

Commercial/Industrial Floodplain Development Permit

Doddridge County, WV Floodplain Management

This permit has been issued to ANTERO RESOURCES , and is for the approved commercial and/or industrial development project associated with this permit that impacts the FEMA-designated floodplain and/or floodway of Doddridge County, WV, pursuant to the rules and regulations established by all applicable Federal, State and local laws and ordinances, including the Doddridge County Floodplain Ordinance. This permit must be posted at the site of work as to be clearly visible, and must remain posted during entirety of development.

Permit: #14-241 Foreman Centralized Freshwater Impoundment

Date Approved: 07/10/2014

Expires: N/A

Issued to: ANTERO RESOURCES

**POC: Emily Kijowski
303-357-7232**

**Company Address: 1615 WYNKOOP ST
DENVER, CO**

Project Address: Greenbrier District

Lat/Long: 39.224847N/80.624535W

Purpose of development: Freshwater Impoundment. Project does NOT impact floodplain.

Issued by: Edwin L. "Bo" Wriston, Doddridge County FPM (or designee)

Date: 07/10/2014

For additional information regarding this permit, please contact
Doddridge County Floodplain Manager at 304.873.2631, or via email at
doddridgecountyfpm@gmail.com
118 East Court Street; West Union, WV 26456

Legal Advertisement:
Doddridge County
Floodplain Permit Application

Please take notice that on the 3rd day of July, 2014

Antero Resources

filed an application for a Floodplain Permit to develop land located at or about:

Greenbrier District 39.224847N / 80.624535W

Permit #14-241 Foreman Centralized Freshwater Impoundment

(Note: This project is not within the floodplain)

The Application is on file with the Clerk of the County Court and may be inspected or copied during regular business hours. As this project is outside the FEMA identified floodplain of Doddridge County, Doddridge County Floodplain Management has no regulatory authority.

Any interested persons who desire to comment shall present the same in writing by **August 4, 2014**, delivered to:

Clerk of the County Court
118 E. Court Street, West Union, WV 26456
Beth A Rogers, Doddridge County Clerk
Edwin L. "Bo" Wriston. Doddridge County Flood Plain Manager

#14-241

FILED

2014 JUL -3 PM 1:20

BETH A. ROGERS
COUNTY CLERK
DODDRIDGE COUNTY, WV

June 27, 2014



Antero Resources
1615 Wynkoop Street
Denver, CO 80202
Office 303.357.7310
Fax 303.357.7315

Doddridge County Commission
Attn: Bo Wriston, Doddridge County Floodplain Manager
118 East Court Street, Room 102
West Union, WV 26456

Mr. Wriston:

Antero Resources Appalachian Corporation (Antero) would like to submit a Doddridge County Floodplain permit application for our Foreman Centralized Fresh Water Impoundment. Our project is located in Doddridge County, Greenbrier District and per FIRM maps #54017C0225C and #54017C0235C, this location is **not** within the floodplain.

Attached you will find the following:

- Doddridge County Floodplain Permit Application
- Foreman Construction Plans
- FIRM Map
- WV Flood Tool Map

If you have any questions please feel free to contact me at (303) 357-7232.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Emily Kijowski".

Emily Kijowski
Permit Representative
Antero Resources Appalachian Corporation

Enclosures

DODDRIDGE COUNTY FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

SECTION 1: GENERAL PROVISIONS (APPLICANT TO READ AND SIGN)

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within six months of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state, and federal requirements.
7. Applicant hereby gives consent to the Floodplain Administrator/Manager or his/her representative to make inspections to verify compliance.
8. **I, THE APPLICANT CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.**

APPLICANT'S SIGNATURE _____



DATE June 30, 2014

SECTION 2: PROPOSE DEVELOPMENT (TO BE COMPLETED BY APPLICANT).

IF THE APPLICANT IS NOT A NATURAL PERSON, THE NAME, ADDRESS, AND TELEPHONE NUMBER OF A NATURAL PERSON WHO SHALL BE APPOINTED BY THE APPLICANT TO RECEIVE NOTICE PURSUANT TO ANY PROVISION OF THE CURRENT DODDRIDGE COUNTY FLOODPLAIN ORDINANCE.

APPLICANT'S NAME: Antero Midstream LLC - Randy Kloberdanz,

ADDRESS: 1615 Wynkoop Street, Denver, CO 80202

TELEPHONE NUMBER: Contact Emily Kijowski: (303)-357-7232

BUILDER'S NAME: Antero Midstream LLC

ADDRESS: 1615 Wynkoop Strett, Denver, CO 80202

TELEPHONE NUMBER: (303)-357-7310

ENGINEER'S NAME: Horner Bros. Engineers

ADDRESS: 140 South Third Street, P.O. Box 386, Clarksburg, West Virginia, 26301

TELEPHONE NUMBER: (304)-624-6445

PROJECT LOCATION:

NAME OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) Please see attached Firm map with landowner tabulation

ADDRESS OF SURFACE OWNER/OWNERS (IF NOT THE APPLICANT) Please see attached Firm map with landowner tabulation

DISTRICT: Greenbrier

DATE/FROM WHOM PROPERTY

PURCHASED: N/A

LAND BOOK DESCRIPTION: Please see attached Firm map with landowner tabulation

DEED BOOK REFERENCE: Please see attached Firm map with landowner tabulation

TAX MAP REFERENCE: Please see attached Firm map with landowner tabulation

EXISTING BUILDINGS/USES OF PROPERTY: None

NAME OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY Please see attached Firm map with landowner tabulation

ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON THE SUBJECT PROPERTY _____

To avoid delay in processing the application, please provide enough information to easily identify the project location.

DESCRIPTION OF WORK (CHECK ALL APPLICABLE BOXES)

A. STRUCTURAL DEVELOPMENT

ACTIVITY

STRUCTURAL TYPE

- | | | | |
|-------------------------------------|-------------------------|--------------------------|----------------------------------|
| <input checked="" type="checkbox"/> | New Structure | <input type="checkbox"/> | Residential (1 – 4 Family) |
| <input type="checkbox"/> | Addition | <input type="checkbox"/> | Residential (more than 4 Family) |
| <input type="checkbox"/> | Alteration | <input type="checkbox"/> | Non-residential (floodproofing) |
| <input type="checkbox"/> | Relocation | <input type="checkbox"/> | Combined Use (res. & com.) |
| <input type="checkbox"/> | Demolition | <input type="checkbox"/> | Replacement |
| <input type="checkbox"/> | Manufactured/Mobil Home | | |

B. OTHER DEVELOPMENT ACTIVITIES:

- | | | | | | | | |
|-------------------------------------|---|--------------------------|--------|--------------------------|----------|--------------------------|------------|
| <input checked="" type="checkbox"/> | Fill | <input type="checkbox"/> | Mining | <input type="checkbox"/> | Drilling | <input type="checkbox"/> | Pipelining |
| <input checked="" type="checkbox"/> | Grading | | | | | | |
| <input type="checkbox"/> | Excavation (except for STRUCTURAL DEVELOPMENT checked above) | | | | | | |
| <input type="checkbox"/> | Watercourse Altercation (including dredging and channel modification) | | | | | | |
| <input type="checkbox"/> | Drainage Improvements (including culvert work) | | | | | | |
| <input checked="" type="checkbox"/> | Road, Street, or Bridge Construction | | | | | | |
| <input type="checkbox"/> | Subdivision (including new expansion) | | | | | | |
| <input type="checkbox"/> | Individual Water or Sewer System | | | | | | |
| <input type="checkbox"/> | Other (please specify) | | | | | | |
-

C. STANDARD SITE PLAN OR SKETCH

- 1. SUBMIT ALL STANDARD SITE PLANS, IF ANY HAVE BEEN PREPARED.**
- 2. IF STANDARD SITE PLANS HAVE NOT BEEN PREPARED:**
SKETCH ON A SEPARATE 8 ½ X 11 INCH SHEET OF PAPER THE SHAPE AND LOCATION OF THE LOT. SHOW THE LOCATION OF THE INTENDED CONSTRUCTION OR LAND USE INDICATING BUILDING SETBACKS, SIZE & HEIGHT. IDENTIFY EXISTING BUILDINGS, STRUCTURES OR LAND USES ON THE PROPERTY.
- 3. SIGN AND DATE THE SKETCH.**

ACTUAL TOTAL CONSTRUCTION COSTS OF THE COMPLETE DEVELOPMENT IRRESPECTIVE OF WHETHER ALL OR ANY PART OF THE SUBJECT PROPOSED CONSTRUCTION PROJECT IS WITHIN THE FLOODPLAIN \$ N/A - Project is not located within the floodplain

D. ADJACENT AND/OR AFFECTED LANDOWNERS:

1. NAME AND ADDRESS OF ALL OWNERS OF SURFACE TRACTS ADJACENT TO THE AREA OF THE SURFACE TRACT (UP & DOWN STREAM) UPON WHICH THE PROPOSED ACTIVITY WILL OCCUR AND ALL OTHER SURFACE OWNERS UP & DOWN STREAM) WHO OWN PROPERTY THAT MAY BE AFFECTED BY FLOODING AS IS DEMONSTRATED BY A FLOODPLAIN STUDY OR SURVEY (IF ONE HAS BEEN COMPLETED).

NAME: N/A - No properties sharing an
ADDRESS: immediate common boundary up
or down stream due to the location
not being in floodplain

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

1. NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN EACH RESIDENCE LOCATED UPON ANY ADJACENT PROPERTY AT THE TIME THE FLOODPLAIN PERMIT APPLICATION IS FILED AND THE NAME AND ADDRESS OF AT LEAST ONE ADULT RESIDING IN ANY HOME ON ANY PROPERTY THAT MAY BE AFFECTED BY FLOODING AS IS DEMONSTRATED BY A FLOODPLAIN STUDY OR SURVEY.

NAME: N/A - No properties sharing an
ADDRESS: immediate common boundary up
or down stream due to the location
not being in floodplain

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

NAME: _____
ADDRESS: _____

E. CONFIRMATION FORM

THE APPLICANT ACKNOWLEDGES, AGREES, AND CONFIRMS THAT HE/IT WILL PAY WITHIN 30 DAYS OF RECEIPT OF INVOICE BY THE COUNTY FOR ALL EXPENSES RELATIVE TO THE PERMIT APPLICATION PROCESS GREATER THAN THE REQUIRED DEPOSIT FOR EXPENSES INCLUDING:

- (A) PERSONAL SERVICE OF PROCESS BY THE DODDRIDGE COUNTY SHERIFF AT THE RATES PERMITTED BY LAW FOR SUCH SERVICE.
- (B) SERVICE BY CERTIFIED MAIL RETURN RECEIPT REQUESTED.
- (C) PUBLICATION.

- (D) COURT REPORTING SERVICES AT ANY HEARINGS REQUESTED BY THE APPLICANT.
- (E) CONSULTANTS AND/OR HEARING EXPERTS UTILIZED BY DODDRIDGE COUNTY FLOODPLAIN ADMINISTRATOR/MANAGER OR FLOODPLAIN APPEALS BOARD FOR REVIEW OF MATERIALS AND/OR TESTIMONY REGARDING THE EFFICACY OF GRANTING OR DENYING THE APPLICANT'S FLOODPLAIN PERMIT.

