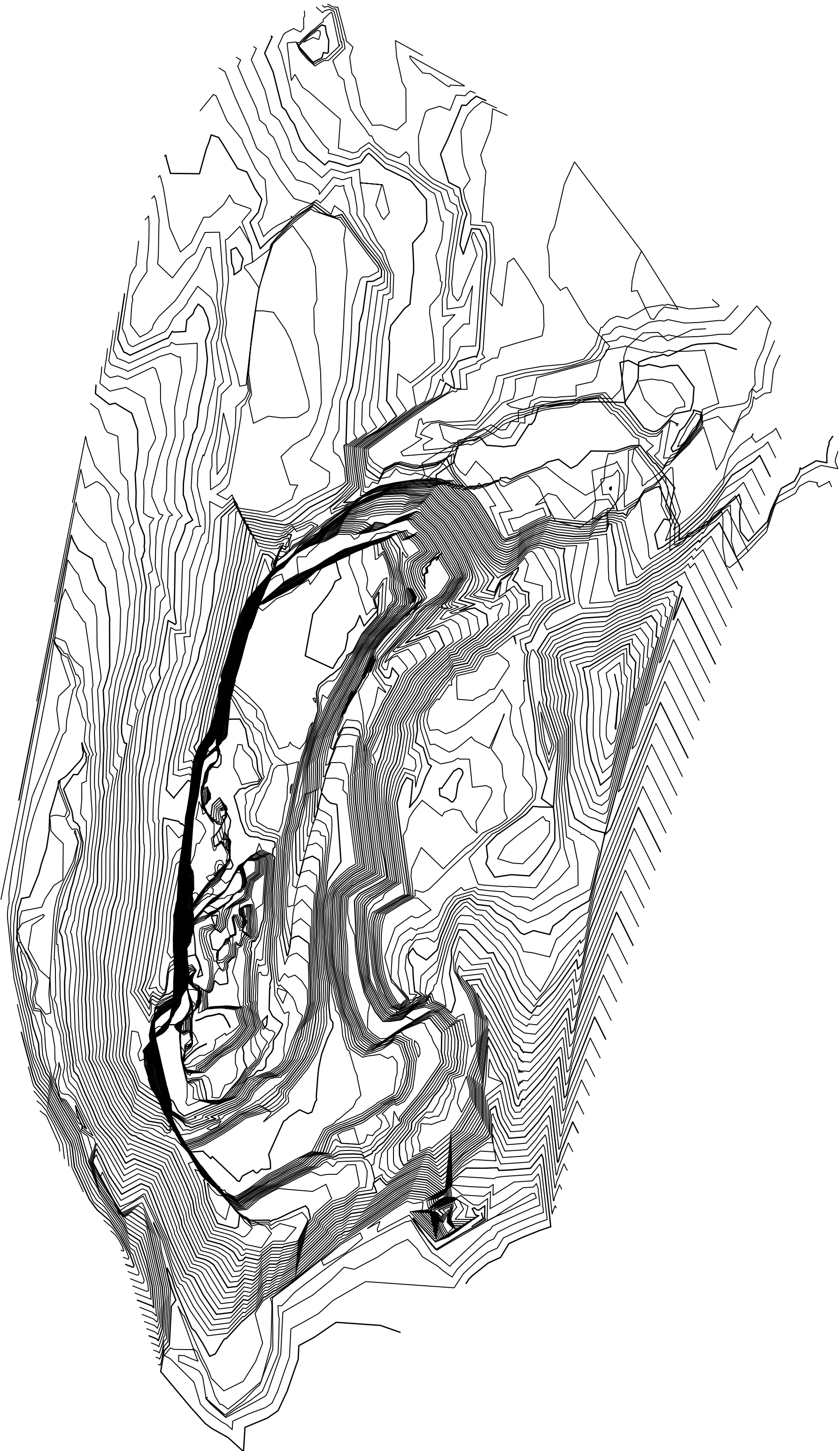
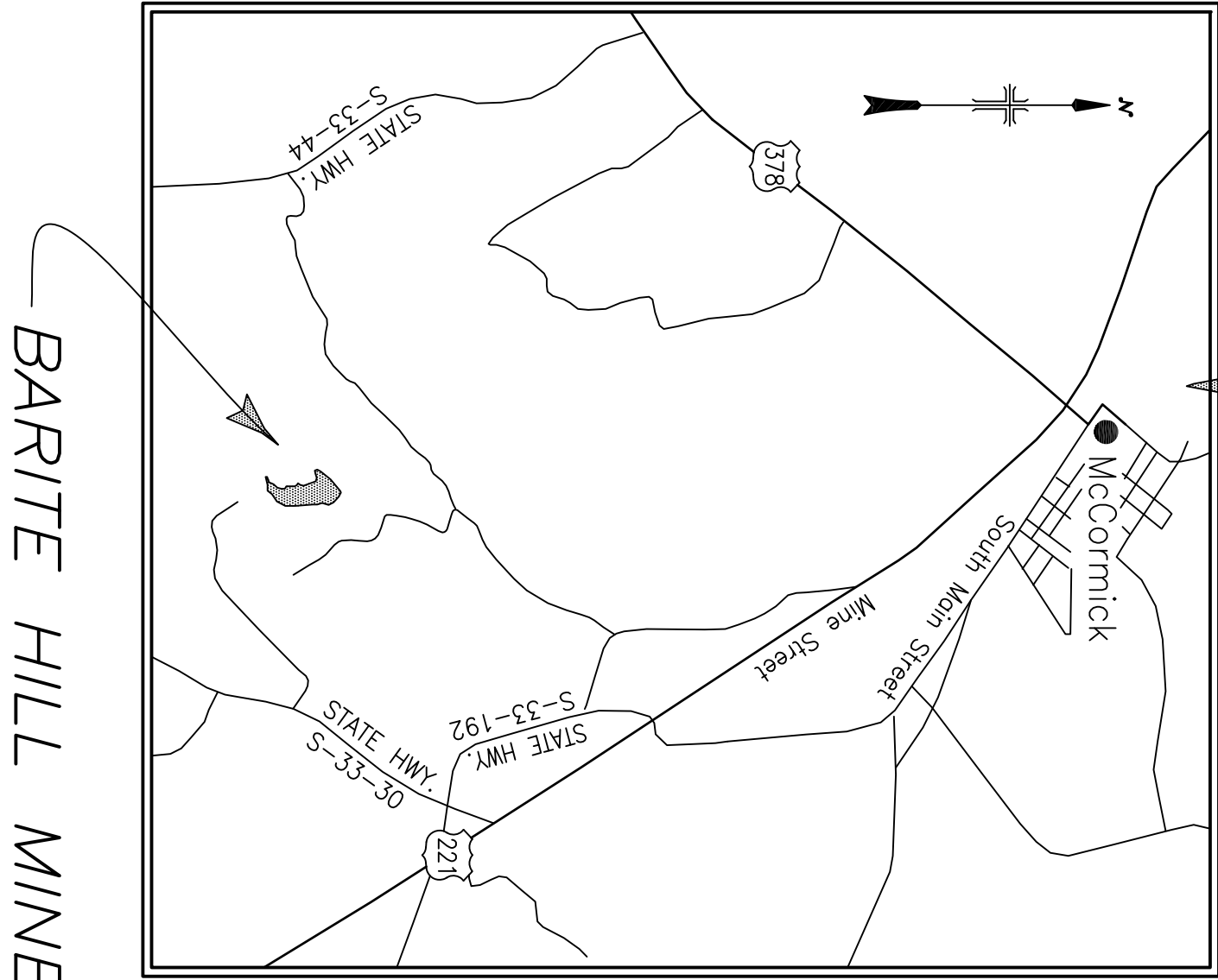
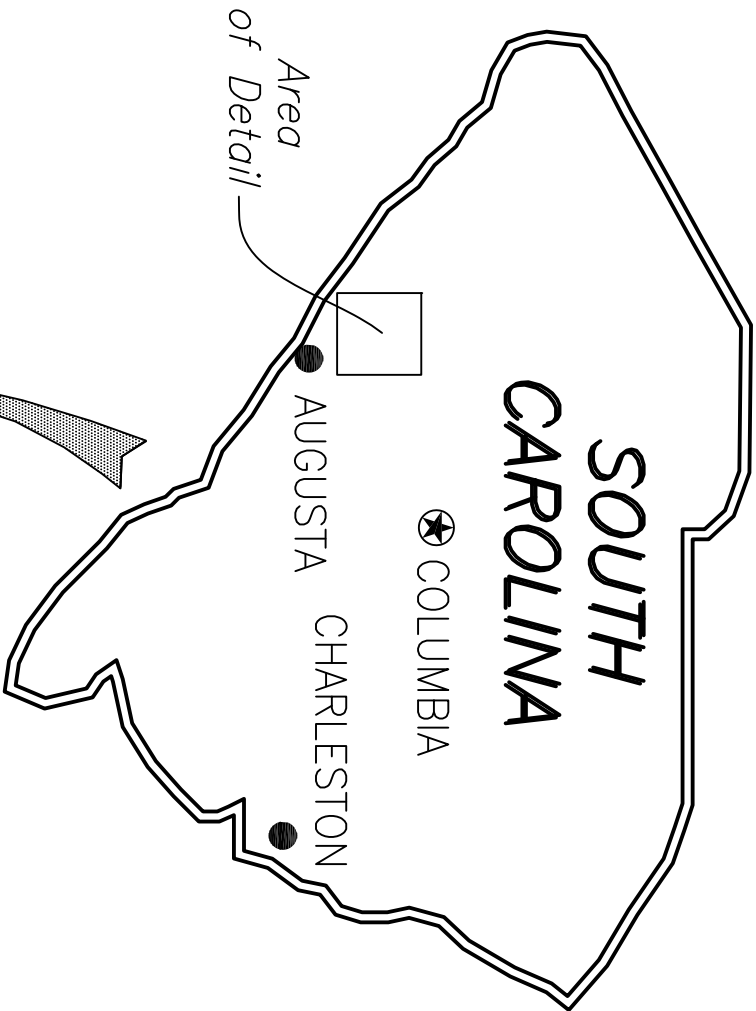


ENVIRONMENTAL PROTECTION AGENCY - SUPERFUND SITE

BARITE HILL MINE

MCCORMICK COUNTY, SOUTH CAROLINA

PROJECT LOCATION



3-DIMENSIONAL VIEW OF THE  
BARITE HILL MINE TOPOGRAPHY



Prepared By:  
BUREAU OF RECLAMATION  
TECHNICAL SERVICE CENTER  
DENVER FEDERAL CENTER  
COLORADO

DRAWING INDEX

COVER SHEET	1556-D-201
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⊕ ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
EPA SUPERFUND ACTIVITIES  
MCCORMICK COUNTY, SOUTH CAROLINA  
**BARITE HILL MINE**  
COVER SHEET

DESIGNED	CHECKED	DATE
DRAWN	TECH. APPR.	DATE
APPROVED	FIELD REVIEWER	DATE
DENVER, COLORADO SHEET 1 OF 1		
1556-D-201		

D

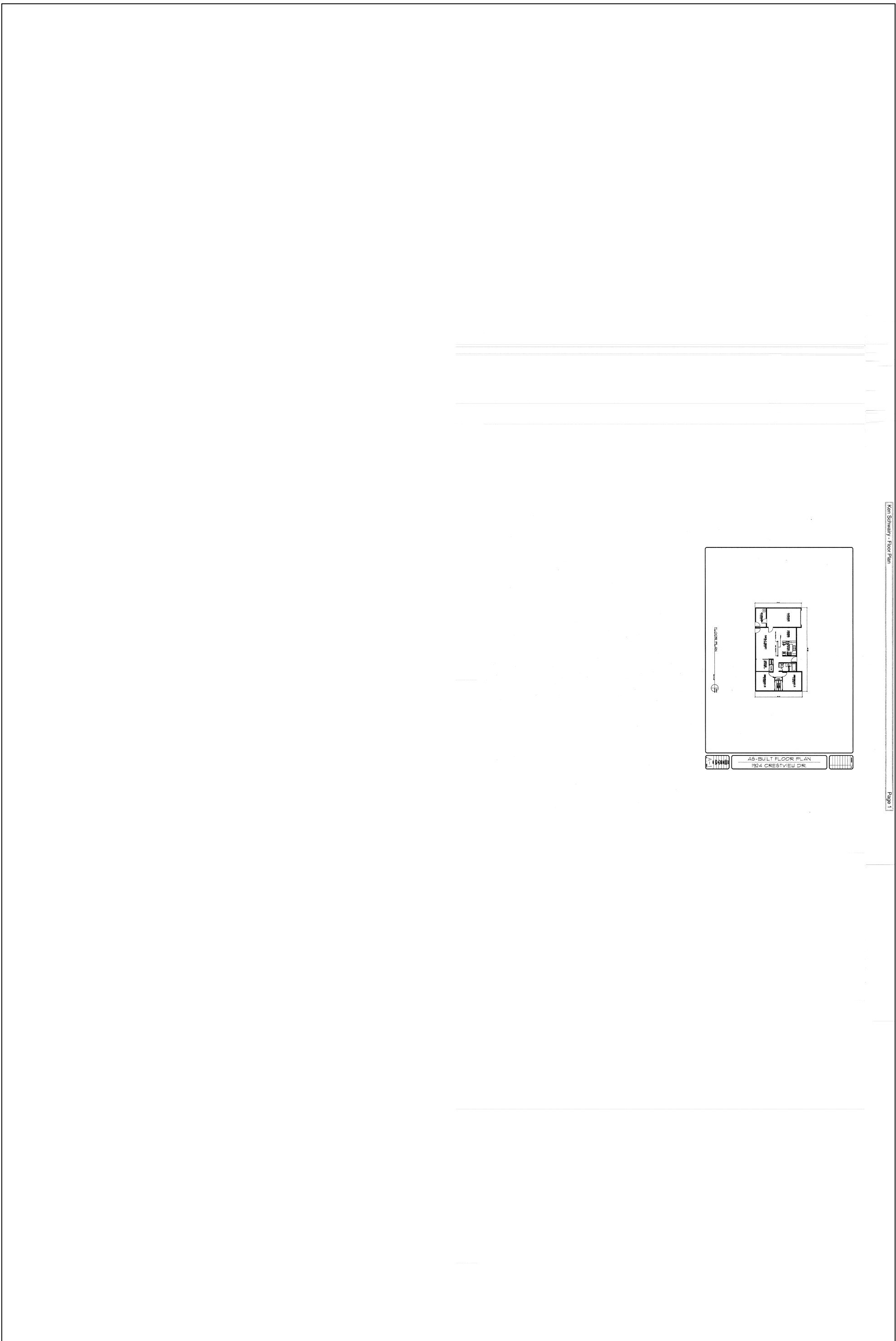
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B

A

DATE AND TIME PLOTTED  
MARCH 19, 2008 10:13  
PLOTTED BY  
KSCHWAIRY

CAD SYSTEM  
AutoCAD R16.2s  
CAD FILENAME  
1556-D-202A.DWG



LOCATION PLAN

NOTES

- Existing topography above the water line (E1, 414.0) by Murphy Geomatics Professional Land Surveying, completed December, 2007.
- Existing topography below the water line (E1, 414.0) and cliff areas taken from drawing titled "Nevada Goldfields, Inc., the main pit with sulfide backfill" topography dated November 3, 1994.

