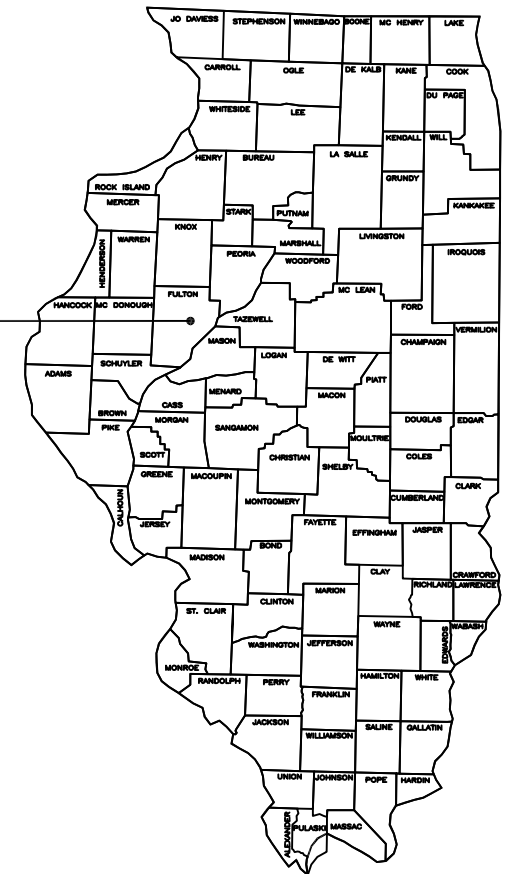


State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands

Funded by the
 United States Department of Interior
 Federal Office of Surface Mining

Red Ember - Central
 Reclamation Project
 AML-GFuE-1304
 Fulton County
 1LR

Red Ember - Central
 Fulton County




Pre-Bid Meeting


A pre-bid meeting is scheduled for this project at 9:00 A.M., Friday, September 13, 2013 at the intersection of E. Arrow Road and N. Arrow Road, on the East side of the project.

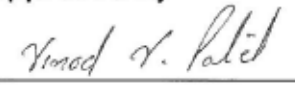
SCHEDULE OF DRAWINGS:


1. Cover Sheet
 2. Summary of Quantities/General Notes/Location Map
 3. Sheet Lay-out/Survey Information
 - 4-16. Existing + Proposed Conditions
 - 17-61. Cross Sections
 62. Details
- IDOT Standard 665001-01

Prepared By IDNR Staff

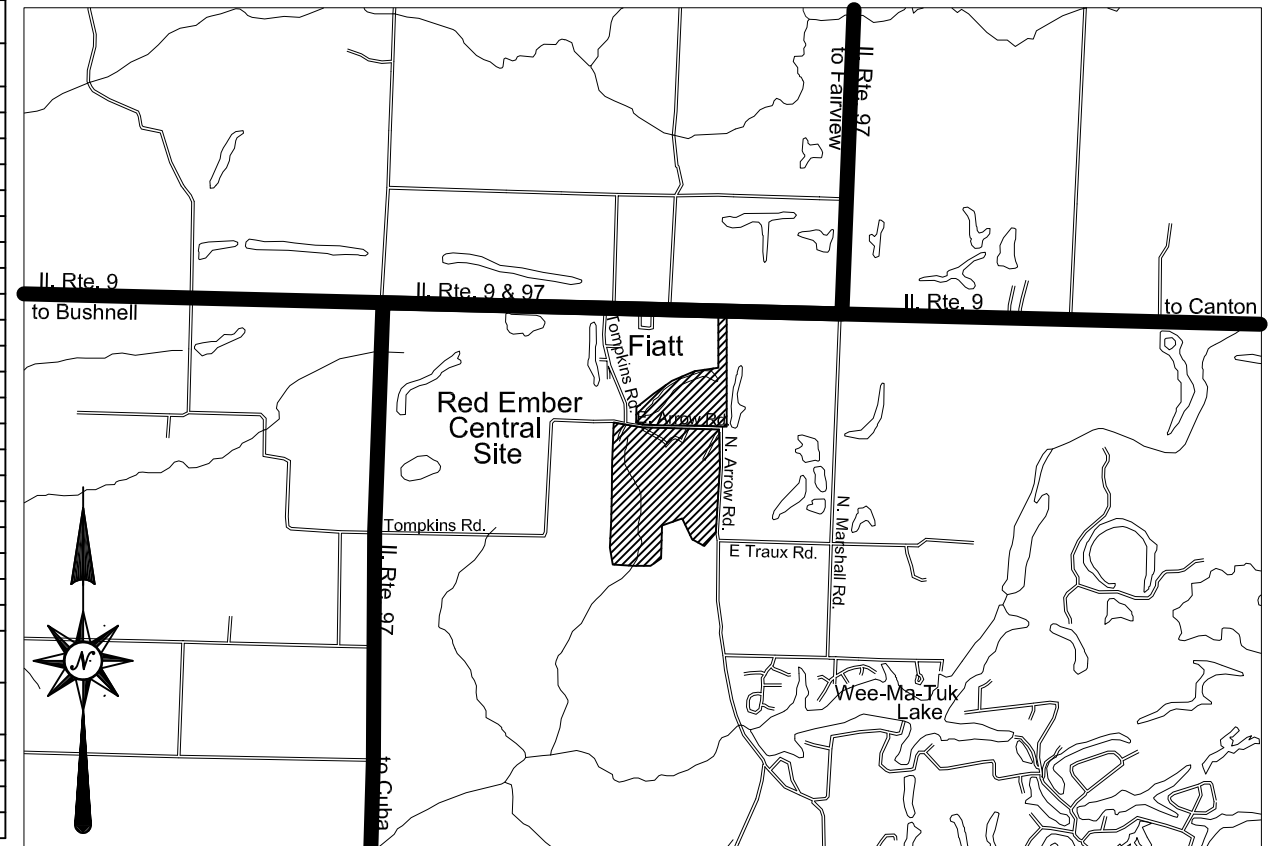
Approved for Bidding:

 Michael L. Woods, Director
 Office of Mines and Minerals

Approved By:

 Greg Pinto, Acting Manager
 AML Division

Approved By:

 Vinodchandra V. Patel
 IL Licensed Professional Engineer
 No. 062.046043



Summary of Quantities					
#	Item	Section	Quantity	Unit	Rates/Remarks
1	Special Clearing	201	1	L.S.	
2	Earth Excavation	202	640,332	C.Y.	Compaction Required per SP 205
3	Mine Refuse Excavation	202	425,378	C.Y.	Compaction Required per SP 205
4	Seeding	250	147.7	Acre	See Schedule This Sheet
5	Nitrogen Fertilizer Nutrient	250	35,448	Pound	See Schedule This Sheet
6	Phosphorous Fertilizer Nutrient	250	59,080	Pound	See Schedule This Sheet
7	Potassium Fertilizer Nutrient	250	88,620	Pound	See Schedule This Sheet
8	Agricultural Ground Limestone	250	295.4	Ton	See Schedule This Sheet
9	Mulch, Method 2, Procedure 1	IDOT 251	147.7	Acre	See Schedule This Sheet
10	Erosion Control Blanket	IDOT 251	20,920	S.Y.	
11	Mine Refuse Treatment – Limestone	255	1,000	Ton	50 Ton/Acre
12	Mowing	258	147.7	Acre	See Schedule This Sheet
13	Coal Combustion By-Products Placement	259	100,000	Ton	See Special Note This Sheet
14	Perimeter Erosion Barrier – Silt Fence	280	4,828	Foot	
15	Earth Excavation for Erosion Control	280	556	C.Y.	
16	Stone Riprap A-4	IDOT 281	9,620	S.Y.	
17	Stone Riprap A-3	IDOT 281	1,626	S.Y.	
18	Filter Fabric for use w/Riprap	IDOT 282	9,620	S.Y.	
19	Aggregate Surface Course Type B, CA-1	IDOT 402	500	Ton	For Site Access road Construction
20	Aggregate Surface Course Type B, CA-6	IDOT 402	2,772	Ton	For Site Access road Cons. & Main.
21	Removal of Existing Structures	501	1	L.S.	
22	Pipe Culvert 48" Corrugated Polyethylene(PE) with a Smooth Interior Type 1	IDOT 542	100	Foot	
23	Pipe Culvert 30" Corrugated Polyethylene(PE) with a Smooth Interior Type 2	IDOT 542	40	Foot	
24	Dewatering Impoundment 1	614	1	L.S.	
25	Dewatering Impoundment 2	614	1	L.S.	
26	Woven Wire Fence 4' High	IDOT 665	650	Foot	IDOT Standard 665001-01
27	Mobilization (Max. 6% of Bid)	671	1	L.S.	



Location Map

GENERAL NOTES

Unless otherwise noted on the plans, all disturbed areas within the construction limits will be amended with agricultural ground limestone, fertilizer nutrients, seeded and mulched at the required rates specified in the plans.

The contractor is responsible for visiting the site and familiarizing himself with the existing conditions and the proposed reclamation work prior to submitting a bid.

The contractor shall provide and pay for all field engineering services to execute the project as specified in the Field Engineering section of the Special Provisions.

The contractor is responsible for locating and protecting all existing utility lines pertaining to the work.

Unless noted on the plans, all onsite access roads may be used for construction and must be maintained during construction and restored to original or better condition at the completion of work by the contractor. Access roads to the site as designated in the plans are to be maintained to the satisfaction of the engineer.

The construction limits will be staked by the contractor prior to construction. The contractor is responsible for the repair and or restitution at his own expense for all damages done to any area outside the construction limits.

Application rates specified in the plans are shown in the Summary of Quantities-Rates/Remarks column.

