped White Aster	3%		
Aster prenanthoides	Zigzag Aster	3%		
Scirpus arivirens	Green Bulrush	3%		
Aster pilosus	Purplestem Aster	2%	30lbs/acre	
Ludwigia alternifolia	Seedbox	2%		
Zizia aurea	Golden Alexanders	2%		
Asclepias incarnata	Swaroop Milkweed	1%		
Veronica gigantea	Giant Ironweed	1%		
Lobelia siphilitica	Great Blue Lobelia	1%		
Scirpus cyperinus	Woolgrass	1%		
Eupatorium perfoliatum	Boneset	1%		
FALL/WINTER COVER CROP				
Plant Species	Common Name	Seed Mix Composition		Seeding Rate
Cereale cereale	Aroostok Rye	100%	30lbs/acre	
SPRING COVER CROP				
Plant Species	Common Name	Seed Mix Composition	Seeding Rate	
Avena sativa	Oats	100%	30lbs/acre	

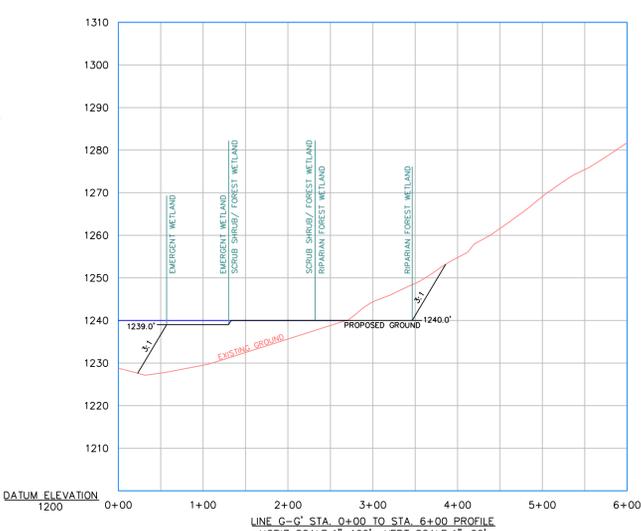
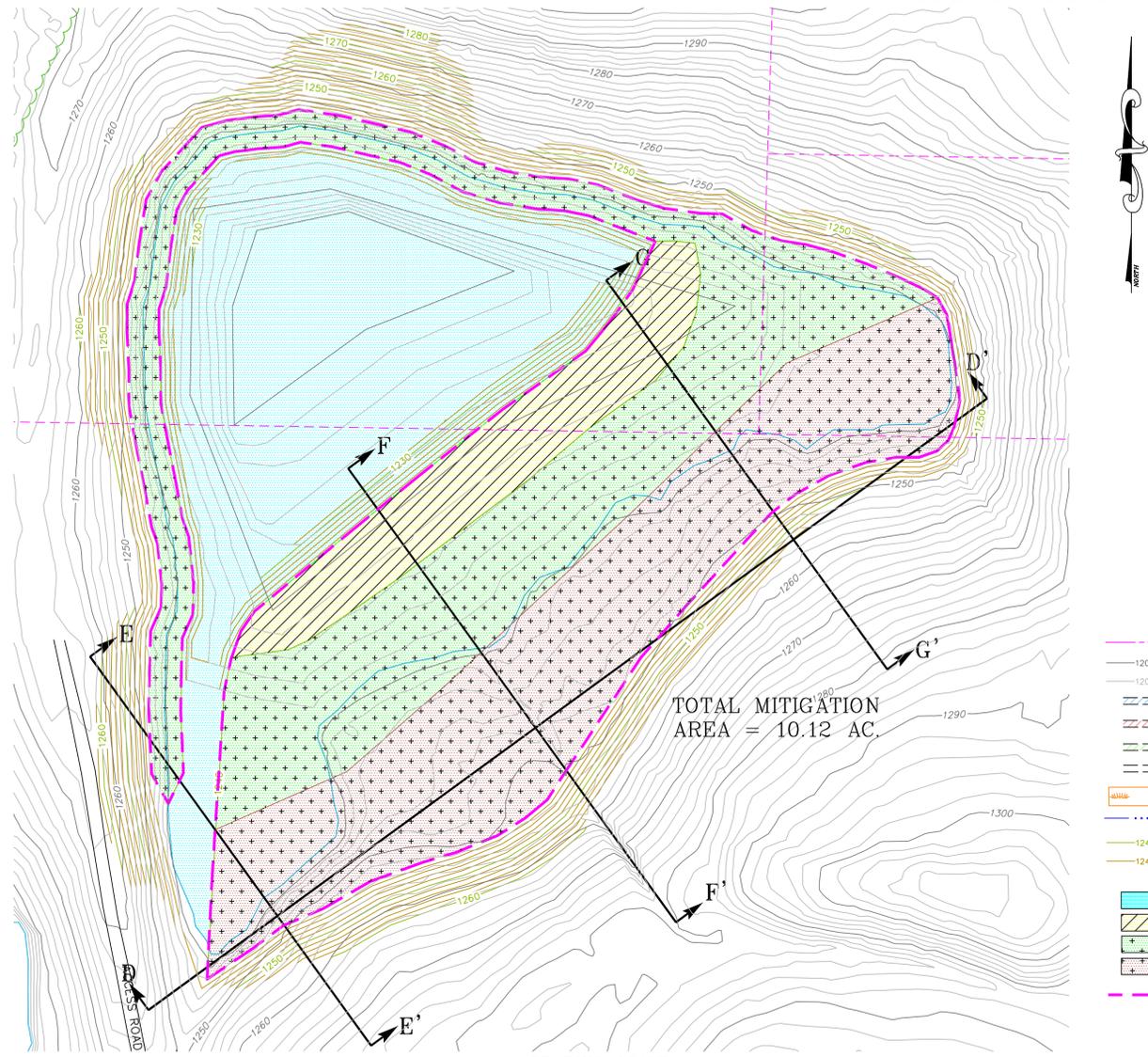