REFERENCE DRAWINGS

SITE LOCATION PLAN ----- 1556-D-202  
EXISTING TOPOGRAPHY - PLAN ----- 1556-D-204

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MCCORMICK COUNTY, SOUTH CAROLINA

BARITE HILL MINE

SITE LOCATION PLAN

DESIGNED ----- CHECKED -----  
DRAWN ----- TECH. APPR. -----  
APPROVED ----- ADMINSTRATIVE APPROVAL - NAME - TITLE -----

DENVER, COLORADO SHEET 1 OF 1 1556-D-202





DATE AND TIME PLOTTED  
MARCH 19, 2008 10:04  
PLOTTED BY  
KSCHWARTZ

CAD SYSTEM  
AutoCAD R16.2  
CAD FILENAME  
1556-D-203.DWG

REFERENCE DRAWINGS

SITE LOCATION PLAN 1556-D-202  
EXISTING TOPOGRAPHY - PLAN 1556-D-204

NOTES

- Existing topography above the existing water line (E: 414.0) by Murphy Geomatics Professional Land Surveying, completed December, 2007.
- Existing topography below the existing water line (E: 414.0) and cliff areas taken from drawing titled "Nevada Goldfields, Inc., the main pit with sulfide backfill" topography dated November 3, 1994.

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
MCORMICK COUNTY, SOUTH CAROLINA  
BARIE HILL MINE  
PLAN - EXISTING CONDITIONS

DESIGNED	CHECKED
DRAWN	TECH. APPR.
APPROVED	ADMINISTRATIVE APPROVAL - NAME - TITLE
DENVER, COLORADO	1556-D-203
SHEET 1 OF 1	



D

E. 1,606,250  
N. 746,250

E. 1,606,250  
N. 746,000

E. 1,606,250  
N. 745,750

E. 1,606,250  
N. 745,500

E. 1,606,250  
N. 745,250

E. 1,606,250  
N. 745,000

E. 1,606,250  
N. 744,750

E. 1,606,250  
N. 744,500

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DATE AND TIME PLOTTED  
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PLOTTED BY  
KSCHWARY

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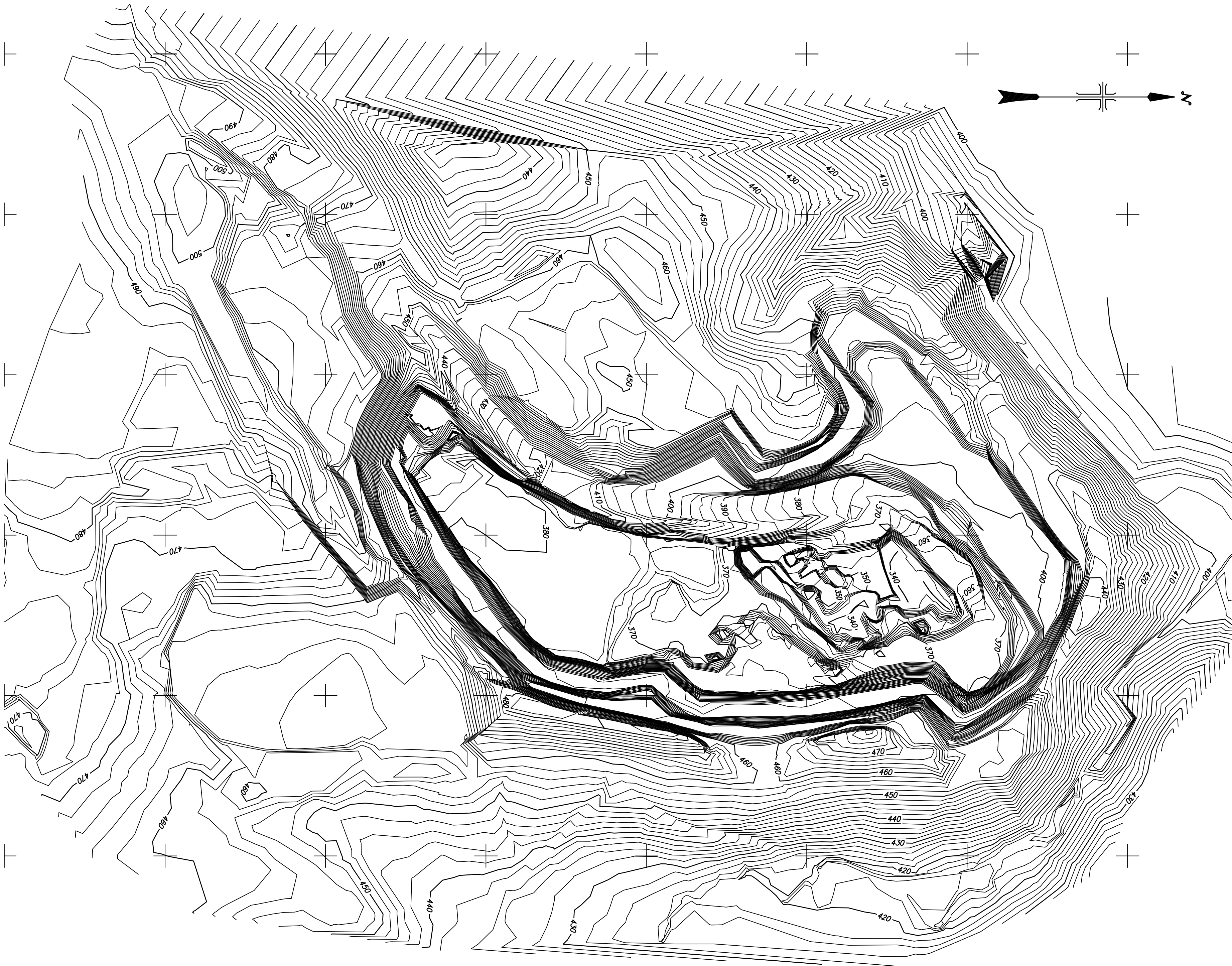
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D

C

B

A



E. 1,608,000  
N. 746,250

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N. 745,750

E. 1,608,000  
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N. 745,250

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E. 1,608,000  
N. 744,750

E. 1,608,000  
N. 744,500

100  
0  
100  
200  
300  
SCALE OF FEET

### NOTES

1. Existing topography above the existing water line (E. 414.0) by Murphy Geomatics Professional Land Surveying, completed December, 2007.
2. Existing topography below the existing water line (E. 414.0) and cliff areas taken from drawing titled, "Nevada Goldfields, Inc., the main pit with sulfide backfill" topography dated November 3, 1994.
3. The contour interval shown on this drawing is 2.0 feet.

### REFERENCE DRAWINGS

SITE LOCATION PLAN 1556-D-202

 ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
MCORMICK COUNTY, SOUTH CAROLINA  
**BARTE HILL MINE**  
EXISTING TOPOGRAPHY

DESIGNED ----- CHECKED -----  
DRAWN ----- TECH. APPR. -----  
APPROVED ----- ADMINISTRATIVE APPROVAL - NAME - TITLE -----  
DENVER, COLORADO SHEET 1 OF 1 1556-D-204





LEGEND

Extents of geomembrane

- NOTES**
- Existing topography above the water line (Ei. 414.0) by Murphy Geomatics Professional Land Surveying, completed December, 2007.
  - Existing topography below the water line (Ei. 414.0) and cliff areas taken from drawing titled "Nevada Goldfields, Inc., the main pit with sulfide backfill" topography dated November 3, 1994.
  - For details on geomembrane installation, see dwgs. 213, 214 and 215.

**REFERENCE DRAWINGS**

SITE LOCATION PLAN	1556-D-202
EXISTING TOPOGRAPHY - PLAN	1556-D-204
SECTIONS 1 THRU 4	1556-D-206
SECTIONS 5 THRU 9	1556-D-207
SECTIONS 10 THRU 14	1556-D-208
SECTIONS 15 THRU 18	1556-D-209
SECTIONS 19 THRU 22	1556-D-210
SECTIONS 23 THRU 32	1556-D-211
MISCELLANEOUS SECTIONS AND DETAILS	1556-D-212
WASTEROCK CAP - PLAN	1556-D-213
WASTEROCK CAP - SECTIONS	1556-D-214
WASTEROCK CAP - DETAILS	1556-D-215

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U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MCORMICK COUNTY, SOUTH CAROLINA

**BARITE HILL MINE**

GRADING PLAN

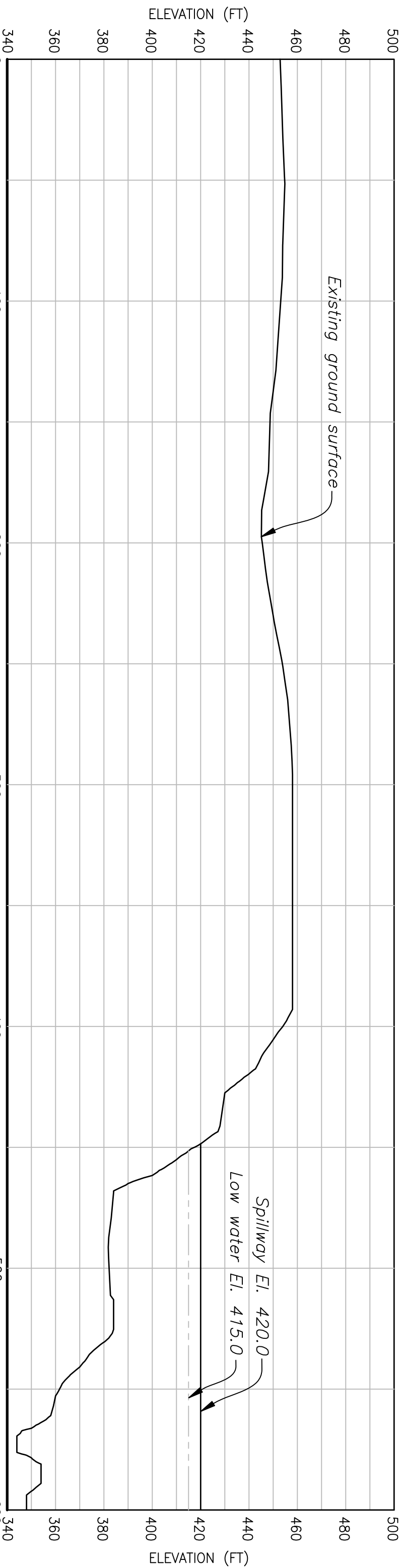
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DATE AND TIME PLOTTED  
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PLOTTED BY  
KSCWHARY

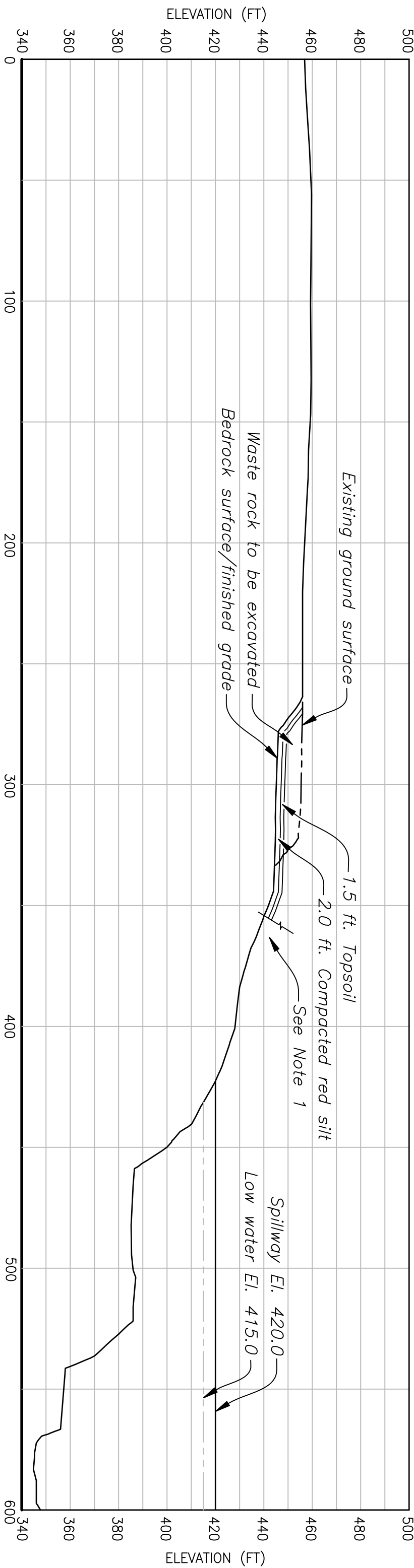
SCALE OF FEET  
0 90 180  
80

DESIGNED: MICHAEL J. GORLA	CHECKED: NAREND JENSEN
DRAWN: GEMINI E. SCHWARTZ	TECH. APPR: JIMMY L. GORLA
APPROVED: DAVID B. PAUL	ADMINISTRATIVE APPROVAL: NAME - TITLE
DENVER, COLORADO	SHEET 1 OF 1
1556-D-205	