CONSTRUCTION NOTES

BURIAL/REMOVAL OF MATERIAL-Concrete and masonry debris designated for burial by the engineer shall be buried at least three feet below proposed final grade. Onsite organic debris and trash shall be disposed of in an engineer approved offsite landfill in accordance with Sections 201 and 501 of the Special Provisions.

TREE REMOVAL-Trees removed shall be disposed of onsite per Section 201 of the Special Provisions. Tree clearing shall only occur between October 16 and March 31.

ACID WATER TREATMENT-If acid mine drainage treatment is determined necessary by the engineer, and not otherwise specified in the plans, any water treatment will be paid for in accordance with Article 109.04 of the Standard Specifications.

EROSION CONTROL-The contractor shall schedule his operations and take such precautions that may be necessary to prevent or minimize erosion. Failure to comply with this requirement shall cause the contractor to be fully responsible for repairing any eroded areas and cleaning up areas or drainage structures that have become silted in or damaged.

AGRICULTURAL GROUND LIMESTONE-Immediately prior to seed bed preparation, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the rates specified in the plans.

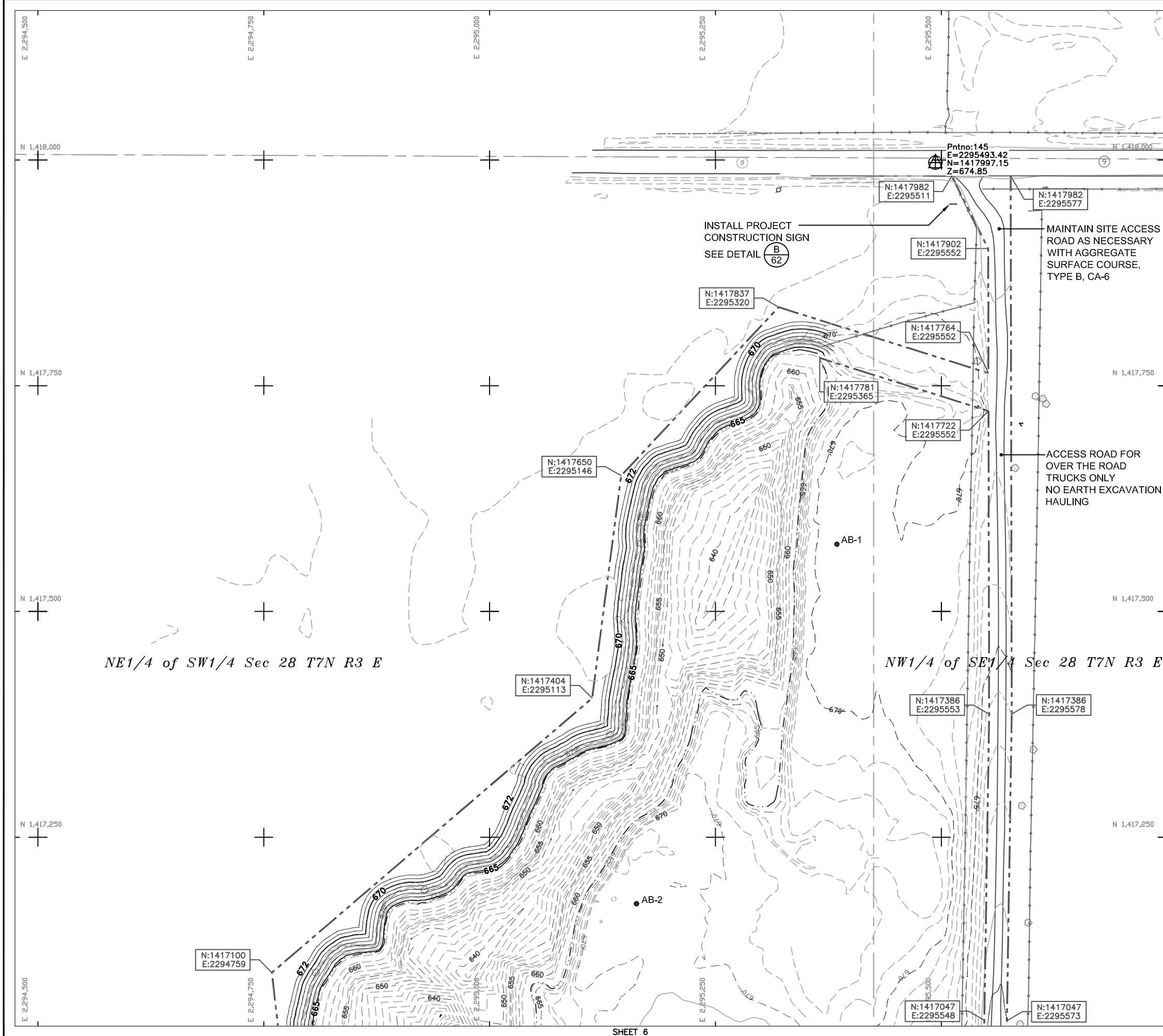
MULCHING-Within 24 hours from the time seeding has been performed, the seeded area shall be given a covering of mulch at the rates specified in the plans. The mulch is to be anchored into the soil in accordance with the requirements for method 2, procedure 1 of Article 251.03 of the Standard Specifications. If Excelsior or Special Excelsior Blanket is to be used, the blanket shall be placed the same day that the areas are seeded.

MINE REFUSE TREATMENT-After mine refuse has been graded to the subgrade shown in the plans, agricultural ground limestone shall be uniformly spread at the rate specified in the plans. A 3 inch layer of soil shall then be spread over the mine refuse treatment area and blended to a depth of 6 inches with an industrial offset disk approved by the engineer. Treated areas included in Baseline A shall then be covered with 33 inches of soil. Treated areas included in Baseline B shall then be covered with 39 inches of soil.

Special Note:

Coal Combustion By-Products - In Accordance with Article 259 of the Special Provisions, approximately 100,000 tons of CCB's shall be spread in lifts in mine refuse fill areas prior to earth cover placement.

Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing				
ITEM (unit)	March 1, 2015 – April 20, 2015	September 1, 2015 – September 30, 2015	June 15, 2015 – July 15, 2015	TOTAL QUANTITY
SEEDING (acres)	147.7			147.7
AGRICULTURAL GROUND LIMESTONE (tons)	295.4 2 Tons/Acre			295.4 Tons
NITROGEN FERTILIZER NUTRIENT (pounds)	17,724 Pounds 120 Lb./Acre	17,724 Pounds 120 Lb./Acre		35,448 Pounds
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	29,540 Pounds 200 Lb./Acre	29,540 Pounds 200 Lb./Acre		59,080 Pounds
POTASSIUM FERTILIZER NUTRIENT (pounds)	44,310 Pounds 300 Lb./Acre	44,310 Pounds 300 Lb./Acre		88,620 Pounds
MULCH, METHOD 2 1 (tons)	147.7 Acres 2 Tons/Acre			147.7 Acres
MOWING (acres)			147.7 Acres	147.7 Acres