NAME (PRINT): Randy Kloberdanz

SIGNATURE:  DATE: 6/30/14

After completing SECTION 2, APPLICANT should submit form to Floodplain Administrator/Manager or his/her representative for review.

SECTION 3: FLOODPLAIN DETERMINATION (to be completed by Floodplain Administrator/Manager or his/her representative)

THE PROPOSED DEVELOPMENT:

THE PROPOSED DEVELOPMENT IS LOCATED ON:

FIRM Panel: _____

Dated: _____

Is **NOT** located in a Specific Flood Hazard Area (Notify applicant that the application review is complete and **NO FLOODPLAIN DEVELOPMENT PERMIT IS REQUIRED**).

Is located in Special Flood Hazard Area.

FIRM zone designation _____

100-Year flood elevation is: _____ NGVD (MSL)

Unavailable

The proposed development is located in a floodway.

FBFM Panel No. _____

Dated _____

See section 4 for additional instructions.

SIGNED _____

DATE _____

SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by Floodplain Administrator/Manager or his/her representative)

The applicant must submit the documents checked below before the application can be processed.

- A plan showing the location of all existing structures, water bodies, adjacent roads, lot dimensions and proposed development.

- Development plans, drawn to scale, and specifications, including where applicable: details for anchoring structures, storage tanks, proposed elevation of lowest floor, (including basement or crawl space), types of water resistant materials used below the first floor, details of flood proffing of utilities located below the first floor and details of enclosures below the first floor. Also _____

- Subdivision or other development plans (If the subdivision or development exceeds 50 lots or 5 acres, whichever is the lesser, the applicant must provide 100-year flood elevations if they are not otherwise available).

- Plans showing the extent of watercourse relocation and/or landform alterations.

- Top of new fill elevation _____ Ft. NGVD (MSL).
For floodproofing structures applicant must attach certification from registered engineer or architect.

- Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood. A copy of all data and calculations supporting this finding must also be submitted.

- Manufactured homes located in a floodplain area must have a West Virginia Contractor's License and a Manufactured Home Installation License as required by the Federal Emergency Management Agency (FEMA).

Other:

SECTION 5: PERMIT DETERMINATION (To be completed by Floodplain Administrator/Manager or his/her representative)

I have determined that the proposed activity **(type is or is not)** in conformance with provisions of the Floodplain Ordinance adopted by the County Commission of Doddridge County on May 21, 2013. The permit is issued subject to the conditions attached to and made part of this permit.

SIGNED _____ DATE _____

If the Floodplain Administrator/Manager found that the above was not in conformance with the provisions of the Doddridge County Floodplain Ordinance and/or denied that application, the applicant may complete an appealing process below.

APPEALS: Appealed to the County Commission of Doddridge County? Yes No

Hearing Date: _____

County Commission Decision - Approved Yes No

CONDITIONS: _____

SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Compliance is issued).

The following information must be provided for project structures. This section must be completed by a registered professional engineer or a licensed land surveyor (or attach a certification to this application).

COMPLETE 1 OR 2 BELOW:

- 1 Actual (As-Built) Elevation of the top of the lowest floor (including basement or crawl space is _____ FT. NGVD (MSL)
- 2 Actual (As Built) elevation of floodproofing is _____ FT. NGVD (MSL)

Note: Any work performed prior to submittal of the above information is at risk of the applicant.

SECTION 7: COMPLIANCE ACTION (To be completed by the Floodplain Administrator/Manager or his/her representative).

The Floodplain Administrator/Manager or his/her representative will complete this section as applicable based on inspection of the project to ensure compliance with the Doddridge County Floodplain Ordinance.

INSPECTIONS:

DATE: _____ BY: _____
DEFICIENCIES ? Y/N

COMMENTS _____

SECTION 8: CERTIFICATE OF COMPLIANCE (To be completed by Floodplain Administrator/Manager or his/her representative).

Certificate of Compliance issued: DATE: _____ BY: _____

**CERTIFICATE OF COMPLIANCE
FOR DEVELOPMENT IN SPECIAL FLOOD HAZARD AREA
(OWNER MUST RETAIN)**

PERMIT NUMBER: _____

PERMIT DATE: _____

PURPOSE –

CONSTRUCTION LOCATION: _____

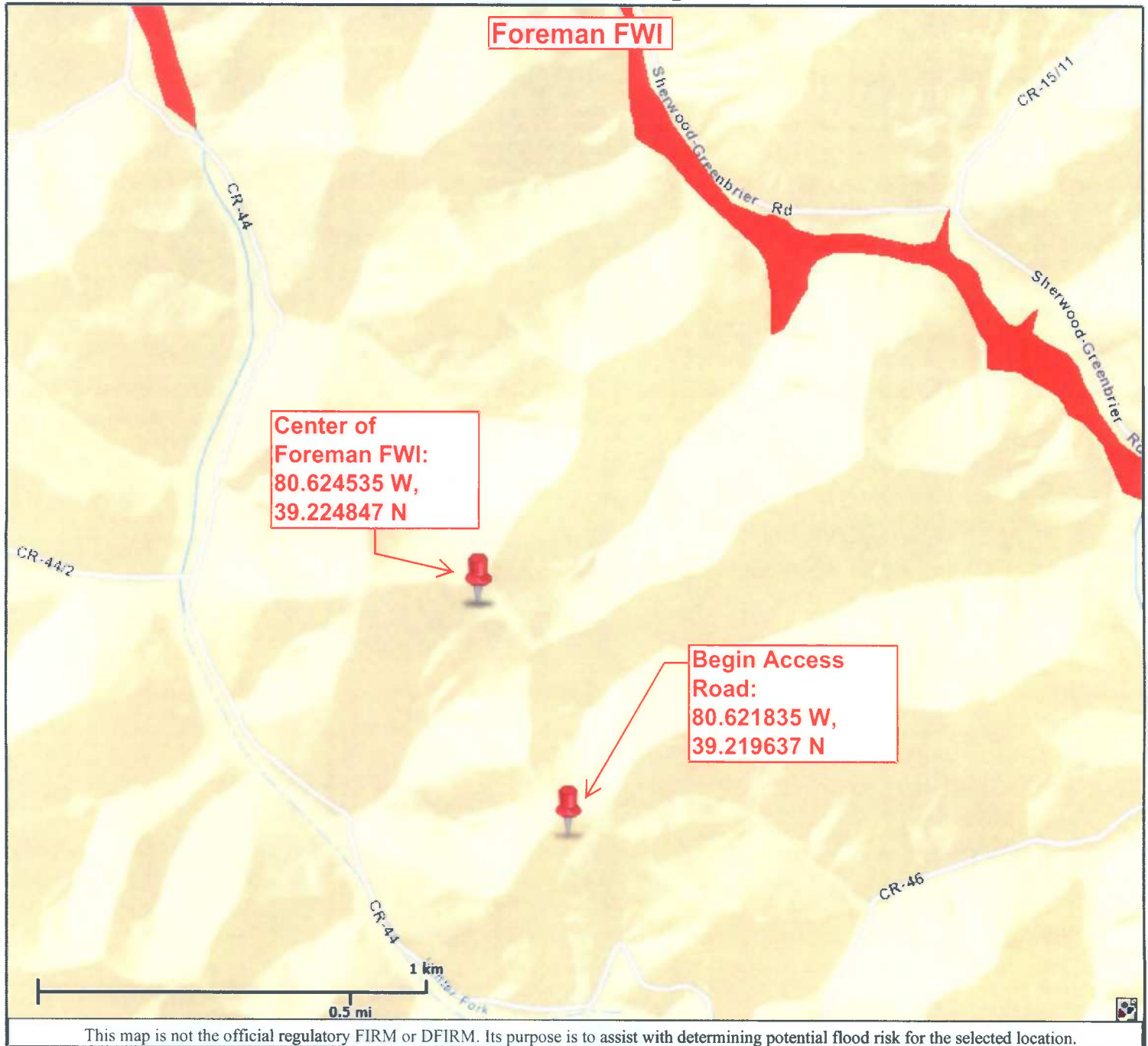
OWNER'S ADDRESS: _____

**THE FOLLOWING MUST BE COMPLETED BY THE FLOODPLAIN
ADMINISTRATOR/MANAGER OR HIS/HER AGENT.**

**COMPLIANCE IS HEREBY CERTIFIED WITH THE REQUIREMENT OF THE
FLOODPLAIN ORDINANCE ADOPTED BY THE COUNTY COMMISSION OF
DODDRIDGE COUNTY ON MAY 21, 2013.**

SIGNED _____ **DATE** _____

WV Flood Map



This map is not the official regulatory FIRM or DFIRM. Its purpose is to assist with determining potential flood risk for the selected location.

Map Created on 6/27/2014



Location of the mouse click



Flood Hazard Zone
(1% annual chance floodplain)

User Notes:

Disclaimer:

The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. To obtain more detailed information in areas where Base Flood Elevations have been determined, users are encouraged to consult the latest Flood Profile data contained in the official flood insurance study. These studies are available online at www.msc.fema.gov.

WV Flood Tool is supported by FEMA, WV NFIP Office, and WV GIS Technical Center
(<http://www.MapWV.gov/flood>)

Flood Hazard Area:

Elevation: About 1280 feet

Location (long, lat): 80.650115 W, 39.222099 N

Location (UTM 17N): (530202, 4341482)

FEMA Issued Flood Map: 54017C0235C

Contacts: Doddridge County

CRS Information: N/A

Parcel Number:

WW-6A Notice of Application:

Surface Owners (Road and/or Other Disturbance):

Owner: Jeffrey G. Burnside and Darlene R. Burnside
Address: Route 1, Box 386A
Salem WV 26426

Owner: Dennis F. Foreman
Address: Rt. 1, Box 340
Salem WV 26426

Owner: Richard D. and Marguerite A. Clevenger
Address: Route 1, Box 370
Salem WV 26426

Owner: Peter C. McDonald
Address: Route 1, Box 419
Salem WV 26426

Surface Owners (Impoundments/Pits):

Owner: Bruner Land Co, Inc
Address: PO Box 98
Byesville OH 43723

Owner: Dennis F. Foreman
Address: Rt. 1, Box 340
Salem WV 26426

Owner: Richard D. and Marguerite A. Clevenger
Address: Route 1, Box 370
Salem WV 26426

STATE OF WEST VIRGINIA,
COUNTY OF DODDRIDGE, TO WIT

I, Virginia Nicholson, Editor of THE
HERALD RECORD, a weekly newspaper
published regularly, in Doddridge County,
West Virginia, Do Hereby Certify Upon
Oath That the Accompanying Legal Notice
Entitled:

Floodplain Permit
14-241
Foreman Impoundment

was published in said paper for *2*
successive weeks beginning with the issue
of *July 15th* 2014 and
ending with the issue of