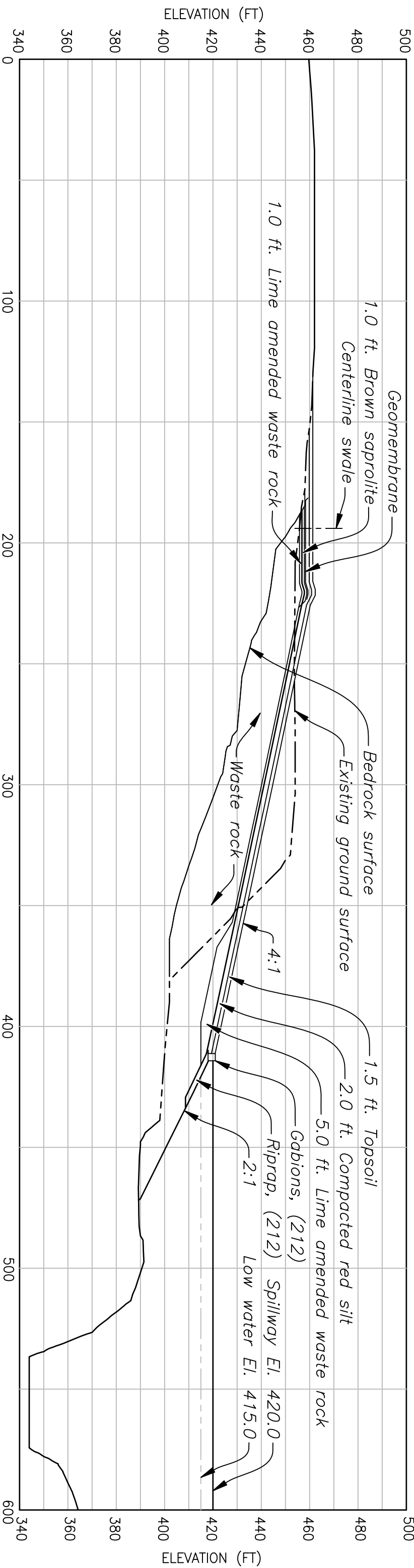




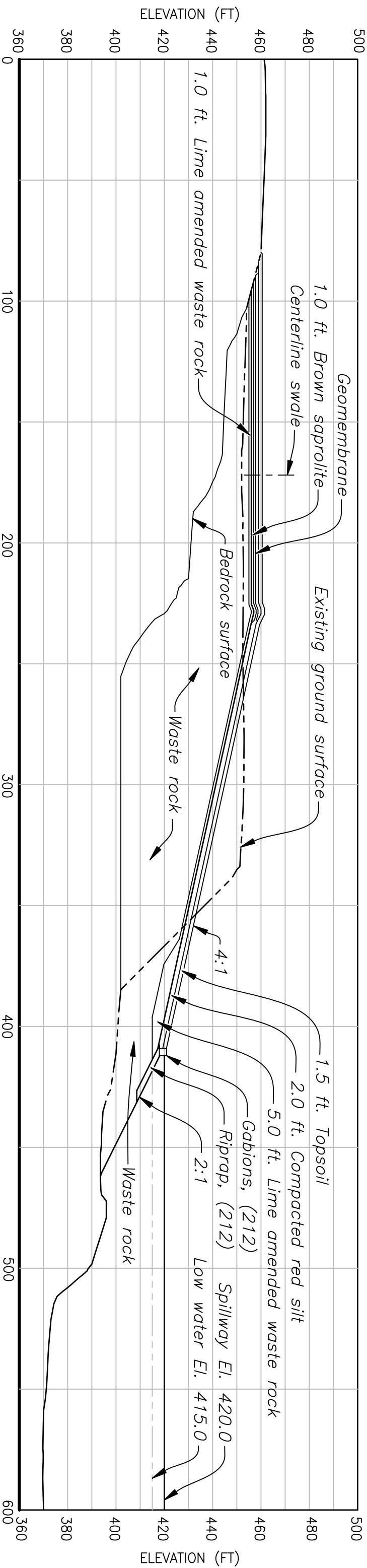
SECTION 1



SECTION 2



SECTION 3



SECTION 4

- NOTES**
- The extent and thickness of red silt and topsoil capping placed on exposed pyritic bedrock surfaces will be determined in the field by the EPA O.S.C.
  - For details on geomembrane installation, see dwgs. 213, 214 and 215.

**REFERENCE DRAWINGS**

EXISTING TOPOGRAPHY - PLAN 1556-D-204  
GRADING PLAN 1556-D-205  
SECTIONS 5 THRU 9 1556-D-207  
SECTIONS 10 THRU 14 1556-D-208  
SECTIONS 15 THRU 18 1556-D-209  
SECTIONS 19 THRU 22 1556-D-210  
SECTIONS 23 THRU 32 1556-D-211  
MISCELLANEOUS SECTIONS AND DETAILS 1556-D-212  
WASTEROCK CAP - PLAN 1556-D-213  
WASTEROCK CAP - SECTIONS 1556-D-214  
WASTEROCK CAP - DETAILS 1556-D-215

DATE AND TIME PLOTTED  
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PLOTTED BY  
KSCHWARY

CAD SYSTEM  
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1556-D-206.DWG

**ALWAYS THINK SAFETY**

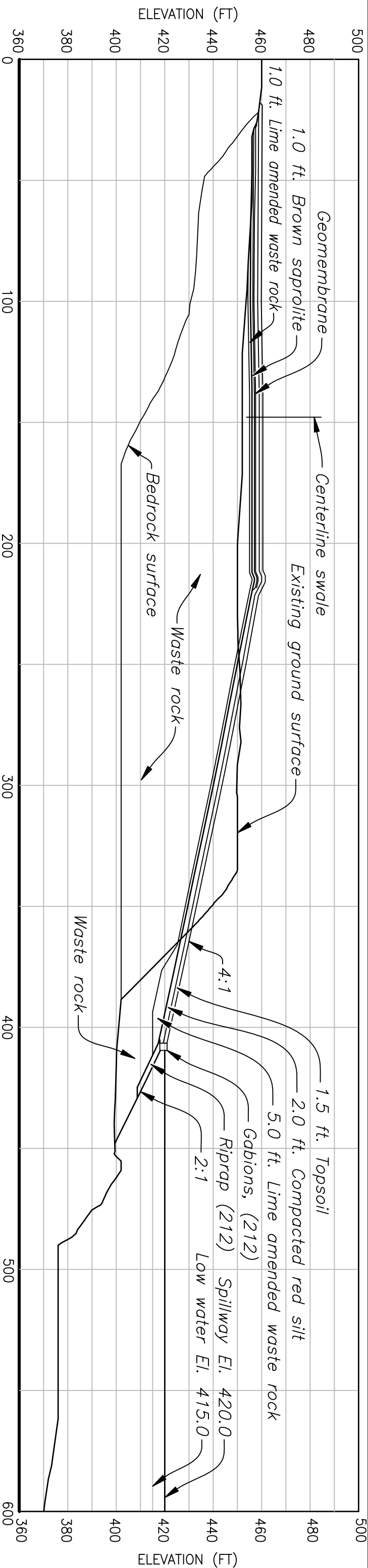
U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MCORMICK COUNTY, SOUTH CAROLINA

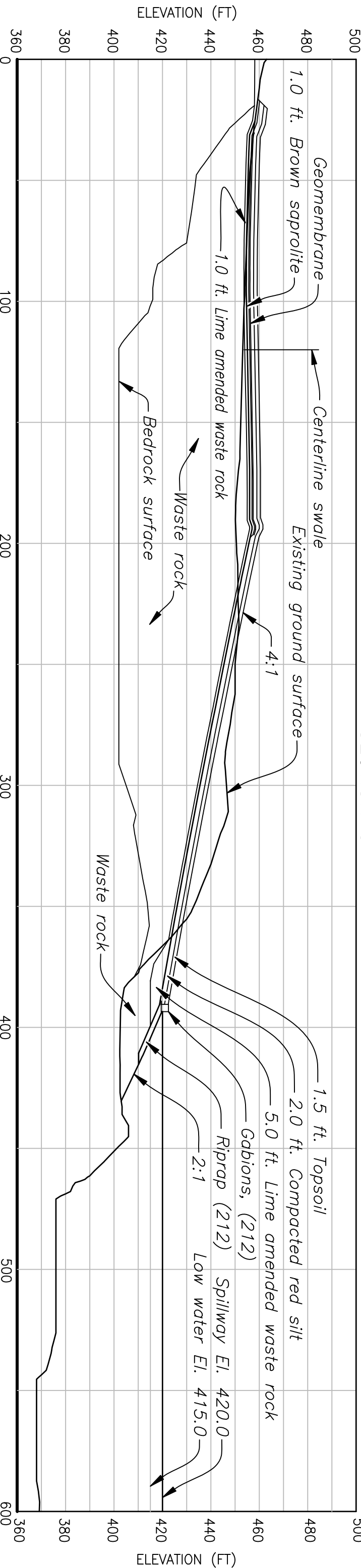
**BARTE HILL MINE**

**SECTIONS 1 THRU 4**

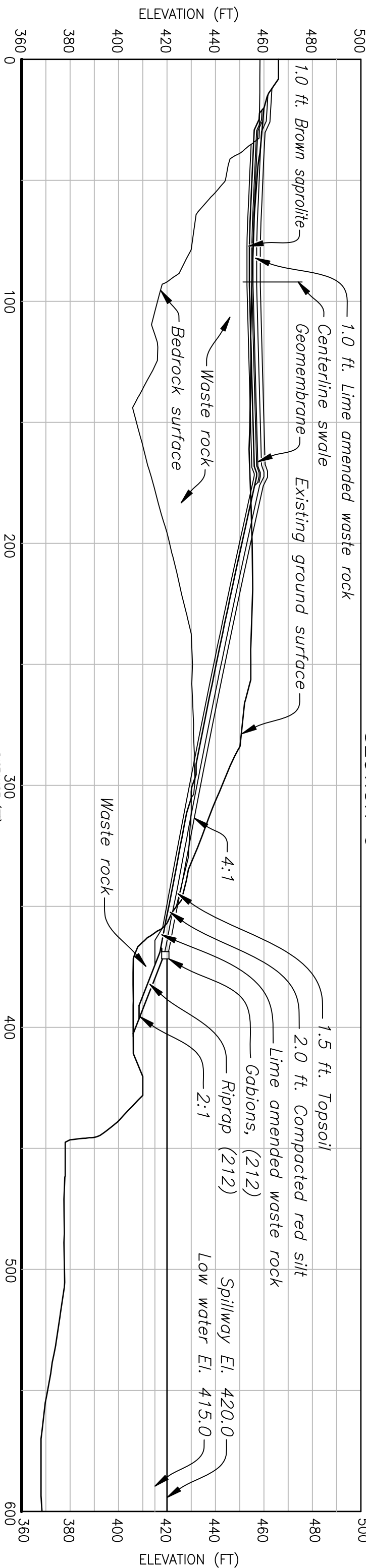
DESIGNED MICHAEL J. GOBLA  
DRAWN KENNETH E. SCHWARY  
APPROVED DAVID B. PAUL  
CHECKED NANCY JENSEN  
TECH. APPR. MICHAEL J. GOBLA  
FREE REVIEW  
DENVER, COLORADO  
SHEET 1 OF 1  
2008-01-04  
1556-D-206



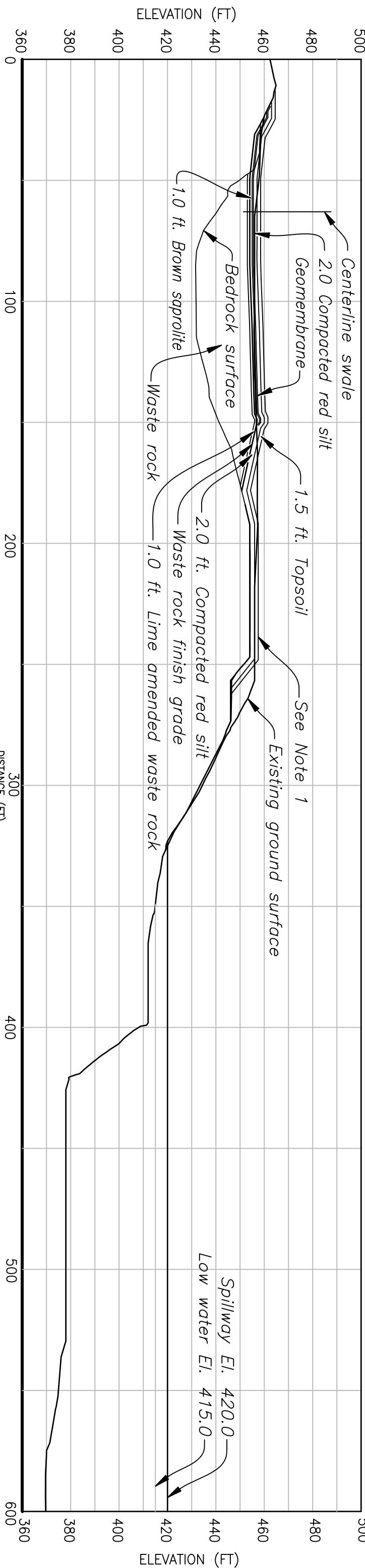
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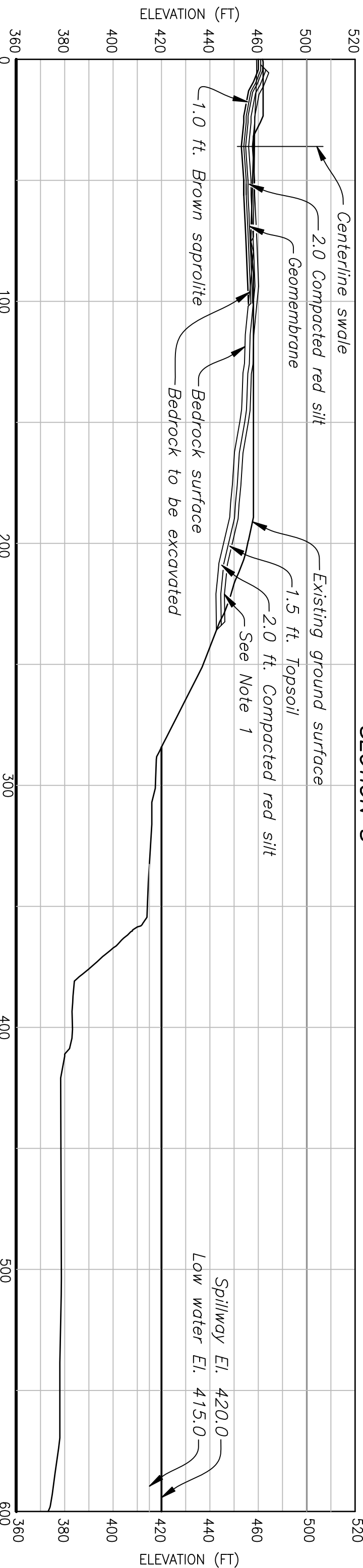
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B

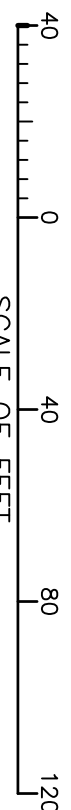


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CAD SYSTEM  
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1556-D-207.DWG

DATE AND TIME PLOTTED  
MAY 28, 2008 15:01  
PLOTTED BY  
KSCWHARY



- NOTES**
1. The extent and thickness of red silt and topsoil capping placed on exposed pyritic bedrock surfaces will be determined in the field by the EPA O.S.C.
  2. For details on geomembrane installation, see dngs: 213, 214 and 215.