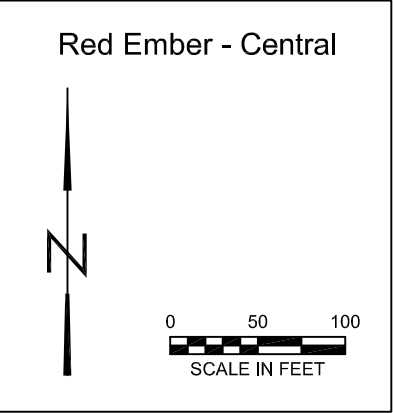
SHEET 6

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Sheet Layout

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— 400 —	PROPOSED CONTOUR
- - - - -	CONSTRUCTION LIMITS
— — — — —	EDGE OF ROAD
~~~~~	TREELINE
- - - - -	EDGE OF WATER
● 12B-1	AML BORING
● AB-1	ANDREWS ENG. BORING
● HB-1	HOLCOMB FOUNDATION BORING
⊕	SURVEY CONTROL POINT

Legend

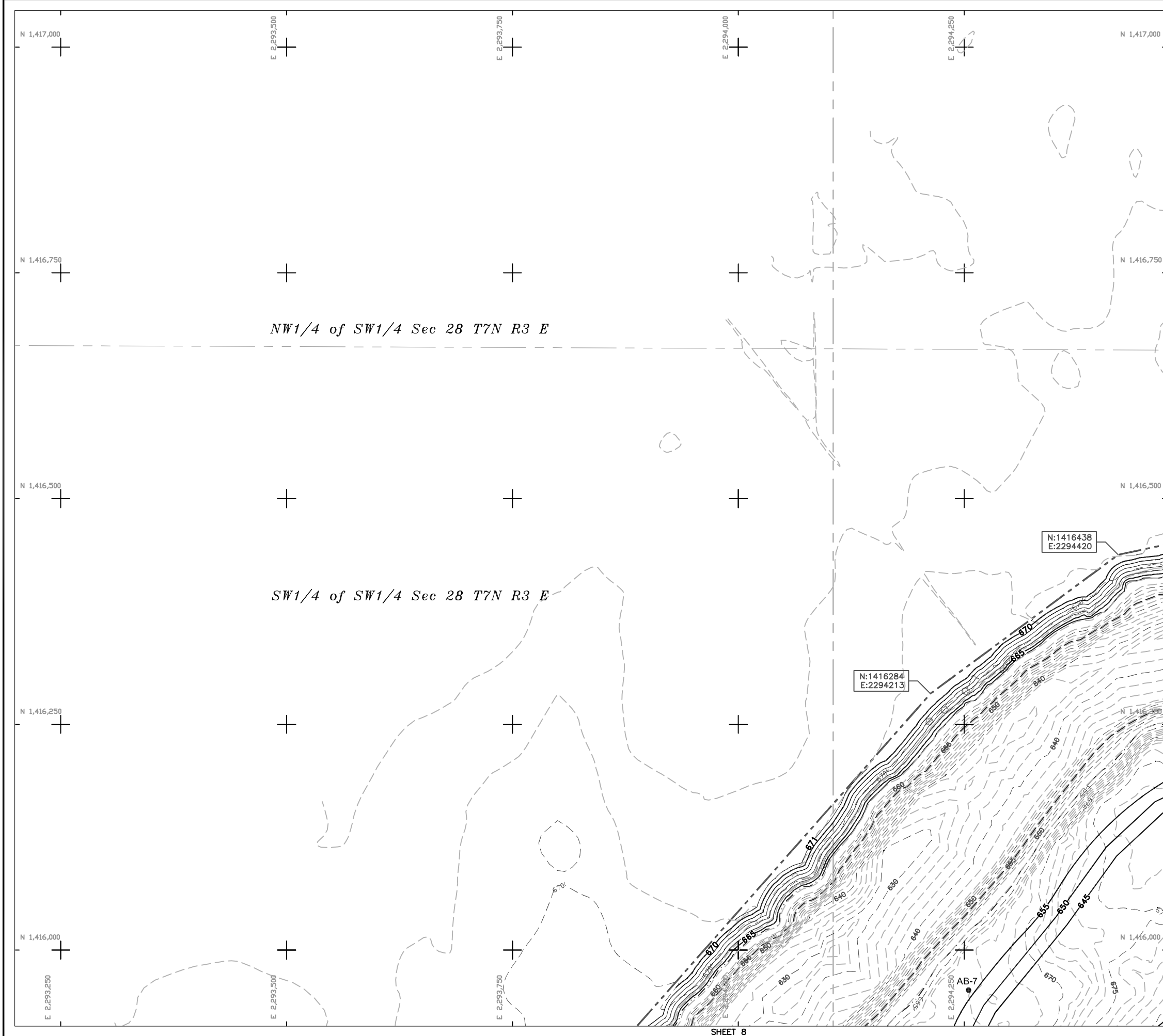


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Date: 8/2013

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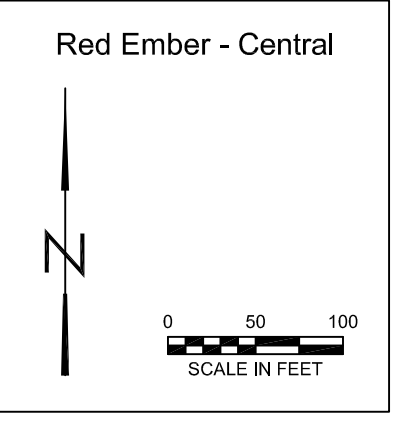


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	EXISTING CONTOUR
	PROPOSED CONTOUR
	CONSTRUCTION LIMITS
	EDGE OF ROAD
	TREELINE
	EDGE OF WATER
	12B-1 AML BORING
	AB-1 ANDREWS ENG. BORING
	HB-1 HOLCOMB FOUNDATION BORING
	SURVEY CONTROL POINT

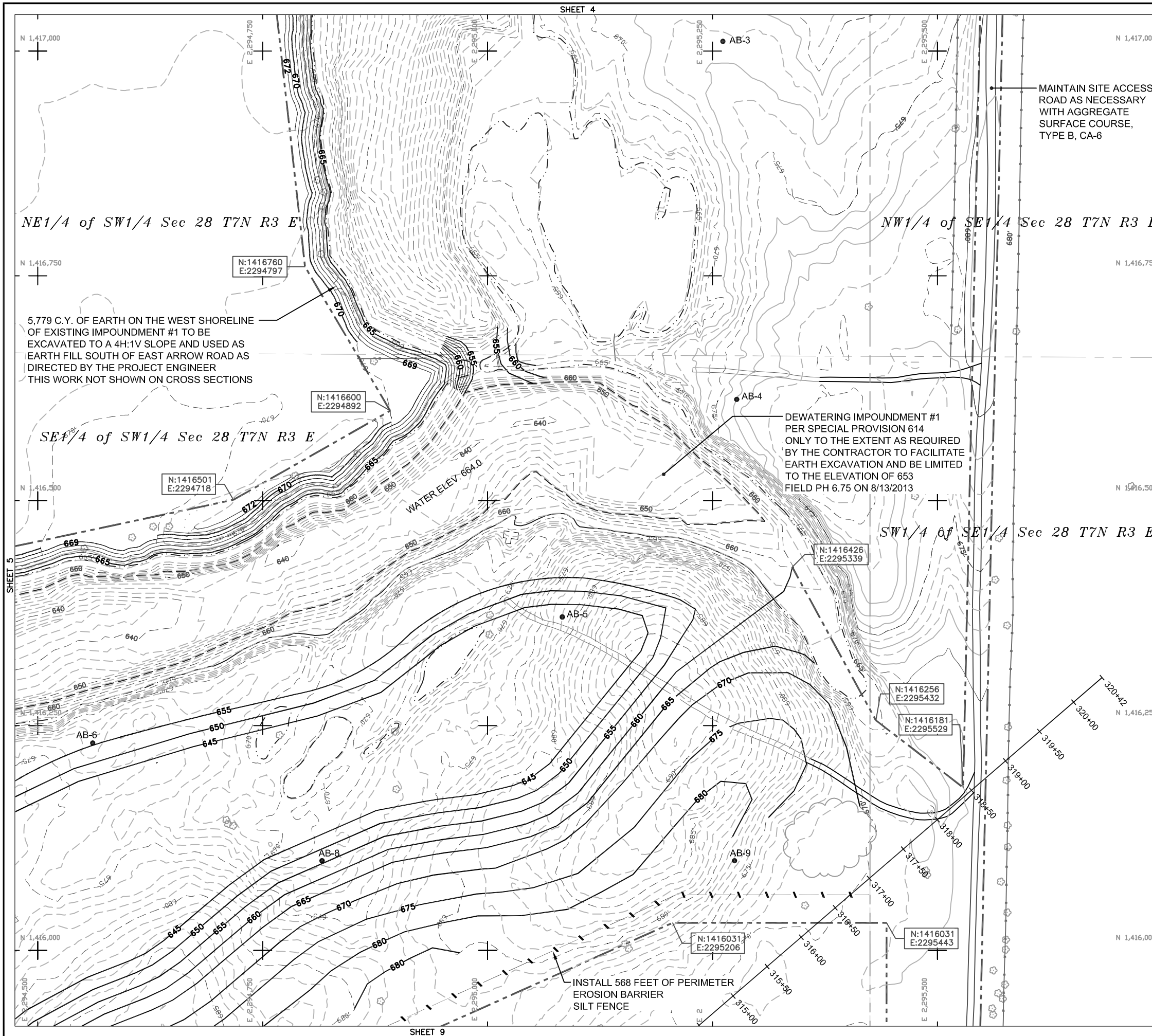


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MAINTAIN SITE ACCESS ROAD AS NECESSARY WITH AGGREGATE SURFACE COURSE, TYPE B, CA-6

NE1/4 of SW1/4 Sec 28 T7N R3 E

NW1/4 of SE1/4 Sec 28 T7N R3 E

SE1/4 of SW1/4 Sec 28 T7N R3 E

SW1/4 of SE1/4 Sec 28 T7N R3 E

5,779 C.Y. OF EARTH ON THE WEST SHORELINE OF EXISTING IMPOUNDMENT #1 TO BE EXCAVATED TO A 4H:1V SLOPE AND USED AS EARTH FILL SOUTH OF EAST ARROW ROAD AS DIRECTED BY THE PROJECT ENGINEER THIS WORK NOT SHOWN ON CROSS SECTIONS

DEWATERING IMPOUNDMENT #1 PER SPECIAL PROVISION 614 ONLY TO THE EXTENT AS REQUIRED BY THE CONTRACTOR TO FACILITATE EARTH EXCAVATION AND BE LIMITED TO THE ELEVATION OF 653 FIELD PH 6.75 ON 8/13/2013

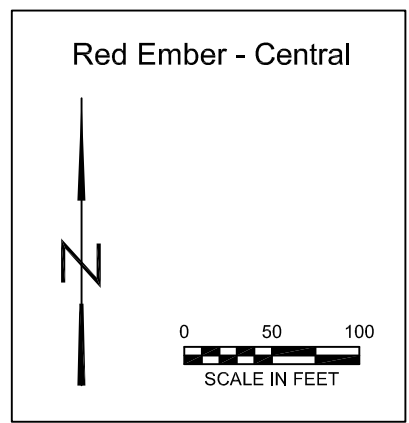
INSTALL 568 FEET OF PERIMETER EROSION BARRIER SILT FENCE

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Sheet Layout

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---	CONSTRUCTION LIMITS
---	EDGE OF ROAD
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---	EDGE OF WATER
● 12B-1	AML BORING
● AB-1	ANDREWS ENG. BORING
● HB-1	HOLCOMB FOUNDATION BORING
⊕	SURVEY CONTROL POINT

Legend

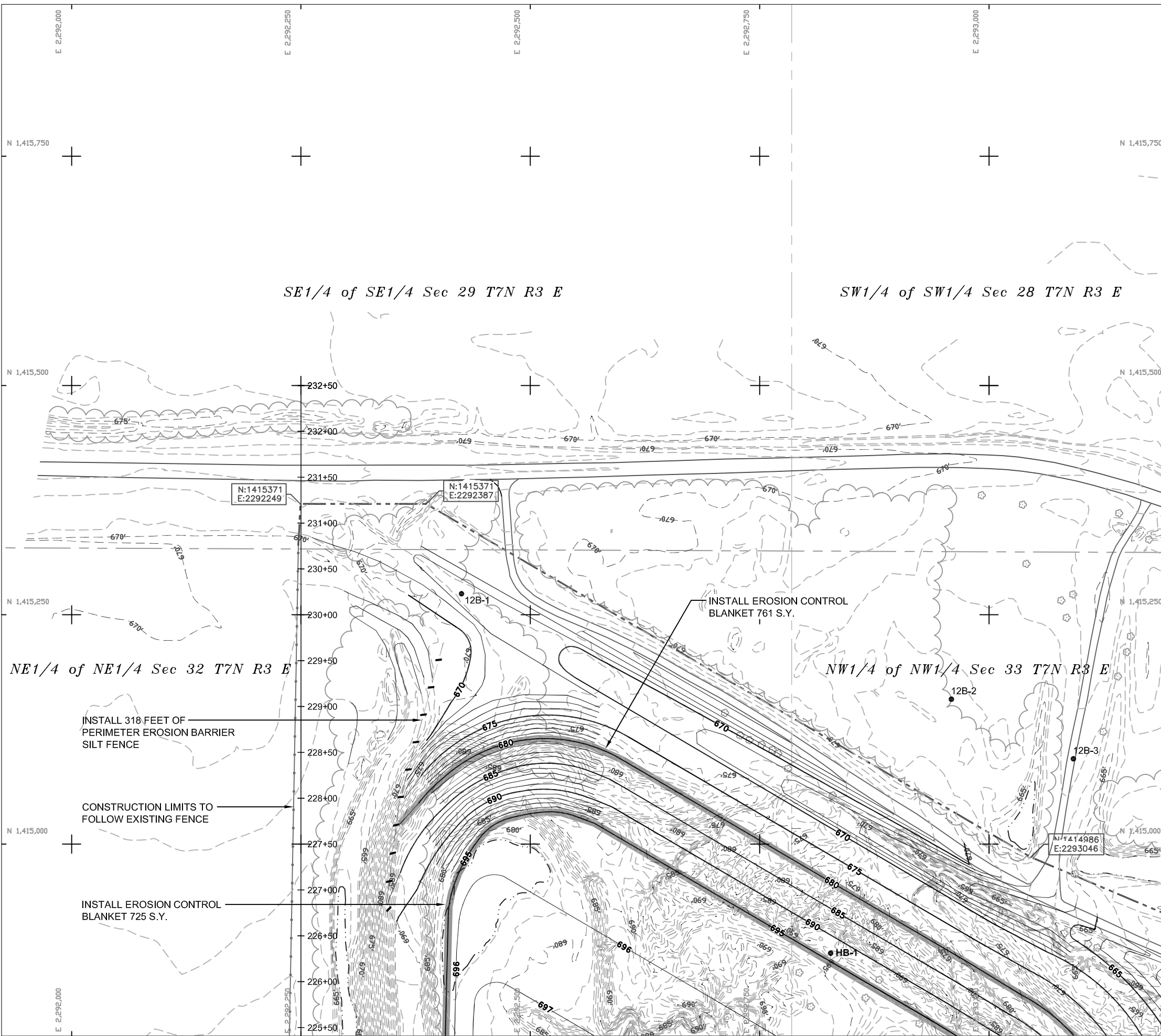


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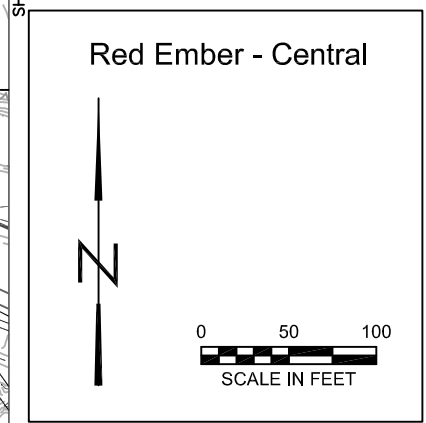
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— 400 —	PROPOSED CONTOUR
- - - - -	CONSTRUCTION LIMITS
— — — — —	EDGE OF ROAD
~~~~~	TREELINE
- - - - -	EDGE OF WATER
● 12B-1	AML BORING
● AB-1	ANDREWS ENG. BORING
● HB-1	HOLCOMB FOUNDATION BORING
⊕	SURVEY CONTROL POINT

