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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Thursday, April 24, 2025  
PERMIT MODIFICATION APPROVAL  
Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION  
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit Modification Approval for Ralph Unit 1H  
47-017-06984-00-00

**Modified LOD**

ANTERO RESOURCES CORPORATION

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

A blue ink signature of James A. Martin, written in a cursive style.

James A. Martin  
Chief

Operator's Well Number: Ralph Unit 1H  
Farm Name: Shawn A Glaspell  
U.S. WELL NUMBER: 47-017-06984-00-00  
Horizontal 6A New Drill  
Date Modification Issued: 4/24/2025

Promoting a healthy environment.

04/25/2025

LOCATION COORDINATES:  
ACCESS ROAD ENTRANCE  
LATITUDE: 39.386878 LONGITUDE: -80.676999 (NAD 83)  
LATITUDE: 39.386794 LONGITUDE: -80.677176 (NAD 27)  
N 4359760.04 E 527816.33 (UTM ZONE 17 METERS)

CENTER OF TANK  
LATITUDE: 39.385725 LONGITUDE: -80.685345 (NAD 83)  
LATITUDE: 39.385642 LONGITUDE: -80.685521 (NAD 27)  
N 4359629.59 E 527098.04 (UTM ZONE 17 METERS)

CENTROID OF PAD  
LATITUDE: 39.385093 LONGITUDE: -80.685409 (NAD 83)  
LATITUDE: 39.385009 LONGITUDE: -80.685586 (NAD 27)  
N 4359559.36 E 527092.73 (UTM ZONE 17 METERS)

#### GENERAL DESCRIPTION:

THE ACCESS ROAD(S), WATER CONTAINMENT PAD, AND WELL PAD HAVE BEEN CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS.

#### FLOODPLAIN NOTES:

THE SITE IS LOCATED WITHIN FEMA FLOOD ZONE "X" PER FEMA FLOOD MAP #54017C0045C.

#### MISS UTILITY STATEMENT:

ANTERO RESOURCES CORPORATION HAS NOTIFIED MISS UTILITY OF WEST VIRGINIA FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN. IN ADDITION, MISS UTILITY HAS BEEN CONTACTED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION FOR THIS PROJECT.

#### ENTRANCE PERMIT:

ANTERO RESOURCES CORPORATION HAS OBTAINED AN ENCROACHMENT PERMIT (FORM MM-109) FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

#### ENVIRONMENTAL NOTES:

STREAM AND WETLAND DELINEATIONS WERE PERFORMED IN JULY/AUGUST, 2021 BY ALLSTAR ECOLOGY TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY PURVIEW OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP). THE AUGUST 8, 2021 STREAM AND WETLAND DELINEATION INDEX MAP WAS PREPARED BY ALLSTAR ECOLOGY AND SUMMARIZES THE RESULTS OF THE FIELD DELINEATION. THE MAP DOES NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE LANDWARD LIMITS OF WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE USACE OR THE WVDEP.

#### GEOTECHNICAL NOTES:

A SUBSURFACE INVESTIGATION OF THE PROPOSED SITE WAS PERFORMED BY PENNSYLVANIA SOIL & ROCK, INC. ON AUGUST 13 - OCTOBER 5, 2022. THE REPORT PREPARED BY PENNSYLVANIA SOIL & ROCK, INC. DATED OCTOBER 31, 2022, REFLECTS THE RESULTS OF THE SUBSURFACE INVESTIGATION. THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS REPORT WERE USED IN THE PREPARATION OF THESE PLANS. PLEASE REFER TO THE SUBSURFACE INVESTIGATION REPORT BY PENNSYLVANIA SOIL & ROCK, INC. FOR ADDITIONAL INFORMATION, AS NEEDED.

#### PROJECT CONTACTS:

##### OPERATOR:

ANTERO RESOURCES CORPORATION  
535 WHITE OAKS BLVD  
BRIDGEPORT, WV 26330  
PHONE: (304) 842-4100  
FAX: (304) 842-4102

ELI WAGONER - ENVIRONMENTAL ENGINEER &  
REGULATORY MANAGER  
OFFICE: (304) 842-4068 CELL: (304) 476-9770

JON McEVERS - SVP OPERATIONS  
OFFICE: (303) 357-6799

AARON KUNZLER - CONSTRUCTION MANAGER  
OFFICE: (304) 842-4191

ROBERT WIRKS - DESIGN MANAGER  
OFFICE: (304) 842-4100 CELL: (304) 627-7405

#### NOTES:

- ALL BMP'S MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL ALL AREAS WITHIN THE LIMIT OF DISTURBANCE ARE COMPLETE AND PERMANENTLY STABILIZED. MAINTENANCE MUST INCLUDE INSPECTION OF ALL EROSION AND SEDIMENT CONTROLS AFTER EACH RUNOFF EVENT IN EXCESS OF 0.5" AND ON A BIWEEKLY BASIS.
- THE CONSTRUCTION SITE SHOULD BE STABILIZED AS SOON AS POSSIBLE AFTER COMPLETION. ESTABLISHMENT OF FINAL STABILIZATION MUST BE INITIATED NO LATER THAN 7 DAYS AFTER REACHING FINAL GRADE. FINAL STABILIZATION MEANS THAT ALL SOIL-DISTURBING ACTIVITIES ARE COMPLETED, AND THAT EITHER A PERMANENT VEGETATIVE COVER WITH A DENSITY OF 70% OR GREATER HAS BEEN ESTABLISHED OR THAT THE SURFACE HAS BEEN STABILIZED BY HARD COVER SUCH AS PAVEMENT OR BUILDINGS. IT SHOULD BE NOTED THAT THE 70% REQUIREMENT REFERS TO THE TOTAL AREA VEGETATED AND NOT JUST A PERCENT OF THE SITE.
- ALL PERMANENT SEDIMENT CONTROL MEASURES CAN BE REMOVED AFTER THE SITE IS PERMANENTLY STABILIZED AND APPROVAL IS RECEIVED FROM THE WVDEP.
- ANY AREAS DISTURBED BY REMOVAL OF CONTROLS SHALL BE REPAIRED, STABILIZED, AND PERMANENTLY SEEDED.
- THE AS-BUILT INFORMATION SHOWN HEREON REFLECTS FIELD DATA COLLECTED RELATING TO THE FINAL GRADING OF THE DISTURBED AREA AS OF FEBRUARY 10, 2025. NAVITUS ENGINEERING IS NOT RESPONSIBLE FOR ANY CHANGES MADE TO THE SITE AFTER THE ABOVE MENTIONED DATES.
- THE EXISTING CONTAINMENT BERM AROUND THE WELL PAD SHALL BE REPAIRED AS NECESSARY TO ENSURE 100% CONTAINMENT OF ALL FLUIDS PRIOR TO DRILLING OPERATIONS
- THE EXISTING EGRESSES TO THE WELL PAD SHALL HAVE THE MOUNTABLE BERMS REPAIRED AS NECESSARY TO ENSURE 100% CONTAINMENT OF ALL FLUIDS PRIOR TO DRILLING OPERATIONS.

### REPRODUCTION NOTE

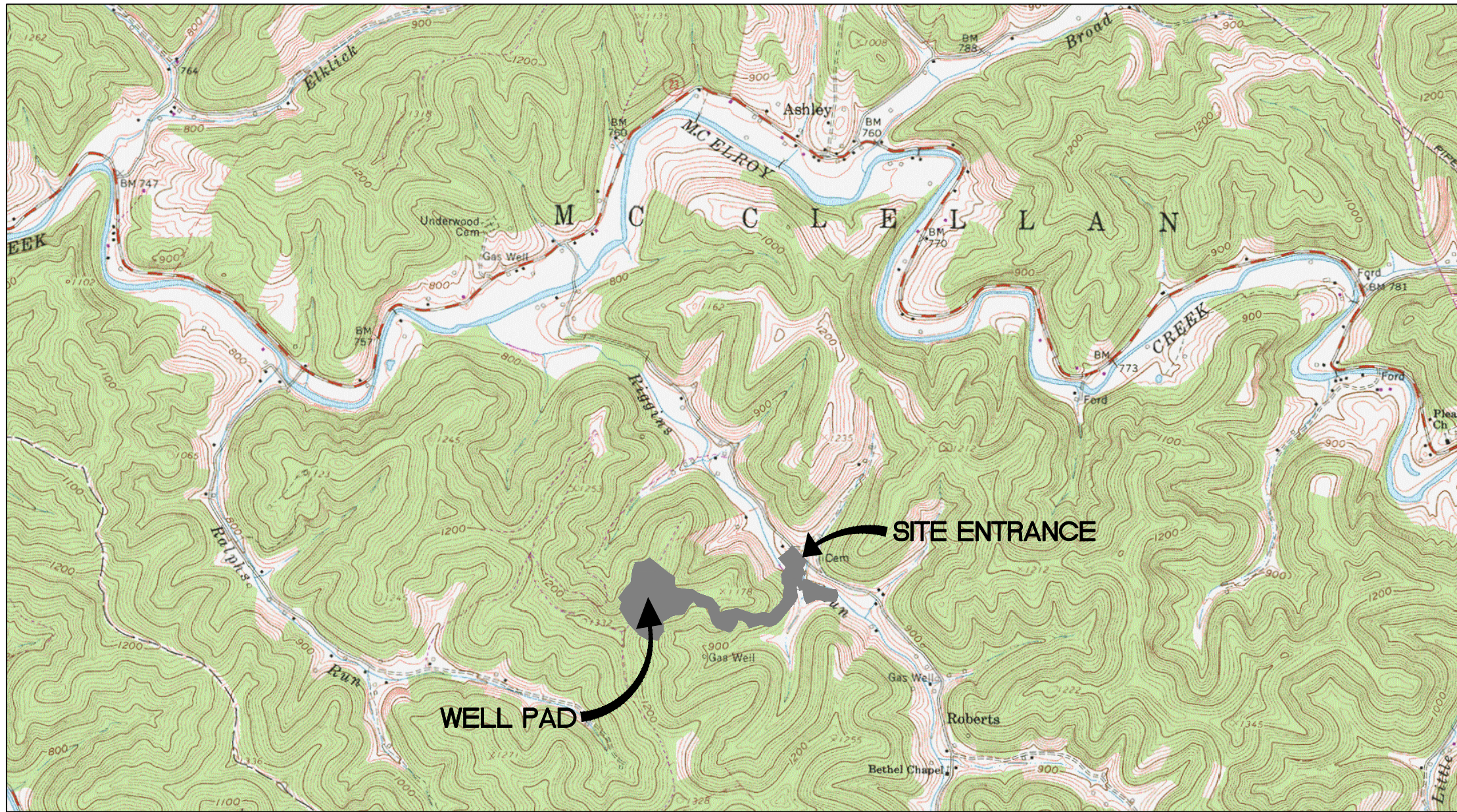
THESE PLANS WERE CREATED TO BE PLOTTED ON 22"X34" (ANSI D) PAPER. HALF SCALE DRAWINGS ARE ON 11"X17" (ANSI B) PAPER.

THESE PLANS WERE CREATED FOR COLOR PLOTTING AND ANY REPRODUCTIONS IN GRAY SCALE OR COLOR MAY RESULT IN A LOSS OF INFORMATION AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

# CRIMSON WELL PAD & WATER CONTAINMENT PAD AS-BUILT EROSION & SEDIMENT CONTROL IMPROVEMENT PLANS

MCLELLAN DISTRICT, DODDRIDGE COUNTY, WV  
MCELROY CREEK WATERSHED

CENTER POINT USGS 7.5 QUAD MAP(S)

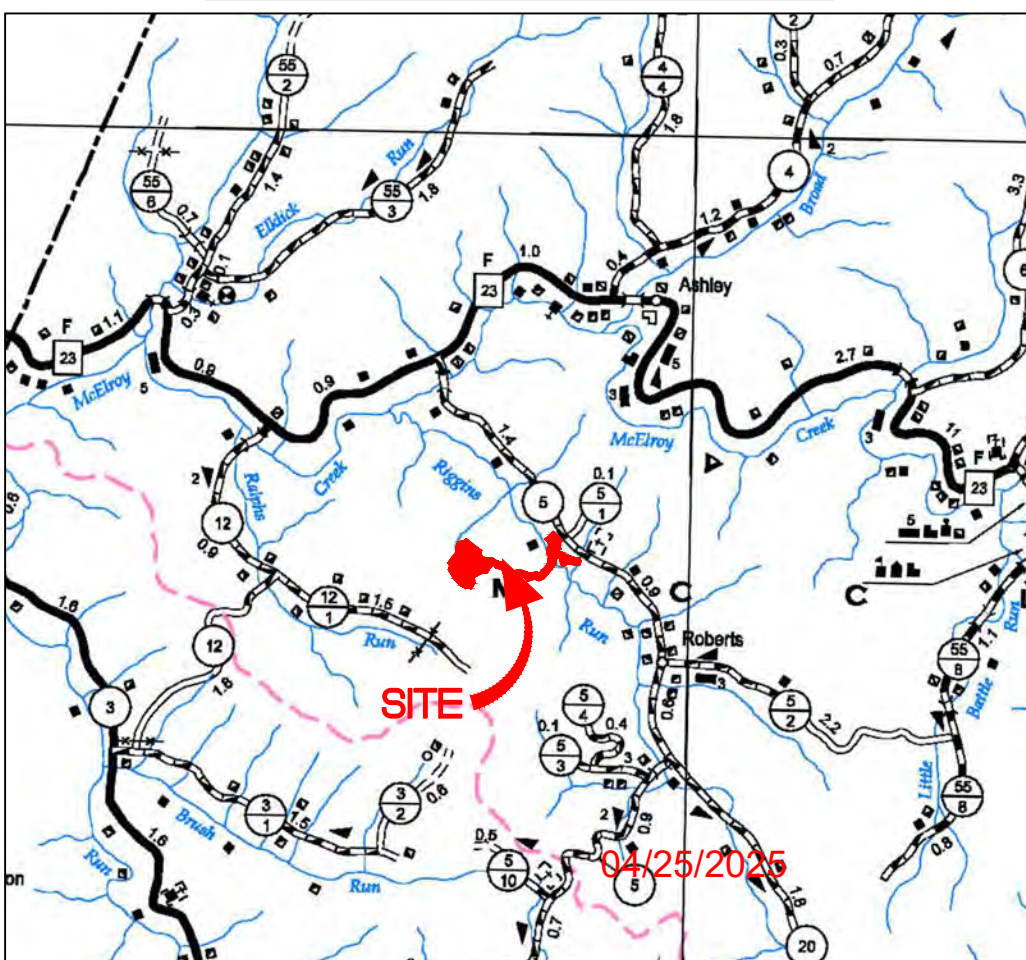


WEST VIRGINIA COUNTY MAP



(NOT TO SCALE)

WVDOH COUNTY ROAD MAP



(NOT TO SCALE)