LOCATION MAP
SCALE: 1"=2000'
USGS 7.5' QUAD - SLIPPERY ROCK, PA

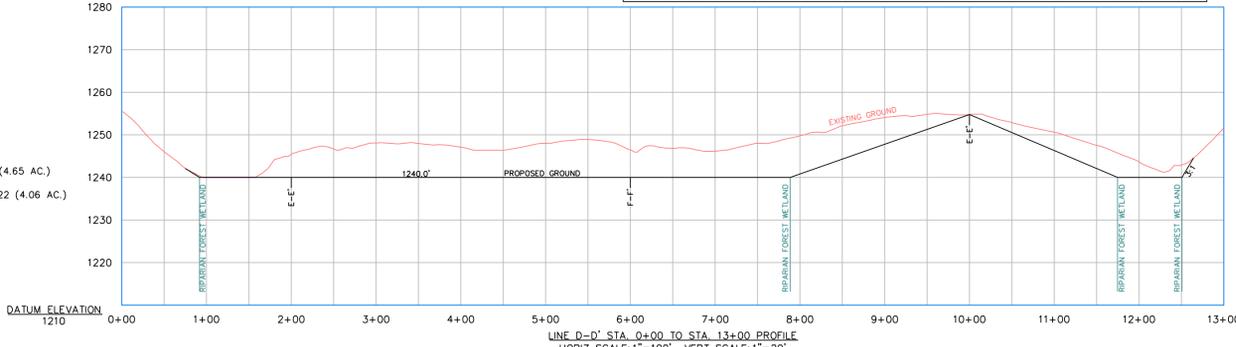
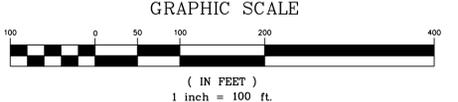
- Planting Notes**
- Plant materials will be from plant stock native or adapted to the Eastern Broadleaf Forest Ecoregions, as defined by the USDA Forest Service, and USDA plant hardiness zones 5 and 6.
 - Within the riparian forest wetland planting zone, a total of 1,000 woody plants should be established per acre. Within the scrub-shrub/forested planting zone, a total of 1,500 woody plants should be established per acre. The exact number of each species will vary depending on nursery stock availability.
 - Plant handling and installation should be performed by a contractor with experience in landscaping, plant propagation, planting wetland mitigation sites, reforestation, and/or ecological restoration work.
 - Condition of plant materials:
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 - Container-grown plants will be fully rooted in the soil potting medium without spiraling primary woody roots.
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 - Live stakes will be submerged in water for 24 hrs prior to installation. A planting bar or appropriate tool will be used to form a pilot hole the same diameter as the live stakes. Care must be taken to insure that each stake is planted with the angled cut pointing down. Approximately 6" of each stake should remain above the ground.
 - Container-grown woody and herbaceous wetland plants will be installed in moist soil using appropriate hand tools (spade, dibble, auger, etc.). Plastic plant protectors will be installed with all rooted woody plants.