Legend

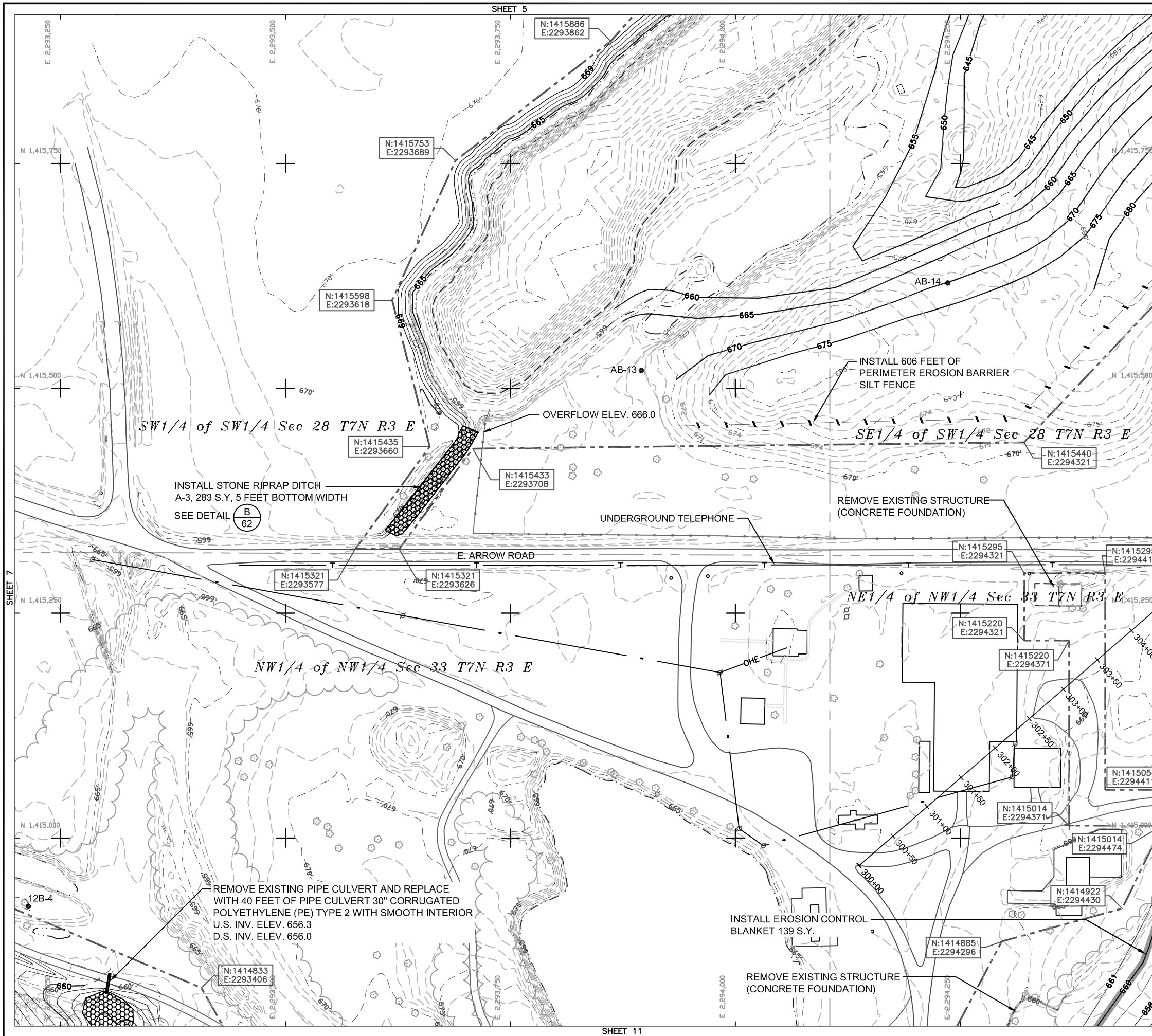


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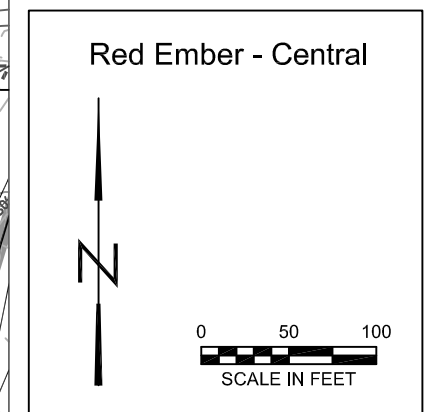


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---		EDGE OF ROAD
---		TREELINE
---		EDGE OF WATER
●	12B-1	AML BORING
●	AB-1	ANDREWS ENG. BORING
●	HB-1	HOLCOMB FOUNDATION BORING
⊕		SURVEY CONTROL POINT