#### SHEET INDEX:

- 1 - COVER SHEET
- 2 - LEGEND
- 3 - OVERALL PLAN SHEET INDEX
- 4 - ACCESS ROAD, STAGING AREA & STOCKPILE AS-BUILT PLAN
- 5 - ACCESS ROAD AS-BUILT PLAN
- 6 - ACCESS ROAD, WELL PAD & STOCKPILE AS-BUILT PLAN
- 7 - WELL PAD & STOCKPILE AS-BUILT PLAN
- 8-10 - ACCESS ROAD AS-BUILT PROFILE
- 11 - WELL PAD & STAGING AREA AS-BUILT SECTIONS
- 12 - STOCKPILE AS-BUILT SECTIONS

| CRIMSON LIMITS OF DISTURBANCE AREA (AC) |              |              |              |
|-----------------------------------------|--------------|--------------|--------------|
| Total Site                              | Permitted    | Modification | Total        |
| Access Road "A" (3,232')                | 13.26        | 0.51         | 13.77        |
| Staging Area                            | 1.53         | 0.00         | 1.53         |
| Well Pad                                | 14.46        | 0.00         | 14.46        |
| Production Equipment Pad                | 1.62         | 0.00         | 1.62         |
| Excess/Topsoil Material Stockpiles      | 6.02         | 0.00         | 6.02         |
| <b>Total Affected Area</b>              | <b>36.89</b> | <b>0.51</b>  | <b>37.40</b> |
| Total Wooded Acres Disturbed            | 0.00         | 0.51         | 0.51         |
| Impacts to Shawn A. Glaspell TM 17-3-11 |              |              |              |
| Staging Area                            | 0.55         | 0.00         | 0.55         |
| <b>Total Affected Area</b>              | <b>0.55</b>  | <b>0.00</b>  | <b>0.55</b>  |
| Total Wooded Acres Disturbed            | 0.00         | 0.00         | 0.00         |
| Impacts to Shawn A. Glaspell TM 17-14   |              |              |              |
| Access Road "A" (1,935')                | 8.23         | 0.51         | 8.74         |
| Staging Area                            | 0.98         | 0.00         | 0.98         |
| Excess/Topsoil Material Stockpiles      | 2.95         | 0.00         | 2.95         |
| <b>Total Affected Area</b>              | <b>12.16</b> | <b>0.51</b>  | <b>12.67</b> |
| Total Wooded Acres Disturbed            | 0.00         | 0.51         | 0.51         |
| Impacts to Shawn A. Glaspell TM 17-23   |              |              |              |
| Excess/Topsoil Material Stockpiles      | 0.02         | 0.00         | 0.02         |
| <b>Total Affected Area</b>              | <b>0.02</b>  | <b>0.00</b>  | <b>0.02</b>  |
| Total Wooded Acres Disturbed            | 0.00         | 0.00         | 0.00         |
| Impacts to Shawn A. Glaspell TM 17-3-5  |              |              |              |
| Access Road "A"                         | 0.02         | 0.00         | 0.02         |
| <b>Total Affected Area</b>              | <b>0.02</b>  | <b>0.00</b>  | <b>0.02</b>  |
| Total Wooded Acres Disturbed            | 0.00         | 0.00         | 0.00         |
| Impacts to Shawn A. Glaspell TM 17-3-2  |              |              |              |
| Access Road "A" (1,297')                | 5.01         | 0.00         | 5.01         |
| Well Pad                                | 5.48         | 0.00         | 5.48         |
| Excess/Topsoil Material Stockpiles      | 2.91         | 0.00         | 2.91         |
| <b>Total Affected Area</b>              | <b>13.40</b> | <b>0.00</b>  | <b>13.40</b> |
| Total Wooded Acres Disturbed            | 0.00         | 0.00         | 0.00         |
| Impacts to Shawn A. Glaspell TM 17-3-3  |              |              |              |
| Well Pad                                | 8.98         | 0.00         | 8.98         |
| Production Equipment Pad                | 1.62         | 0.00         | 1.62         |
| Excess/Topsoil Material Stockpiles      | 0.14         | 0.00         | 0.14         |
| <b>Total Affected Area</b>              | <b>10.74</b> | <b>0.00</b>  | <b>10.74</b> |
| Total Wooded Acres Disturbed            | 0.00         | 0.00         | 0.00         |

| CRIMSON WETLAND PERMANENT IMPACT (SQUARE FEET) |           |                   |                   |
|------------------------------------------------|-----------|-------------------|-------------------|
| Wetland and Impact Cause                       | Fill (SF) | Total Impact (SF) | Total Impact (AC) |
| ASE_Wetland09 (Well Pad)                       | 5,477     | 5,477             | 0.126             |
| ASE_Wetland08 (Well Pad)                       | 986       | 986               | 0.023             |

| CRIMSON PERENNIAL STREAM IMPACT (LINEAR FEET)             |                     |                                |                             |                              |                         |                         |
|-----------------------------------------------------------|---------------------|--------------------------------|-----------------------------|------------------------------|-------------------------|-------------------------|
| Stream and Impact Cause                                   | Permanent Impacts   |                                | Total Permanent Impact (LF) | Temp. Impacts                |                         | Total Temp. Impact (LF) |
|                                                           | Culvert / Fill (LF) | Inlets/Outlets Structures (LF) |                             | Cofferdam/ E&S Controls (LF) | Distance To L.O.D. (LF) |                         |
| ASE_Stream05_ASE_Stream01_MOD (Riggins Run) (Access Road) | 110                 | 0                              | 110                         | 25                           | 57                      | 82                      |
| CRIMSON INTERMITTENT STREAM IMPACT (LINEAR FEET)          |                     |                                |                             |                              |                         |                         |
| Stream and Impact Cause                                   | Permanent Impacts   |                                | Total Permanent Impact (LF) | Temp. Impacts                |                         | Total Temp. Impact (LF) |
|                                                           | Culvert / Fill (LF) | Inlets/Outlets Structures (LF) |                             | Cofferdam/ E&S Controls (LF) | Distance To L.O.D. (LF) |                         |
| ASE_Stream25 (Access Road)                                | 0                   | 0                              | 0                           | 0                            | 38                      | 38                      |
| ASE_Stream24_ASE_Stream02_MOD (Access Road)               | 0                   | 0                              | 0                           | 0                            | 33                      | 33                      |
| CRIMSON EPHEMERAL STREAM IMPACT (LINEAR FEET)             |                     |                                |                             |                              |                         |                         |
| Stream and Impact Cause                                   | Permanent Impacts   |                                | Total Permanent Impact (LF) | Temp. Impacts                |                         | Total Temp. Impact (LF) |
|                                                           | Culvert / Fill (LF) | Inlets/Outlets Structures (LF) |                             | Cofferdam/ E&S Controls (LF) | Distance To L.O.D. (LF) |                         |
| ASE_Stream_12 (Access Road)                               | 33                  | 18                             | 51                          | 36                           | 4                       | 40                      |
| ASE_Stream_40 (Well Pad)                                  | 41                  | 19                             | 60                          | 12                           | 12                      | 24                      |
| ASE_Stream_46 (Well Pad)                                  | 30                  | 0                              | 30                          | 21                           | 8                       | 29                      |
| ASE_Stream_43 (Well Pad)                                  | 0                   | 0                              | 0                           | 9                            | 6                       | 15                      |

MISS Utility of West Virginia  
1-800-245-4848

West Virginia State Law  
(Section XIV: Chapter 24-C)  
Requires that you call two  
business days before you dig in  
the state of West Virginia.  
IT'S THE LAW!!

#### AS-BUILT CERTIFICATIONS:

THE DRAWINGS, CONSTRUCTION NOTES, AND REFERENCE DIAGRAM ATTACHED HERETO HAVE BEEN PREPARED IN ACCORDANCE WITH THE WEST VIRGINIA CODE OF STATE RULES, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS CRS 35-8.

| Well Name                                                      | WV North NAD 27             | NAD 27 Lat & Long                        | NAD 83 UTM (METERS) ZONE 17 | NAD 83 Lat & Long                        |
|----------------------------------------------------------------|-----------------------------|------------------------------------------|-----------------------------|------------------------------------------|
| Permitted Location                                             |                             |                                          |                             |                                          |
| FRIPP UNIT 1HA                                                 | N 324371.21<br>E 1664794.58 | LAT 39-23-04.2579<br>LONG -80-41-09.4232 | N 4359504.51<br>E 527061.49 | LAT 39-23-04.5586<br>LONG -80-41-08.7865 |
| RALPH UNIT 1H<br>API# 47-017-06984                             | N 324382.29<br>E 1664804.68 | LAT 39-23-04.3688<br>LONG -80-41-09.2964 | N 4359507.94<br>E 527064.51 | LAT 39-23-04.6695<br>LONG -80-41-08.6597 |
| FRIPP UNIT 1H - TO BE PLUGGED & ABANDONED<br>API# 47-017-06980 | N 324383.38<br>E 1664814.75 | LAT 39-23-04.4796<br>LONG -80-41-09.1696 | N 4359511.37<br>E 527067.83 | LAT 39-23-04.7804<br>LONG -80-41-08.6329 |
| RABIN UNIT 1H<br>API# 47-017-06983                             | N 324404.48<br>E 1664824.89 | LAT 39-23-04.5905<br>LONG -80-41-09.0428 | N 4359514.80<br>E 527070.55 | LAT 39-23-04.8913<br>LONG -80-41-08.4061 |
| GLASPELL UNIT 1H<br>API# 47-017-06981                          | N 324415.55<br>E 1664835.00 | LAT 39-23-04.7014<br>LONG -80-41-08.9159 | N 4359518.23<br>E 527073.58 | LAT 39-23-05.0021<br>LONG -80-41-08.2792 |
| PERNA UNIT 1H<br>API# 47-017-06982                             | N 324426.64<br>E 1664845.10 | LAT 39-23-04.8123<br>LONG -80-41-08.7891 | N 4359521.66<br>E 527076.60 | LAT 39-23-05.1130<br>LONG -80-41-08.1524 |
| RAMZA UNIT 1H<br>API# 47-017-06985                             | N 324437.72<br>E 1664855.21 | LAT 39-23-04.9232<br>LONG -80-41-08.6623 | N 4359525.09<br>E 527079.62 | LAT 39-23-05.2239<br>LONG -80-41-08.0256 |
| DODRILL UNIT 1H<br>API# 47-017-06979                           | N 324468.81<br>E 1664865.31 | LAT 39-23-05.0341<br>LONG -80-41-08.5355 | N 4359528.52<br>E 527082.64 | LAT 39-23-05.3348<br>LONG -80-41-07.8988 |
| CRIMSON UNIT 5V<br>API# 47-017-06951                           | N 324405.98<br>E 1664844.27 | LAT 39-23-04.6211<br>LONG -80-41-07.9228 | N 4359515.87<br>E 527106.91 | LAT 39-23-04.9219<br>LONG -80-41-06.8860 |
| Proposed Well Pad Elevation                                    |                             | 1,222.0                                  |                             |                                          |

NAVITUS  
ENERGY ENGINEERING  
Telephone: (888) 662-4185 | www.NavitusEng.com

| REVISION | DATE       | REVISED PER WELLS | REVISED PER LOD MODIFICATION |
|----------|------------|-------------------|------------------------------|
|          | 08/01/2024 |                   |                              |
|          | 03/07/2025 |                   |                              |

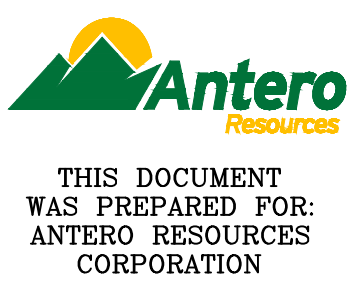


LEGEND

| LEGEND                                               |  |                                                       |  |
|------------------------------------------------------|--|-------------------------------------------------------|--|
| EX. INDEX CONTOUR & CONTOUR LABEL                    |  | PR. INDEX CONTOUR (10' INTERVAL) & CONTOUR LABEL      |  |
| EX. INTERMEDIATE CONTOUR                             |  | PR. INTERMEDIATE CONTOUR (2' INTERVAL)                |  |
| EX. PROPERTY LINE                                    |  | PR. INTERMEDIATE CONTOUR (1' INTERVAL)                |  |
| EX. TOP OF BERM                                      |  | PR. INDEX ROAD CONTOUR (10' INTERVAL) & CONTOUR LABEL |  |
| EX. ROAD EDGE OF GRAVEL/DIRT                         |  | PR. INTERMEDIATE ROAD CONTOUR (2' INTERVAL)           |  |
| EX. ROAD EDGE OF PAVEMENT                            |  | PR. PADS/STOCKPILE TOPO LIMITS                        |  |
| EX. ROAD CENTERLINE                                  |  | PERMITTED LIMITS OF DISTURBANCE                       |  |
| EX. GUARDRAIL                                        |  | MODIFICATION LIMITS OF DISTURBANCE                    |  |
| EX. BRIDGE                                           |  | PR. ROAD/IMPOUNDMENT EDGE OF GRAVEL                   |  |
| EX. DITCHLINE/DRAINAGE FEATURE                       |  | PR. ROAD EDGE OF PAVEMENT                             |  |
| EX. RIP-RAP                                          |  | PR. ROAD CENTERLINE                                   |  |
| EX. CULVERT                                          |  | PR. GUARDRAIL                                         |  |
| EX. TREELINE                                         |  | PR. ROCK CONSTRUCTION ENTRANCE                        |  |
| EX. BUILDING                                         |  | PR. AIR BRIDGE                                        |  |
| EX. MISCELLANEOUS FEATURE                            |  | PR. CULVERT                                           |  |
| EX. 100 YR FEMA FLOODPLAIN                           |  | PR. DITCH                                             |  |
| EX. DELINEATED STREAM                                |  | PR. RIP-RAP TRAPEZOIDAL DITCH                         |  |
| EX. DELINEATED WETLAND/POND                          |  | PR. OUTLET PROTECTION                                 |  |
| 100' WETLAND/STREAM BUFFER                           |  | PR. ROCK LEVEL SPREADER                               |  |
| STREAM/WETLAND DELINEATION STUDY AREA                |  | PR. COMPOST FILTER SOCK                               |  |
| EX. FENCELINE                                        |  | PR. SMART FENCE HD                                    |  |
| EX. GATE                                             |  | PR. WELL HEAD                                         |  |
| EX. PERIMETER SAFETY FENCE                           |  | PR. PAD DEWATERING SYSTEM                             |  |
| EX. ACCESS GATE WITH EMERGENCY LIFELINE              |  | PR. TOP OF PAD CONTAINMENT BERM                       |  |
| EX. WELL HEAD ON DESIGNED PAD                        |  | PR. 220' X 320' PAD FOOTPRINT                         |  |
| EX. GAS WELL                                         |  | PR. SPOT SHOT                                         |  |
| EX. PIPELINE                                         |  | PR. PERIMETER SAFETY FENCE                            |  |
| EX. PIPELINE R/W                                     |  | PR. ACCESS GATE WITH EMERGENCY LIFELINE               |  |
| EX. PIPELINE METER                                   |  | PR. PIPELINE                                          |  |
| EX. PIPELINE VALVE                                   |  | PR. PIPELINE R/W                                      |  |
| EX. SUMP PUMP LINE                                   |  | PR. OVERHEAD UTILITY                                  |  |
| EX. OVERHEAD UTILITY                                 |  | PR. POWER POLE/GUY WIRE                               |  |
| EX. POWER POLE/GUY WIRE                              |  | PR. UNDERGROUND ELECTRIC                              |  |
| EX. UNDERGROUND ELECTRIC                             |  | PR. WATERLINE                                         |  |
| EX. UNDERGROUND TELEPHONE                            |  | BORING LOCATION                                       |  |
| EX. UNDERGROUND FIBER OPTIC                          |  | X-SECTION/PROFILE GRID INDEX                          |  |
| EX. UTILITY R/W                                      |  | X-SECTION/PROFILE GRID INTERMEDIATE                   |  |
| EX. WATERLINE                                        |  | X-SECTION/PROFILE PROPOSED GRADE                      |  |
| EX. WATER WELL/EX. SPRING                            |  | X-SECTION/PROFILE EXISTING GRADE                      |  |
| EX. COMPOST SOCK                                     |  | X-SECTION/PROFILE WATER SURFACE                       |  |
| EX. SMART FENCE HD                                   |  | X-SECTION/PROFILE CULVERT                             |  |
| EX. SILT FENCE                                       |  | MATCHLINE                                             |  |
| APPROX. LOCATION OF SLIDE AREA                       |  | EX. METER                                             |  |
| APPROX. LOCATION OF BORROW/ SPOIL AREA               |  | EX. TANK                                              |  |
| PR. TOE BENCH                                        |  | EX. COMBUSTOR                                         |  |
| EX. APPROX. SURFACE & SUB-SURFACE ELECTRIC LINE AREA |  | EX. GPU                                               |  |
| EX. APPROX. SURFACE & SUB-SURFACE DUMP LINE AREA     |  | EX. SEPARATOR                                         |  |
| EX. APPROX. SURFACE & SUB-SURFACE WELL LINE AREA     |  | EX. VRT                                               |  |
| EX. APPROX. SURFACE & SUB-SURFACE SALES LINE AREA    |  | EX. KNOCK-OUT VESSEL                                  |  |
|                                                      |  | EX. STAIRS/CATWALK                                    |  |
|                                                      |  | EX. DEWATERING SYSTEM                                 |  |
|                                                      |  | EX. PIG LAUNCHER                                      |  |
|                                                      |  | EX. SECONDARY CONTAINMENT                             |  |
|                                                      |  | EX. ABOVE-GND VAPOR LINE                              |  |
|                                                      |  | EX. ESD                                               |  |
|                                                      |  | EX. MAILBOX                                           |  |
|                                                      |  | EX. CONTROL PT.                                       |  |
|                                                      |  | EX. MUSTER AREA                                       |  |