Woody Planting Specifications						
Plant Species	Note	Type of Plant Material	Height or Length (inches)	Unit	Planting Density (units/acre)	
Salix sericea		Silky Willow	24	stake	1,500	
Cephalanthus occidentalis		Common Buttonbush	24	stake	1,500	
Platanus occidentalis		American Sycamore	24	stake	1,500	
Cornus amomum		Silky Dogwood	24	stake	1,500	
Viburnum recognitum		Northern Arrowwood	24	stake	1,500	
Salix nigra		Black Willow	24	stake	1,500	
Platanus occidentalis		American Sycamore	24-36	plant	1,000	
Quercus bicolor		Swamp White Oak	24-36	plant	1,000	
Cornus sericea		Red Osier Dogwood	24-36	plant	1,000	
Nyssa sylvatica		Black Gum	24-36	plant	1,000	
Salix nigra		Black Willow	24-36	plant	1,000	
Acer rubrum		Red Maple	24-36	plant	1,000	

- Total live stakes should equal 1,500 plants per acre; use mixture of species listed above based upon availability.
- Total potted plants should equal 1,000 plants per acre; use mixture of species listed above based upon availability.



- LEGEND**
- PROPERTY LINES
 - EXISTING MAJOR CONTOURS
 - EXISTING MINOR CONTOURS
 - STREAM BARRIER AREA
 - ROAD BARRIER AREA
 - HOUSE BARRIER AREA
 - STREAM, ROAD & HOUSE VARIANCE AREAS
 - DELINEATED WETLAND AREAS
 - EXISTING STREAMS
 - PROPOSED MAJOR CONTOURS
 - PROPOSED MINOR CONTOURS
 - UNMANAGED OPEN WATER (5.50 AC.)
 - EMERGENT WETLAND SEED MIX ERNMX-122 (1.41 AC.)
 - SCRUB-SHRUB/FORESTED WETLAND - LIVE STAKES & SEED MIX ERNMX-122 (4.65 AC.)
 - RIPARIAN FOREST - POTTED PLANTS & SEED MIX ERNMX-122 (4.06 AC.)
 - MINE 34 MITIGATION AREA (10.12 AC.)



APPROVED:		DATE	
PROJECT ENGINEER		DATE	
APPROVED:		DATE	
PROJECT GEOLOGIST		DATE	
APPROVED:		DATE	
REV.	DATE	DESCRIPTION	BY
1	3-8-13	REVISED GRADING AND CROSS SECTIONS	TJB

APPROVED: _____ DATE _____
 PROJECT ENGINEER _____ DATE _____
 APPROVED: _____ DATE _____
 PROJECT GEOLOGIST _____ DATE _____
 APPROVED: _____ DATE _____



CLARION OFFICE
 15392 ROUTE 322
 P.O. BOX 684
 CLARION PA, 16214
 (814) 764-5050
 (814) 764-5055 FAX
 EMAIL: clarion@eadsgroup-clarion.com

MODULE 14
 WETLAND MITIGATION
 PLAN & POST MINING
 POND DESIGN
 (MDP 3074SM13 McCANDLESS MINE)

ALLEGHENY MINERAL CORP.
 MINE 34
 WORTH TOWNSHIP, BUTLER COUNTY

DRAWN BY: TJB
 PERMIT NO:
 DATE: 10/2012 SCALE: 1"=100'
 PROJECT NO: 270-10-53.01
 DRAWING NAME: MINE34_MIT.dwg
 SHEET NO: 1 of 3