Legend



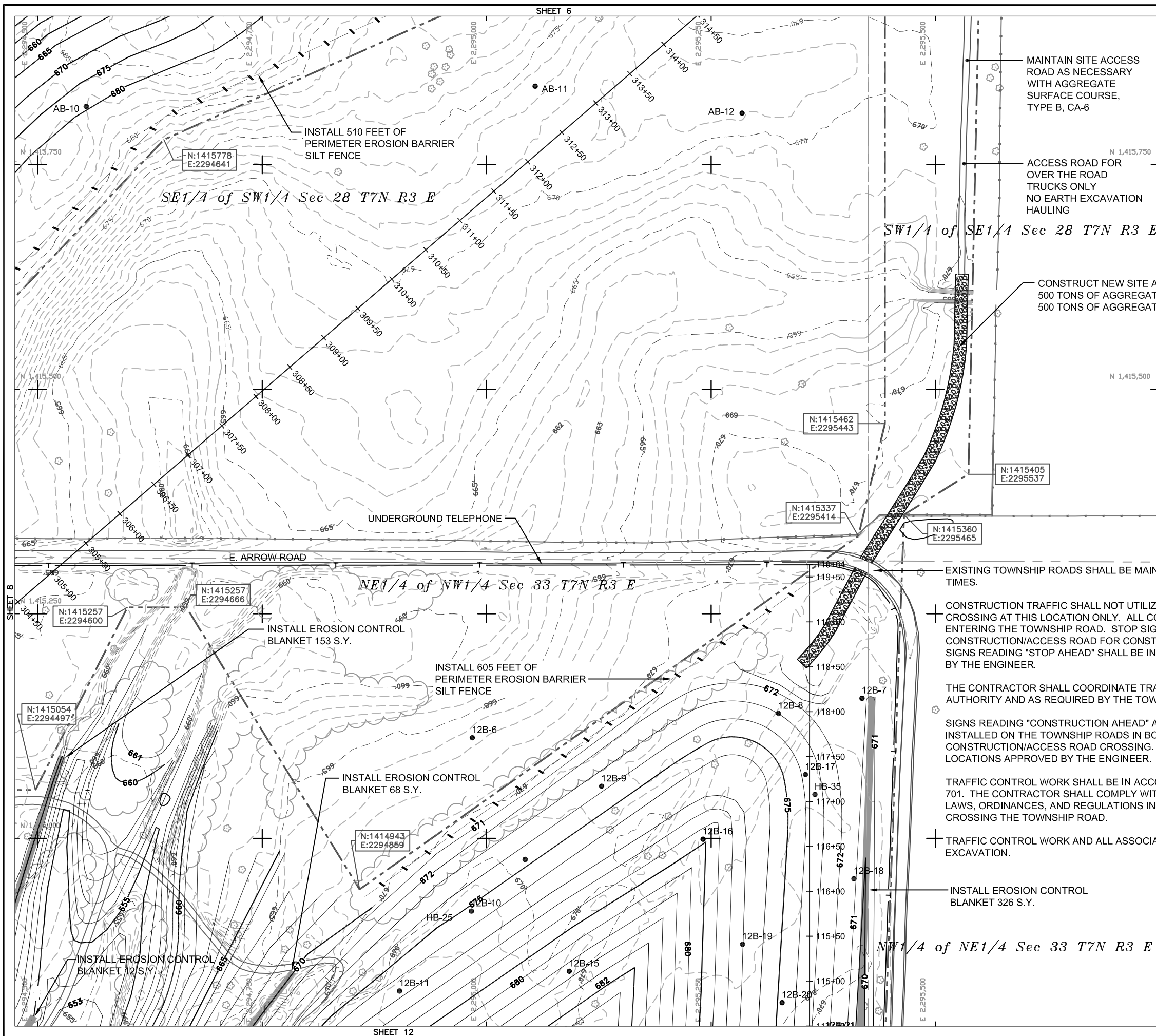
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— 400 —	PROPOSED CONTOUR
- - - -	CONSTRUCTION LIMITS
— — — —	EDGE OF ROAD
~~~~~	TREELINE
- · - · -	EDGE OF WATER
● 12B-1	AML BORING
● AB-1	ANDREWS ENG. BORING
● HB-1	HOLCOMB FOUNDATION BORING
⊕	SURVEY CONTROL POINT

400 Legend

MAINTAIN SITE ACCESS ROAD AS NECESSARY WITH AGGREGATE SURFACE COURSE, TYPE B, CA-6

ACCESS ROAD FOR OVER THE ROAD TRUCKS ONLY NO EARTH EXCAVATION HAULING

CONSTRUCT NEW SITE ACCESS ROAD
500 TONS OF AGGREGATE SURFACE COURSE, TYPE B, CA-1
500 TONS OF AGGREGATE SURFACE COURSE, TYPE B, CA-6

EXISTING TOWNSHIP ROADS SHALL BE MAINTAINED AND REMAIN OPEN TO TRAFFIC AT ALL TIMES.

CONSTRUCTION TRAFFIC SHALL NOT UTILIZE THE TOWNSHIP ROADS OTHER THAN CROSSING AT THIS LOCATION ONLY. ALL CONSTRUCTION TRAFFIC MUST STOP BEFORE ENTERING THE TOWNSHIP ROAD. STOP SIGNS ON POSTS SHALL BE INSTALLED ON THE CONSTRUCTION/ACCESS ROAD FOR CONSTRUCTION TRAFFIC IN BOTH DIRECTIONS. SIGNS READING "STOP AHEAD" SHALL BE INSTALLED ON POSTS AT LOCATIONS APPROVED BY THE ENGINEER.

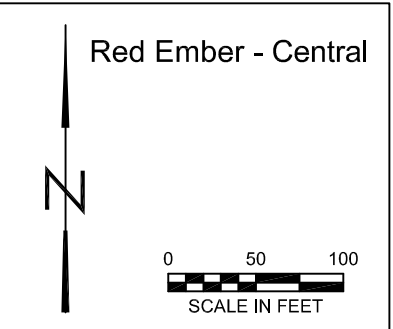
THE CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL WITH THE TOWNSHIP ROAD AUTHORITY AND AS REQUIRED BY THE TOWNSHIP ROAD AUTHORITY.

SIGNS READING "CONSTRUCTION AHEAD" AND "CAUTION TRUCK CROSSING" SHALL BE INSTALLED ON THE TOWNSHIP ROADS IN BOTH DIRECTIONS FROM THE CONSTRUCTION/ACCESS ROAD CROSSING. SIGNS SHALL BE ON POSTS AND SHALL BE AT LOCATIONS APPROVED BY THE ENGINEER.

TRAFFIC CONTROL WORK SHALL BE IN ACCORD WITH APPLICABLE SECTIONS OF ARTICLE 701. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL AND STATE LAWS, AND LOCAL LAWS, ORDINANCES, AND REGULATIONS IN CONDUCTING THE WORK AND WHEN CROSSING THE TOWNSHIP ROAD.

TRAFFIC CONTROL WORK AND ALL ASSOCIATED COSTS SHALL BE INCIDENTAL TO EARTH EXCAVATION.

INSTALL EROSION CONTROL BLANKET 326 S.Y.

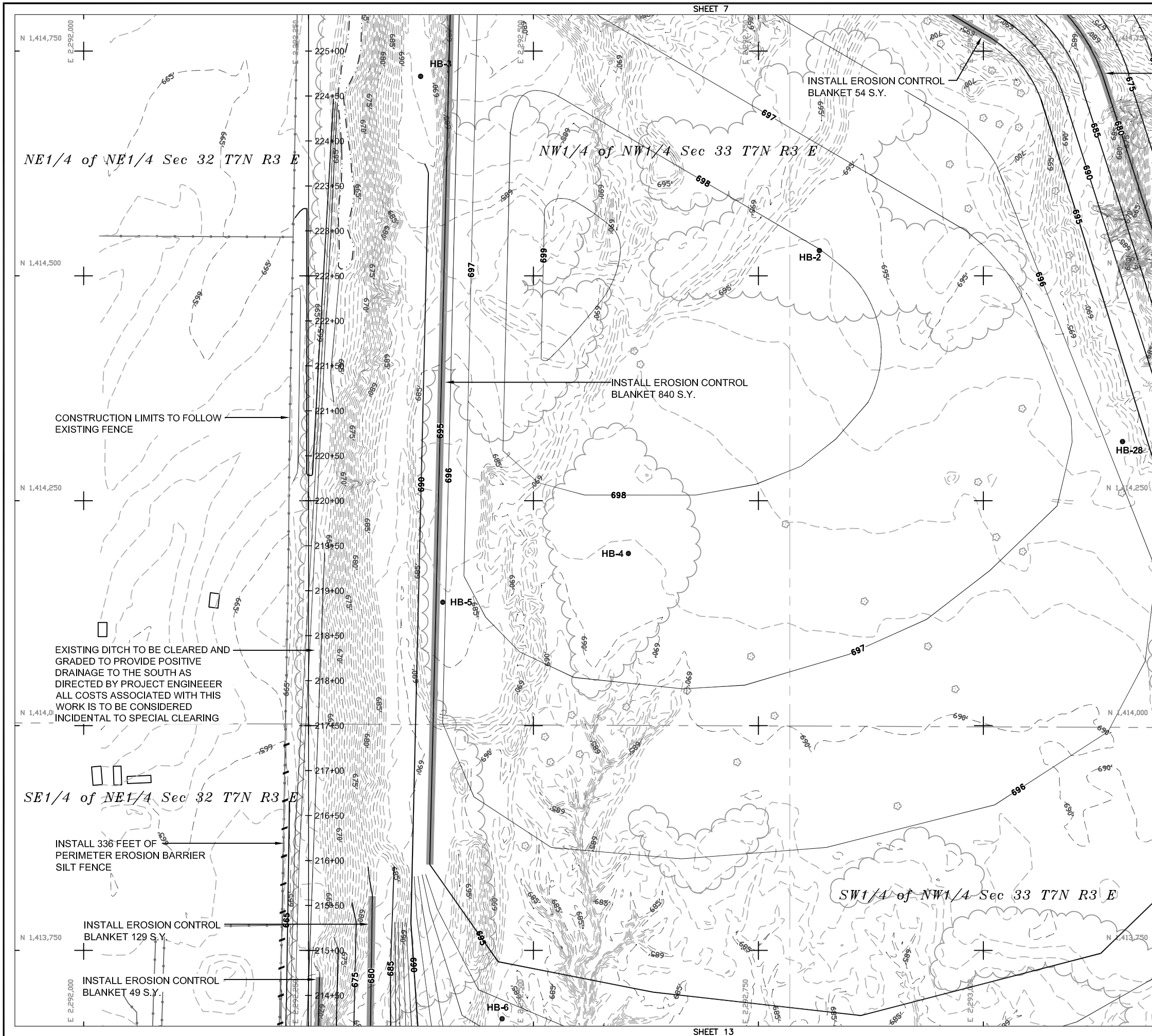


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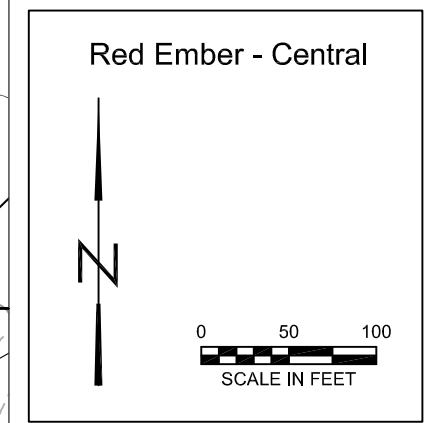