| DATE       | REVISION                     |
|------------|------------------------------|
| 08/01/2024 | REVISED PER WELLS            |
| 03/07/2025 | REVISED PER LOD MODIFICATION |
|            |                              |
|            |                              |
|            |                              |
|            |                              |



LEGEND  
**CRIMSON**  
WELL PAD & WATER CONTAINMENT PAD  
McCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA

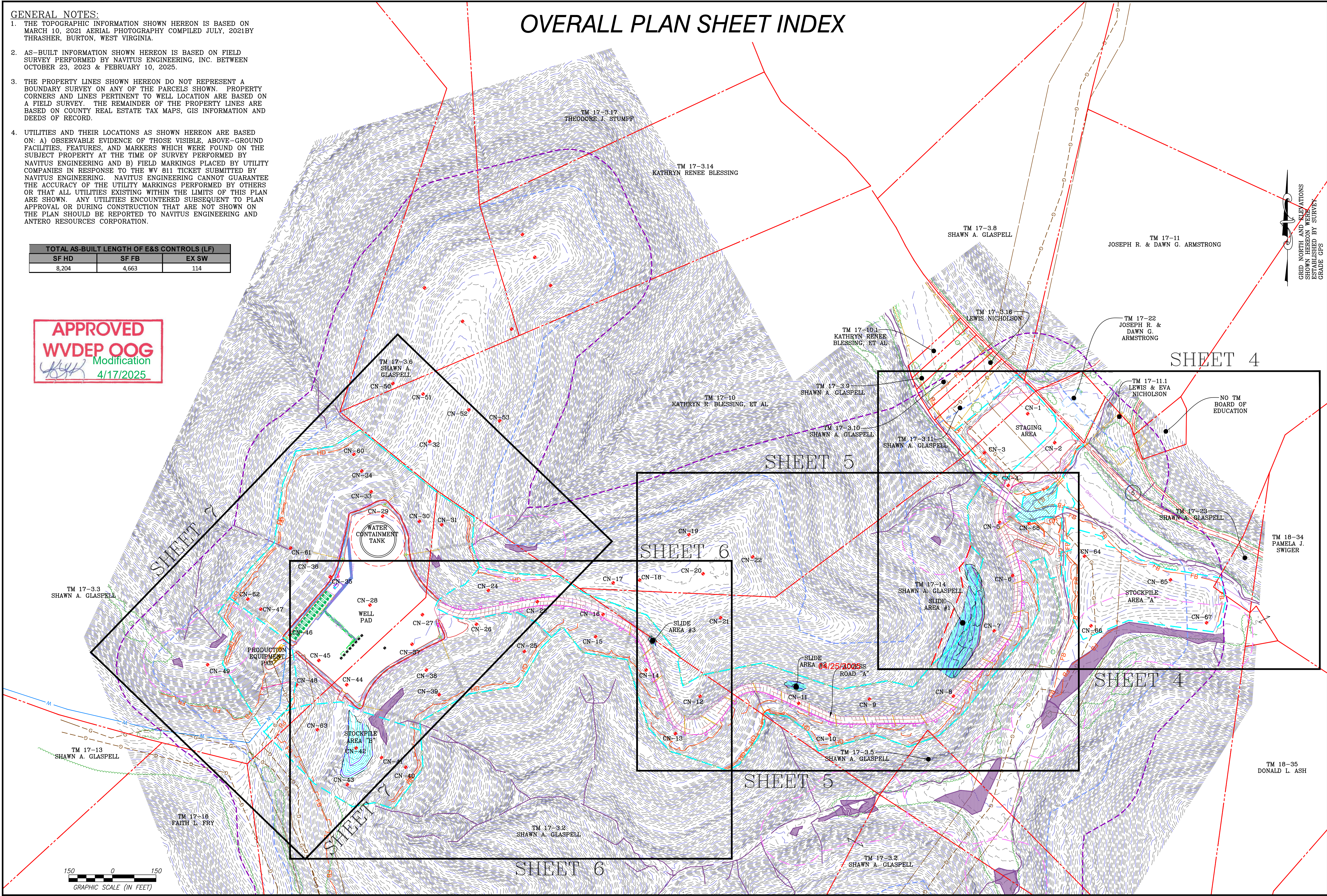


- GENERAL NOTES:
1. THE TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON MARCH 10, 2021 AERIAL PHOTOGRAPHY COMPILED JULY, 2021BY THRASHER, BURTON, WEST VIRGINIA.
  2. AS-BUILT INFORMATION SHOWN HEREON IS BASED ON FIELD SURVEY PERFORMED BY NAVITUS ENGINEERING, INC. BETWEEN OCTOBER 23, 2023 & FEBRUARY 10, 2025.
  3. THE PROPERTY LINES SHOWN HEREON DO NOT REPRESENT A BOUNDARY SURVEY ON ANY OF THE PARCELS SHOWN. PROPERTY CORNERS AND LINES PERTINENT TO WELL LOCATION ARE BASED ON A FIELD SURVEY. THE REMAINDER OF THE PROPERTY LINES ARE BASED ON COUNTY REAL ESTATE TAX MAPS, GIS INFORMATION AND DEEDS OF RECORD.
  4. UTILITIES AND THEIR LOCATIONS AS SHOWN HEREON ARE BASED ON: A) OBSERVABLE EVIDENCE OF THOSE VISIBLE, ABOVE-GROUND FACILITIES, FEATURES, AND MARKERS WHICH WERE FOUND ON THE SUBJECT PROPERTY AT THE TIME OF SURVEY PERFORMED BY NAVITUS ENGINEERING AND B) FIELD MARKINGS PLACED BY UTILITY COMPANIES IN RESPONSE TO THE WV 811 TICKET SUBMITTED BY NAVITUS ENGINEERING. NAVITUS ENGINEERING CANNOT GUARANTEE THE ACCURACY OF THE UTILITY MARKINGS PERFORMED BY OTHERS OR THAT ALL UTILITIES EXISTING WITHIN THE LIMITS OF THIS PLAN ARE SHOWN. ANY UTILITIES ENCOUNTERED SUBSEQUENT TO PLAN APPROVAL OR DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLAN SHOULD BE REPORTED TO NAVITUS ENGINEERING AND ANTERO RESOURCES CORPORATION.

| TOTAL AS-BUILT LENGTH OF E&S CONTROLS (LF) |       |       |
|--------------------------------------------|-------|-------|
| SF HD                                      | SF FB | EX SW |
| 8,204                                      | 4,663 | 114   |

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WVDEP OOG  
Modification  
4/17/2025

OVERALL PLAN SHEET INDEX



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| REVISION                     | DATE       |
|------------------------------|------------|
| REVISED PER WELLS            | 08/01/2024 |
| REVISED PER LOD MODIFICATION | 03/07/2025 |
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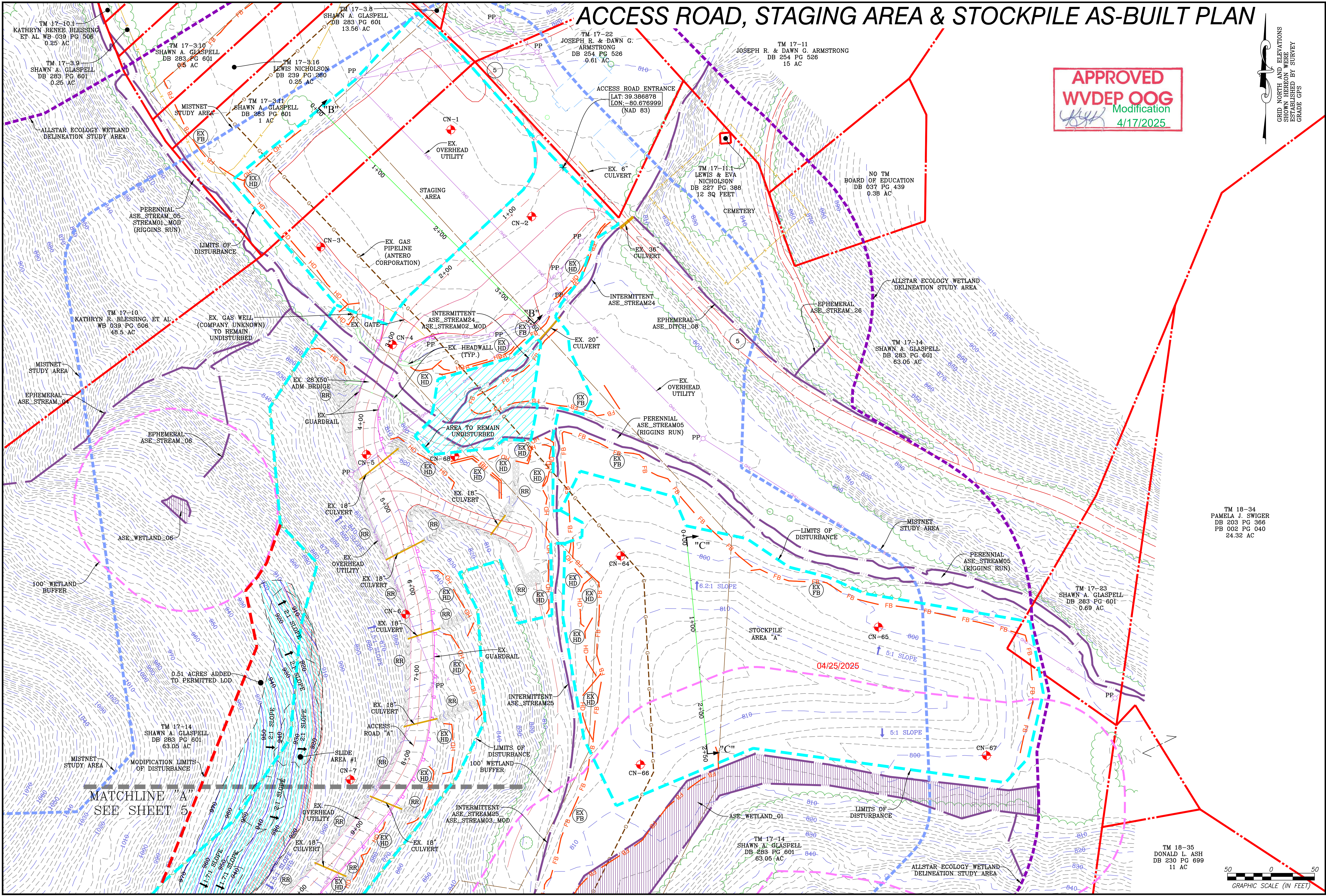
THIS DOCUMENT  
WAS PREPARED FOR:  
ANTERO RESOURCES  
CORPORATION

OVERALL PLAN SHEET INDEX

**CRIMSON**

WELL PAD & WATER CONTAINMENT PAD  
MCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA

DATE: 12/12/2023  
SCALE: 1" = 150'  
SHEET 3 OF 12



APPROVED  
WVDEP OOG  
Modification  
4/17/2025

GRID NORTH AND ELEVATIONS  
SHOWN HEREON WERE  
ESTABLISHED BY SURVEY  
GRADE GPS

| DATE       | REVISION                     |
|------------|------------------------------|
| 08/01/2024 | REVISED PER WELLS            |
| 03/07/2025 | REVISED PER LOD MODIFICATION |
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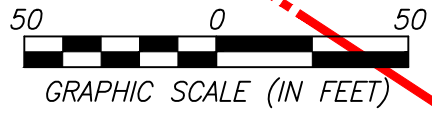
**Antero**  
Resources