July 22 2014 and
that said notice contains *189*

WORD SPACE at *115* cents a word
amounts to the sum of \$ *21.74*

FOR FIRST PUBLICATION, SECOND
PUBLICATION IS 75% OF THE FIRST
PUBLICATION

\$ *16.31*
and each publication thereafter

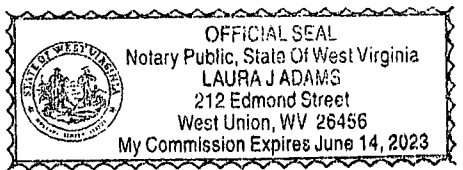
\$ *38.05* TOTAL

EDITOR
Virginia Nicholson

SWORN TO AND SUBSCRIBED
BEFORE ME THIS THE *24th* DAY
OF *July* 2014

NOTARY PUBLIC
Laura J Adams

LEGAL ADVERTISEMENT
Doddridge County
Floodplain Permit Application
Please take notice that on the 3rd day of July, 2014
Antero Resources filed an application for a Floodplain
Permit to develop land located at or about: Greenbrier
District 39.224847N/80.624535W Permit #14-241 Foreman
Centralized Freshwater Impoundment (Note: This project
is not within the floodplain)
The Application is on file with the Clerk of the County
Court and may be inspected or copied during regular
business hours. As this project is outside the FEMA
identified floodplain of Doddridge County, Doddridge
County Floodplain Management has no regulatory
authority. Any interested persons who desire to comment
shall present the same in writing by August 4, 2014.
Delivered to the
Clerk of the County Court
118 E. Court Street, West Union, WV 26456
Beth A. Rogers, Doddridge County Clerk
Edwin L. "Bo" Wriston, Doddridge County Flood Plain
Manager
7-15-2xb





Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035



Hornor
Since Bros. Engineers
Civil, Mining, Environmental and
Consulting Engineering
145 South Third Street, P.O. Box 300,
Charleston, West Virginia, 25301 (304) 251-0400



THIS DOCUMENT
PREPARED FOR
ANTERO RESOURCES
CORPORATION

FEMA FIRM MAPS OF AREA
**FOREMAN CENTRALIZED FRESH
WATER IMPOUNDMENT**
GREENBRIER DISTRICT
DODDRIDGE COUNTY, WV



NFIP PANEL 8255C
FIRM
FLOOD INSURANCE RATE MAP
DODDRIDGE COUNTY,
WEST VIRGINIA
AND INCORPORATED AREAS

PANEL 258 OF 328
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTRACT NUMBER: 54017C0255C
SCALE: 1"=500'
DATE: OCTOBER 4, 2011

MAP NUMBER: 54017C0255C
MAP REVISED: OCTOBER 4, 2011
Federal Emergency Management Agency

Note to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

NFIP PANEL 8255C
FIRM
FLOOD INSURANCE RATE MAP
DODDRIDGE COUNTY,
WEST VIRGINIA
AND INCORPORATED AREAS

PANEL 258 OF 328
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTRACT NUMBER: 54017C0255C
SCALE: 1"=500'
DATE: OCTOBER 4, 2011

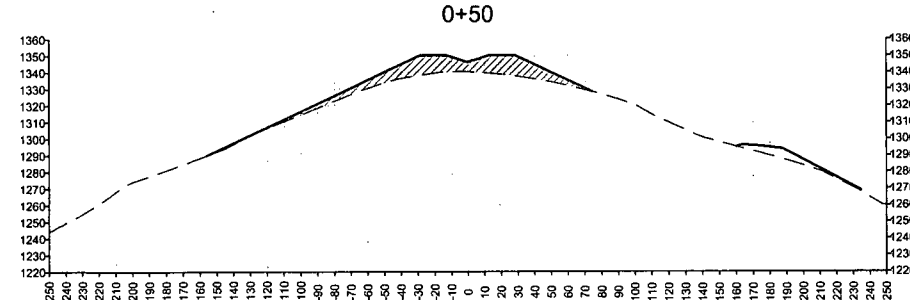
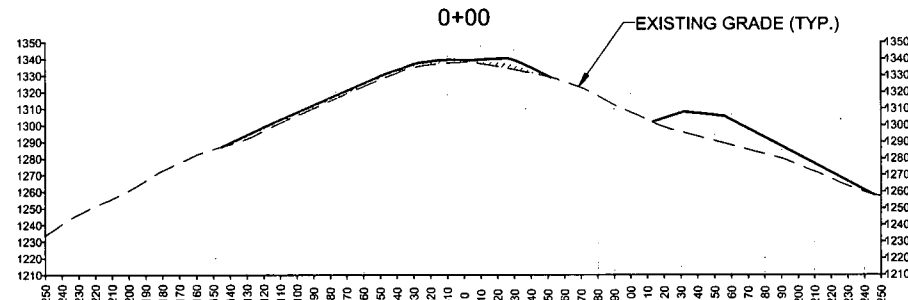
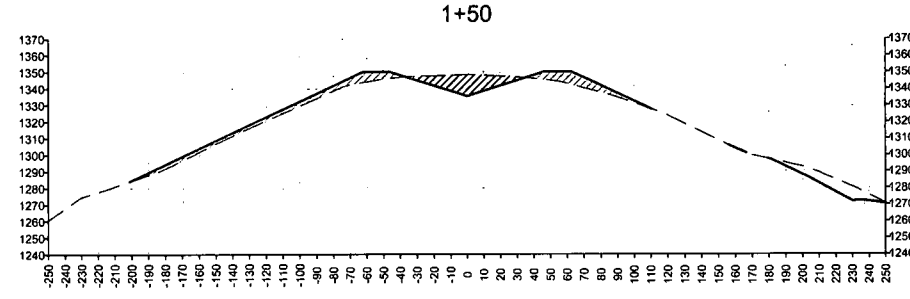
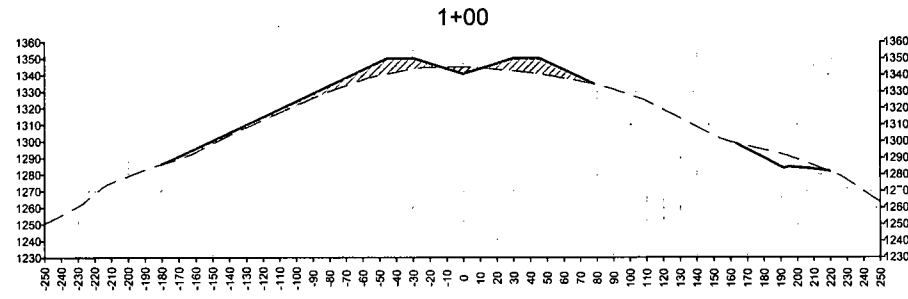
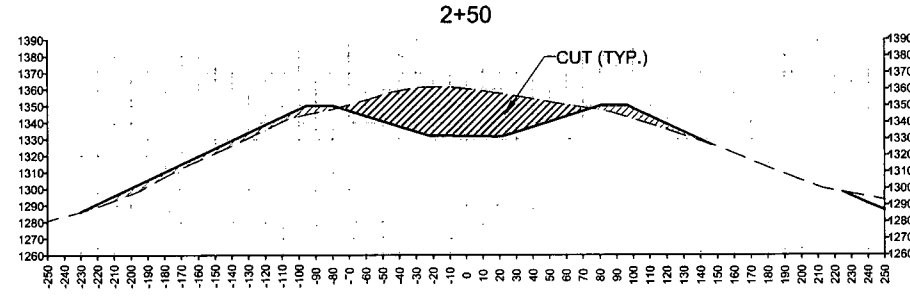
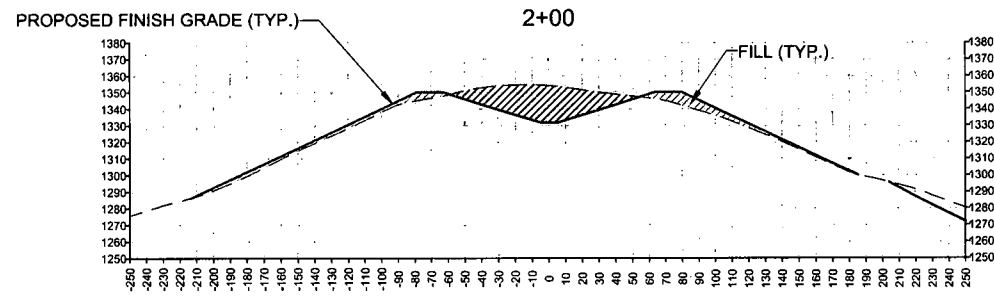
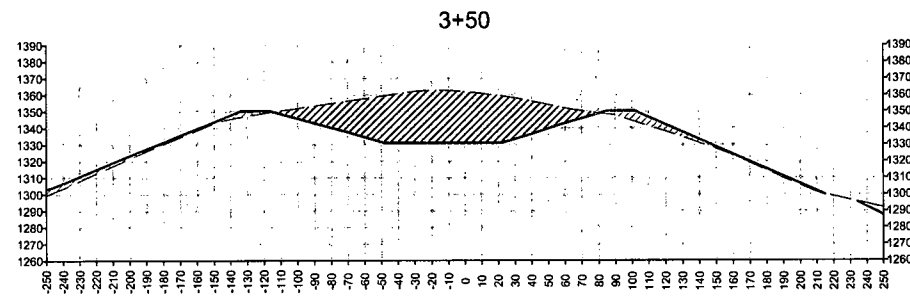
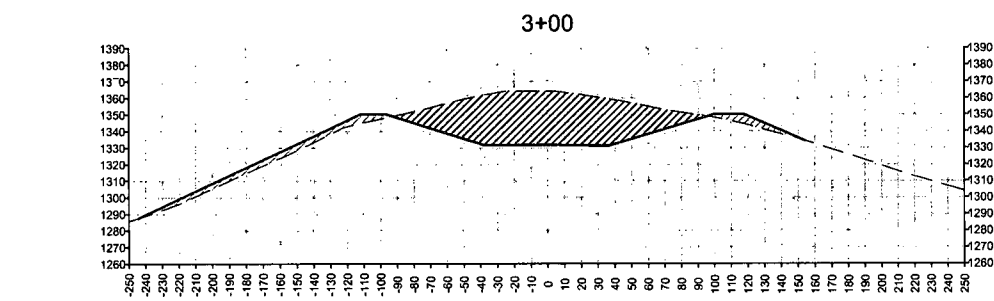
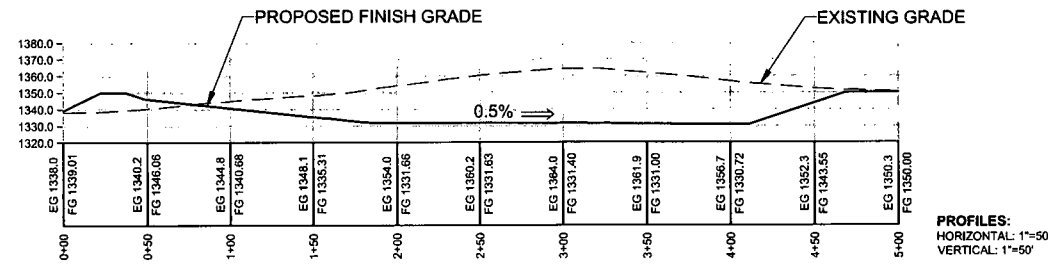
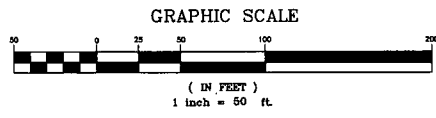
MAP NUMBER: 54017C0255C
MAP REVISED: OCTOBER 4, 2011
Federal Emergency Management Agency

Note to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.