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	EXISTING CONTOUR
	PROPOSED CONTOUR
	CONSTRUCTION LIMITS
	EDGE OF ROAD
	TREELINE
	EDGE OF WATER
	12B-1 AML BORING
	AB-1 ANDREWS ENG. BORING
	HB-1 HOLCOMB FOUNDATION BORING
	SURVEY CONTROL POINT

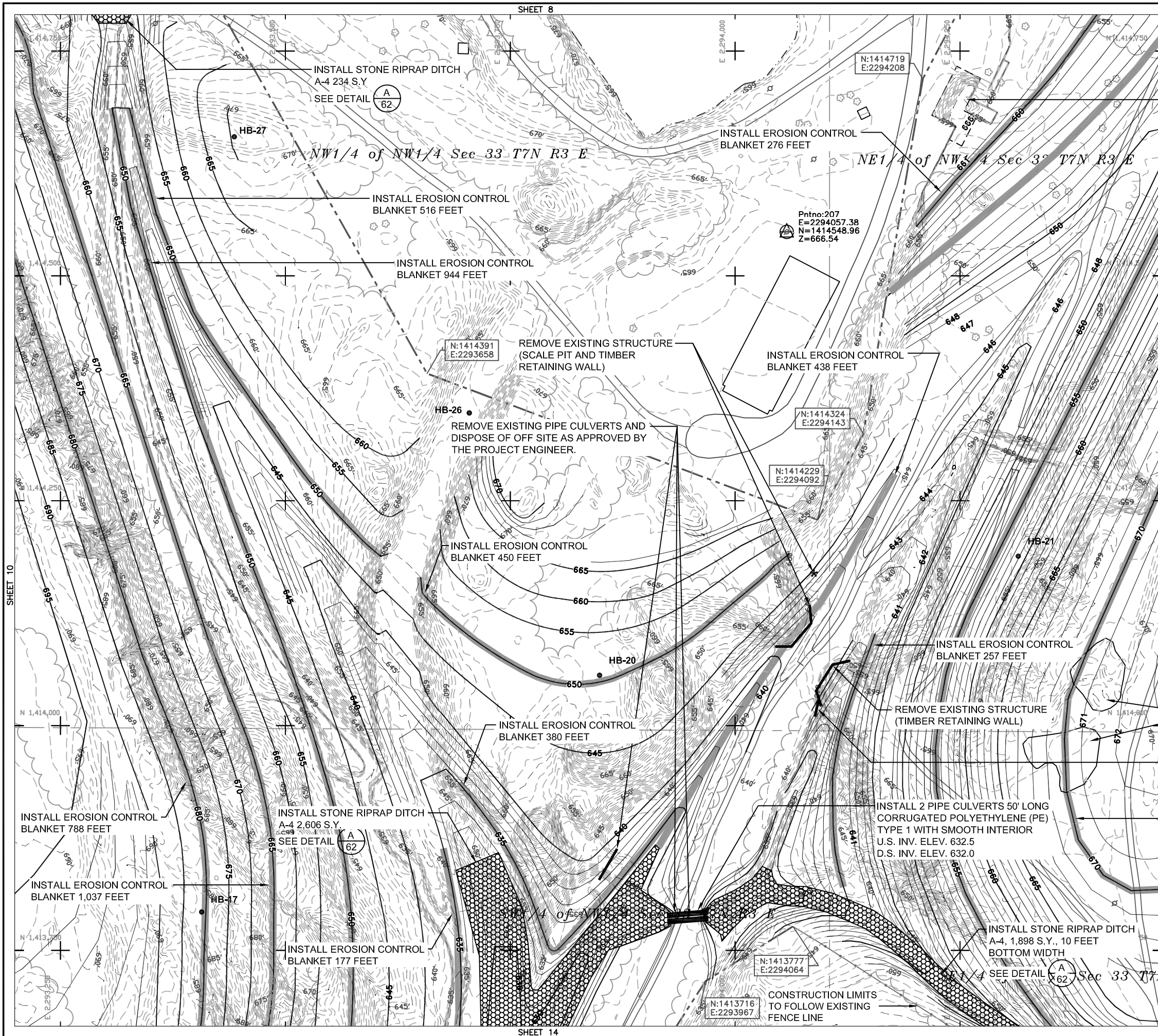


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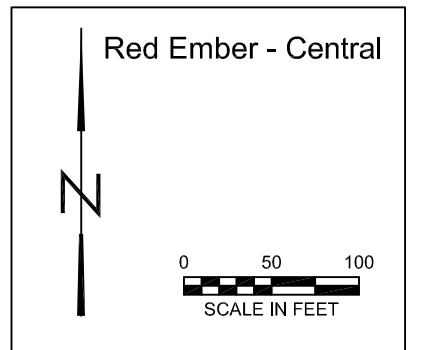
- INSTALL EROSION CONTROL BLANKET 369 FEET
- REMOVE EXISTING STRUCTURE (CONCRETE FOUNDATION)
- INSTALL EROSION CONTROL BLANKET 870 FEET
- INSTALL EROSION CONTROL BLANKET 276 FEET
- INSTALL EROSION CONTROL BLANKET 516 FEET
- INSTALL EROSION CONTROL BLANKET 944 FEET
- INSTALL EROSION CONTROL BLANKET 438 FEET
- INSTALL EROSION CONTROL BLANKET 450 FEET
- INSTALL EROSION CONTROL BLANKET 257 FEET
- INSTALL EROSION CONTROL BLANKET 380 FEET
- INSTALL EROSION CONTROL BLANKET 788 FEET
- INSTALL EROSION CONTROL BLANKET 1,037 FEET
- INSTALL EROSION CONTROL BLANKET 177 FEET
- INSTALL EROSION CONTROL BLANKET 478 FEET

Sheet Layout

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- Legend
- EXISTING CONTOUR
 - 400 — PROPOSED CONTOUR
 - - - CONSTRUCTION LIMITS
 - EDGE OF ROAD
 - TREELINE
 - 400 — EDGE OF WATER
 - 12B-1 AML BORING
 - AB-1 ANDREWS ENG. BORING
 - HB-1 HOLCOMB FOUNDATION BORING
 - ⊕ SURVEY CONTROL POINT

- REMOVE EXISTING DEBRIS
- REMOVE EXISTING STRUCTURE (TIMBER RETAINING WALL)
- REMOVE EXISTING PIPE CULVERT AND DISPOSE OF AS DIRECTED BY PROJECT ENGINEER
- INSTALL EROSION CONTROL BLANKET 478 FEET

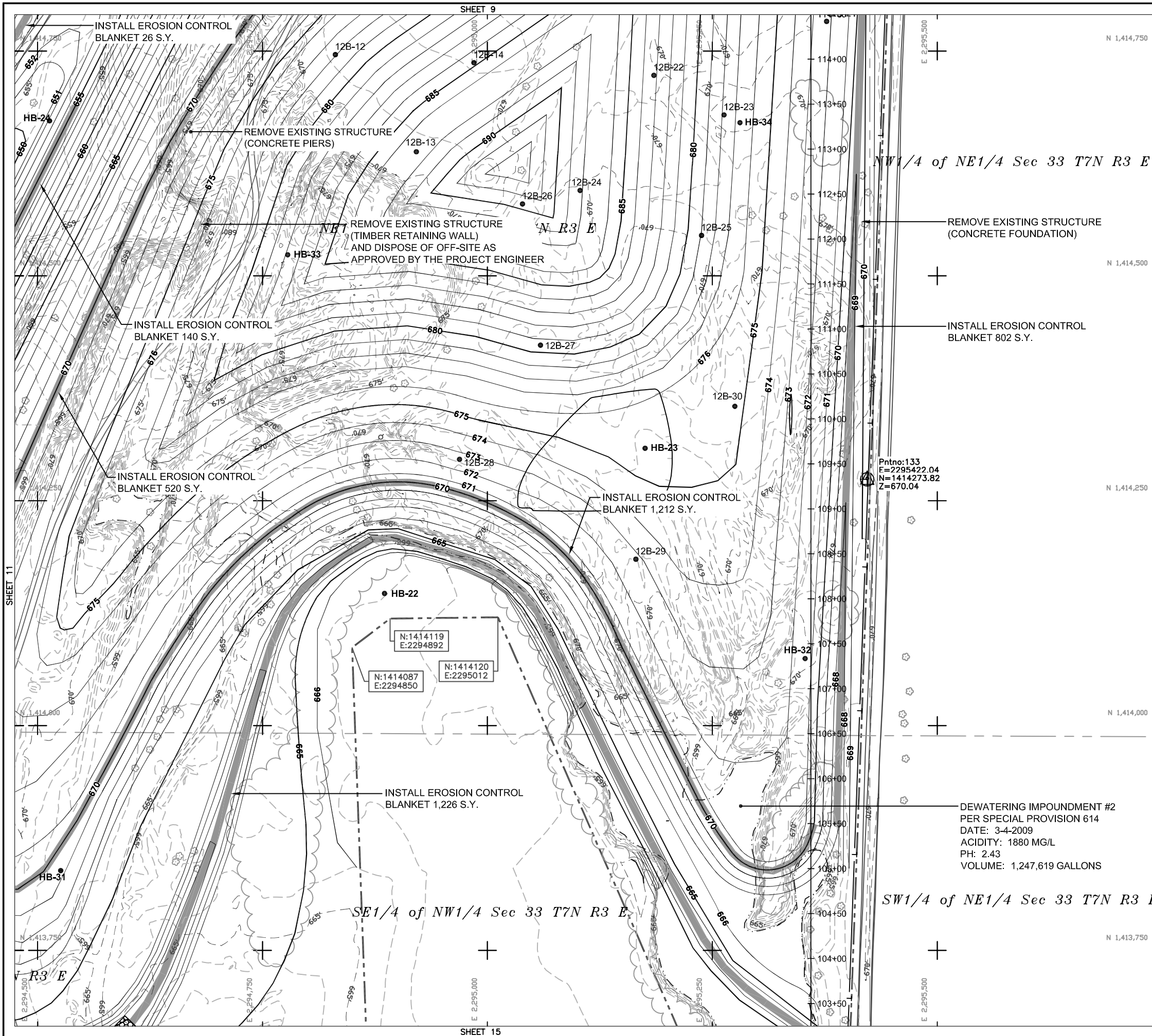


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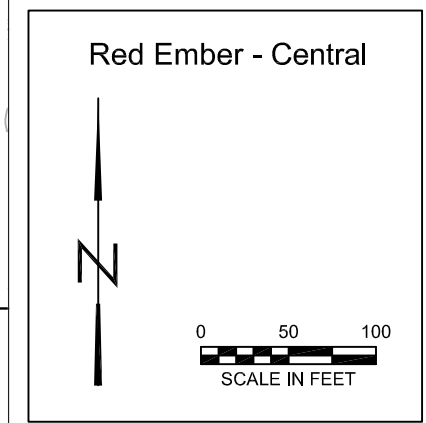


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- 400 --- EXISTING CONTOUR
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- - - - - CONSTRUCTION LIMITS
- — — — — EDGE OF ROAD
- ~~~~~ TREELINE
- - - - - EDGE OF WATER
- 12B-1 AML BORING
- AB-1 ANDREWS ENG. BORING
- HB-1 HOLCOMB FOUNDATION BORING
- ⊕ SURVEY CONTROL POINT