**REFERENCE DRAWINGS**

EXISTING TOPOGRAPHY - PLAN \_\_\_\_\_ 1556-D-204  
GRADING PLAN \_\_\_\_\_ 1556-D-205  
SECTIONS 1 THRU 4 \_\_\_\_\_ 1556-D-206  
SECTIONS 10 THRU 14 \_\_\_\_\_ 1556-D-208  
SECTIONS 15 THRU 18 \_\_\_\_\_ 1556-D-209  
SECTIONS 19 THRU 22 \_\_\_\_\_ 1556-D-210  
SECTIONS 23 THRU 32 \_\_\_\_\_ 1556-D-211  
MISCELLANEOUS SECTIONS AND DETAILS \_\_\_\_\_ 1556-D-212  
MASTER ROCK CAP - PLAN \_\_\_\_\_ 1556-D-213  
MASTER ROCK CAP - SECTIONS \_\_\_\_\_ 1556-D-214  
MASTER ROCK CAP - DETAILS \_\_\_\_\_ 1556-D-215

B

REV NO	2008 - 2 - 1	REVISED TO: SCOPE TO 2.1, REVISED GABIONS AND NOTES.
1	D -	REVISED BERM

**ALWAYS THINK SAFETY**

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

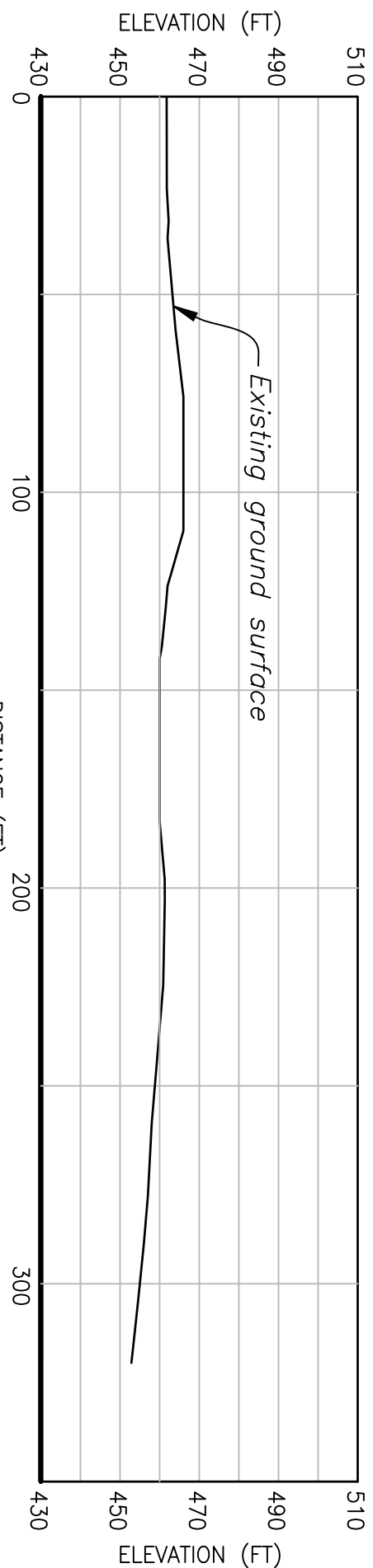
MCORMICK COUNTY, SOUTH CAROLINA

**BARIE HILL MINE**

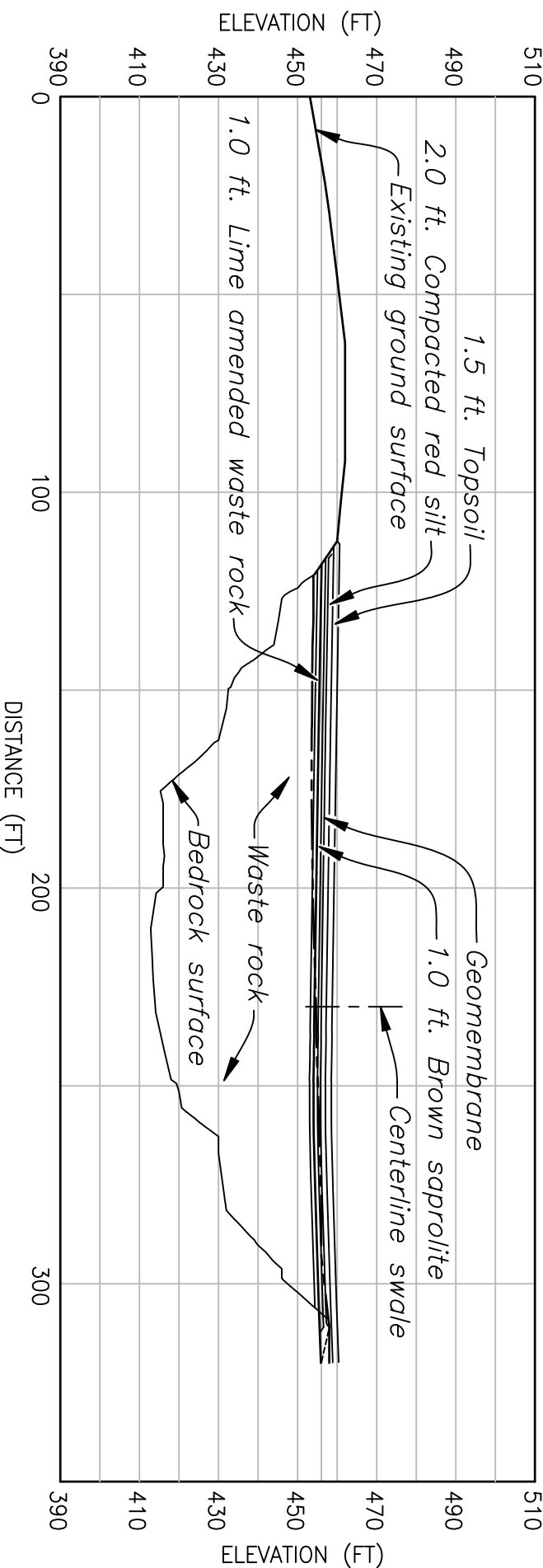
**SECTIONS 5 THRU 9**

DESIGNED MICHAEL J. GOBLA  
DRAWN GENEVIEVE E. SCHWARTZ  
APPROVED DAVID B. PAUL  
CHECKED NANCY JENSEN  
TECH. APPR. MICHAEL J. GOBLA  
DENVER, COLORADO  
SHEET 1 OF 1  
2008-01-04  
1556-D-207

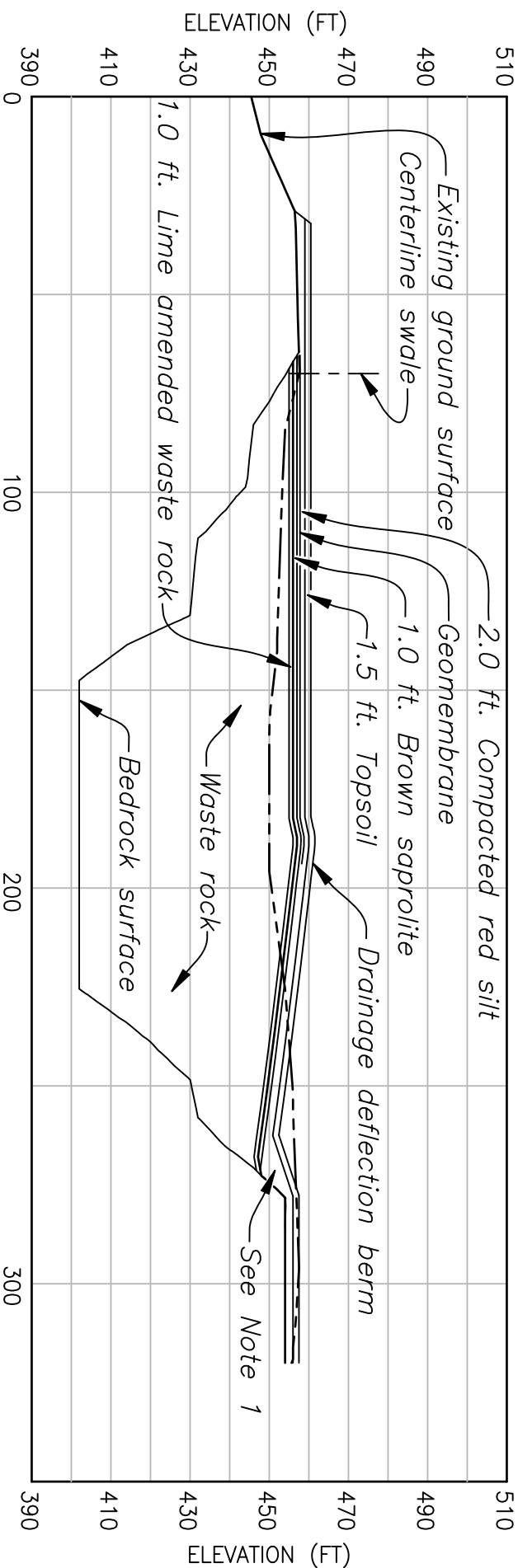
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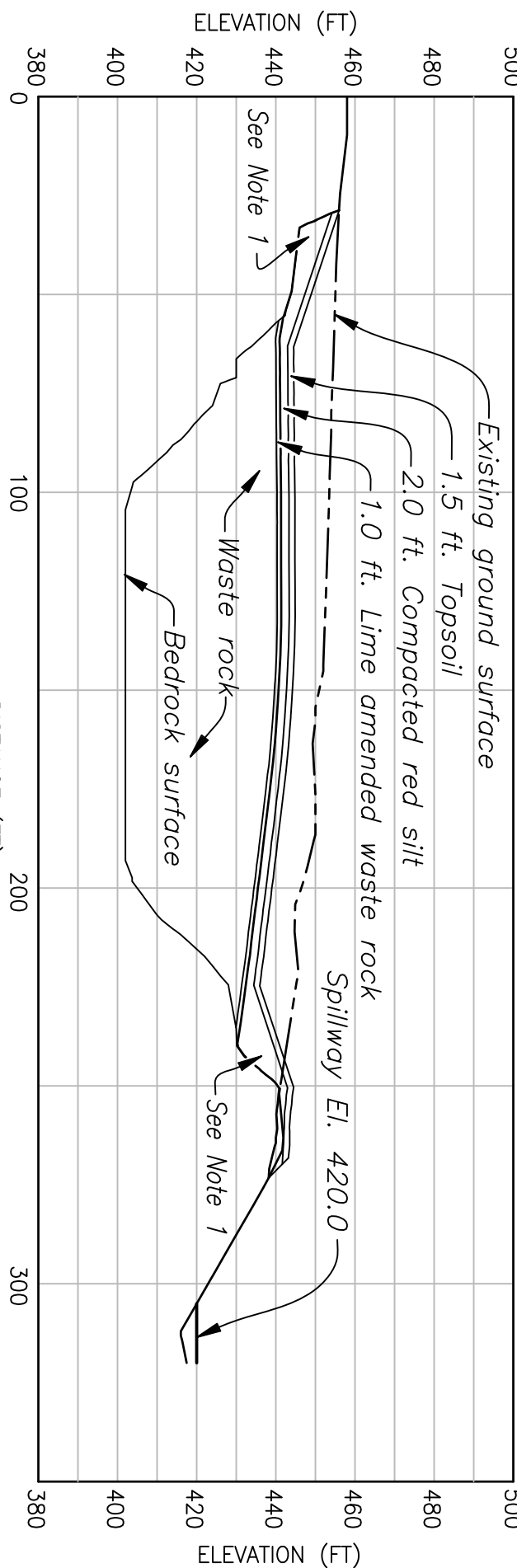
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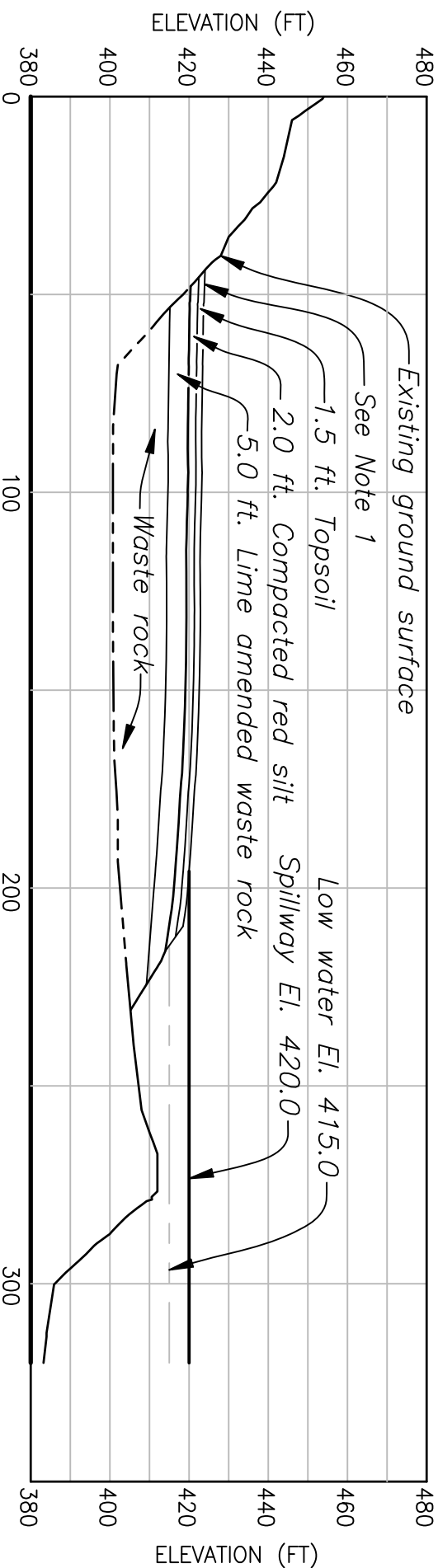
SECTION 11



SECTION 12



SECTION 13



SECTION 14

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PLOTTED BY  
KSCHWARY

CAD SYSTEM  
AutoCAD Rev. 17.1s  
CAD FILENAME  
1556-D-208.DWG

NOTES

1. The extent and thickness of red silt and topsoil capping placed on exposed pyritic bedrock surfaces will be determined in the field by the EPA O.S.C.
2. For details on geomembrane installation, see dwgs. 213, 214 and 215.