DATE	REVISIONS	Date: 7-2-2013
7-26-2013	ANTERO REQUESTED REVISIONS	Scale: 1"=500'
		Designed By: TBC
		File No: 17412C-0255C
		Page 2 of 20

FRESH WATER IMPOUNDMENT 1 PROFILE & CROSS SECTIONS 0+00 - 3+50



SECTIONS:
HORIZONTAL: 1"=50'
VERTICAL: 1"=50'



Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035



Hornor Bros. Engineers
Since 1902
Civil, Mining, Environmental and Consulting Engineering
140 South Third Street, Post Office Box 306
Carmarthen, West Virginia, 26013 (304) 637-0400

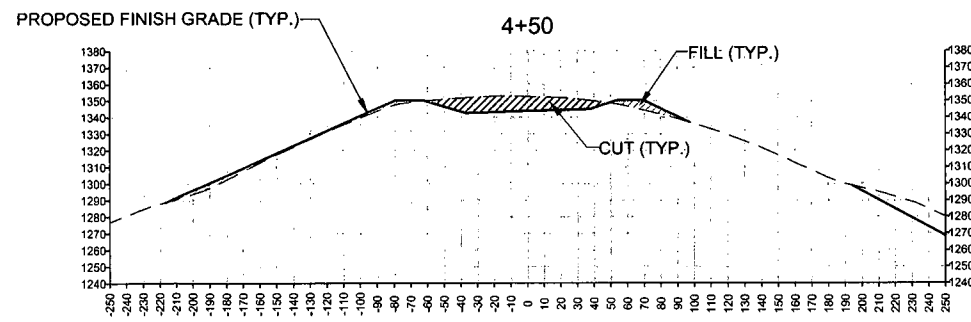
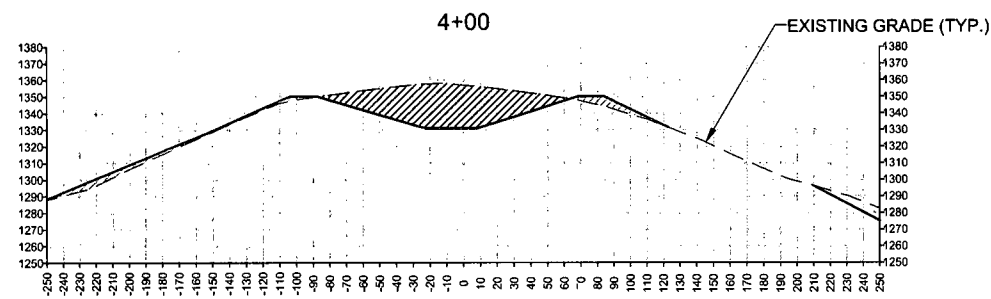
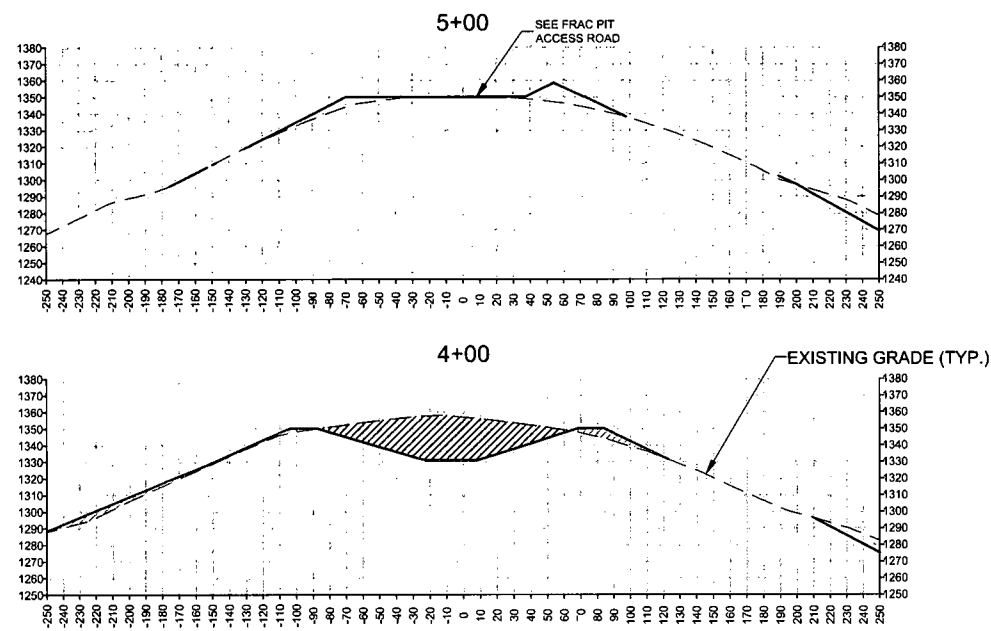
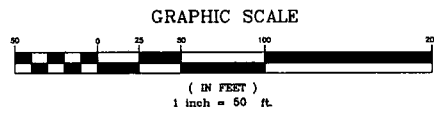


THIS DOCUMENT
PREPARED FOR
ANTERO RESOURCES
APPALACHIAN CORP

PROFILE & CROSS SECTIONS
FOREMAN CENTRALIZED
FRESH WATER IMPOUNDMENT 1
GREENBRIER DISTRICT
DODDRIDGE COUNTY, WV

DATE	REVISIONS	Date: 12-7-2012
		Scale: 1"=50'
		Designed By: JDR
		File No. 12120701
		Page 9 of 17

FRESH WATER IMPOUNDMENT 1 PROFILE & CROSS SECTIONS 4+00 - 5+00



SECTIONS:
HORIZONTAL: 1"=50'
VERTICAL: 1"=50'

DATE	REVISIONS	Date: 12-7-2012
		Scale: 1"=50'
		Designed By: JDR
		File No. 12-2012-001
		Page 10 of 17



Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035

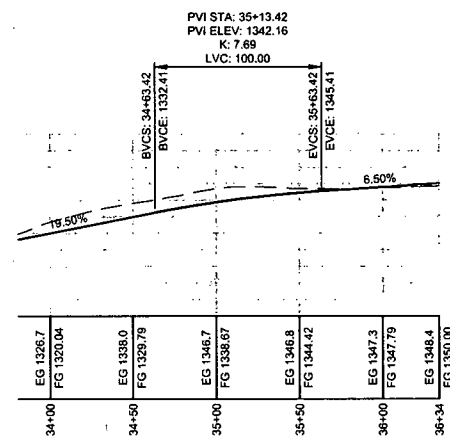
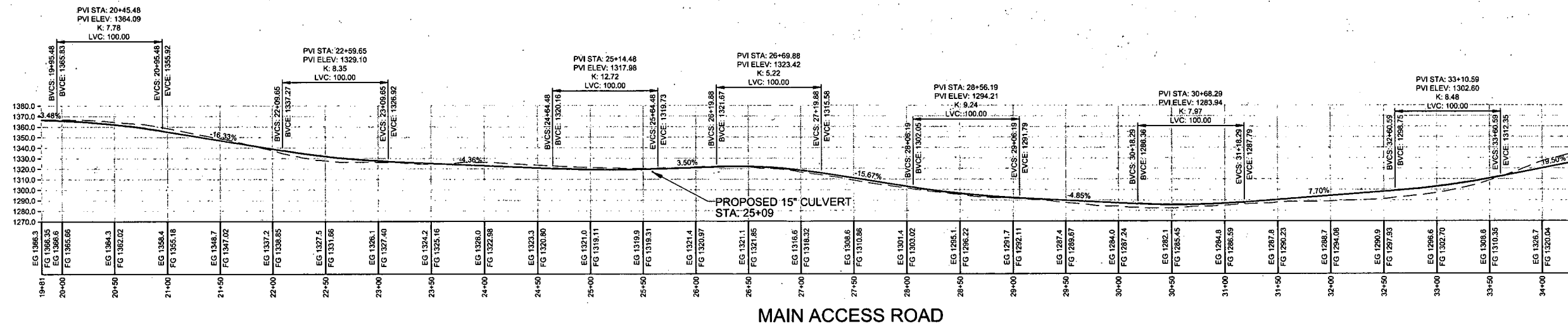


Hornor Bros. Engineers
Since 1902
1902 Bros. Engineers
Civil, Mining, Environmental and
Consulting Engineering
140 South Third Street, Post Office Box 306,
Martinsburg, West Virginia, 26001 (304) 624-4445



THIS DOCUMENT
PREPARED FOR
ANTERO RESOURCES
APPALACHIAN CORP

PROFILE & CROSS SECTIONS
FOREMAN CENTRALIZED
FRESH WATER IMPOUNDMENT 1
GREENBRIER DISTRICT
DODDRIDGE COUNTY, WV

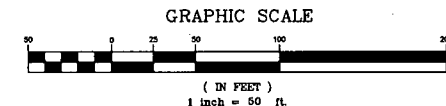


MAIN ACCESS ROAD

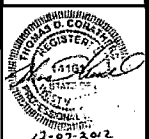
CONTRACTOR SHALL INSTALL GEOTEXTILE FABRIC (US200) UNDER TRUCK TURN AROUND AREA AND ALL ACCESS ROAD SECTIONS WHERE THE PROFILE GRADE IS LESS THAN 10%.

CONTRACTOR SHALL INSTALL DITCH LINING AS FOLLOWS:
 JUTE MATTING = 0%-4%
 SYNTHETIC MATTING (TRM) = 4%-10%
 6"-8" RIPRAP = 10%-20%

CONTRACTOR SHALL INSTALL DITCH CHECK DAMS AT STATIONS 21+35, 33+65 AND 34+90 AS SHOWN ON PLANS



Allegheny Surveys, Inc.
 172 Thompson Drive
 Bridgport, WV 26330
 (304) 848-5035



Hornor Bros. Engineers
 Since 1902
 Civil, Mining, Environmental and Consulting Engineering
 140 South Third Street, Post Office Box 308,
 Charleston, West Virginia, 25301 (304) 524-4445