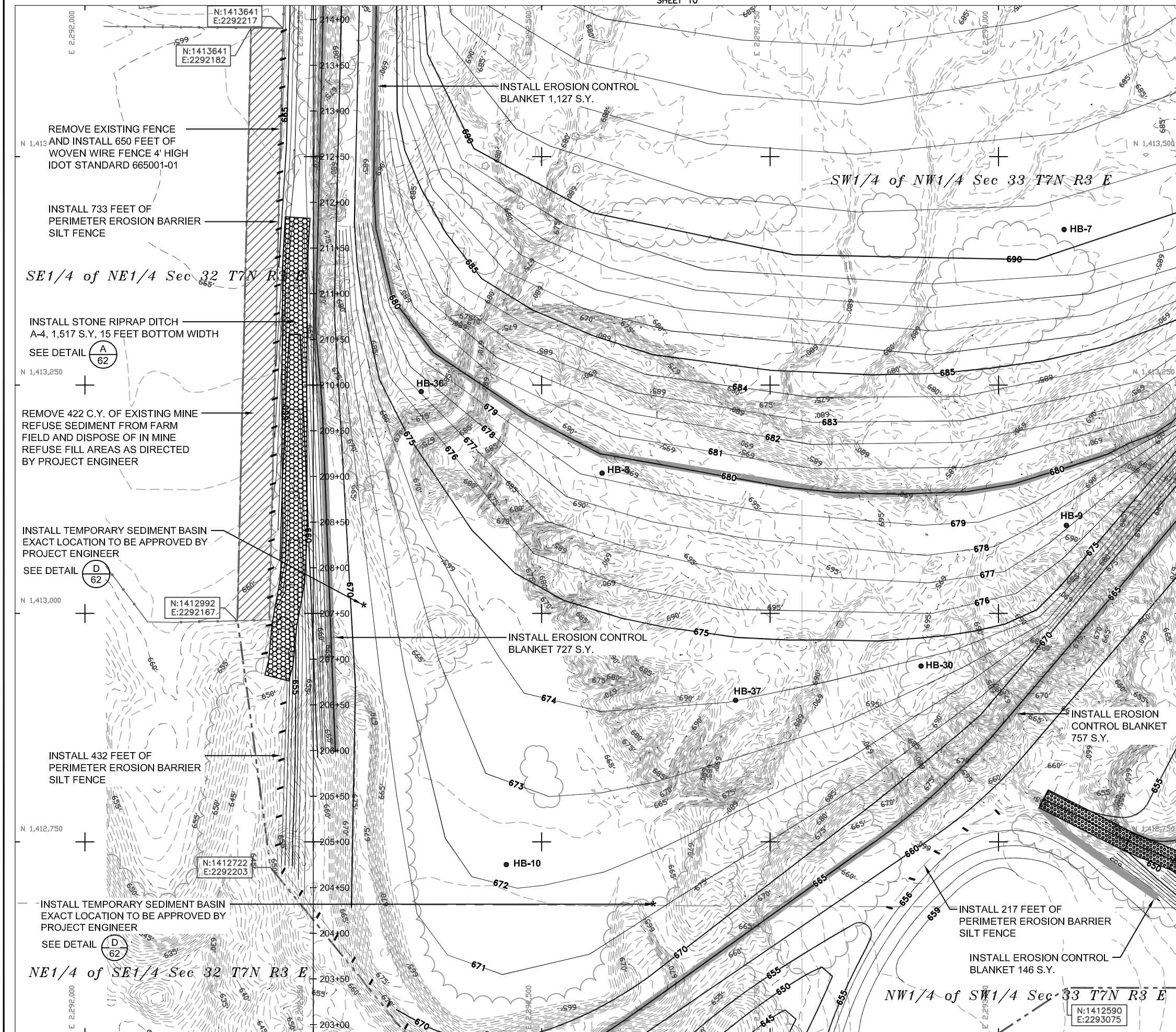


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REMOVE EXISTING FENCE AND INSTALL 650 FEET OF WOVEN WIRE FENCE 4' HIGH IDOT STANDARD 665001-01

INSTALL 733 FEET OF PERIMETER EROSION BARRIER SILT FENCE

SE1/4 of NE1/4 Sec 32 T7N R3 E

INSTALL STONE RIPRAP DITCH A-4, 1,517 S.Y., 15 FEET BOTTOM WIDTH
SEE DETAIL (A) 62

REMOVE 422 C.Y. OF EXISTING MINE REFUSE SEDIMENT FROM FARM FIELD AND DISPOSE OF IN MINE REFUSE FILL AREAS AS DIRECTED BY PROJECT ENGINEER

INSTALL TEMPORARY SEDIMENT BASIN EXACT LOCATION TO BE APPROVED BY PROJECT ENGINEER
SEE DETAIL (D) 62

INSTALL 432 FEET OF PERIMETER EROSION BARRIER SILT FENCE

INSTALL TEMPORARY SEDIMENT BASIN EXACT LOCATION TO BE APPROVED BY PROJECT ENGINEER
SEE DETAIL (D) 62

NE1/4 of SE1/4 Sec 32 T7N R3 E

INSTALL EROSION CONTROL BLANKET 1,127 S.Y.

INSTALL EROSION CONTROL BLANKET 727 S.Y.

INSTALL EROSION CONTROL BLANKET 757 S.Y.

INSTALL 217 FEET OF PERIMETER EROSION BARRIER SILT FENCE

INSTALL EROSION CONTROL BLANKET 146 S.Y.

NW1/4 of SW1/4 Sec 33 T7N R3 E

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13	14	15
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Sheet Layout

- 400 --- EXISTING CONTOUR
- 400 — PROPOSED CONTOUR
- - - CONSTRUCTION LIMITS
- EDGE OF ROAD
- TREELINE
- - - EDGE OF WATER
- 12B-1 AML BORING
- AB-1 ANDREWS ENG. BORING
- HB-1 HOLCOMB FOUNDATION BORING
- ⊕ SURVEY CONTROL POINT

Legend

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INSTALL EROSION CONTROL BLANKET 48 S.Y.