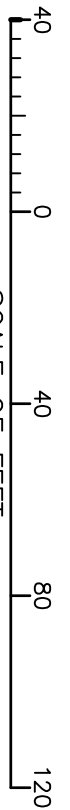
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GRADING PLAN  
1556-D-205  
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1556-D-206  
SECTIONS 5 THRU 9  
1556-D-207  
SECTIONS 15 THRU 18  
1556-D-209  
SECTIONS 19 THRU 22  
1556-D-210  
SECTIONS 23 THRU 32  
1556-D-211  
MISCELLANEOUS SECTIONS AND DETAILS  
1556-D-212  
WASTEROCK CAP - PLAN  
1556-D-213  
WASTEROCK CAP - SECTIONS  
1556-D-214  
WASTEROCK CAP - DETAILS  
1556-D-215

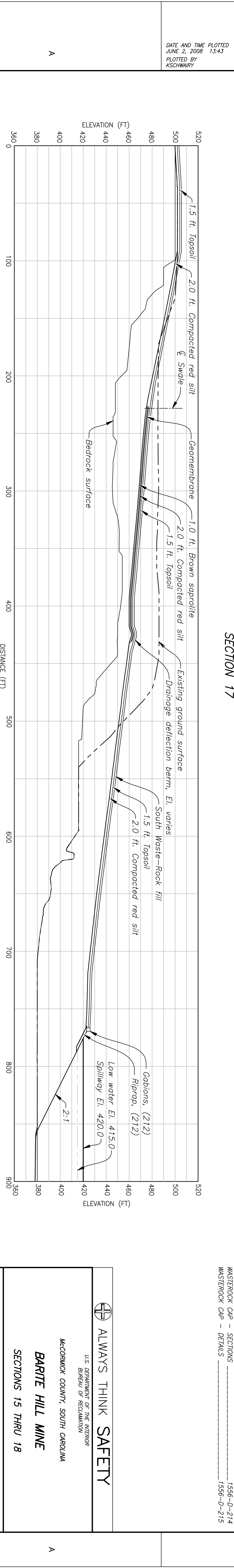
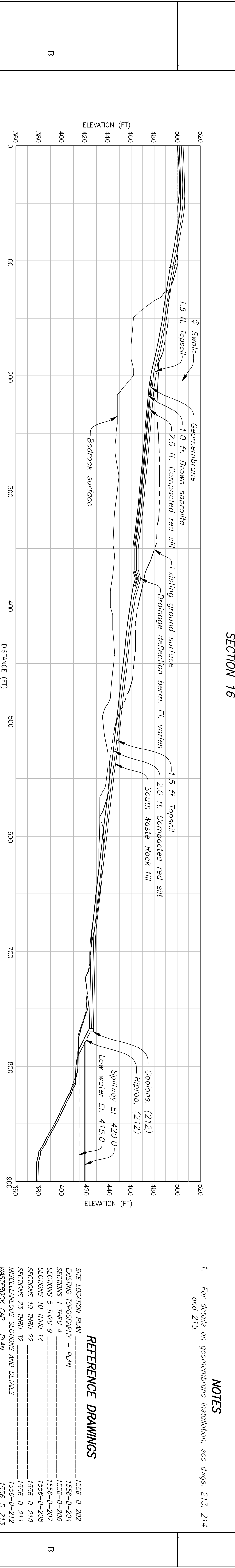
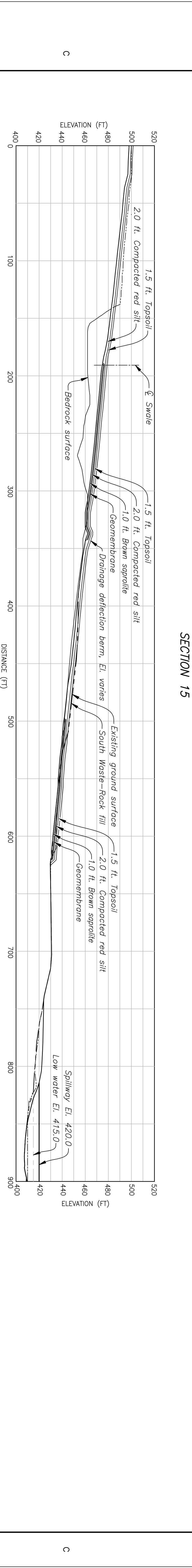
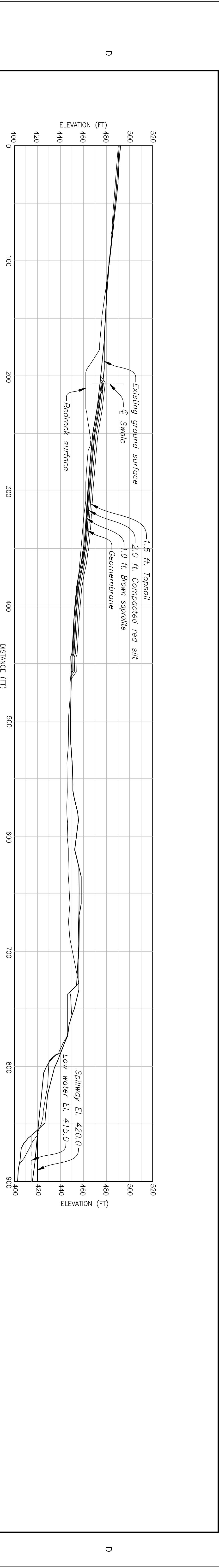
ALWAYS THINK SAFETY

McCOMICK COUNTY, SOUTH CAROLINA  
BARTE HILL MINE  
SECTIONS 10 THRU 14

DESIGNED MICHAEL J. GORDA	CHECKED JANEEN JENSEN
DRAWN KENNETH E. SCHWARTZ	TECH. APPR. MICHAEL J. GORDA
APPROVED DAVID B. PAUL	PER REVIEWER
DENVER, COLORADO	SHEET 1 OF 1
1556-D-208	







**NOTES**

1. For details on geomembrane installation, see dwgs. 213, 214 and 215.

**REFERENCE DRAWINGS**

SITE LOCATION PLAN  
EXISTING TOPOGRAPHY - PLAN  
SECTIONS 1 THRU 4  
SECTIONS 5 THRU 9  
SECTIONS 10 THRU 14  
SECTIONS 19 THRU 22  
SECTIONS 23 THRU 32  
MISCELLANEOUS SECTIONS AND DETAILS  
MASTERROCK CAP - PLAN  
MASTERROCK CAP - SECTIONS  
MASTERROCK CAP - DETAILS



U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MCCORMICK COUNTY, SOUTH CAROLINA

**BARIE HILL MINE**

**SECTIONS 15 THRU 18**

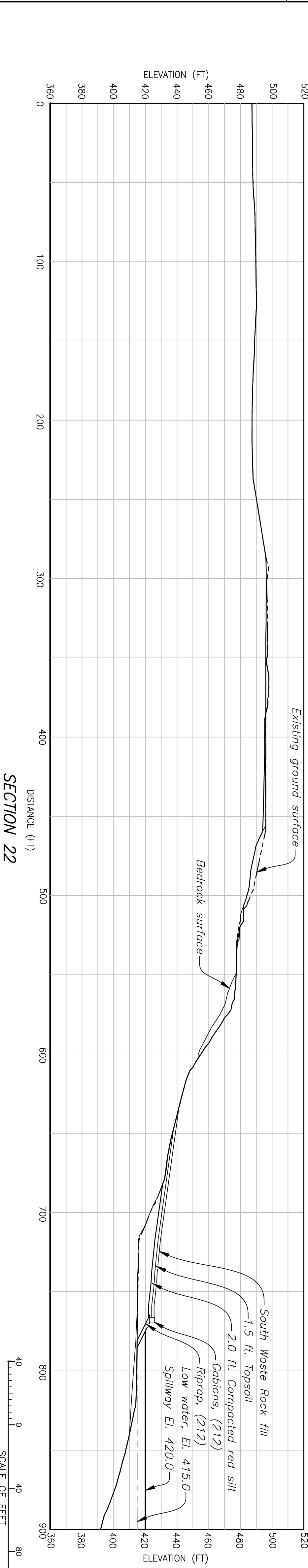
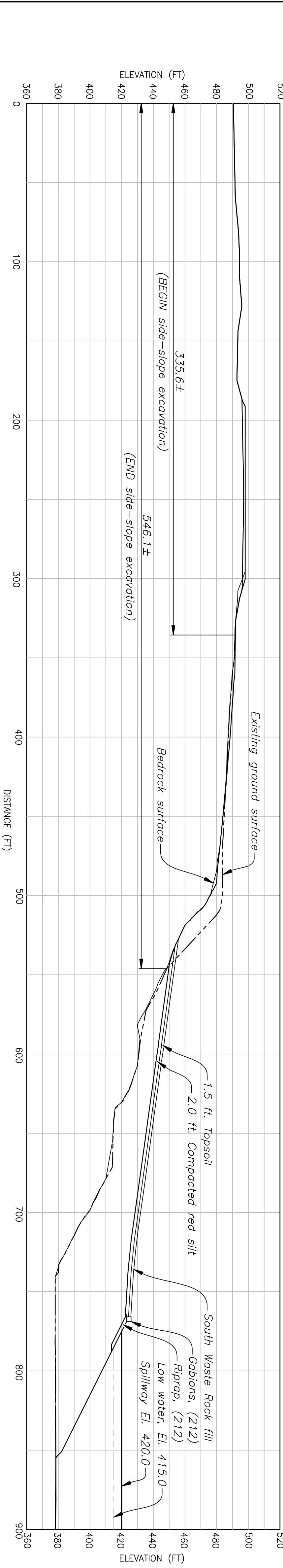
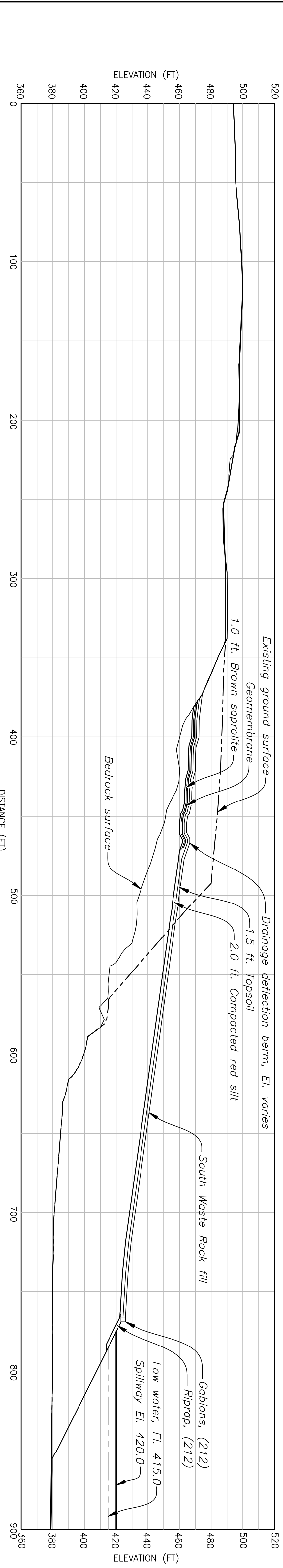
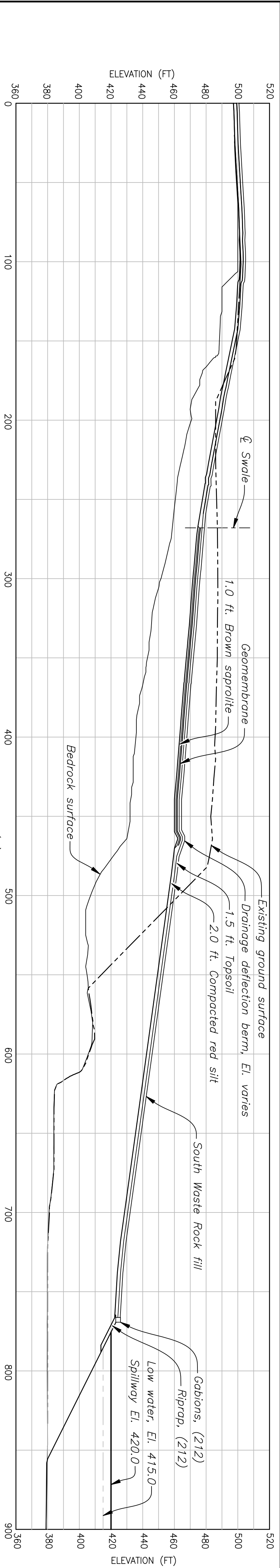
DESIGNED - MICHAEL L. GOSBLA  
DRAWN - JENNIFER E. SCHWARTZ  
APPROVED - DAVID B. PAUL  
ADMINISTRATIVE APPROVAL - NAME - TITLE  
DENVER, COLORADO  
SHEET 1 OF 1

**1556-D-209**

DATE AND TIME PLOTTED  
JUNE 2, 2008 13:43  
PLOTTED BY  
KSCWHARY

CAD SYSTEM  
AutoCAD Rlt. 17.1s  
CAD FILENAME  
1556-D-209.DWG





1. For details on geomembrane installation, see dwgs. 213, 214 and 215.

NOTES

REFERENCE DRAWINGS

SITE LOCATION PLAN 1556-D-202  
EXISTING TOPOGRAPHY - PLAN 1556-D-204  
SECTIONS 1 THRU 4 1556-D-206  
SECTIONS 5 THRU 9 1556-D-207  
SECTIONS 10 THRU 14 1556-D-208  
SECTIONS 15 THRU 18 1556-D-209  
SECTIONS 23 THRU 32 1556-D-211  
MISCELLANEOUS SECTIONS AND DETAILS 1556-D-212  
MASTEROCK CAP - PLAN 1556-D-213  
MASTEROCK CAP - SECTIONS 1556-D-214  
MASTEROCK CAP - DETAILS 1556-D-215



U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MCORMICK COUNTY, SOUTH CAROLINA