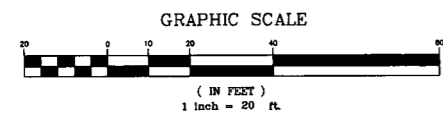
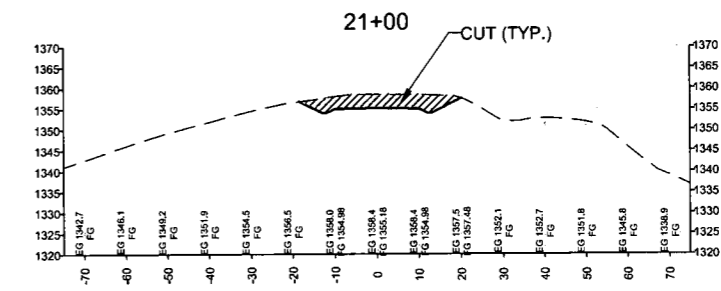
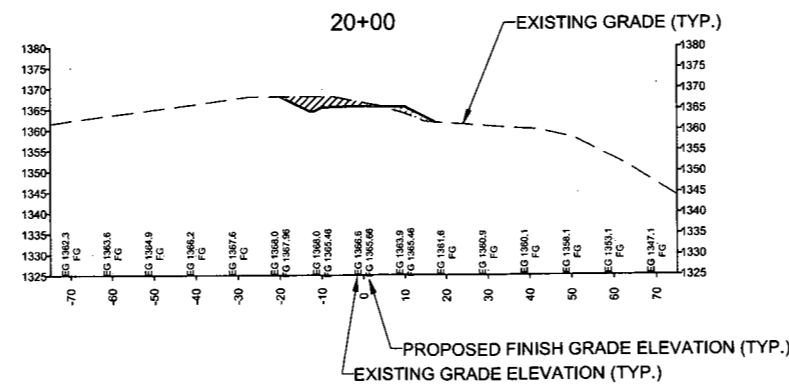
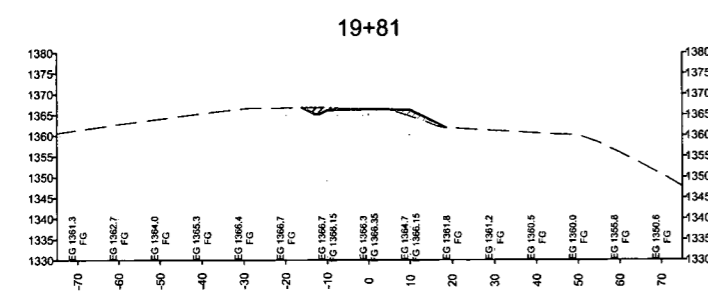
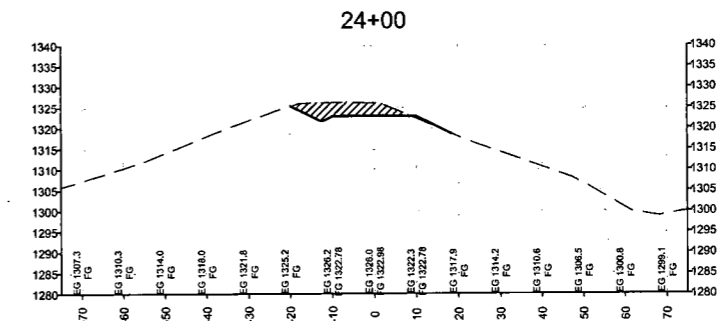
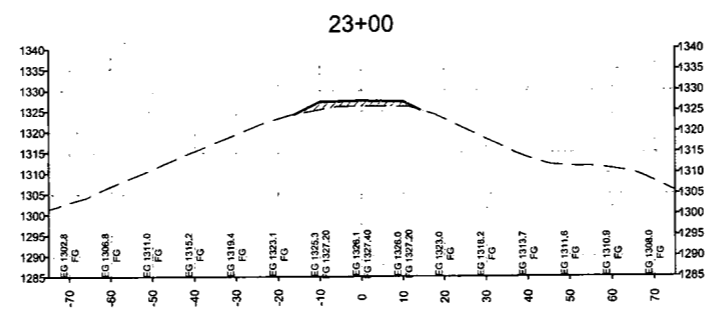
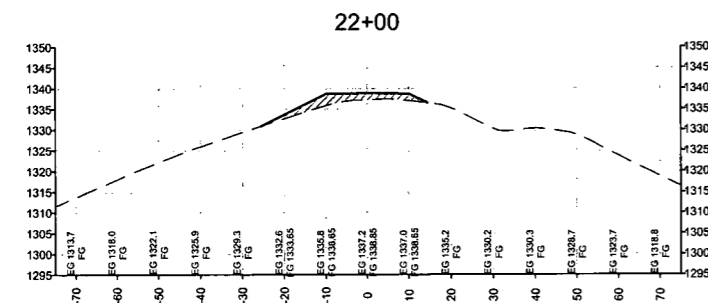
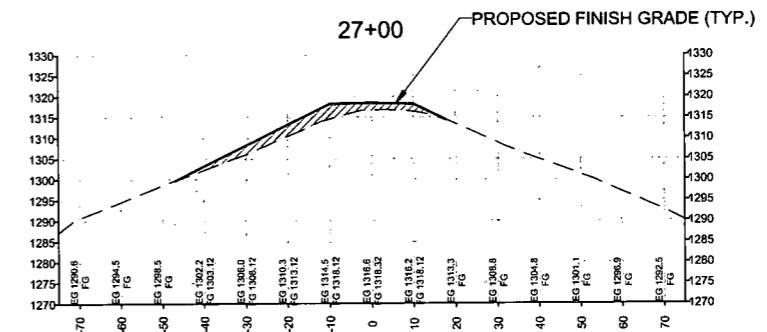
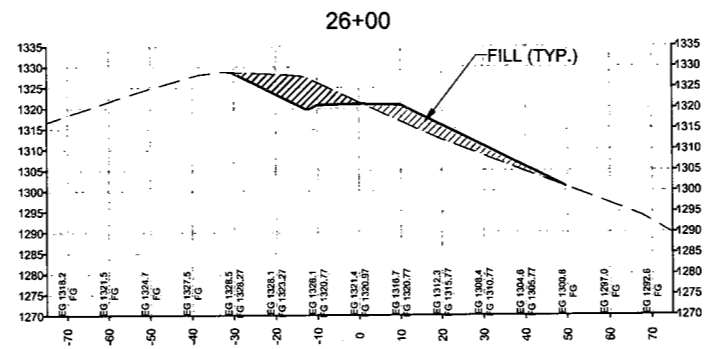
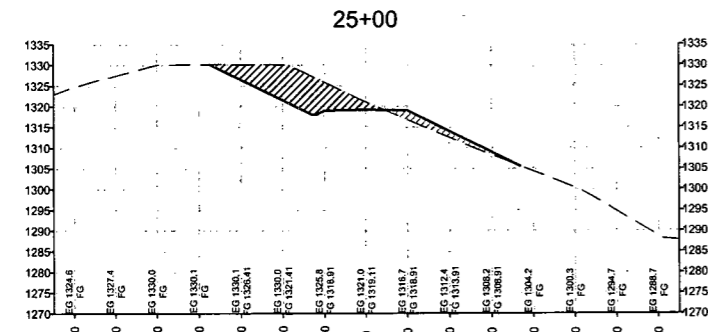
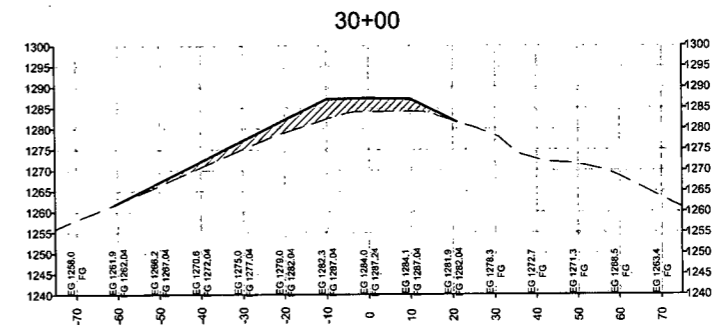
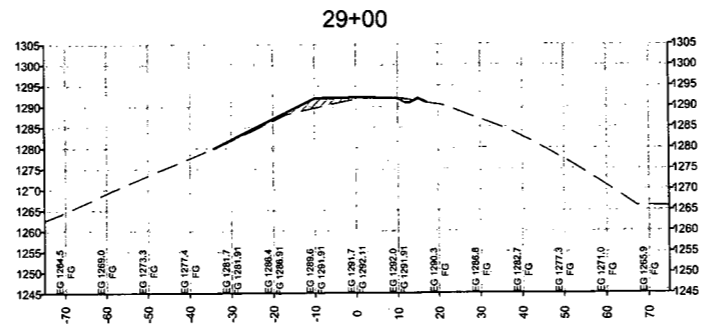
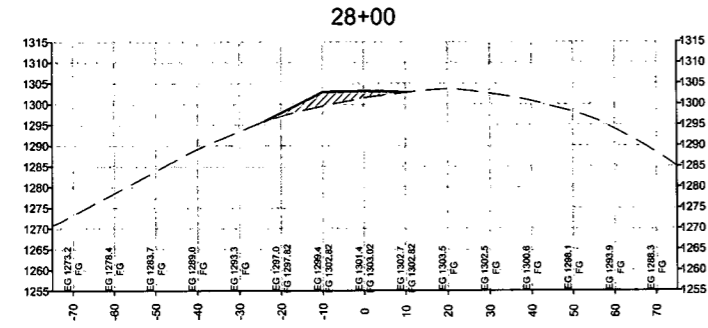


THIS DOCUMENT PREPARED FOR ANTERO RESOURCES APPALACHIAN CORP

ACCESS ROAD PROFILE
FOREMAN CENTRALIZED FRESH WATER IMPOUNDMENT 1
 GREENBRIER DISTRICT
 DODDRIDGE COUNTY, WV

DATE	REVISIONS	Date: 12-7-2012
		Scale: 1" = 50"
		Designed By: JDR
		HSE PROJECTS 2012ASR File No. 141270-2012 PROJECT: 1005-001.dwg
		Page 11 of 17

MAIN ACCESS ROAD CROSS SECTIONS 19+81 - 30+00

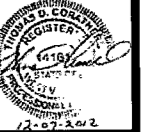


SECTIONS:
HORIZONTAL: 1"=20'
VERTICAL: 1"=20'

DATE	REVISIONS	Date: 12-7-2012
		Scale: 1" = 20"
		Designed By: JDR
		File No. HRS PROJ1212012101
		1141-301-1000-001-04
		Page 12 of 17



Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035



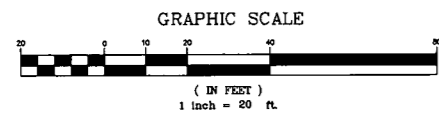
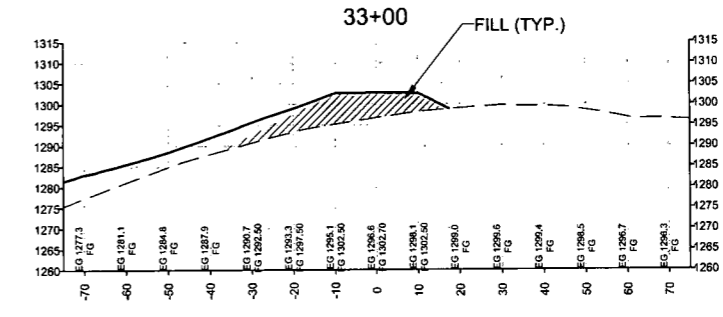
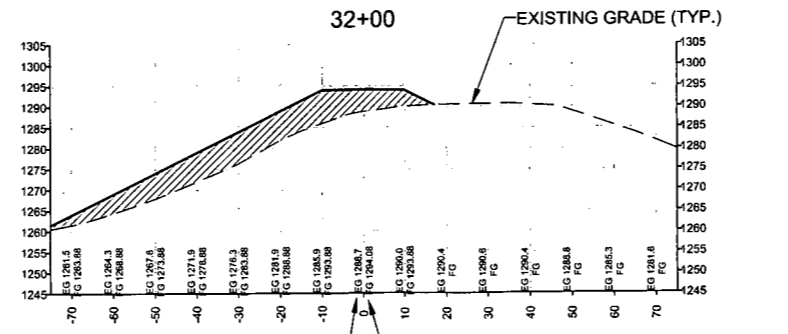
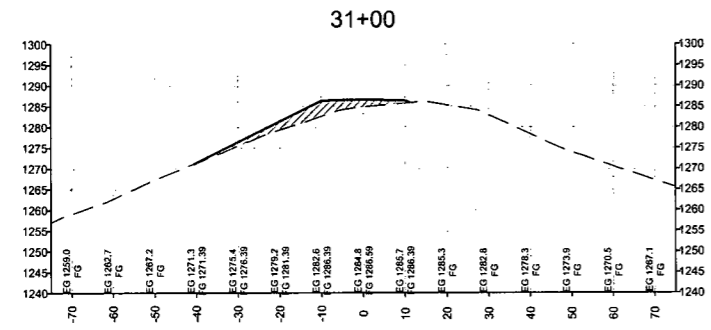
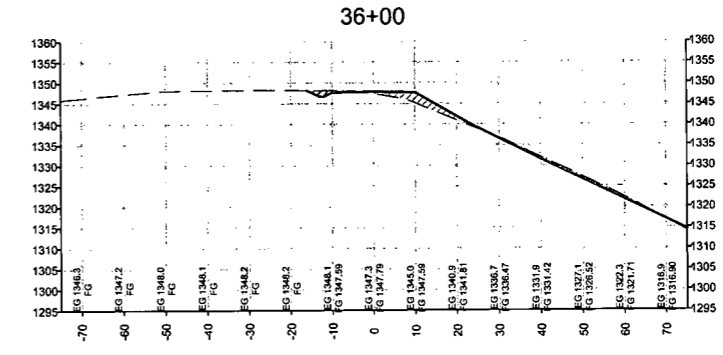
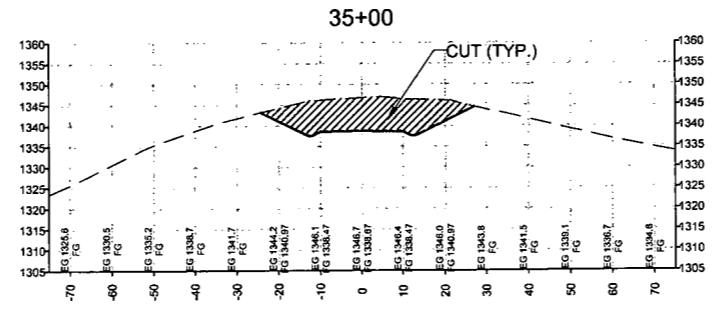
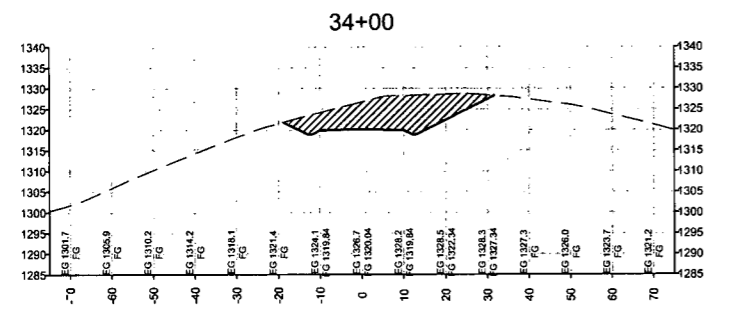
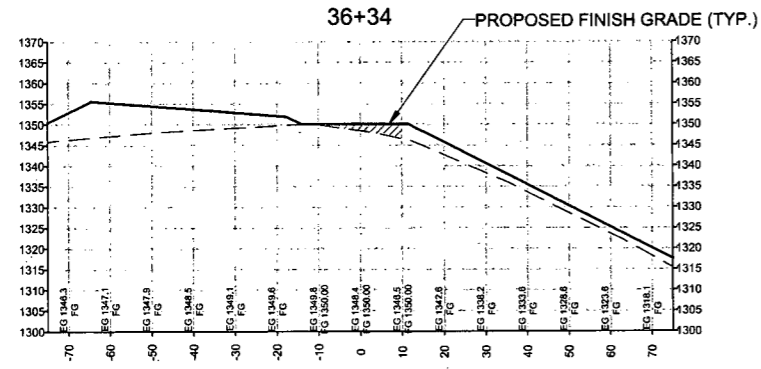
Hornor Bros. Engineers
Since 1902
Civil, Mining, Environmental and
Consulting Engineering
140 South Third Street, Post Office Box 304
Canton, West Virginia, 26031 (304) 824-4444



THIS DOCUMENT
PREPARED FOR
ANTERO RESOURCES
APPALACHIAN CORP.

ACCESS ROAD CROSS SECTIONS
FOREMAN CENTRALIZED
FRESH WATER IMPOUNDMENT 1
GREENBRIER DISTRICT
DODDRIEGE COUNTY, WV

MAIN ACCESS ROAD CROSS SECTIONS 31+00 - 36+34



SECTIONS:
HORIZONTAL: 1"=20'
VERTICAL: 1"=20'

DATE	REVISIONS	Date: 12-7-2012
		Scale: 1" = 20"
		Designed By: JDR
		File No.: 1111-0001(12-7-2012).dwg
		Page: 13 of 17



Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035

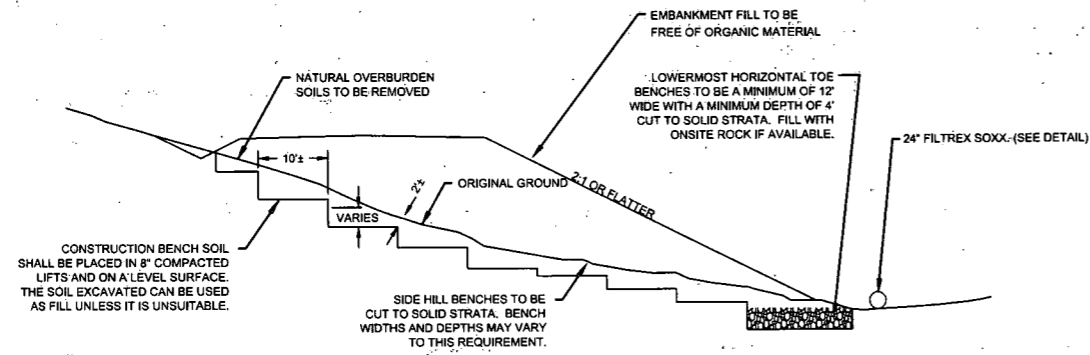


Horner Since 1902 Bros. Engineers
Mining, Environmental and
Civil, Consulting Engineering
140 South Third Street, Post Office Box 304
Charleston, West Virginia, 25301 (304) 341-4443

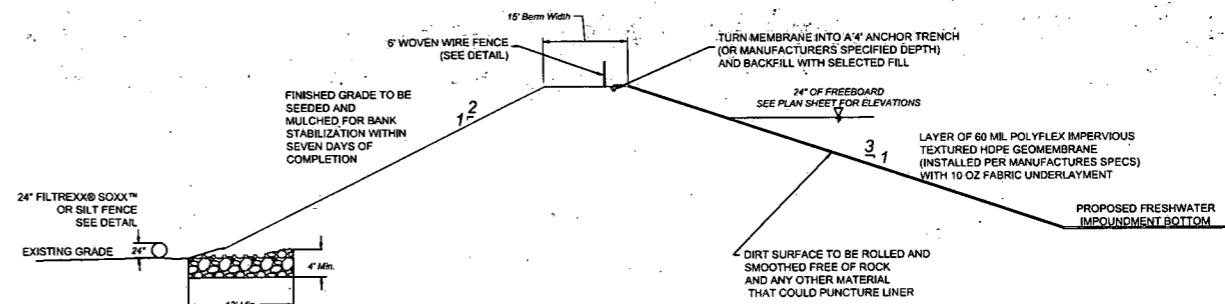


THIS DOCUMENT
PREPARED FOR
ANTERO RESOURCES
APPALACHIAN CORP

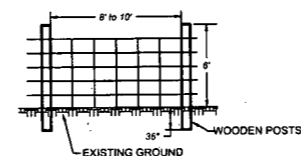
ACCESS ROAD CROSS SECTIONS
FOREMAN CENTRALIZED
FRESH WATER IMPOUNDMENT 1
GREENBRIER DISTRICT
DODDRIIDGE COUNTY, WV



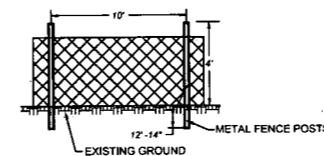
EMBANKMENT FILL BENCH DETAIL (TYP.)
N.T.S.



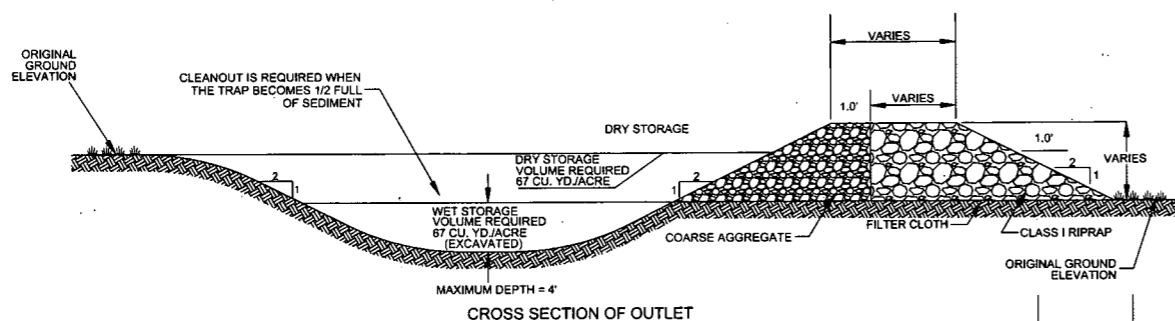
TYPICAL FRAC. PIT EMBANKMENT DETAIL
N.T.S.



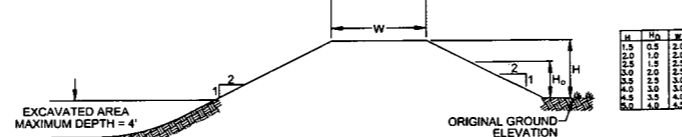
TYPICAL WOVEN WIRE FENCE DETAIL
N.T.S.



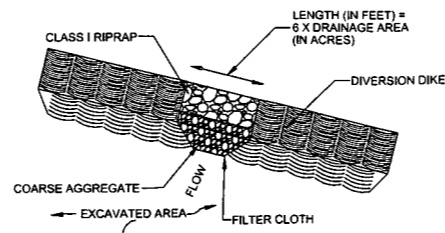
TYPICAL CONSTRUCTION FENCE DETAIL
N.T.S.



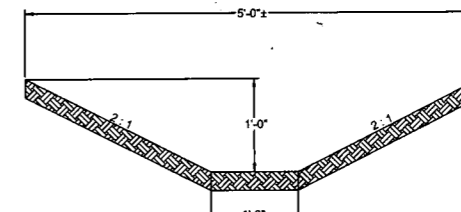
CROSS SECTION OF OUTLET



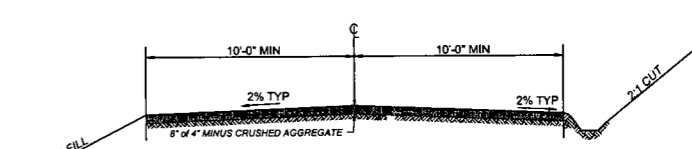
MINIMUM TOP WIDTH (W) REQUIRED FOR
SEDIMENT TRAP EMBANKMENTS
ACCORDING TO HEIGHT OF EMBANKMENT (FEET)



OUTLET (PERSPECTIVE VIEW)



TYPICAL ROAD DITCH DETAIL
N.T.S.