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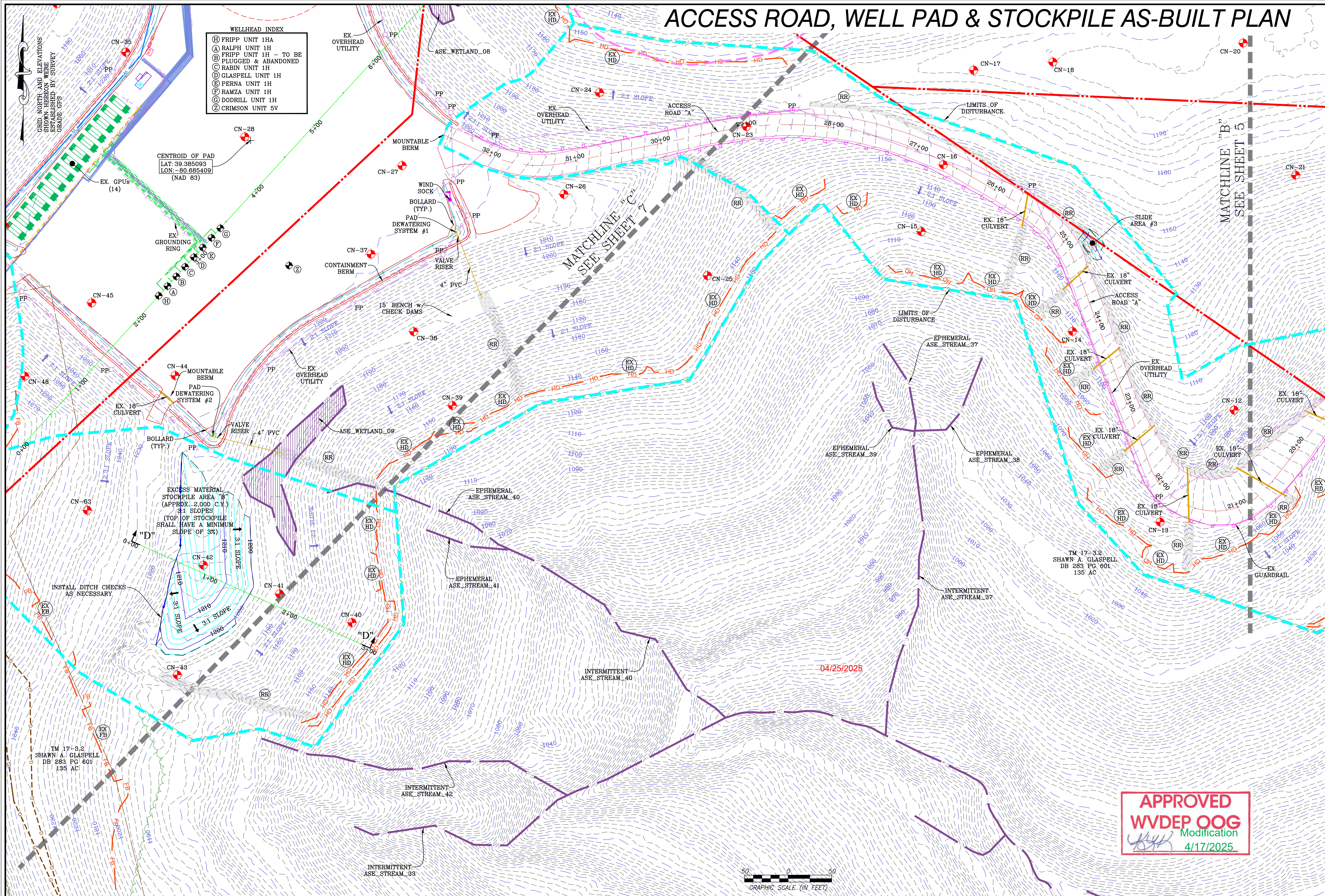
**CRIMSON**  
WELL PAD & WATER CONTAINMENT PAD  
MCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA



DATE: 12/12/2023  
SCALE: 1" = 50'  
SHEET 4 OF 12







ACCESS ROAD, WELL PAD & STOCKPILE AS-BUILT PLAN

- WELLHEAD INDEX
- Ⓜ FRIPP UNIT 1HA
  - Ⓜ RALPH UNIT 1H - TO BE
  - Ⓜ PLUGGED & ABANDONED
  - Ⓜ RABIN UNIT 1H
  - Ⓜ GLASPELL UNIT 1H
  - Ⓜ PERNA UNIT 1H
  - Ⓜ RAMZA UNIT 1H
  - Ⓜ DODRILL UNIT 1H
  - Ⓜ CRIMSON UNIT 5V

CENTROID OF PAD  
LAT: 39.385093  
LON: -80.685409  
(NAD 83)

APPROVED  
WVDEP OOG  
Modification  
4/17/2025

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| REVISION                     | DATE       |
|------------------------------|------------|
| REVISED PER WELLS            | 08/01/2024 |
| REVISED PER LOD MODIFICATION | 03/07/2025 |
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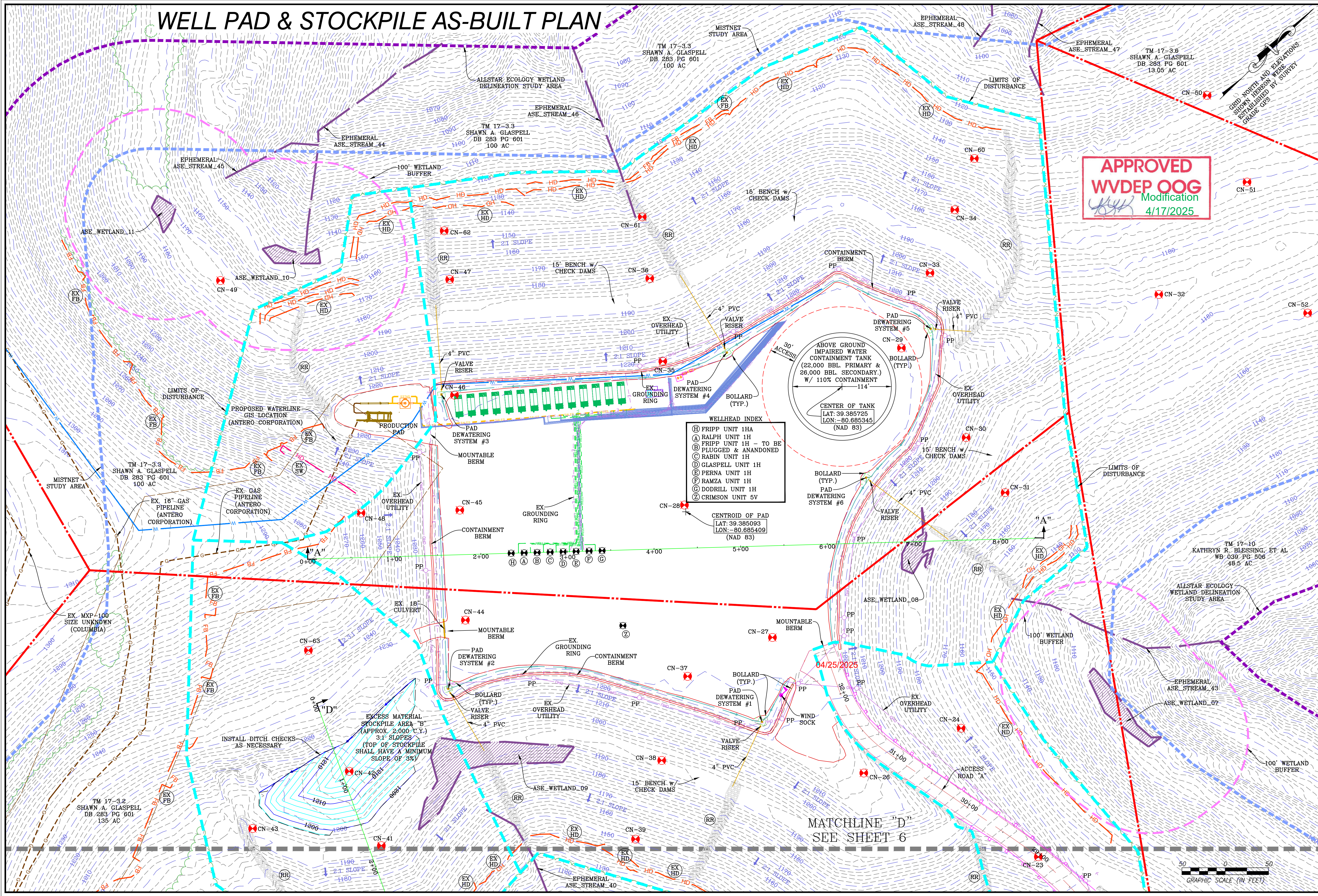
**CRIMSON**  
WELL PAD & WATER CONTAINMENT PAD  
McCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA

04/25/2025

APPROVED  
WVDEP OOG  
Modification  
4/17/2025

DATE: 12/12/2023  
SCALE: 1" = 50'  
SHEET 6 OF 12

WELL PAD & STOCKPILE AS-BUILT PLAN



APPROVED  
WVDEP OOG  
Modification  
4/17/2025

WELLHEAD INDEX  
H FRIPP UNIT 1H  
A RALPH UNIT 1H  
B FRIPP UNIT 1H - TO BE  
PLUGGED & ANANDONED  
C RABIN UNIT 1H  
D GLASPELL UNIT 1H  
E PERNA UNIT 1H  
F RAMZA UNIT 1H  
G DODRILL UNIT 1H  
Z CRIMSON UNIT 5V

CENTROID OF PAD  
LAT: 39.385093  
LON: -80.685409  
(NAD 83)

ABOVE GROUND  
IMPAIRED WATER  
CONTAINMENT TANK  
(22,000 BBL. PRIMARY &  
26,000 BBL. SECONDARY)  
W/ 110% CONTAINMENT  
W/ 114'  
CENTER OF TANK  
LAT: 39.385725  
LON: -80.685345  
(NAD 83)

MATCHLINE "D"  
SEE SHEET 6

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| REVISION | DATE       | REVISED PER                  |
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| 1        | 08/01/2024 | REVISED PER WELLS            |
| 2        | 03/07/2025 | REVISED PER LOD MODIFICATION |
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WELL PAD & STOCKPILE AS-BUILT PLAN

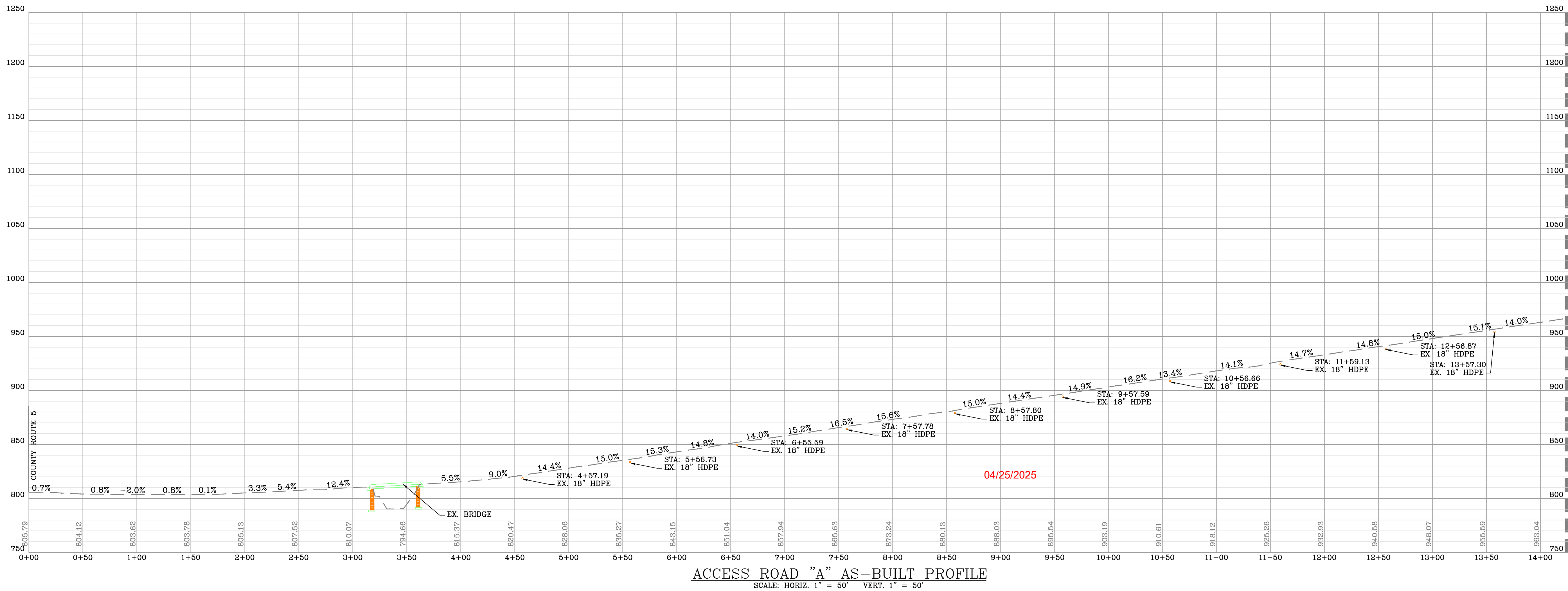
**CRIMSON**

WELL PAD & WATER CONTAINMENT PAD  
McCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA

03/07/2025

DATE: 12/12/2023  
SCALE: 1" = 50'  
SHEET 7 OF 12

ACCESS ROAD AS-BUILT PROFILE



MATCHLINE "F"  
SEE SHEET 9

| DATE       | REVISION                     |
|------------|------------------------------|
| 08/01/2024 | REVISED PER WELLS            |
| 03/07/2025 | REVISED PER LOD MODIFICATION |
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ACCESS ROAD AS-BUILT PROFILE