BARIE HILL MINE

SECTIONS 19 THRU 22

DESIGNED	CHECKED
DRAWN	TECH. APPR.
APPROVED	ADMINISTRATIVE APPROVAL
DENVER, COLORADO	2008-01-04
SHEET 1 OF 1	1556-D-210



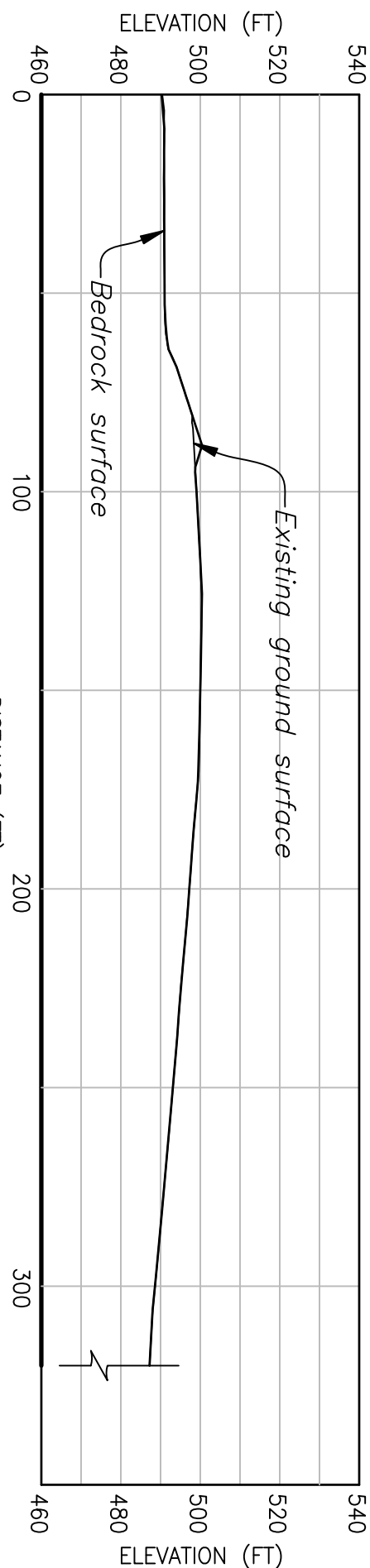
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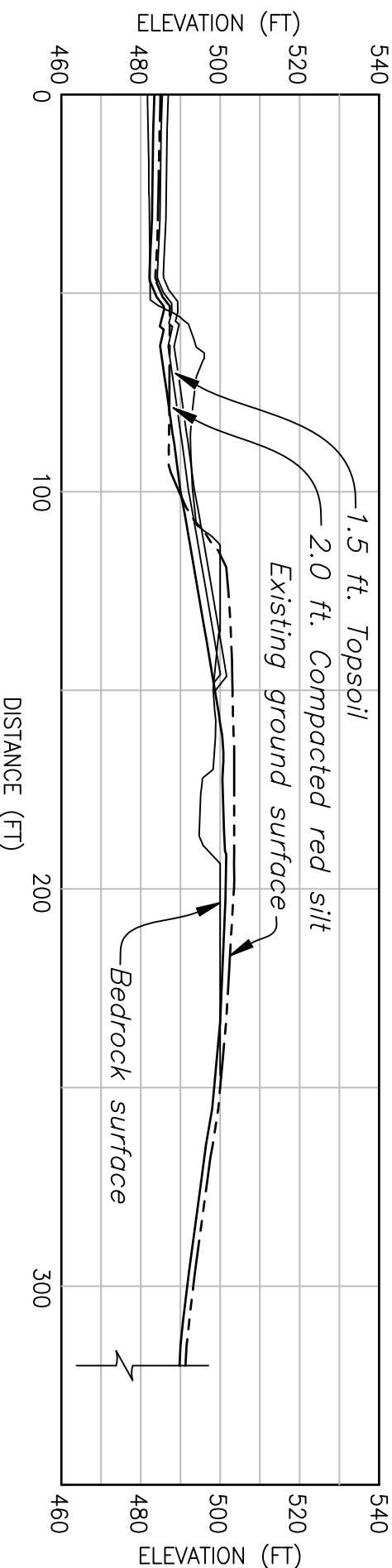
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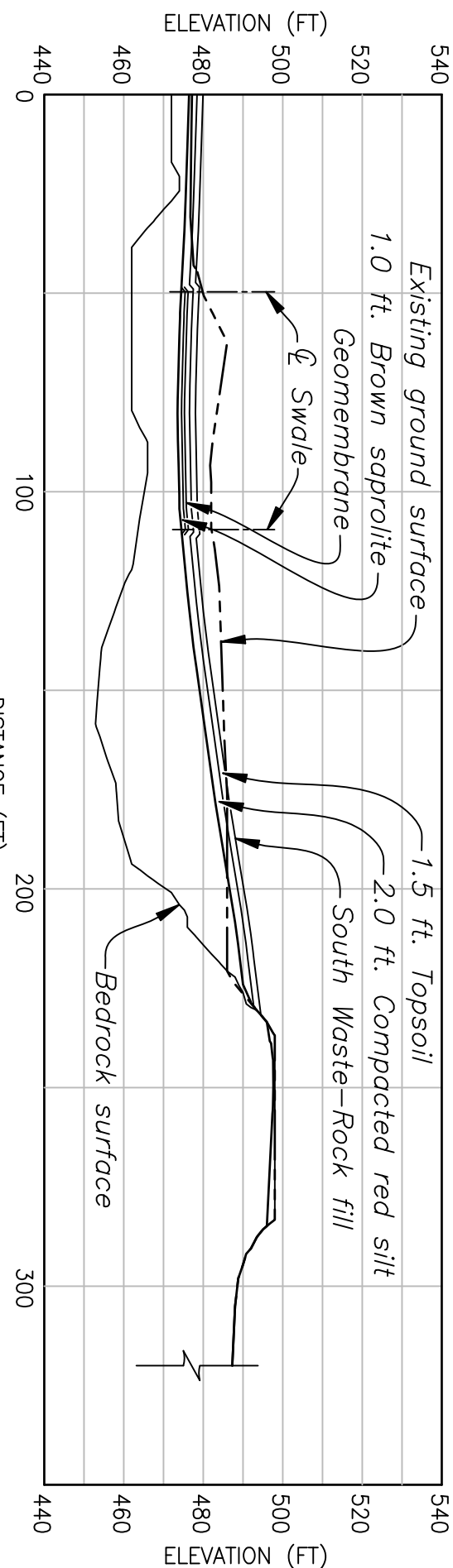
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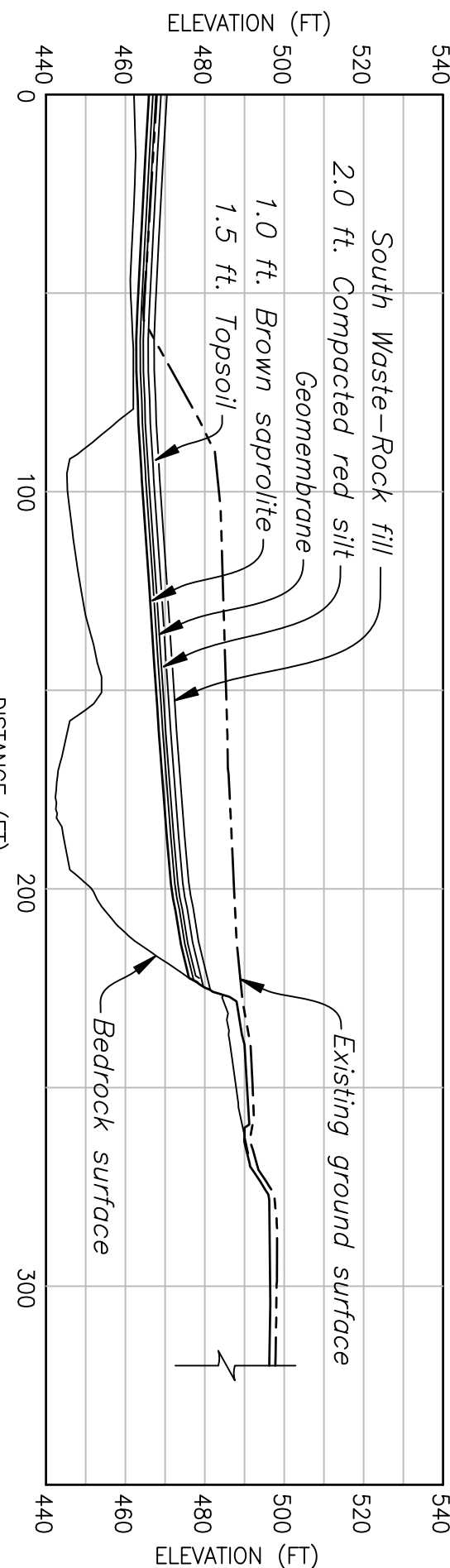
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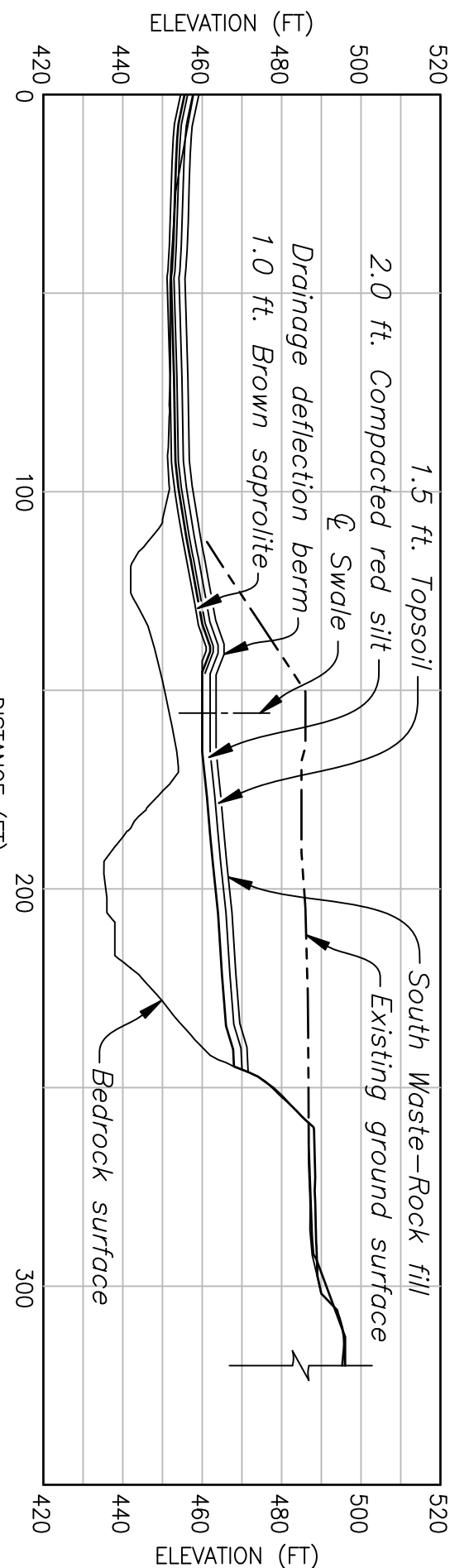
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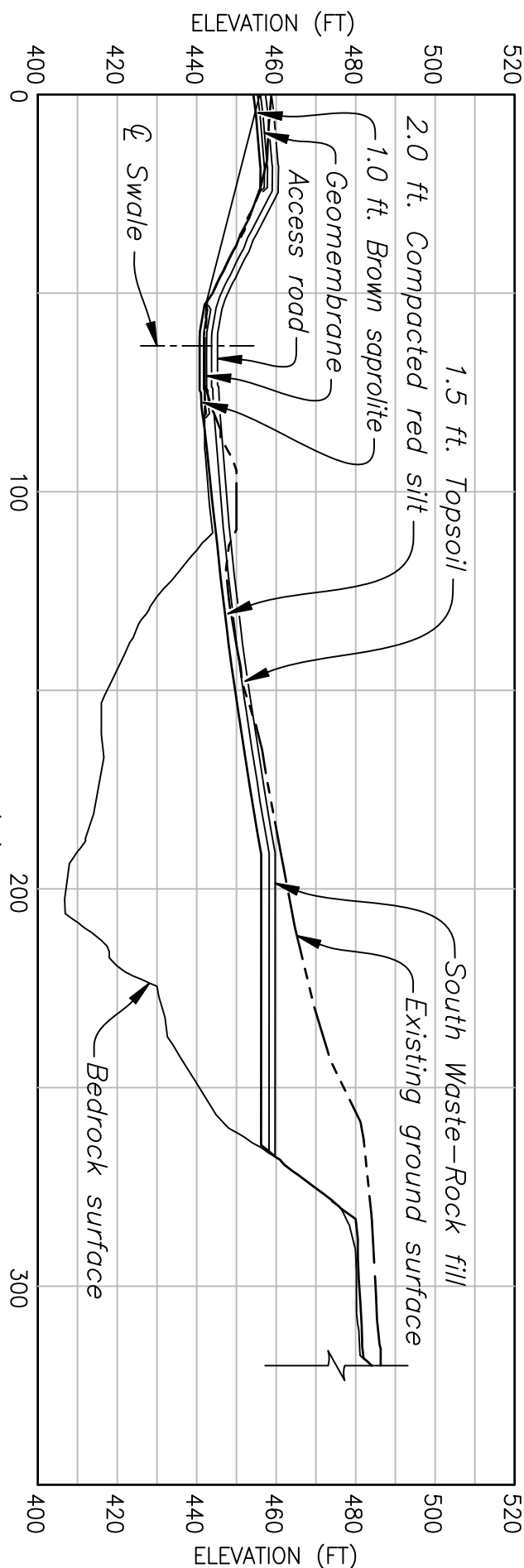
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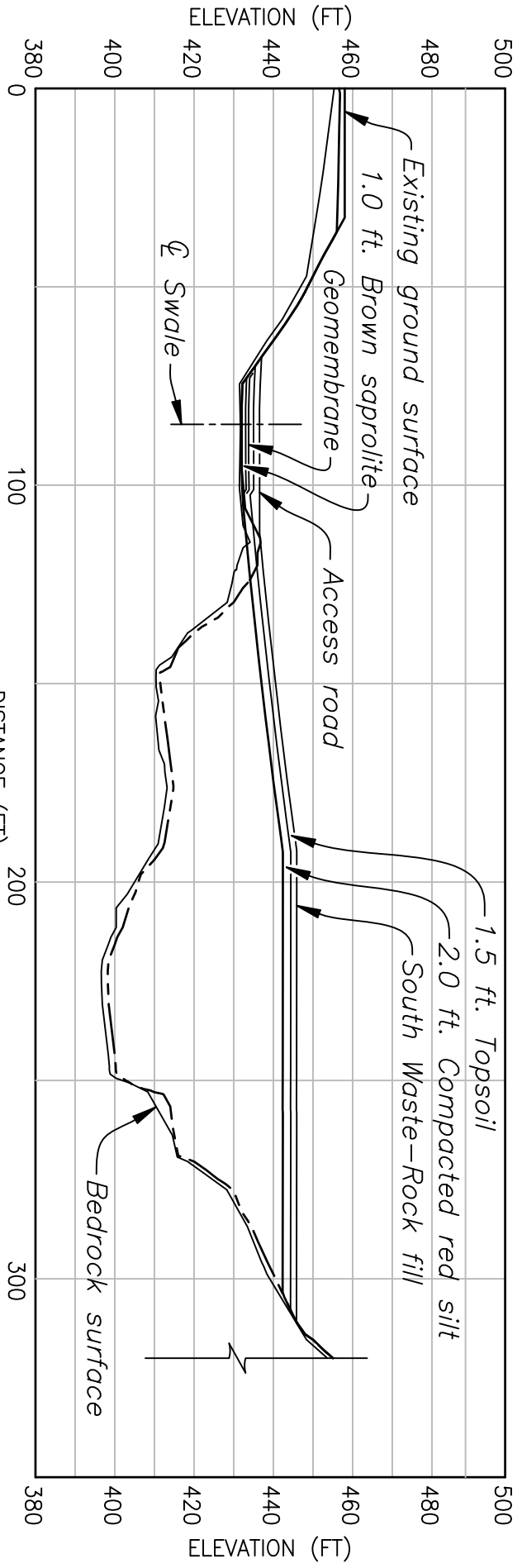
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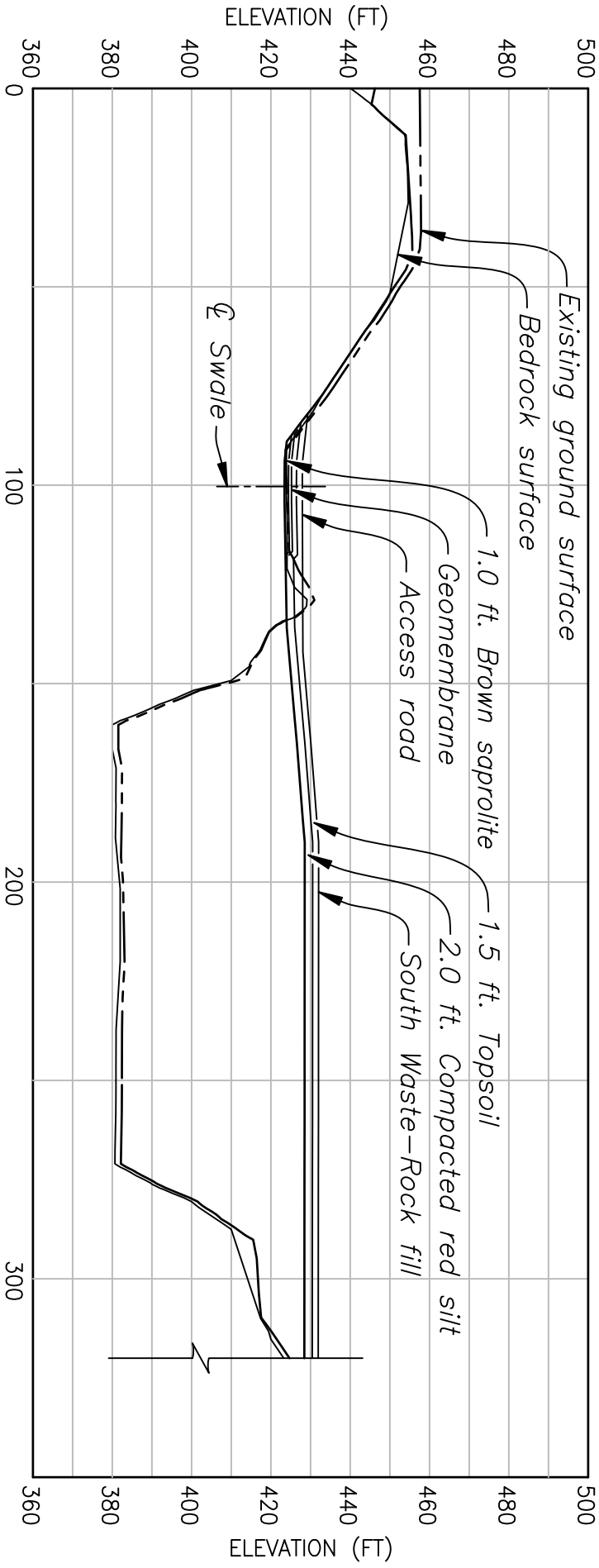
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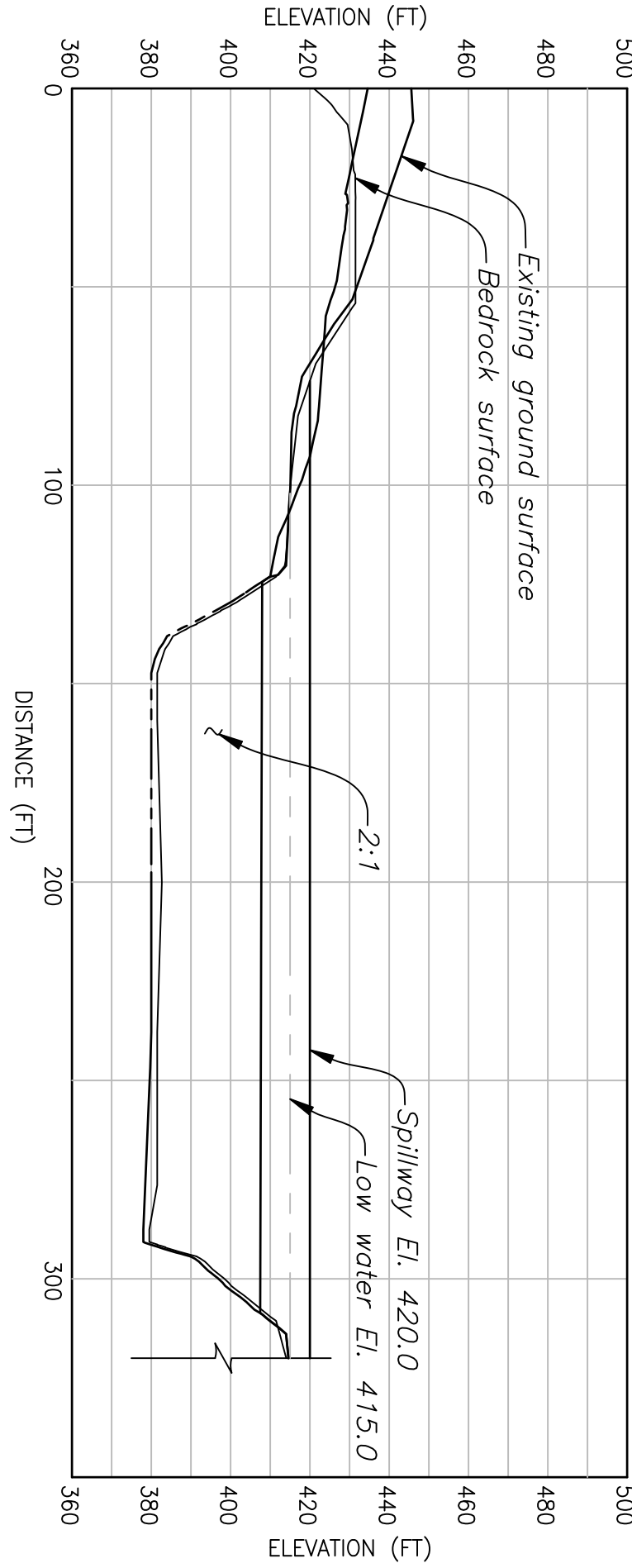
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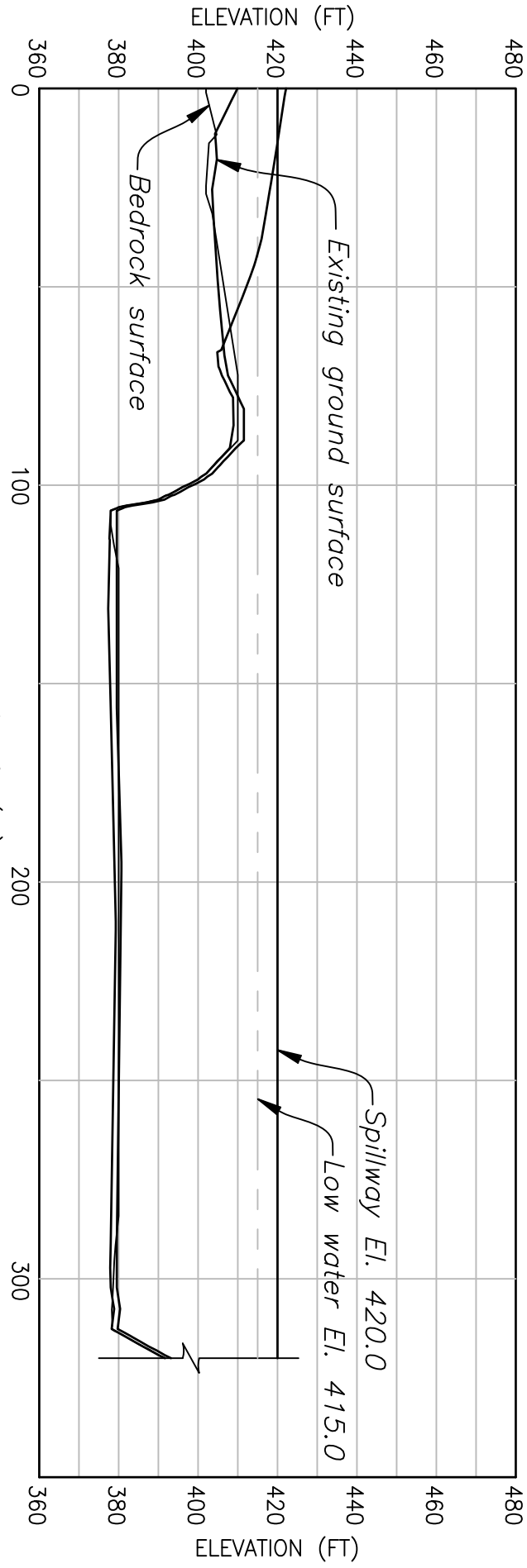
SECTION 29