TYPICAL ROAD CROSS SECTION DETAIL
N.T.S.

TEMPORARY SEDIMENT TRAP NOTES:

1. THE DETAIL SHOWN IS A GENERAL SCHEMATIC. THE CONTRACTOR SHALL DESIGN AND SIZE EACH TRAP ACCORDING TO HIS GRADING PLAN.
2. SEDIMENT TRAPS SHALL BE USED IN AREAS WHERE THE TOTAL CONTRIBUTING DRAINAGE AREA IS LESS THAN 5 ACRES.
3. FILL MATERIAL FOR ANY SEDIMENT TRAP EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHOULD BE COMPACTED IN 6" LAYERS BY TRAVERSING WITH CONSTRUCTION EQUIPMENT.
4. ANY SEDIMENT TRAP EARTH EMBANKMENT SHALL BE SEEDED WITH TEMPORARY VEGETATION IMMEDIATELY AFTER INSTALLATION.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
6. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE UPSLOPE DRAINAGE AREA HAS BEEN STABILIZED.
7. ALL CUT AND FILL SLOPES FORMING THE SEDIMENT TRAP SHALL BE 2:1 OR FLATTER.
8. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 OF THE VOLUME. SEDIMENT REMOVED FROM THE TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE AND CAUSE SEDIMENTATION PROBLEMS.
9. THE STRUCTURE SHOULD BE CHECKED REGULARLY TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
10. A RIPRAP SPILLWAY CHANNEL MAY BE NECESSARY IF A CONCENTRATED OUTLET FLOW IS ANTICIPATED.
11. FILTER STONE SHALL BE REGULARLY CHECKED TO ENSURE THAT FILTRATION PERFORMANCE IS MAINTAINED. STONE CHOKED WITH SEDIMENT SHALL BE REMOVED AND CLEANED OR REPLACED.

TEMPORARY SEDIMENT TRAP DETAIL



Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035



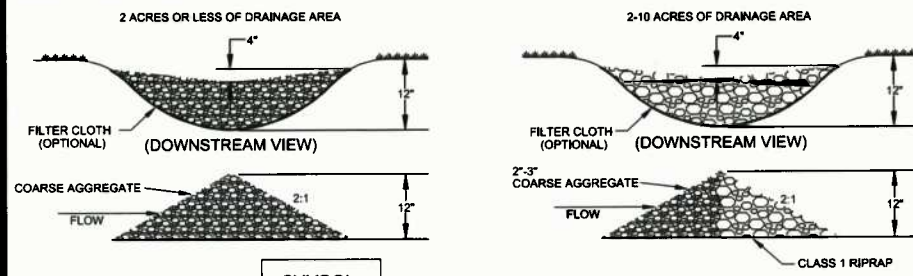
Hornor
Since 1902
Brothers Engineers
Civil, Mining, Environmental and
Consulting Engineering
140 South Third Street, Post Office Box 306
Charleston, West Virginia, 25301 (304) 525-0900



THIS DOCUMENT
PREPARED FOR
ANTERO RESOURCES
APPALACHIAN CORP

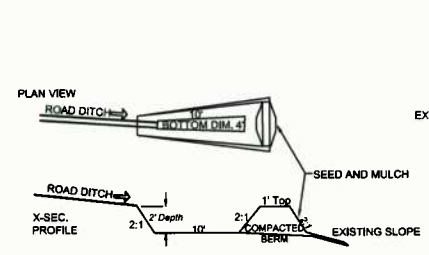
CONSTRUCTION DETAILS
FOREMAN CENTRALIZED
FRESH WATER IMPOUNDMENT 1
GREENBRIER DISTRICT
DODDRIIDGE COUNTY, WV

DATE	REVISIONS	Date: 12-7-2012
		Scale: AS SHOWN
		Designed By: JDR
		FILE NO. 11-12-0018 11-12-0018-001-1.dwg
		Page 14 of 17



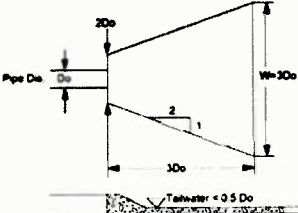
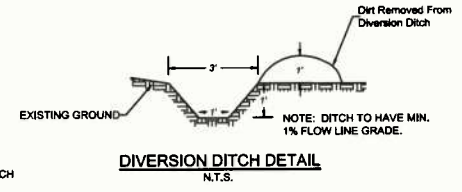
SYMBOL
RCD

DITCH CHECK DAM DETAIL/
SPACING AS INDICATED ON PROFILES
N.T.S.



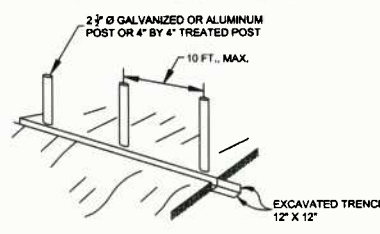
LEVEL SPREADER DETAIL
N.T.S.

NOTE: TO BE PLACED AT THE ENDS OF DITCHES CALLING FOR LEVEL SPREADERS
LEVEL SPREADERS WILL BE CUT INTO THE CONTOUR OF THE EXISTING SLOPE.

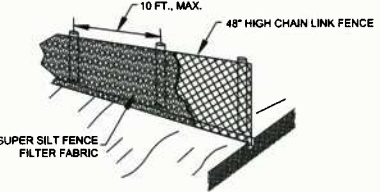


RIP RAP APRON OUTLET PROTECTION
MINIMUM TAILWATER CONDITION
N.T.S.

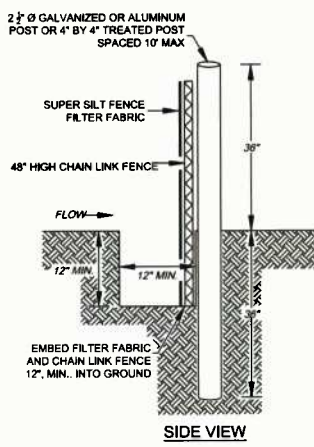
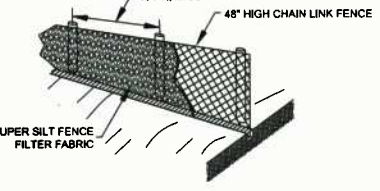
1. SET POSTS ALONG CONTOUR OF THE LAND AND EXCAVATE TRENCH UPSLOPE ALONG THE LINE OF POSTS.



2. ATTACH THE CHAIN LINK FENCE AND FILTER FABRIC TO THE FENCE POSTS AND EXTEND THEM 12" MIN. INTO THE DITCH.

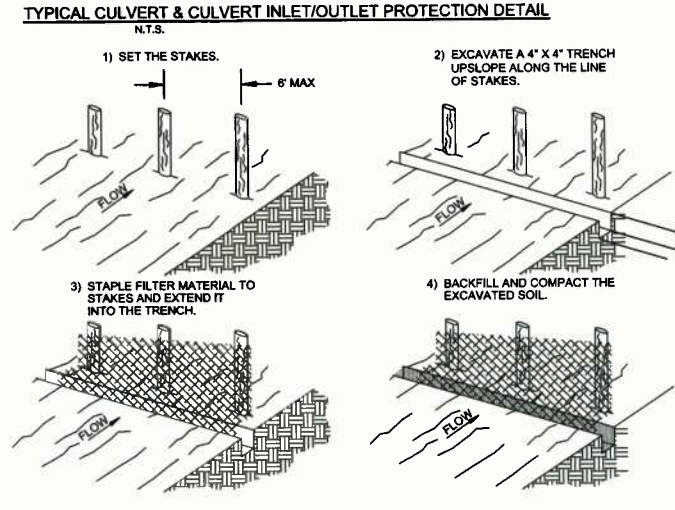
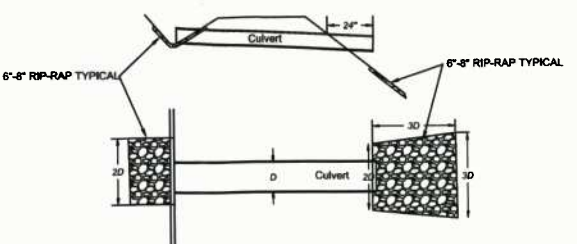
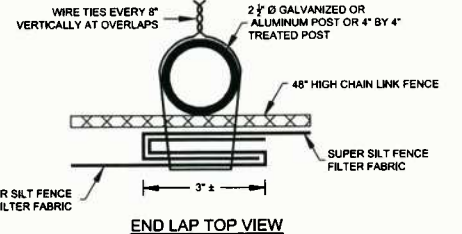


3. BACKFILL AND COMPACT THE TRENCH WITH EXCAVATED SOILS.

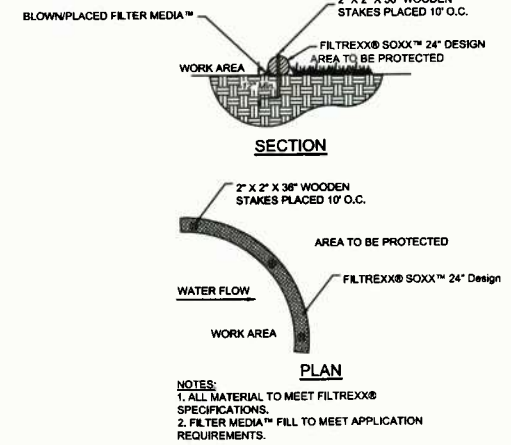


SYMBOL
SSF

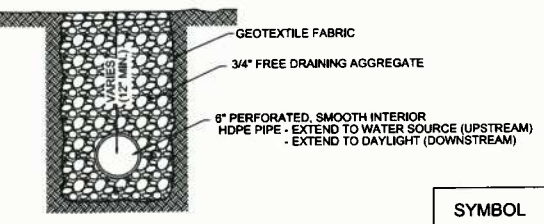
SUPER SILT FENCE DETAIL



CONSTRUCTION OF SILT FENCE
(WITHOUT WIRE SUPPORT)
N.T.S.



FILTREXX "SOXX" 24" FILTER SOCK DETAIL
N.T.S.



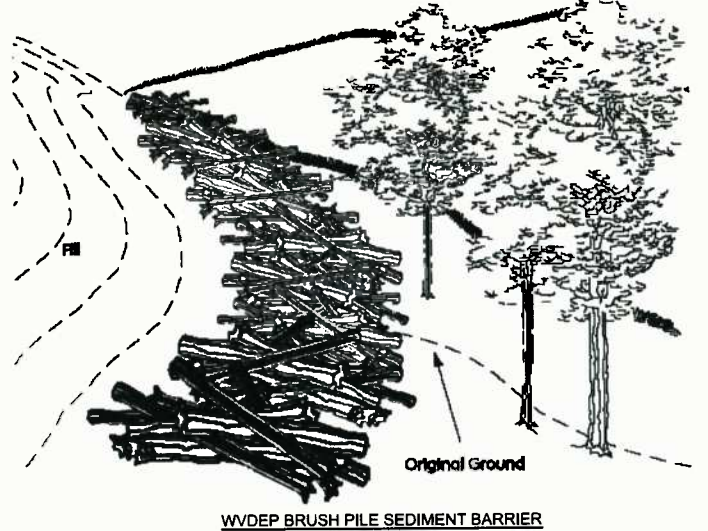
SEEP/ SPRING DRAIN DETAIL
N.T.S.