**CRIMSON**

WELL PAD & WATER CONTAINMENT PAD

McCLELLAN DISTRICT

DODDRIDGE COUNTY, WEST VIRGINIA

APPROVED  
WVDEP OOG  
Modification  
4/17/2025



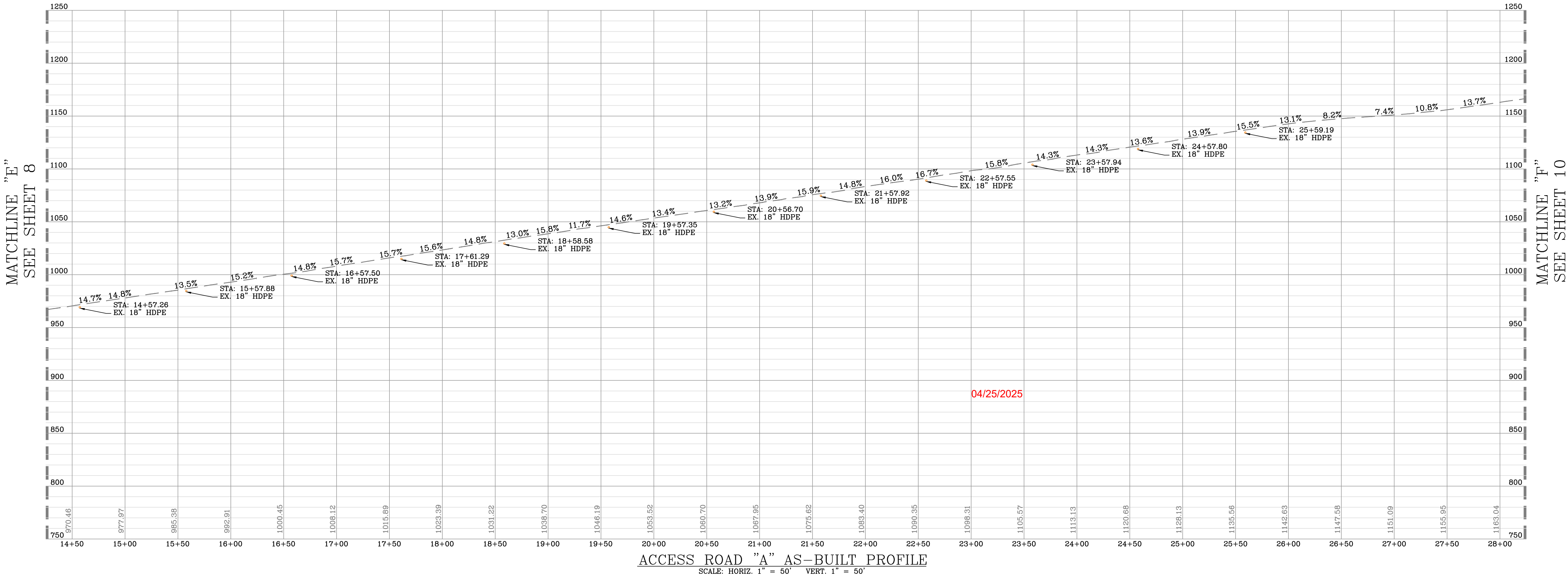
ACCESS ROAD AS-BUILT PROFILE

APPROVED  
WVDEP OOG  
Modification  
4/17/2025

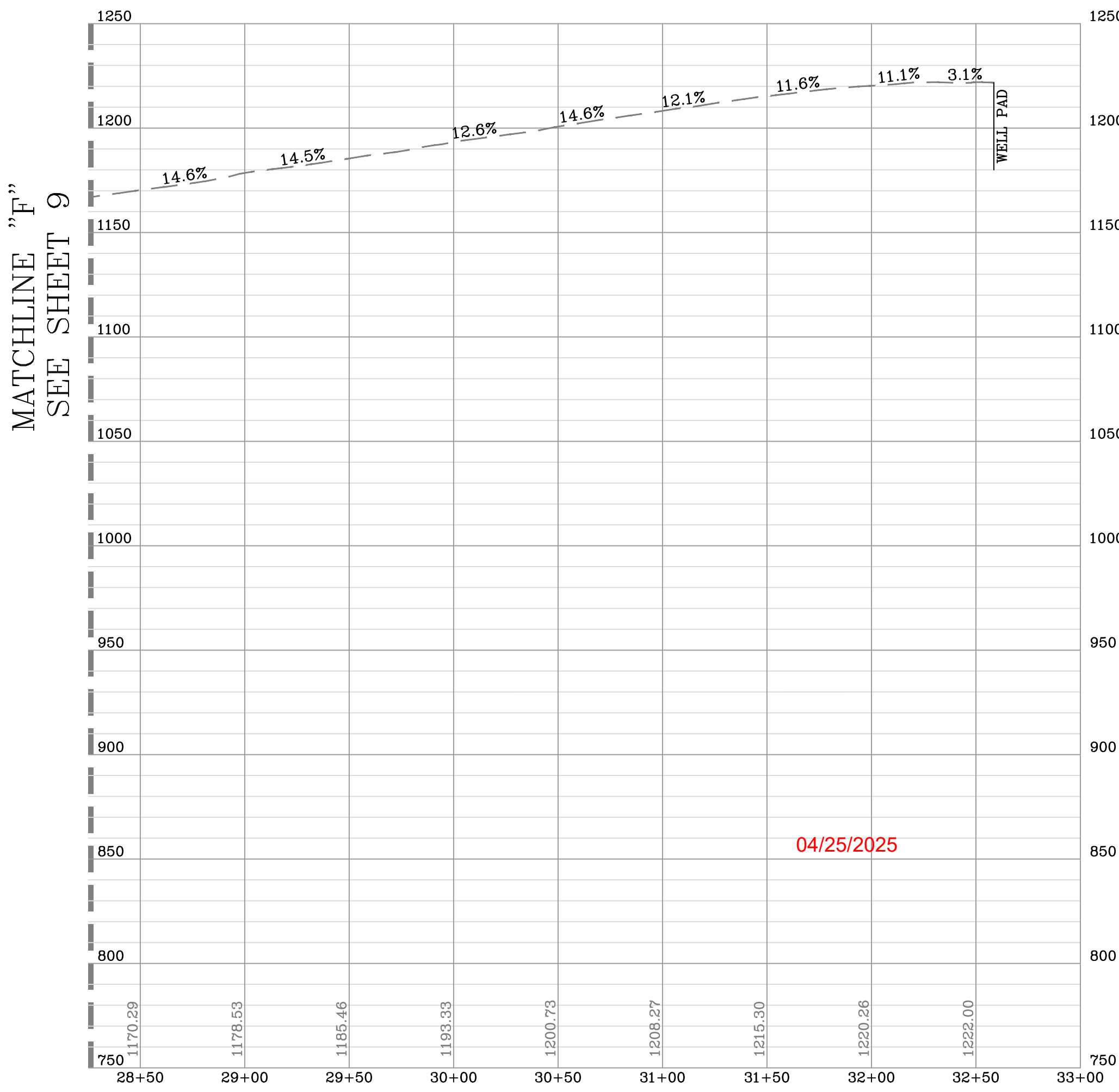
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| 03/07/2025 | REVISED PER LOD MODIFICATION |
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ACCESS ROAD AS-BUILT PROFILE  
**CRIMSON**  
WELL PAD & WATER CONTAINMENT PAD  
McCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA



ACCESS ROAD AS-BUILT PROFILE



ACCESS ROAD "A" AS-BUILT PROFILE  
SCALE: HORIZ. 1" = 50' VERT. 1" = 50'

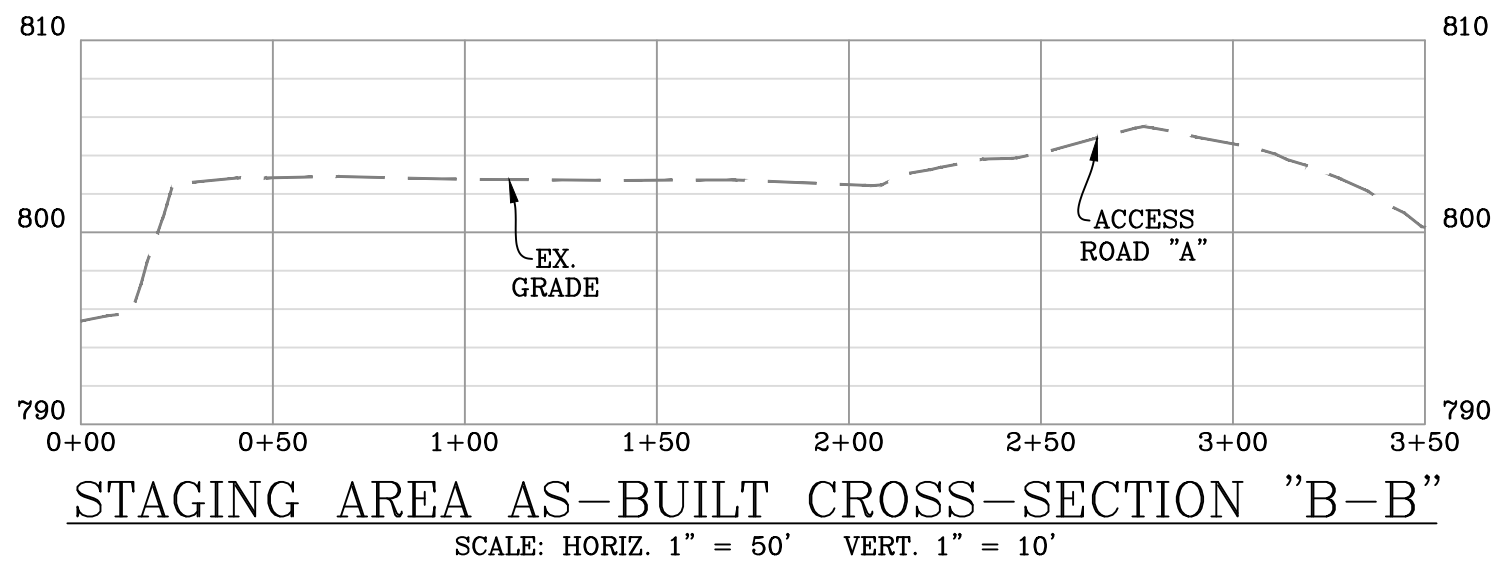
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| 03/07/2025 | REVISED PER LOD MODIFICATION |
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CORPORATION

ACCESS ROAD AS-BUILT PROFILE  
**CRIMSON**  
WELL PAD & WATER CONTAINMENT PAD  
McCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA



WELL PAD & STAGING AREA AS-BUILT SECTIONS



| REVISION                     | DATE       |
|------------------------------|------------|
| REVISED PER WELLS            | 08/01/2024 |
| REVISED PER LOD MODIFICATION | 03/07/2025 |
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WELL PAD & STAGING AREA AS-BUILT SECTIONS

**CRIMSON**

WELL PAD & WATER CONTAINMENT PAD  
McCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA



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| DATE       | REVISION                     |
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| 03/07/2025 | REVISED PER LOD MODIFICATION |
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AS PREPARED FOR:  
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CORPORATION

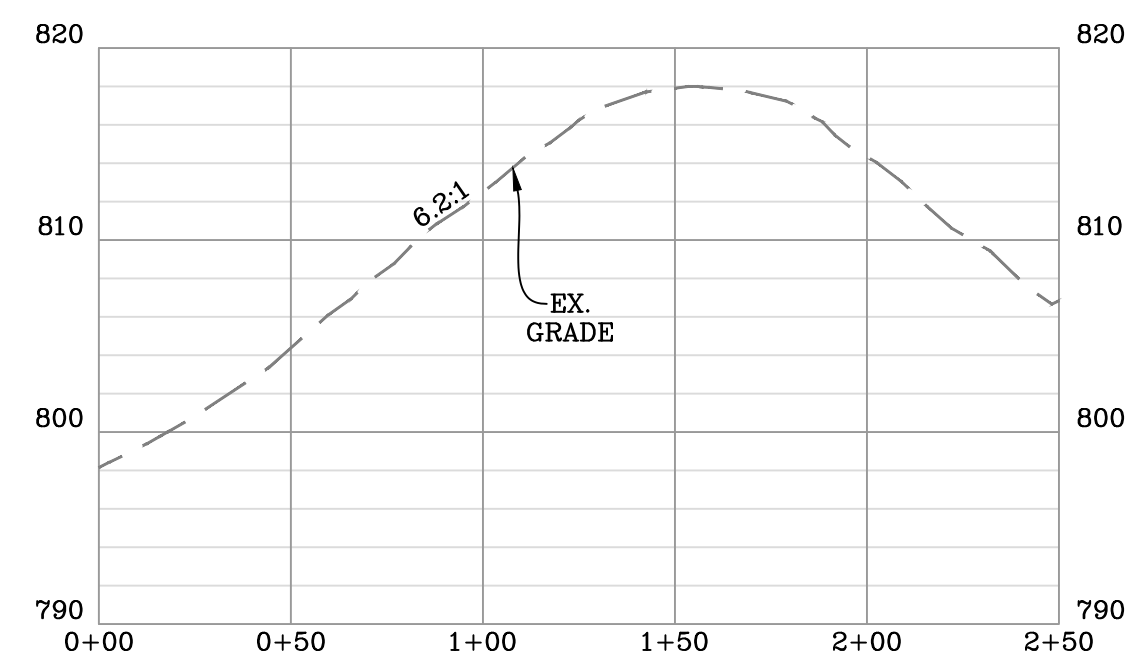
**CRIMSON**  
WELL PAD & WATER CONTAINMENT PAD  
McClellan District  
DODDERIDGE COUNTY, WEST VIRGINIA



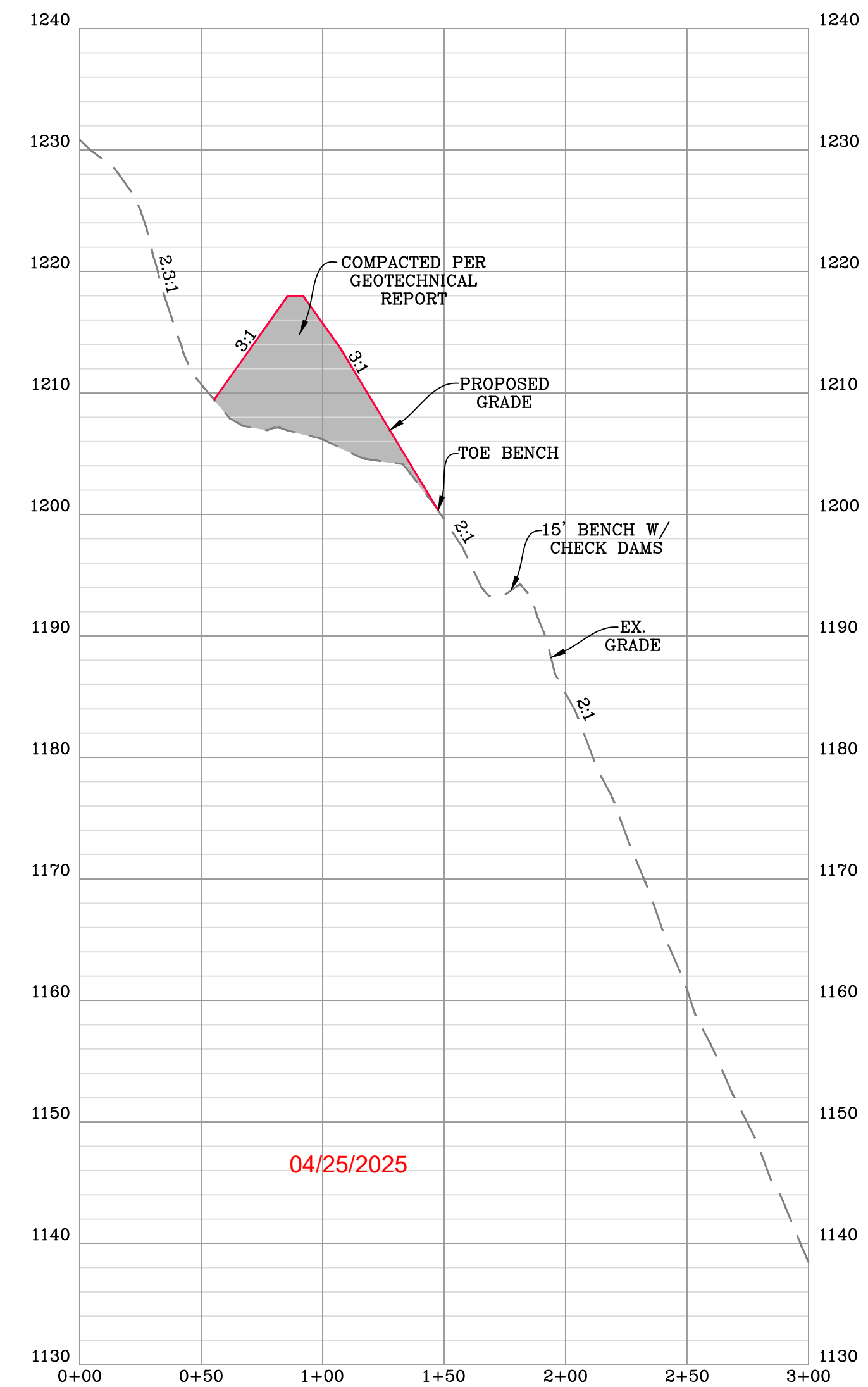
DATE: 12/12/2023

SCALE: AS SHOWN

SHEET 12 OF 12



SCALE: HORIZ. 1" = 50'    VERT. 1" = 10'



SCALE: HORIZ. 1" = 50'    VERT. 1" = 10'

LOCATION COORDINATES:  
ACCESS ROAD ENTRANCE  
LATITUDE: 39.386878 LONGITUDE: -80.676999 (NAD 83)  
LATITUDE: 39.386794 LONGITUDE: -80.677176 (NAD 27)  
N 4359760.04 E 527816.33 (UTM ZONE 17 METERS)

CENTER OF TANK  
LATITUDE: 39.385725 LONGITUDE: -80.685345 (NAD 83)  
LATITUDE: 39.385642 LONGITUDE: -80.685521 (NAD 27)  
N 4359629.59 E 527098.04 (UTM ZONE 17 METERS)

CENTROID OF PAD  
LATITUDE: 39.385093 LONGITUDE: -80.685409 (NAD 83)  
LATITUDE: 39.385009 LONGITUDE: -80.685586 (NAD 27)  
N 4359559.36 E 527092.73 (UTM ZONE 17 METERS)

#### GENERAL DESCRIPTION:

THE ACCESS ROAD(S), WATER CONTAINMENT PAD, AND WELL PAD HAVE BEEN CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS.