SECTION 30



SECTION 31



SECTION 32

NOTES

1. For details on geomembrane installation, see dwgs. 213, 214 and 215.

REFERENCE DRAWINGS

SITE LOCATION PLAN	1556-D-202
EXISTING TOPOGRAPHY - PLAN	1556-D-204
SECTIONS 1 THRU 4	1556-D-206
SECTIONS 5 THRU 9	1556-D-207
SECTIONS 10 THRU 14	1556-D-208
SECTIONS 15 THRU 18	1556-D-209
SECTIONS 19 THRU 22	1556-D-210
MISCELLANEOUS SECTIONS AND DETAILS	1556-D-212
WATERROCK CAP - PLAN	1556-D-213
WATERROCK CAP - SECTIONS	1556-D-214
WATERROCK CAP - DETAILS	1556-D-215



ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MCORMICK COUNTY, SOUTH CAROLINA

BARIE HILL MINE

SECTIONS 23 THRU 32

DESIGNED	CHECKED
DRAWN	TECH. APPR.
APPROVED	ADMINISTRATIVE APPROVAL
DENVER, COLORADO	2008-01-04
SHEET 1 OF 1	1556-D-211

CAD SYSTEM  
AutoCAD Rev. 17.1s  
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PLOTTED BY  
KSCHWARY

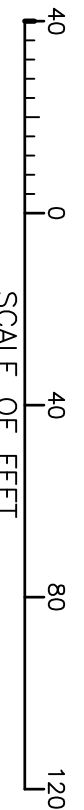
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1556-D-212

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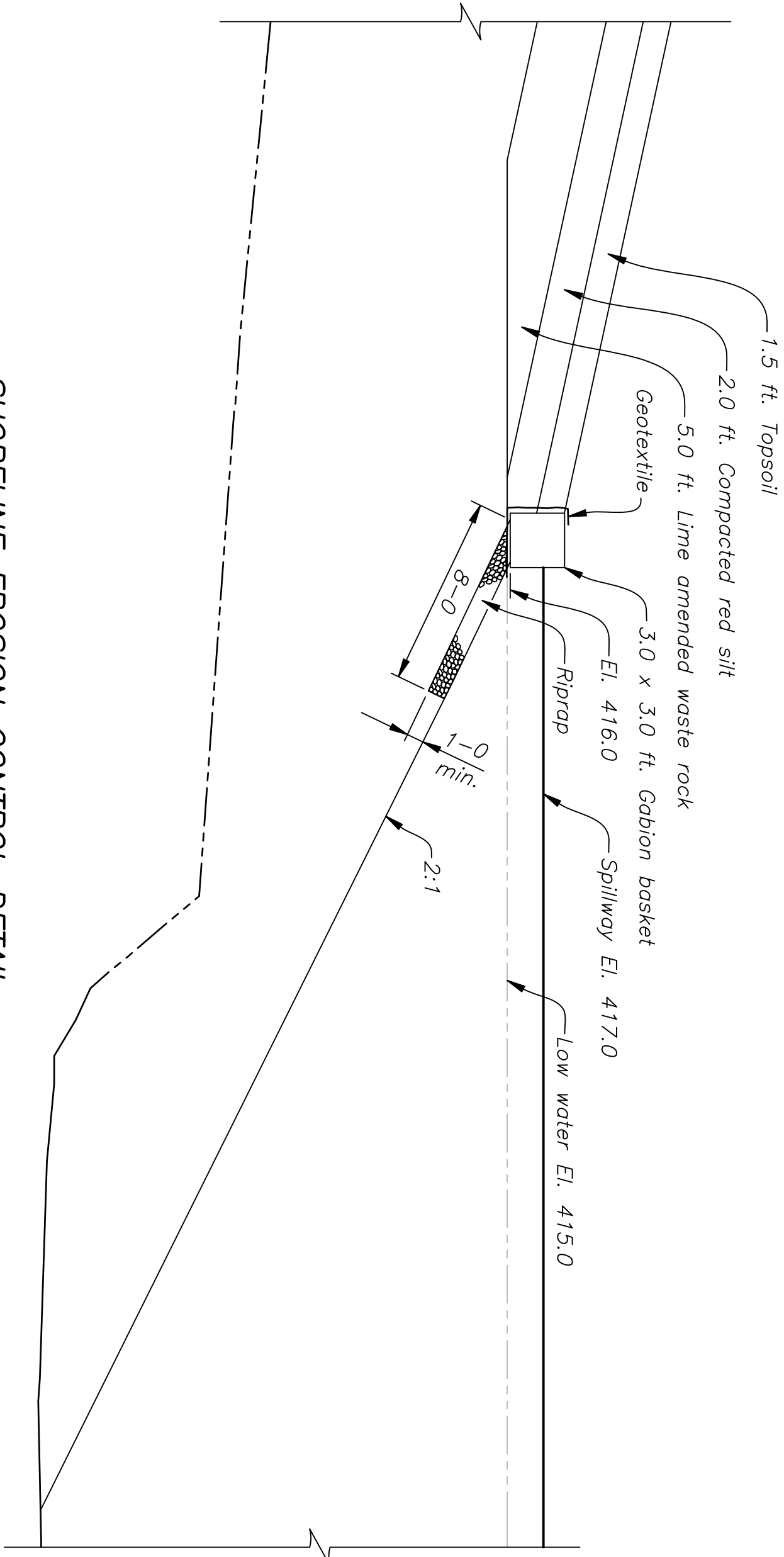
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SHORELINE EROSION CONTROL DETAIL

C

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DATE AND TIME PLOTTED  
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PLOTTED BY  
KSCHWARY

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AutoCAD Rpt. 17.1s  
CAD FILENAME  
1556-D-212.DWG