SYMBOL
SF



	Yellow Ribbon: Yellow Ribbon used to indicate top of Cut (C) Cut to be determined at time of submittal Slope determined by site design
	Yellow & Orange Ribbons: Yellow and Orange Ribbons used to indicate Grade at Top of Pad/Pond/Pit
	Orange Ribbon: Orange Ribbon used to indicate toes of Fill (F) Fill to be determined at time of submittal Slope determined by site design
	Pink Ribbon: Pink Ribbon used to indicate Top Hole Location Pink Ribbons used to indicate Survey Control Locations
	Pink & Black Stripes Ribbon: Pink & Black Stripes Ribbon used to indicate Vertical Cut (VC) at Pad/Pond/Pit corner or edge Pink & Black Stripes Ribbon used to indicate Vertical Fill (VF) at Pad/Pond/Pit corner or edge Vertical Cut/Vertical Fill to be determined at time of submittal
	Blue & White Stripes Ribbon: Blue & White Stripes Ribbon used to indicate clearing limits/construction limits
	Orange & Black Stripes Ribbon: Orange & Black Stripes Ribbon used to indicate Vertical Cut (VC) at Corners or edge of access road Orange & Black Stripes Ribbon used to indicate Vertical Fill (VF) at Corners or edge of access road
	Pink & White Stripes Ribbon: Pink & White Stripes Ribbon used to indicate Stream and Sediment Control Structure Silt Fence (SF) Retention Filter Fence (RFF) Super Silt Fence (SSF) Filter Sock (FS)
	Orange & White Stripes Ribbon: Orange & White Stripes Ribbon used to indicate Topsoil Storage Locations
	Blue Ribbon: Blue Ribbon used to indicate Contention (C) Ditch Blue Ribbon used to indicate Bottom (BTM) Sediment Traps

ANTERO RESOURCES STANDARD RIBBON COLOR SCHEME



WDEP BRUSH PILE SEDIMENT BARRIER

DATE	REVISIONS



Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035



Horner Bros. Engineers
Since 1802
1802 Engineers and
Civil, Mining, Environmental and
Consulting Engineering
140 South Third Street, Post Office Box 364,
Charleston, West Virginia, 25301 (304) 627-0400



ANTERO RESOURCES

CONSTRUCTION DETAILS
FOREMAN CENTRALIZED
FRESH WATER IMPOUNDMENT 1
GREENBRIER DISTRICT
DODDRIIDGE COUNTY, WV

THIS DOCUMENT
PREPARED FOR
ANTERO RESOURCES
APPALACHIAN CORP

Date: 12-7-2012
Scale: AS SHOWN
Designed By: JDR
File No.: 108-PROJ-15-2012-016
12-24-2012 10:18 AM
Page 15 of 17

RECLAMATION PLAN (1)



All topographic information shown herein is based on aerial photography provided by Blue Mountain Aerial Mapping with a flight date of Spring 2011

TM 07 PCL 34
ERIC ELIEZER
NELSON
DB 281/PG 361
(Tracts 3 & 4)
41.92 ACRES

TM 07 PCL 01
JEFFERY G. &
DARLENE BURNSIDE
DB 249/PG 575 (Tract 2)
23 ACRES

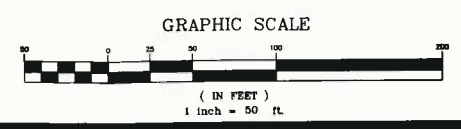
TM 7 PCL 22
Peter C. McDonald
DB 250 PG 578
55 Acres

TM 7 PCL 10
Dennis F. Foreman
DB 260 PG 143
88.28 Acres

TM 7 PCL 21
RICHARD D. & MAGUERITE ANN CLEVINGER
DB 288 PG 54
82.68 ACRES

AREA SHALL BE RECLAIMED TO ORIGINAL CONTOURS OR PER THE OWNER'S SPECIFICATIONS

REMOVE E&S DEVICES UPON COMPLETION OF FINAL VEGETATION AND SITE STABILIZATION



- Legend**
- 1330 Existing 2' Contour
 - Existing 10' Contour
 - Existing Tree Line
 - Existing Utility Pole
 - Existing Gas Line CL
 - Proposed 2' Contour
 - Proposed 10' Contour

DATE	REVISIONS



Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035



Hornor Bros. Engineers
Since 1902
Civil, Mining, Environmental and Consulting Engineering
140 South Third Street, Post Office Box 306,
Clewiston, West Virginia, 26031 (304) 924-6440



THIS DOCUMENT PREPARED FOR ANTERO RESOURCES APPALACHIAN CORP

RECLAMATION PLAN
FOREMAN CENTRALIZED FRESH WATER IMPOUNDMENT 1
GREENBRIER DISTRICT
DODDRIIDGE COUNTY, WV

Date: 12-7-2012
Scale: 1" = 50'
Designed By: JDR
File No.: 12-07-2012-01
Page 16 of 17

RECLAMATION PLAN (2)



All topographic information shown hereon is based on aerial photography provided by Blue Mountain Aerial Mapping with a flight date of Spring 2011



Allegheny Surveys, Inc.
172 Thompson Drive
Bridgeport, WV 26330
(304) 848-5035



Hornor
Since 1902
Bros. Engineers
Civil, Mining, Environmental and
Consulting Engineering
140 South Third Street, Post Office Box 304,
Charleston, West Virginia, 25301 (304) 831-4444



THIS DOCUMENT
PREPARED FOR
ANTERO RESOURCES
APPALACHIAN CORP

RECLAMATION PLAN
FOREMAN CENTRALIZED
FRESH WATER IMPOUNDMENT 1
GREENBRIER DISTRICT
DODDRIEGE COUNTY, WV

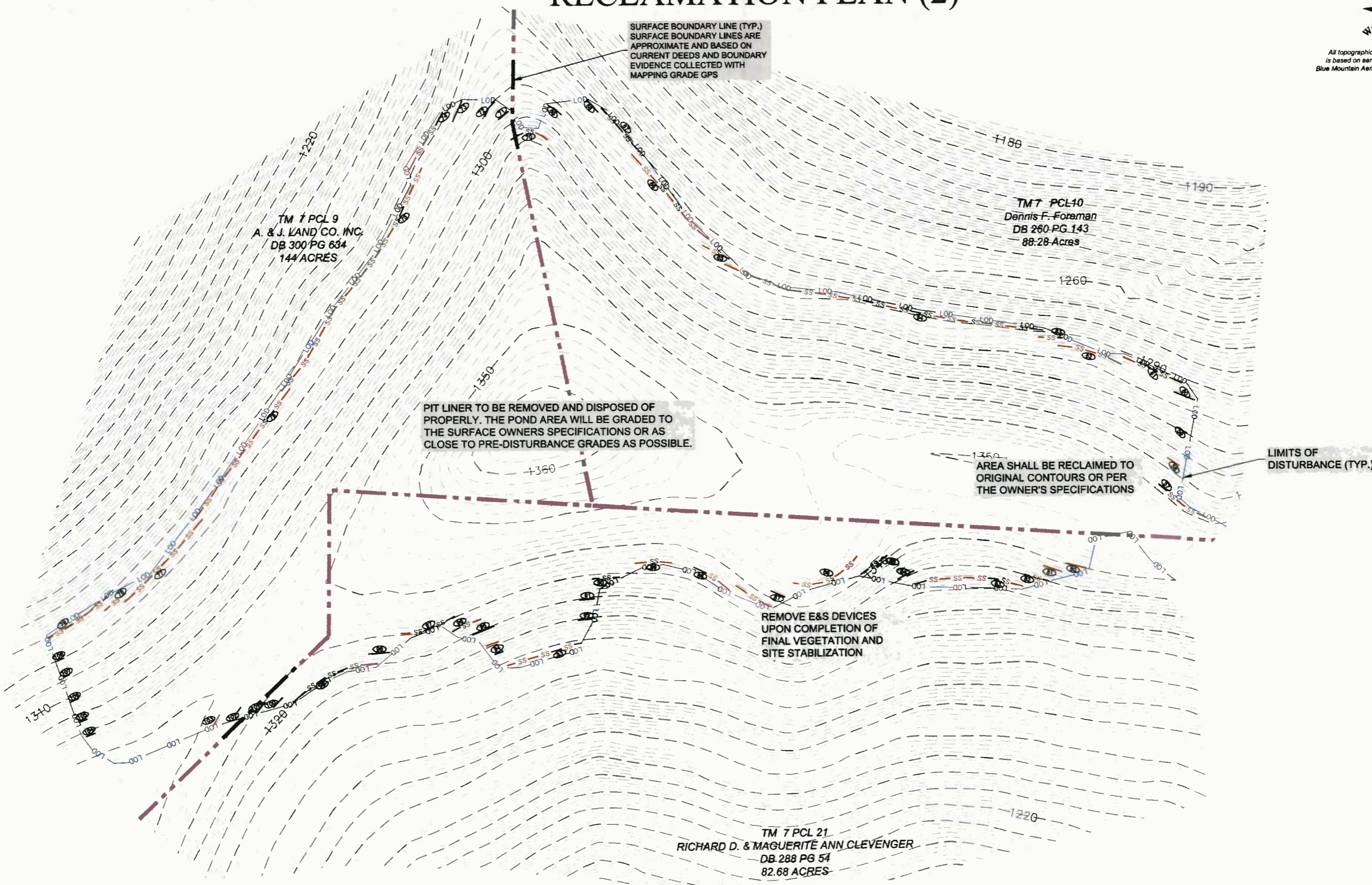
Date: 12-7-2012

Scale: 1" = 50'

Designed By: IDR

File No. 12-07-001

Page 17 of 17



SURFACE BOUNDARY LINE (TYP.)
SURFACE BOUNDARY LINES ARE
APPROXIMATE AND BASED ON
CURRENT DEEDS AND BOUNDARY
EVIDENCE COLLECTED WITH
MAPPING GRADE GPS

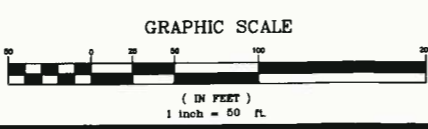
PIT LINER TO BE REMOVED AND DISPOSED OF
PROPERLY. THE POND AREA WILL BE GRADED TO
THE SURFACE OWNERS SPECIFICATIONS OR AS
CLOSE TO PRE-DISTURBANCE GRADES AS POSSIBLE.

AREA SHALL BE RECLAIMED TO
ORIGINAL CONTOURS OR PER
THE OWNER'S SPECIFICATIONS

LIMITS OF
DISTURBANCE (TYP.)

REMOVE E&S DEVICES
UPON COMPLETION OF
FINAL VEGETATION AND
SITE STABILIZATION

TM 7 PCL 21
RICHARD D. & MAGUERITE ANN CLEVENER
DB 288 PG 54
82.68 ACRES



Legend

- - - - - Existing 2' Contour
- - - - - Existing 10' Contour
- - - - - Existing Tree Line
- - - - - Existing Utility Pole
- - - - - Existing Gas Line CL
- - - - - Proposed 2' Contour
- - - - - Proposed 10' Contour

DATE	REVISIONS