#### FLOODPLAIN NOTES:

THE SITE IS LOCATED WITHIN FEMA FLOOD ZONE "X" PER FEMA FLOOD MAP #54017C0045C.

#### MISS UTILITY STATEMENT:

ANTERO RESOURCES CORPORATION HAS NOTIFIED MISS UTILITY OF WEST VIRGINIA FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN. IN ADDITION, MISS UTILITY HAS BEEN CONTACTED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION FOR THIS PROJECT.

#### ENTRANCE PERMIT:

ANTERO RESOURCES CORPORATION HAS OBTAINED AN ENCROACHMENT PERMIT (FORM MM-109) FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

#### ENVIRONMENTAL NOTES:

STREAM AND WETLAND DELINEATIONS WERE PERFORMED IN JULY/AUGUST, 2021 BY ALLSTAR ECOLOGY TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY PURVIEW OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP). THE AUGUST 8, 2021 STREAM AND WETLAND DELINEATION INDEX MAP WAS PREPARED BY ALLSTAR ECOLOGY AND SUMMARIZES THE RESULTS OF THE FIELD DELINEATION. THE MAP DOES NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE LANDWARD LIMITS OF WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE USACE OR THE WVDEP.

#### GEOTECHNICAL NOTES:

A SUBSURFACE INVESTIGATION OF THE PROPOSED SITE WAS PERFORMED BY PENNSYLVANIA SOIL & ROCK, INC. ON AUGUST 13 - OCTOBER 5, 2022. THE REPORT PREPARED BY PENNSYLVANIA SOIL & ROCK, INC. DATED OCTOBER 31, 2022, REFLECTS THE RESULTS OF THE SUBSURFACE INVESTIGATION. THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS REPORT WERE USED IN THE PREPARATION OF THESE PLANS. PLEASE REFER TO THE SUBSURFACE INVESTIGATION REPORT BY PENNSYLVANIA SOIL & ROCK, INC. FOR ADDITIONAL INFORMATION, AS NEEDED.

#### PROJECT CONTACTS:

##### OPERATOR:

ANTERO RESOURCES CORPORATION  
535 WHITE OAKS BLVD  
BRIDGEPORT, WV 26330  
PHONE: (304) 842-4100  
FAX: (304) 842-4102

ELI WAGONER - ENVIRONMENTAL ENGINEER &  
REGULATORY MANAGER  
OFFICE: (304) 842-4068 CELL: (304) 476-9770

JON McEVERS - SVP OPERATIONS  
OFFICE: (303) 357-6799

AARON KUNZLER - CONSTRUCTION MANAGER  
OFFICE: (304) 842-4191

ROBERT WIRKS - DESIGN MANAGER  
OFFICE: (304) 842-4100 CELL: (304) 627-7405

#### NOTES:

- ALL BMP'S MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL ALL AREAS WITHIN THE LIMIT OF DISTURBANCE ARE COMPLETE AND PERMANENTLY STABILIZED. MAINTENANCE MUST INCLUDE INSPECTION OF ALL EROSION AND SEDIMENT CONTROLS AFTER EACH RUNOFF EVENT IN EXCESS OF 0.5" AND ON A BIWEEKLY BASIS.
- THE CONSTRUCTION SITE SHOULD BE STABILIZED AS SOON AS POSSIBLE AFTER COMPLETION. ESTABLISHMENT OF FINAL STABILIZATION MUST BE INITIATED NO LATER THAN 7 DAYS AFTER REACHING FINAL GRADE. FINAL STABILIZATION MEANS THAT ALL SOIL-DISTURBING ACTIVITIES ARE COMPLETED, AND THAT EITHER A PERMANENT VEGETATIVE COVER WITH A DENSITY OF 70% OR GREATER HAS BEEN ESTABLISHED OR THAT THE SURFACE HAS BEEN STABILIZED BY HARD COVER SUCH AS PAVEMENT OR BUILDINGS. IT SHOULD BE NOTED THAT THE 70% REQUIREMENT REFERS TO THE TOTAL AREA VEGETATED AND NOT JUST A PERCENT OF THE SITE.
- ALL PERMANENT SEDIMENT CONTROL MEASURES CAN BE REMOVED AFTER THE SITE IS PERMANENTLY STABILIZED AND APPROVAL IS RECEIVED FROM THE WVDEP.
- ANY AREAS DISTURBED BY REMOVAL OF CONTROLS SHALL BE REPAIRED, STABILIZED, AND PERMANENTLY SEEDED.
- THE AS-BUILT INFORMATION SHOWN HEREON REFLECTS FIELD DATA COLLECTED RELATING TO THE FINAL GRADING OF THE DISTURBED AREA AS OF FEBRUARY 10, 2025. NAVITUS ENGINEERING IS NOT RESPONSIBLE FOR ANY CHANGES MADE TO THE SITE AFTER THE ABOVE MENTIONED DATES.
- THE EXISTING CONTAINMENT BERM AROUND THE WELL PAD SHALL BE REPAIRED AS NECESSARY TO ENSURE 100% CONTAINMENT OF ALL FLUIDS PRIOR TO DRILLING OPERATIONS
- THE EXISTING EGRESSES TO THE WELL PAD SHALL HAVE THE MOUNTABLE BERMS REPAIRED AS NECESSARY TO ENSURE 100% CONTAINMENT OF ALL FLUIDS PRIOR TO DRILLING OPERATIONS.

### REPRODUCTION NOTE

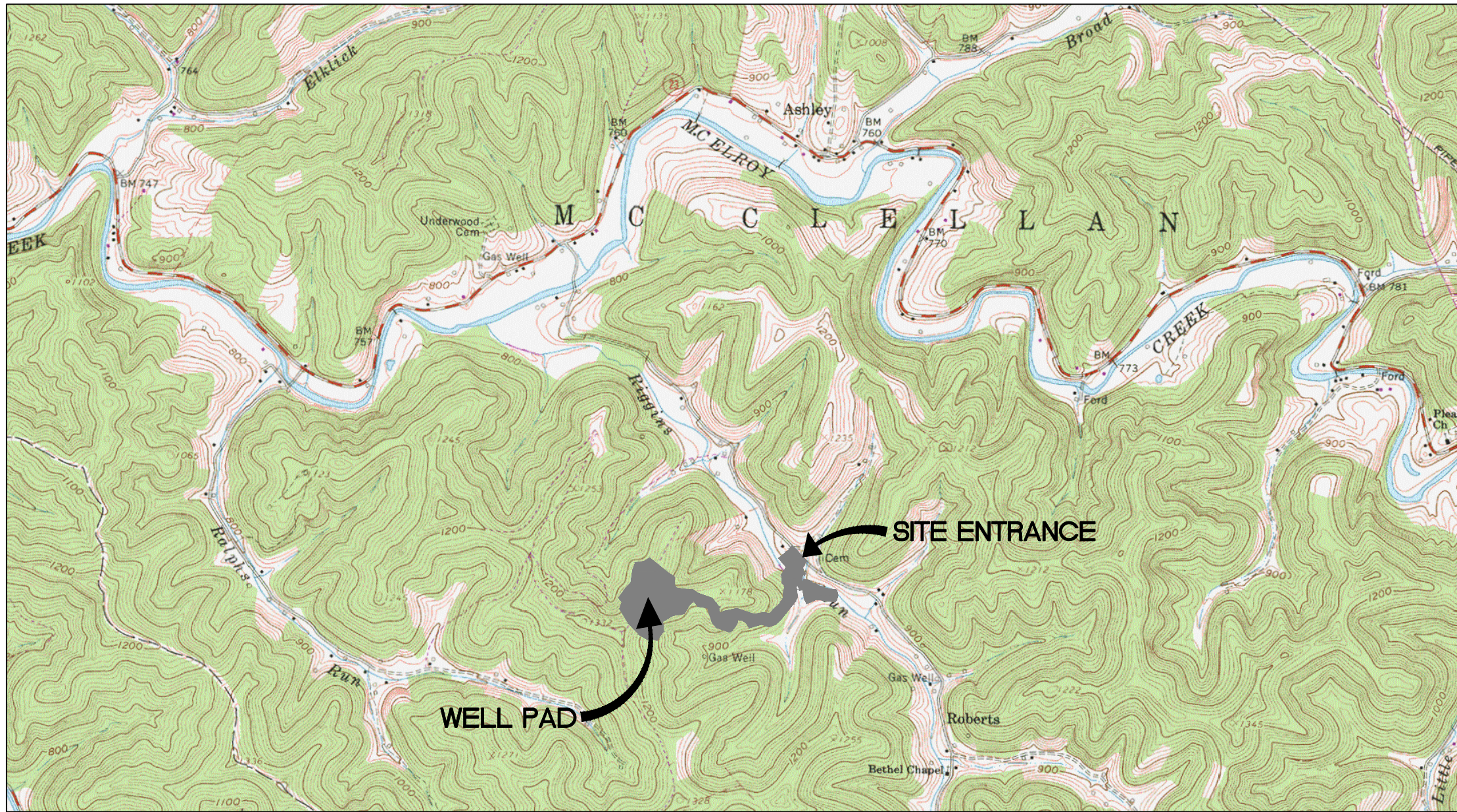
THESE PLANS WERE CREATED TO BE PLOTTED ON 22"X34" (ANSI D) PAPER. HALF SCALE DRAWINGS ARE ON 11"X17" (ANSI B) PAPER.

THESE PLANS WERE CREATED FOR COLOR PLOTTING AND ANY REPRODUCTIONS IN GRAY SCALE OR COLOR MAY RESULT IN A LOSS OF INFORMATION AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

# CRIMSON WELL PAD & WATER CONTAINMENT PAD AS-BUILT EROSION & SEDIMENT CONTROL IMPROVEMENT PLANS

MCLELLAN DISTRICT, DODDRIDGE COUNTY, WV  
MCELROY CREEK WATERSHED

CENTER POINT USGS 7.5 QUAD MAP(S)

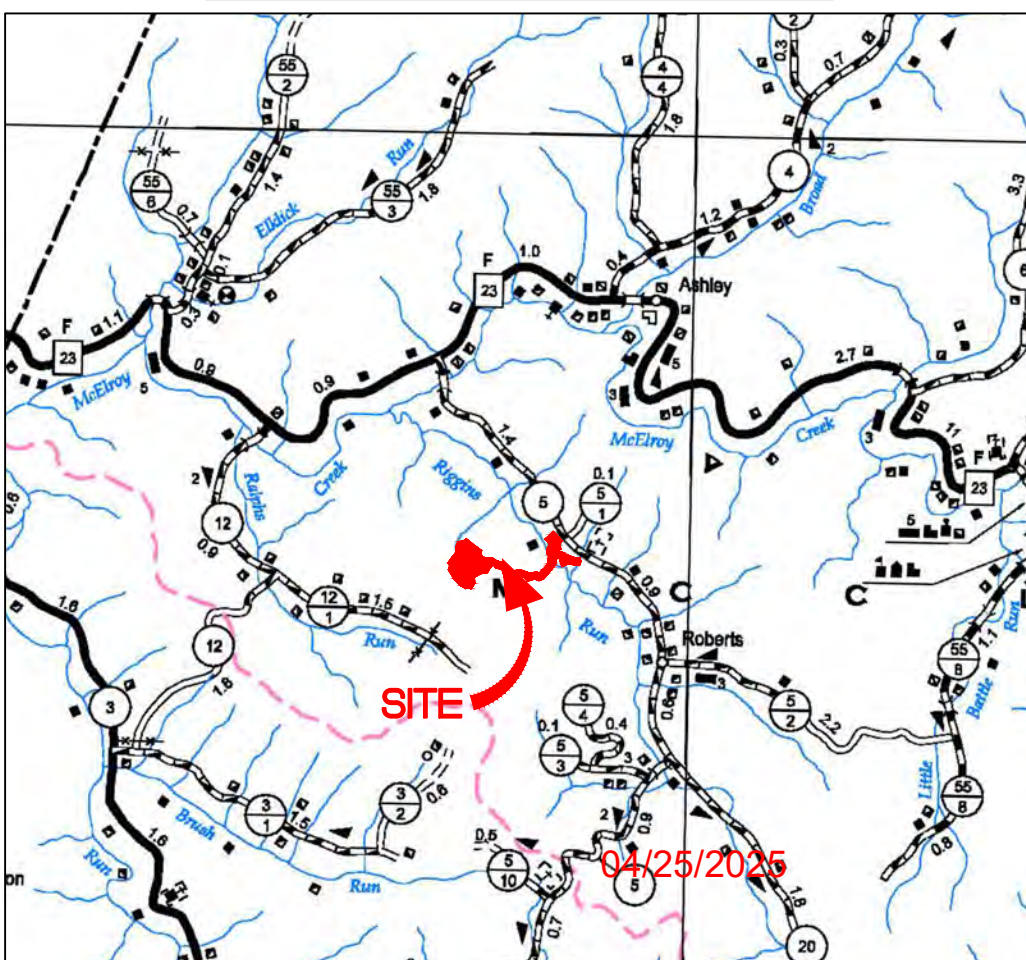


WEST VIRGINIA COUNTY MAP



(NOT TO SCALE)

WVDOH COUNTY ROAD MAP



(NOT TO SCALE)