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REFERENCE DRAWINGS

EXISTING TOPOGRAPHY - PLAN ..... 1556-D-204  
SECTIONS 1 THRU 4 ..... 1556-D-206  
SECTIONS 5 THRU 9 ..... 1556-D-207  
MISCELLANEOUS SECTIONS AND DETAILS ..... 1556-D-212  
MASTEROCK CAP - PLAN ..... 1556-D-213  
MASTEROCK CAP - SECTIONS ..... 1556-D-214  
MASTEROCK CAP - DETAILS ..... 1556-D-215

 ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MCORMICK COUNTY, SOUTH CAROLINA

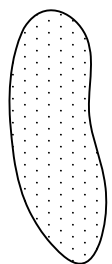
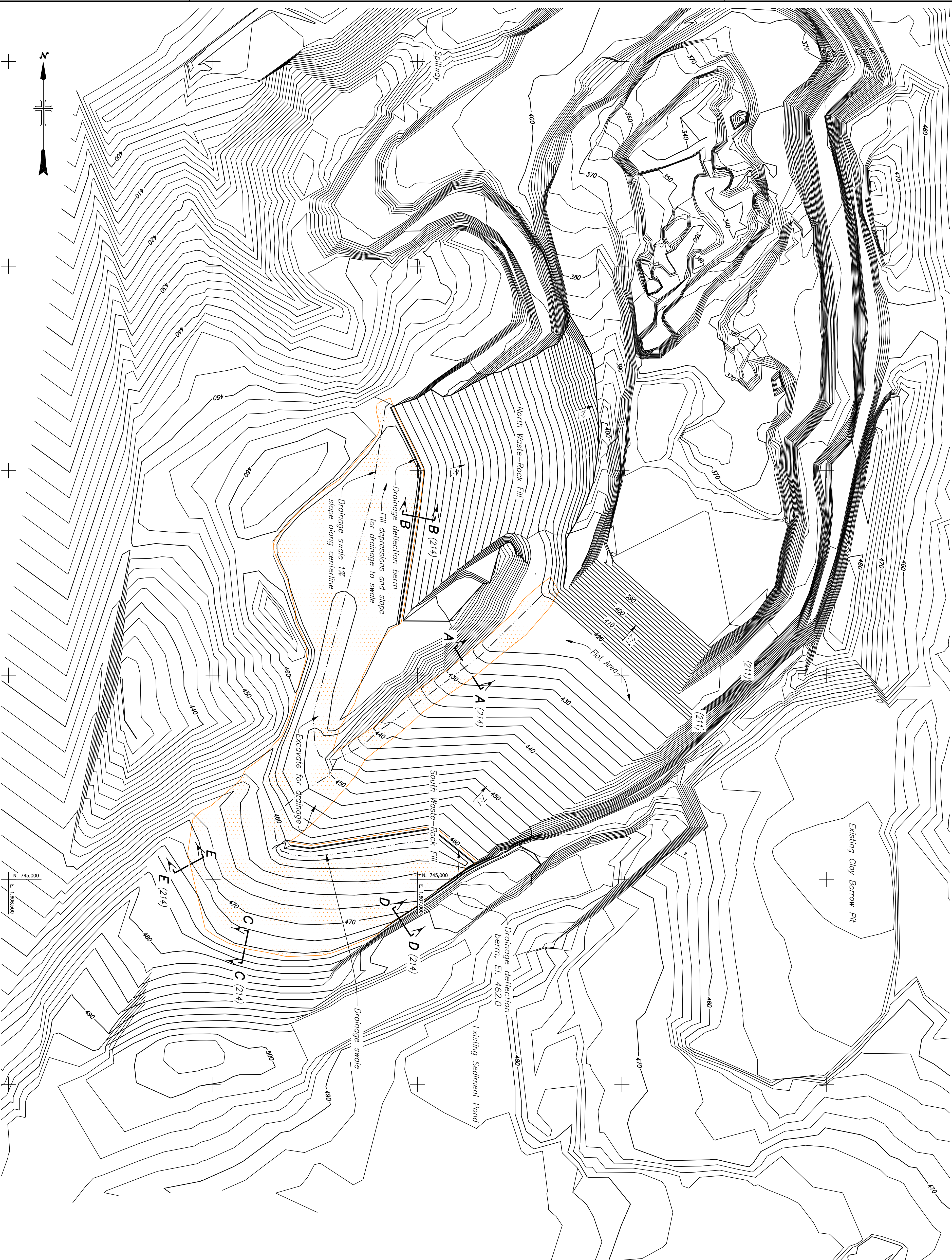
BARTE HILL MINE

MISCELLANEOUS SECTIONS AND DETAILS

DESIGNED ..... CHECKED .....  
DRAWN ..... TECH. APPR. ....  
APPROVED ..... REE REVIEWER .....

DENVER, COLORADO SHEET 1 OF 1 1556-D-212





LEGEND

Extents of geomembrane

NOTES

- Existing topography above the water line (El. 414.0) by Murphy Geomatics Professional Land Surveying, completed December, 2007.
- Existing topography below the water line (El. 414.0) and cliff areas taken from drawing titled "Nevada Goldfields, Inc., the main pit with sulfide backfill" topography dated November 3, 1994.
- The extents of the geomembrane are approximate only. The actual limits of the geomembrane installation shall be determined in the field by the EPA O.S.C.

REFERENCE DRAWINGS

SITE LOCATION PLAN \_\_\_\_\_ 1556-D-202  
EXISTING TOPOGRAPHY - PLAN \_\_\_\_\_ 1556-D-204  
WASTEROCK CAP-SECTIONS \_\_\_\_\_ 1556-D-214  
WASTEROCK CAP-DETAILS \_\_\_\_\_ 1556-D-215



U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MCORMICK COUNTY, SOUTH CAROLINA

BARIE HILL MINE

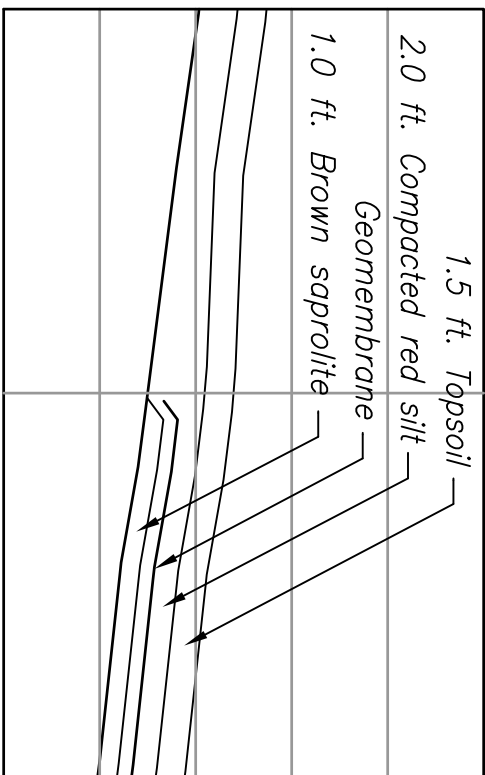
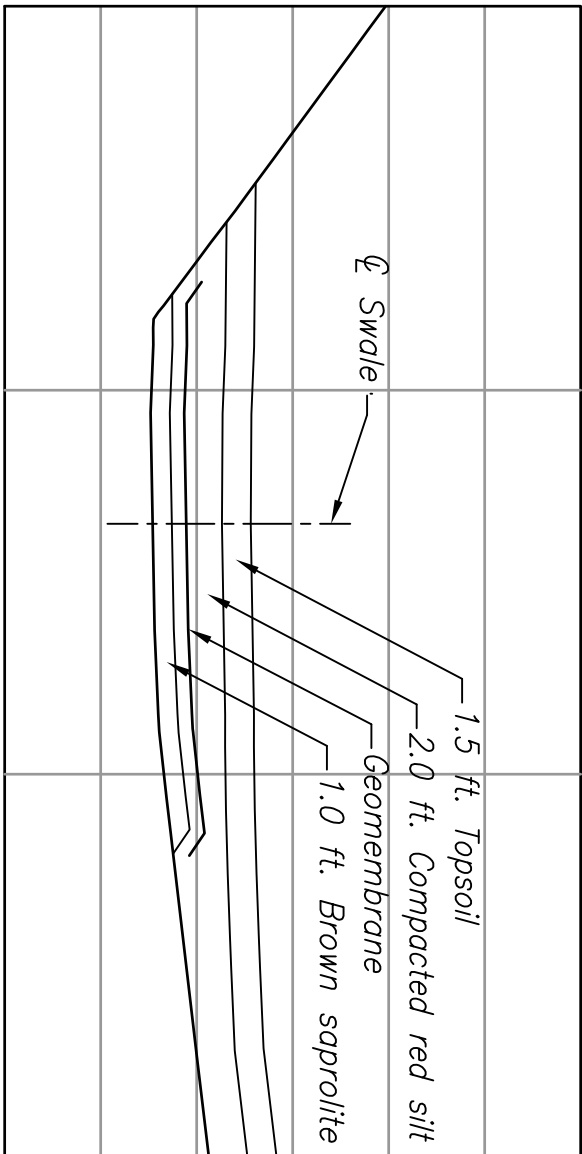
WASTEROCK CAP - PLAN

DESIGNED _____	CHECKED _____
DRAWN _____	TECH. APPR. _____
APPROVED _____	ADMINISTRATIVE APPROVAL - NAME - TITLE _____
DENVER, COLORADO	2008-01-04
SHEET 1 OF 1	1556-D-213

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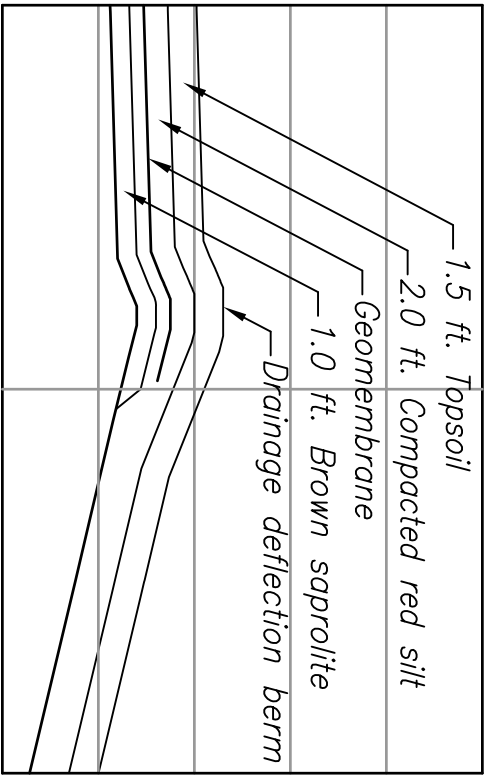
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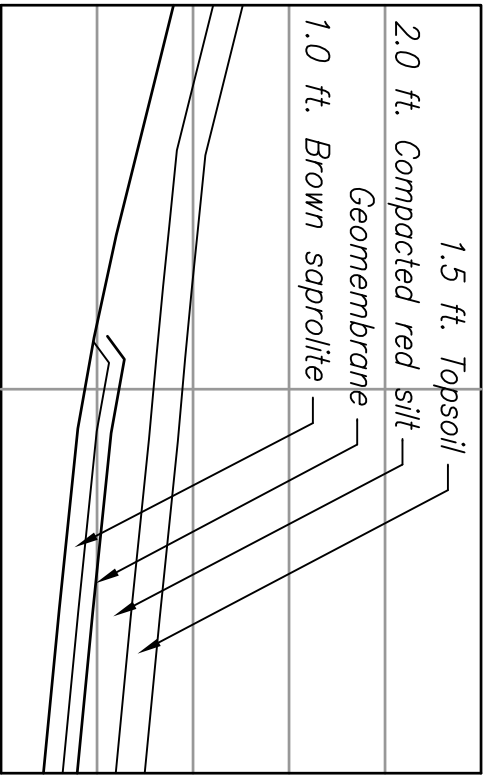


SECTION A

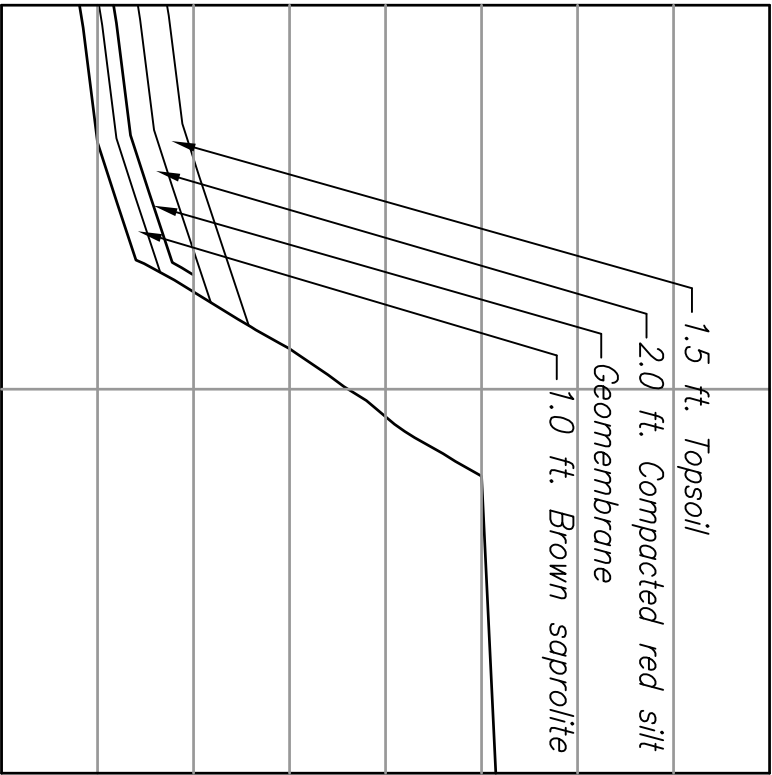
SECTION E



SECTION B



SECTION C



SECTION D

- NOTES**
- The extents of the geomembrane are approximate only. The actual limits of the geomembrane installation shall be determined in the field by the EPA O.S.C.

**REFERENCE DRAWINGS**

SITE LOCATION PLAN ----- 1556-D-202  
EXISTING TOPOGRAPHY - PLAN ----- 1556-D-204  
WASTEROCK CAP-PLAN ----- 1556-D-213  
WASTEROCK CAP-DETAILS ----- 1556-D-215

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BUREAU OF RECLAMATION  
MCORMICK COUNTY, SOUTH CAROLINA  
**BARITE HILL MINE**  
WASTEROCK CAP - SECTIONS

DESIGNED ----- CHECKED -----  
DRAWN ----- TECH. APPR. -----  
APPROVED ----- ADMINISTRATIVE APPROVAL - NAME - TITLE -----  
DENVER, COLORADO SHEET 1 OF 1 **1556-D-214**

D

C

B

A

D

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B

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