#### SHEET INDEX:

- 1 - COVER SHEET
- 2 - LEGEND
- 3 - OVERALL PLAN SHEET INDEX
- 4 - ACCESS ROAD, STAGING AREA & STOCKPILE AS-BUILT PLAN
- 5 - ACCESS ROAD AS-BUILT PLAN
- 6 - ACCESS ROAD, WELL PAD & STOCKPILE AS-BUILT PLAN
- 7 - WELL PAD & STOCKPILE AS-BUILT PLAN
- 8-10 - ACCESS ROAD AS-BUILT PROFILE
- 11 - WELL PAD & STAGING AREA AS-BUILT SECTIONS
- 12 - STOCKPILE AS-BUILT SECTIONS

| CRIMSON LIMITS OF DISTURBANCE AREA (AC)        |              |              |              |
|------------------------------------------------|--------------|--------------|--------------|
| Total Site                                     | Permitted    | Modification | Total        |
| Access Road "A" (3,232')                       | 13.26        | 0.51         | 13.77        |
| Staging Area                                   | 1.53         | 0.00         | 1.53         |
| Well Pad                                       | 14.46        | 0.00         | 14.46        |
| Production Equipment Pad                       | 1.62         | 0.00         | 1.62         |
| Excess/Topsoil Material Stockpiles             | 6.02         | 0.00         | 6.02         |
| <b>Total Affected Area</b>                     | <b>36.89</b> | <b>0.51</b>  | <b>37.40</b> |
| Total Wooded Acres Disturbed                   | 0.00         | 0.51         | 0.51         |
| <b>Impacts to Shawn A. Glaspell TM 17-3-11</b> |              |              |              |
| Staging Area                                   | 0.55         | 0.00         | 0.55         |
| <b>Total Affected Area</b>                     | <b>0.55</b>  | <b>0.00</b>  | <b>0.55</b>  |
| Total Wooded Acres Disturbed                   | 0.00         | 0.00         | 0.00         |
| <b>Impacts to Shawn A. Glaspell TM 17-14</b>   |              |              |              |
| Access Road "A" (1,935')                       | 8.23         | 0.51         | 8.74         |
| Staging Area                                   | 0.98         | 0.00         | 0.98         |
| Excess/Topsoil Material Stockpiles             | 2.95         | 0.00         | 2.95         |
| <b>Total Affected Area</b>                     | <b>12.16</b> | <b>0.51</b>  | <b>12.67</b> |
| Total Wooded Acres Disturbed                   | 0.00         | 0.51         | 0.51         |
| <b>Impacts to Shawn A. Glaspell TM 17-23</b>   |              |              |              |
| Excess/Topsoil Material Stockpiles             | 0.02         | 0.00         | 0.02         |
| <b>Total Affected Area</b>                     | <b>0.02</b>  | <b>0.00</b>  | <b>0.02</b>  |
| Total Wooded Acres Disturbed                   | 0.00         | 0.00         | 0.00         |
| <b>Impacts to Shawn A. Glaspell TM 17-3-5</b>  |              |              |              |
| Access Road "A"                                | 0.02         | 0.00         | 0.02         |
| <b>Total Affected Area</b>                     | <b>0.02</b>  | <b>0.00</b>  | <b>0.02</b>  |
| Total Wooded Acres Disturbed                   | 0.00         | 0.00         | 0.00         |
| <b>Impacts to Shawn A. Glaspell TM 17-3-2</b>  |              |              |              |
| Access Road "A" (1,297')                       | 5.01         | 0.00         | 5.01         |
| Well Pad                                       | 5.48         | 0.00         | 5.48         |
| Excess/Topsoil Material Stockpiles             | 2.91         | 0.00         | 2.91         |
| <b>Total Affected Area</b>                     | <b>13.40</b> | <b>0.00</b>  | <b>13.40</b> |
| Total Wooded Acres Disturbed                   | 0.00         | 0.00         | 0.00         |
| <b>Impacts to Shawn A. Glaspell TM 17-3-3</b>  |              |              |              |
| Well Pad                                       | 8.98         | 0.00         | 8.98         |
| Production Equipment Pad                       | 1.62         | 0.00         | 1.62         |
| Excess/Topsoil Material Stockpiles             | 0.14         | 0.00         | 0.14         |
| <b>Total Affected Area</b>                     | <b>10.74</b> | <b>0.00</b>  | <b>10.74</b> |
| Total Wooded Acres Disturbed                   | 0.00         | 0.00         | 0.00         |

| CRIMSON WETLAND PERMANENT IMPACT (SQUARE FEET) |           |                   |                   |
|------------------------------------------------|-----------|-------------------|-------------------|
| Wetland and Impact Cause                       | Fill (SF) | Total Impact (SF) | Total Impact (AC) |
| ASE_Wetland09 (Well Pad)                       | 5,477     | 5,477             | 0.126             |
| ASE_Wetland08 (Well Pad)                       | 986       | 986               | 0.023             |

| CRIMSON PERENNIAL STREAM IMPACT (LINEAR FEET)             |                     |                                |                             |                              |                         |                         |
|-----------------------------------------------------------|---------------------|--------------------------------|-----------------------------|------------------------------|-------------------------|-------------------------|
| Stream and Impact Cause                                   | Permanent Impacts   |                                | Total Permanent Impact (LF) | Temp. Impacts                |                         | Total Temp. Impact (LF) |
|                                                           | Culvert / Fill (LF) | Inlets/Outlets Structures (LF) |                             | Cofferdam/ E&S Controls (LF) | Distance To L.O.D. (LF) |                         |
| ASE_Stream05_ASE_Stream01_MOD (Riggins Run) (Access Road) | 110                 | 0                              | 110                         | 25                           | 57                      | 82                      |
| CRIMSON INTERMITTENT STREAM IMPACT (LINEAR FEET)          |                     |                                |                             |                              |                         |                         |
| Stream and Impact Cause                                   | Permanent Impacts   |                                | Total Permanent Impact (LF) | Temp. Impacts                |                         | Total Temp. Impact (LF) |
|                                                           | Culvert / Fill (LF) | Inlets/Outlets Structures (LF) |                             | Cofferdam/ E&S Controls (LF) | Distance To L.O.D. (LF) |                         |
| ASE_Stream25 (Access Road)                                | 0                   | 0                              | 0                           | 0                            | 38                      | 38                      |
| ASE_Stream24_ASE_Stream02_MOD (Access Road)               | 0                   | 0                              | 0                           | 0                            | 33                      | 33                      |
| CRIMSON EPHEMERAL STREAM IMPACT (LINEAR FEET)             |                     |                                |                             |                              |                         |                         |
| Stream and Impact Cause                                   | Permanent Impacts   |                                | Total Permanent Impact (LF) | Temp. Impacts                |                         | Total Temp. Impact (LF) |
|                                                           | Culvert / Fill (LF) | Inlets/Outlets Structures (LF) |                             | Cofferdam/ E&S Controls (LF) | Distance To L.O.D. (LF) |                         |
| ASE_Stream_12 (Access Road)                               | 33                  | 18                             | 51                          | 36                           | 4                       | 40                      |
| ASE_Stream_40 (Well Pad)                                  | 41                  | 19                             | 60                          | 12                           | 12                      | 24                      |
| ASE_Stream_46 (Well Pad)                                  | 30                  | 0                              | 30                          | 21                           | 8                       | 29                      |
| ASE_Stream_43 (Well Pad)                                  | 0                   | 0                              | 0                           | 9                            | 6                       | 15                      |

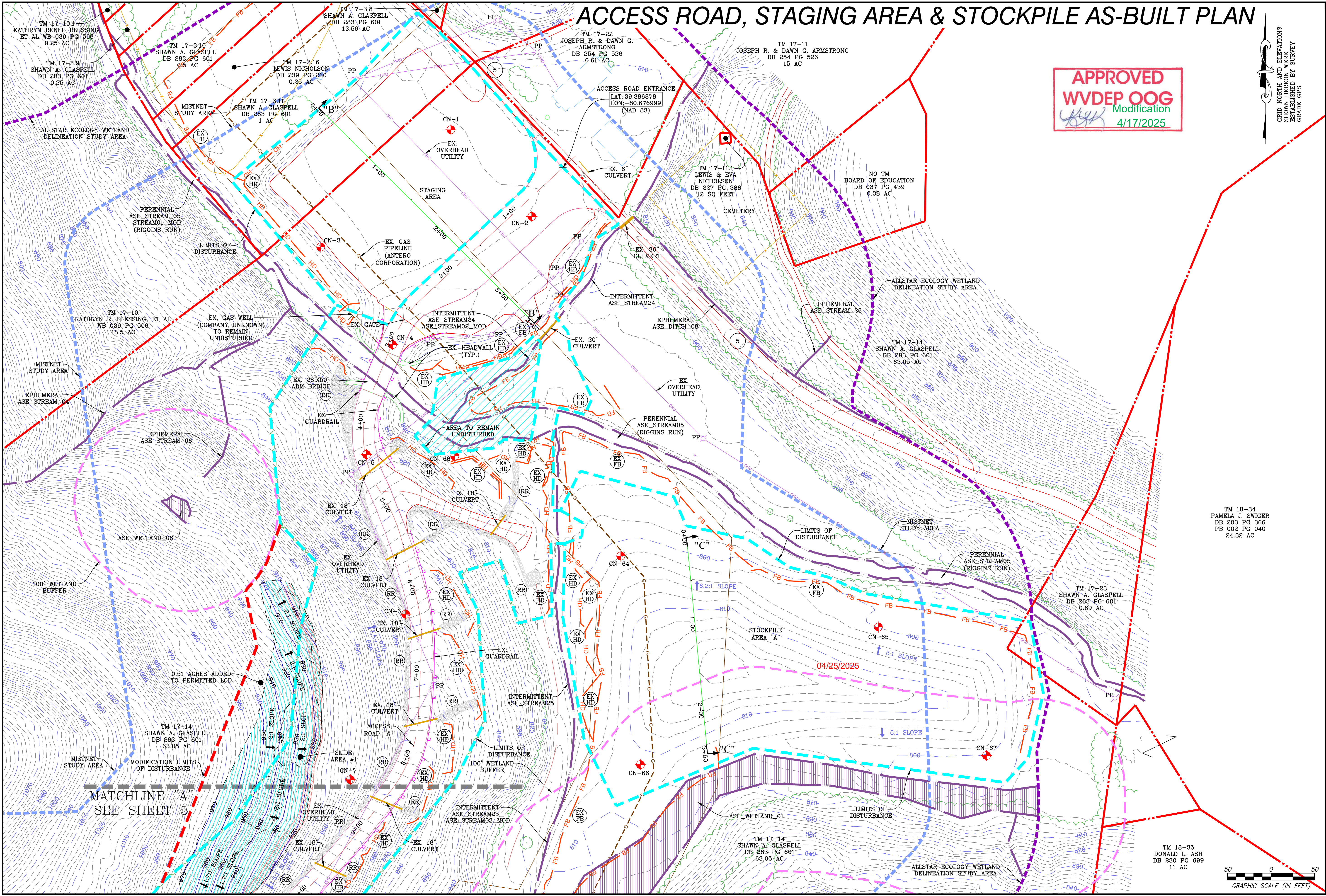
MISS Utility of West Virginia  
1-800-245-4848

West Virginia State Law  
(Section XIV: Chapter 24-C)  
Requires that you call two  
business days before you dig in  
the state of West Virginia.  
IT'S THE LAW!!

#### AS-BUILT CERTIFICATIONS:

THE DRAWINGS, CONSTRUCTION NOTES, AND REFERENCE DIAGRAM ATTACHED HERETO HAVE BEEN PREPARED IN ACCORDANCE WITH THE WEST VIRGINIA CODE OF STATE RULES, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS CRS 35-8.

| Well Name                                                      | WV North NAD 27             | NAD 27 Lat & Long                        | NAD 83 UTM (METERS) ZONE 17 | NAD 83 Lat & Long                        |
|----------------------------------------------------------------|-----------------------------|------------------------------------------|-----------------------------|------------------------------------------|
| Permitted Location                                             |                             |                                          |                             |                                          |
| FRIPP UNIT 1HA                                                 | N 324371.21<br>E 1664794.58 | LAT 39-23-04.2579<br>LONG -80-41-09.4232 | N 4359504.51<br>E 527061.49 | LAT 39-23-04.5586<br>LONG -80-41-08.7865 |
| RALPH UNIT 1H<br>API# 47-017-06984                             | N 324382.29<br>E 1664804.68 | LAT 39-23-04.3688<br>LONG -80-41-09.2964 | N 4359507.94<br>E 527064.51 | LAT 39-23-04.6695<br>LONG -80-41-08.6597 |
| FRIPP UNIT 1H - TO BE PLUGGED & ABANDONED<br>API# 47-017-06980 | N 324383.38<br>E 1664814.75 | LAT 39-23-04.4796<br>LONG -80-41-09.1696 | N 4359511.37<br>E 527067.83 | LAT 39-23-04.7804<br>LONG -80-41-08.6329 |
| RABIN UNIT 1H<br>API# 47-017-06983                             | N 324404.48<br>E 1664824.89 | LAT 39-23-04.5905<br>LONG -80-41-09.0428 | N 4359514.80<br>E 527070.55 | LAT 39-23-04.8913<br>LONG -80-41-08.4061 |
| GLASPELL UNIT 1H<br>API# 47-017-06981                          | N 324415.55<br>E 1664835.00 | LAT 39-23-04.7014<br>LONG -80-41-08.9159 | N 4359518.23<br>E 527073.58 | LAT 39-23-05.0021<br>LONG -80-41-08.2    |



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Modification  
4/17/2025

GRID NORTH AND ELEVATIONS  
SHOWN HEREON WERE  
ESTABLISHED BY SURVEY  
GRADE GPS

| DATE       | REVISION                     |
|------------|------------------------------|
| 08/01/2024 | REVISED PER WELLS            |
| 03/07/2025 | REVISED PER LOD MODIFICATION |
|            |                              |
|            |                              |
|            |                              |
|            |                              |
|            |                              |

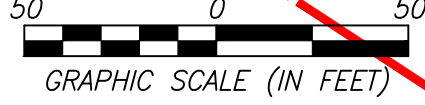
**Antero**  
Resources

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CORPORATION

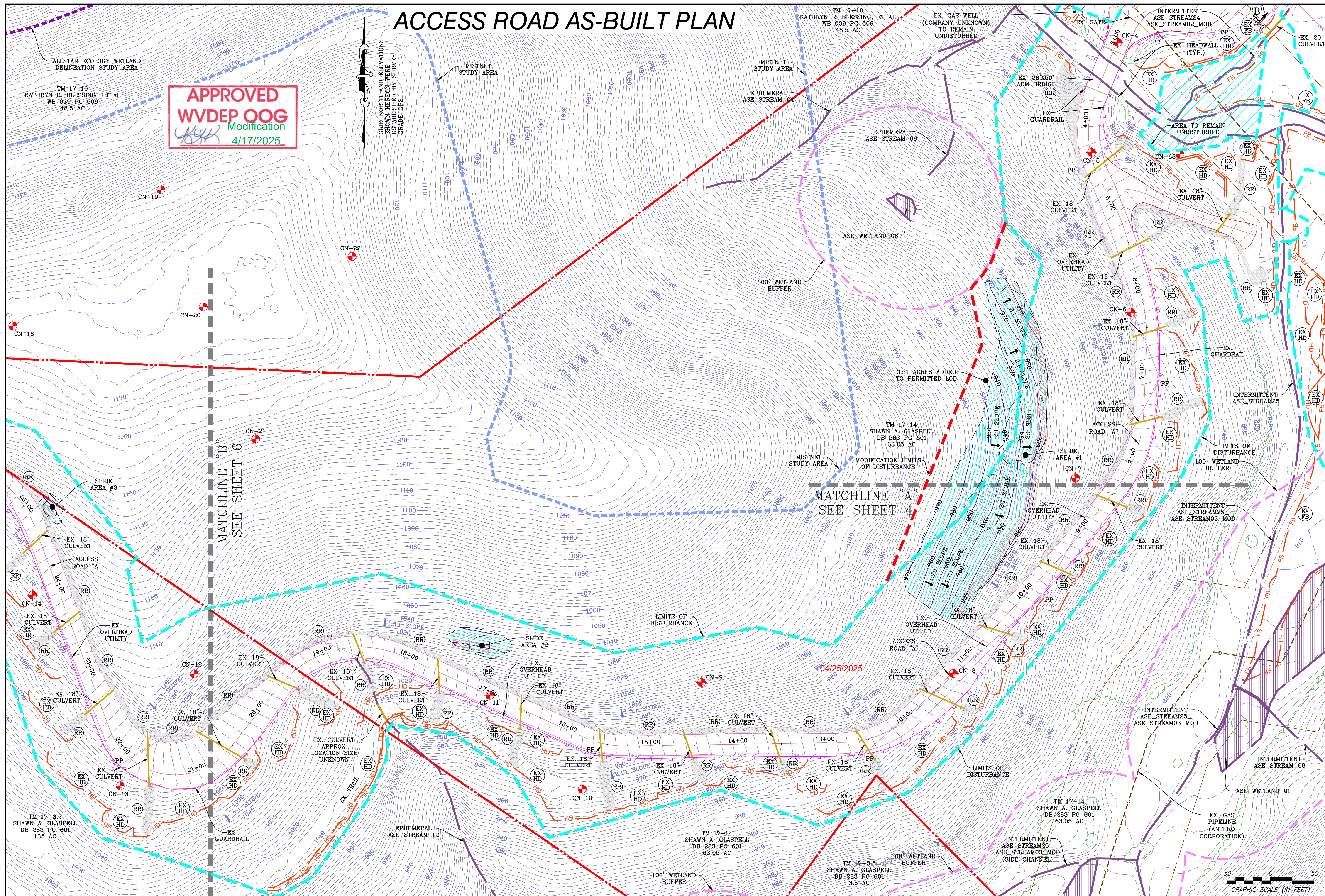
**CRIMSON**  
WELL PAD & WATER CONTAINMENT PAD  
MCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA

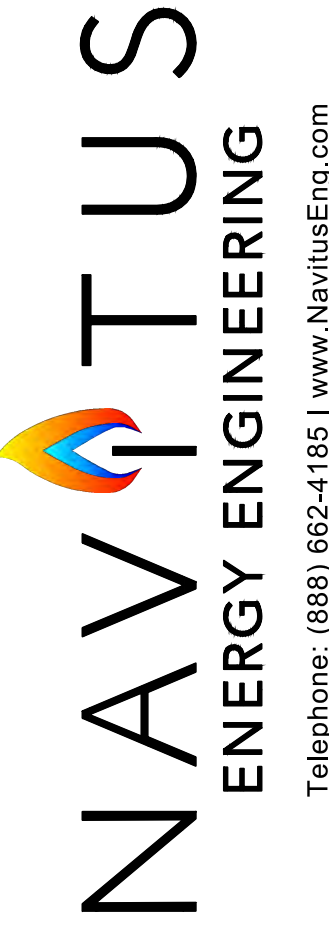


DATE: 12/12/2023  
SCALE: 1" = 50'  
SHEET 4 OF 12



ACCESS ROAD AS-BUILT PLAN





NAVITUS  
ENERGY ENGINEERING  
Telephone: (888) 682-4185 | www.NavitusEng.com

| REVISION | DATE       | REVISED PER                  |
|----------|------------|------------------------------|
| 1        | 08/01/2024 | PER WELLS                    |
| 2        | 03/07/2025 | REVISED PER LOD MODIFICATION |
|          |            |                              |
|          |            |                              |
|          |            |                              |



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ANTERO RESOURCES  
CORPORATION

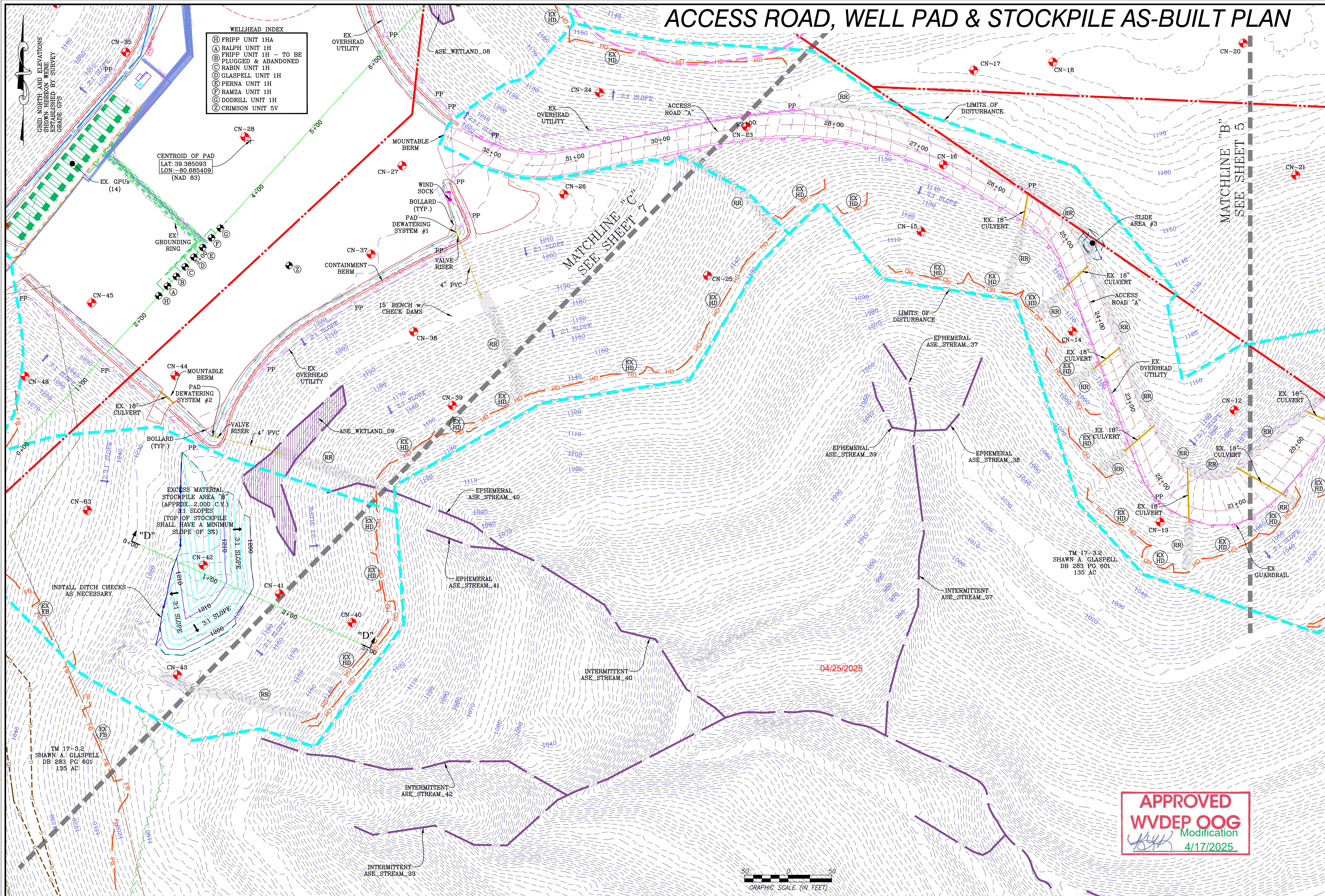
ACCESS ROAD AS-BUILT PLAN

**CRIMSON**

WELL PAD & WATER CONTAINMENT PAD  
MCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA



DATE: 12/12/2023  
SCALE: 1" = 50'  
SHEET 5 OF 12



ACCESS ROAD, WELL PAD & STOCKPILE AS-BUILT PLAN

- WELLHEAD INDEX
- Ⓜ FRIPP UNIT 1HA
  - Ⓐ RALPH UNIT 1H - TO BE
  - Ⓑ PLUGGED & ABANDONED
  - Ⓒ RABIN UNIT 1H
  - Ⓓ GLASPELL UNIT 1H
  - Ⓔ PERNA UNIT 1H
  - Ⓕ RAMZA UNIT 1H
  - Ⓖ DODRILL UNIT 1H
  - Ⓗ CRIMSON UNIT 5V

CENTROID OF PAD  
LAT: 39.385093  
LON: -80.685409  
(NAD 83)

EX. GPUS  
(14)

EX. 18" CULVERT

EXCESS MATERIAL STOCKPILE AREA "B" (APPROX. 2,000 C.Y.)  
3:1 SLOPES  
(TOP OF STOCKPILE SHALL HAVE A MINIMUM SLOPE OF 3%)

INSTALL DITCH CHECKS AS NECESSARY

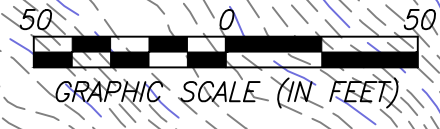
TM 17-3.2  
SHAWN A. GLASPELL  
DB 283 PG 601  
135 AC

TM 17-3.2  
SHAWN A. GLASPELL  
DB 283 PG 601  
135 AC

TM 17-3.2  
SHAWN A. GLASPELL  
DB 283 PG 601  
135 AC

TM 17-3.2  
SHAWN A. GLASPELL  
DB 283 PG 601  
135 AC

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4/17/2025



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| REVISION                     | DATE       |
|------------------------------|------------|
| REVISED PER WELLS            | 08/01/2024 |
| REVISED PER LOD MODIFICATION | 03/07/2025 |
|                              |            |
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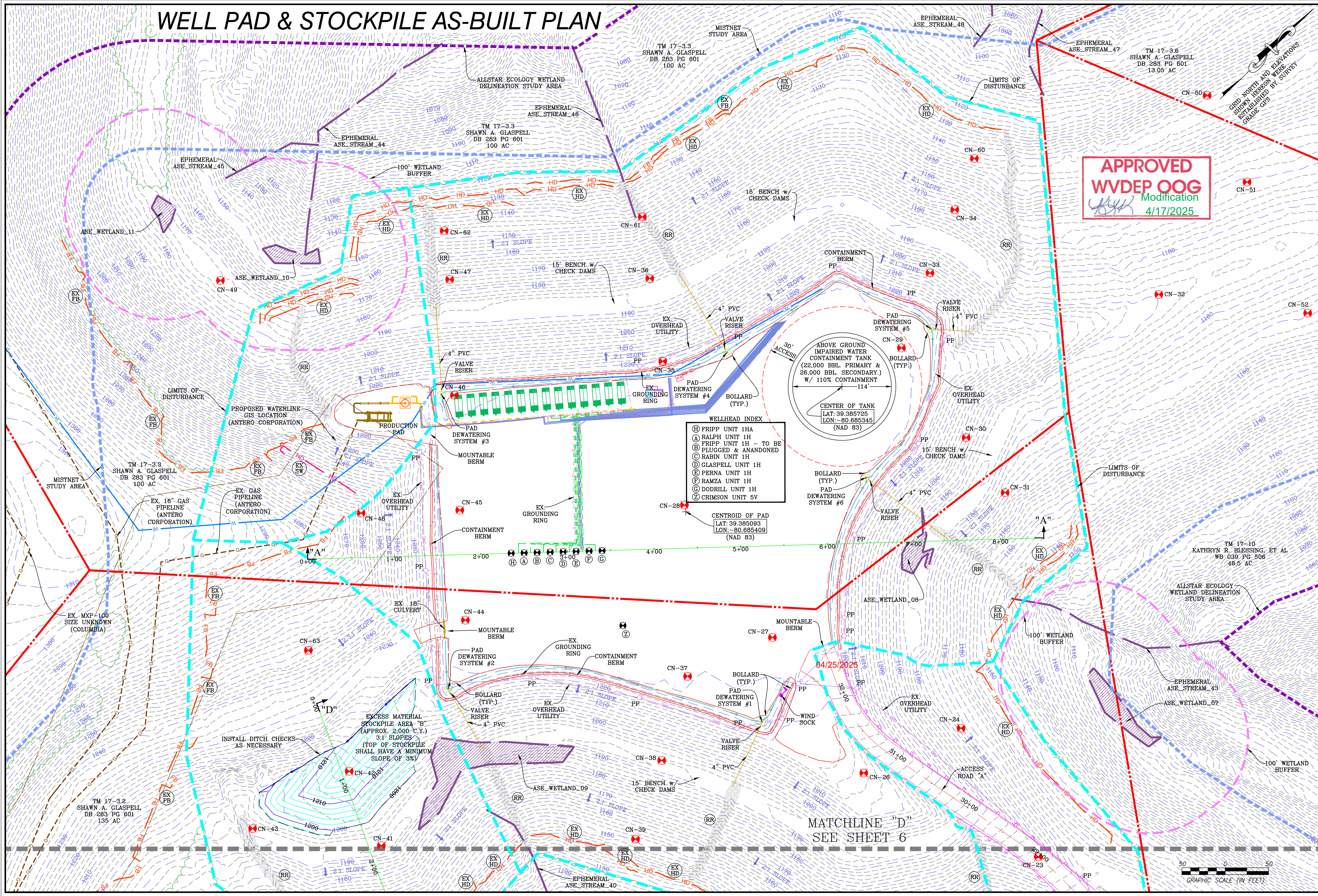
ACCESS ROAD, WELL PAD & STOCKPILE AS-BUILT PLAN

**CRIMSON**

WELL PAD & WATER CONTAINMENT PAD  
McCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA

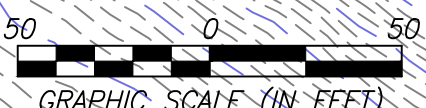
DATE: 12/12/2023  
SCALE: 1" = 50'  
SHEET 6 OF 12

# WELL PAD & STOCKPILE AS-BUILT PLAN



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Modification  
4/17/2025

MATCHLINE "D"  
SEE SHEET 6



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| REVISION | DATE       | REVISED PER  |
|----------|------------|--------------|
| 1        | 08/01/2024 | WELLS        |
| 2        | 03/07/2025 | MODIFICATION |
|          |            |              |
|          |            |              |
|          |            |              |

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WELL PAD & STOCKPILE AS-BUILT PLAN

**CRIMSON**

WELL PAD & WATER CONTAINMENT PAD  
McCLELLAN DISTRICT  
DODDRIDGE COUNTY, WEST VIRGINIA

03/07/2025

DATE: 12/12/2023

SCALE: 1" = 50'

SHEET 7 OF 12