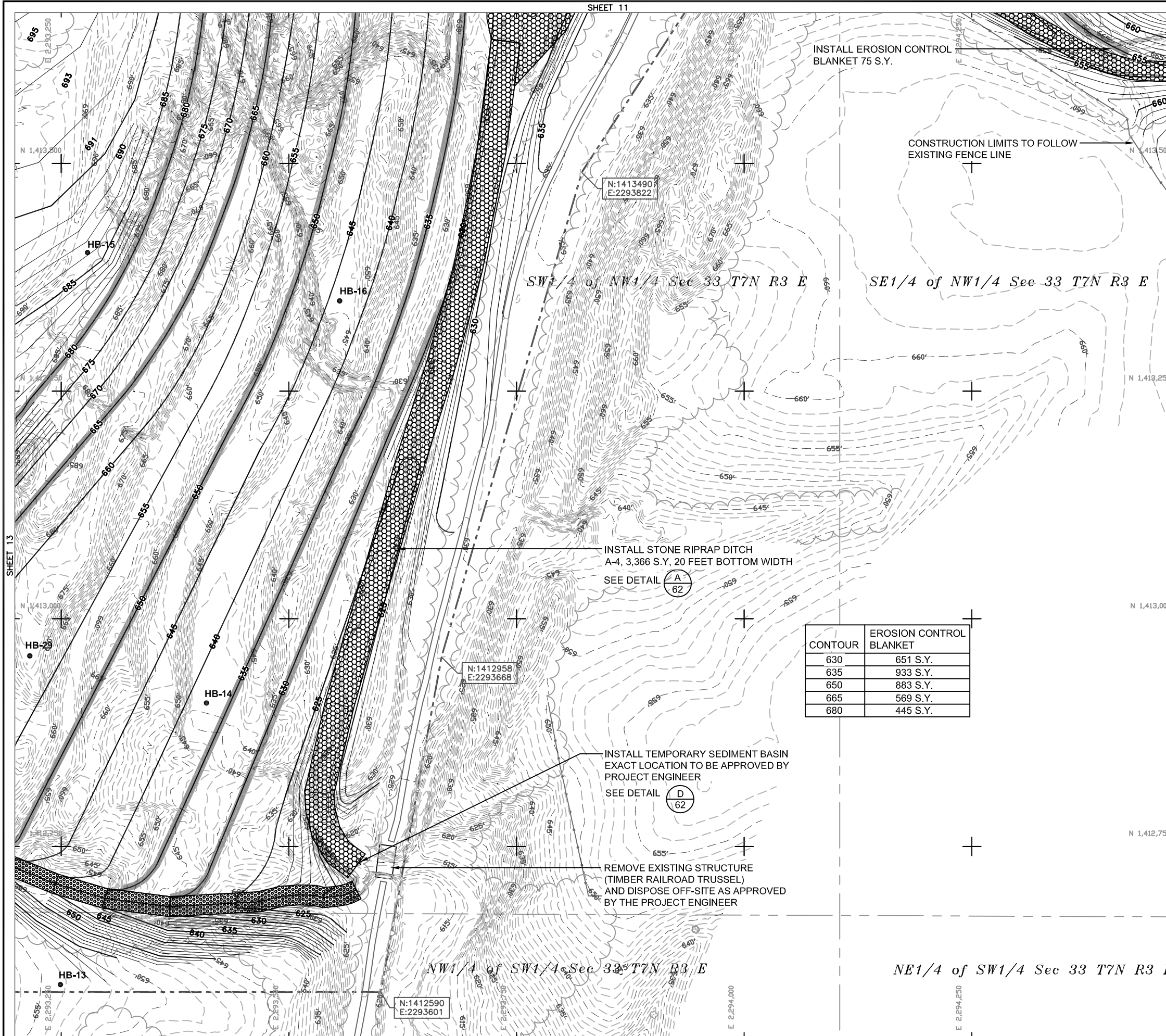
INSTALL STONE RIPRAP DITCH A-3, 1,343 S.Y., 10 FEET BOTTOM WIDTH
SEE DETAIL (B) 62

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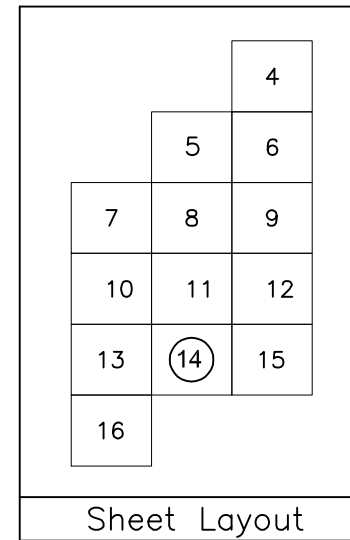
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Drawn By: _____ Date: 8/2013
V.P. _____
Checked By: _____

Existing & Proposed
Conditions
Sheet
13 of 62



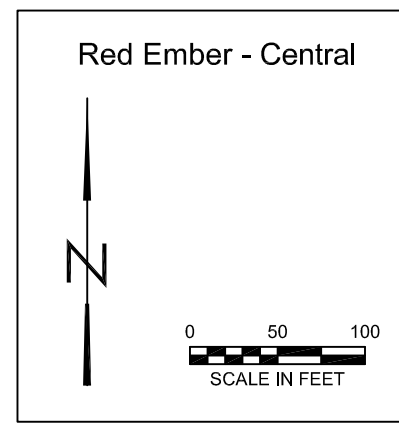
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635	933 S.Y.
650	883 S.Y.
665	569 S.Y.
680	445 S.Y.

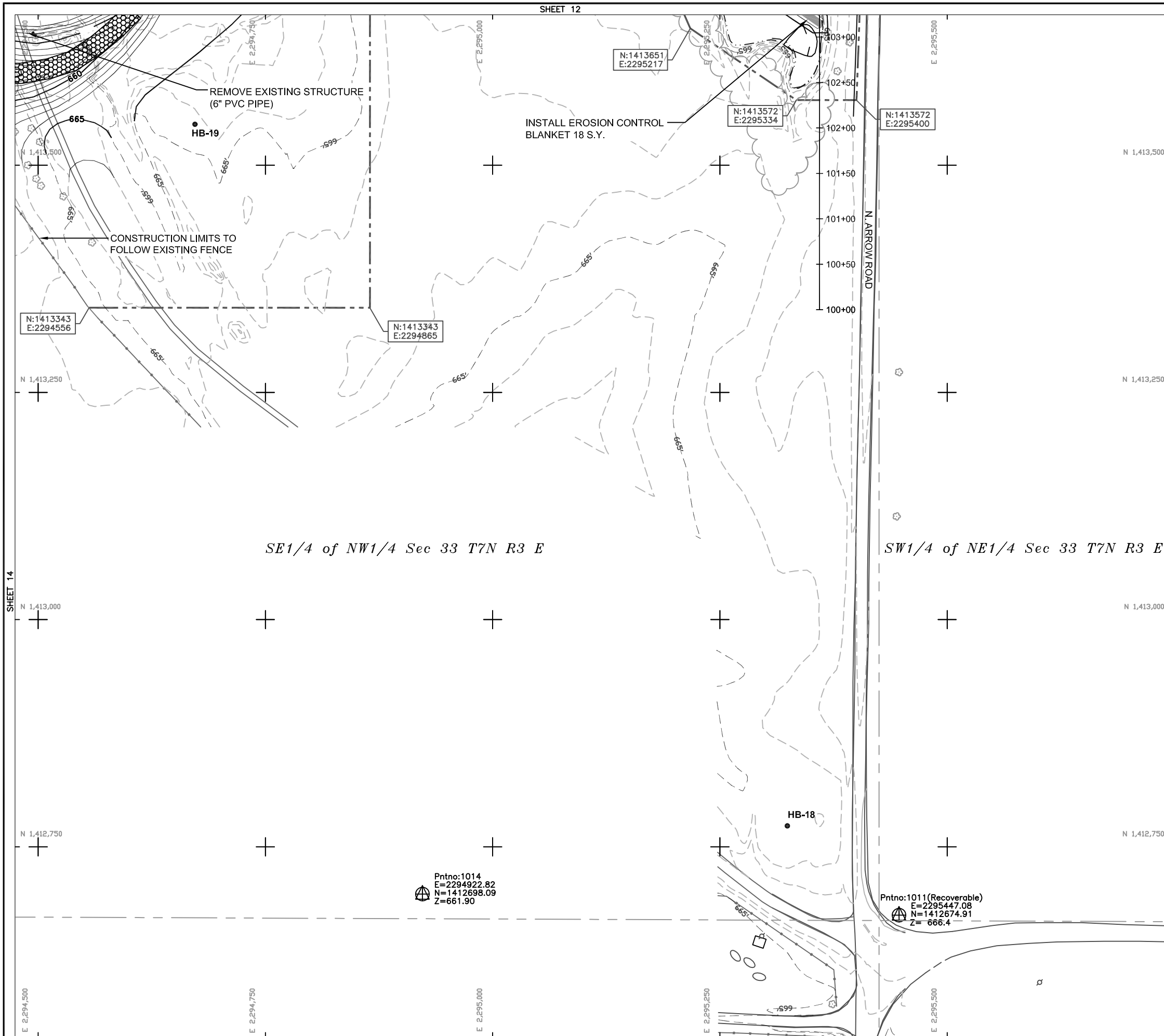


SHEET 15

--- 400 ---	EXISTING CONTOUR
— 400 —	PROPOSED CONTOUR
- - - - -	CONSTRUCTION LIMITS
— — — — —	EDGE OF ROAD
~~~~~	TREELINE
- - - - -	EDGE OF WATER
● 12B-1	AML BORING
● AB-1	ANDREWS ENG. BORING
● HB-1	HOLCOMB FOUNDATION BORING
⊕	SURVEY CONTROL POINT

Legend





SHEET 12

SHEET 14

SE1/4 of NW1/4 Sec 33 T7N R3 E

SW1/4 of NE1/4 Sec 33 T7N R3 E

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N=1412698.09  
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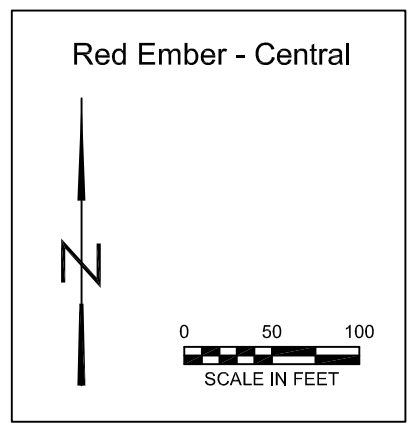
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		4
	5	6
7	8	9
10	11	12
13	14	15
16		

Sheet Layout

---400---	EXISTING CONTOUR
—400—	PROPOSED CONTOUR
- - -	CONSTRUCTION LIMITS
—	EDGE OF ROAD
~~~~~	TREELINE
- · - · -	EDGE OF WATER
●	12B-1 AML BORING
●	AB-1 ANDREWS ENG. BORING
●	HB-1 HOLCOMB FOUNDATION BORING
⊕	SURVEY CONTROL POINT

Legend

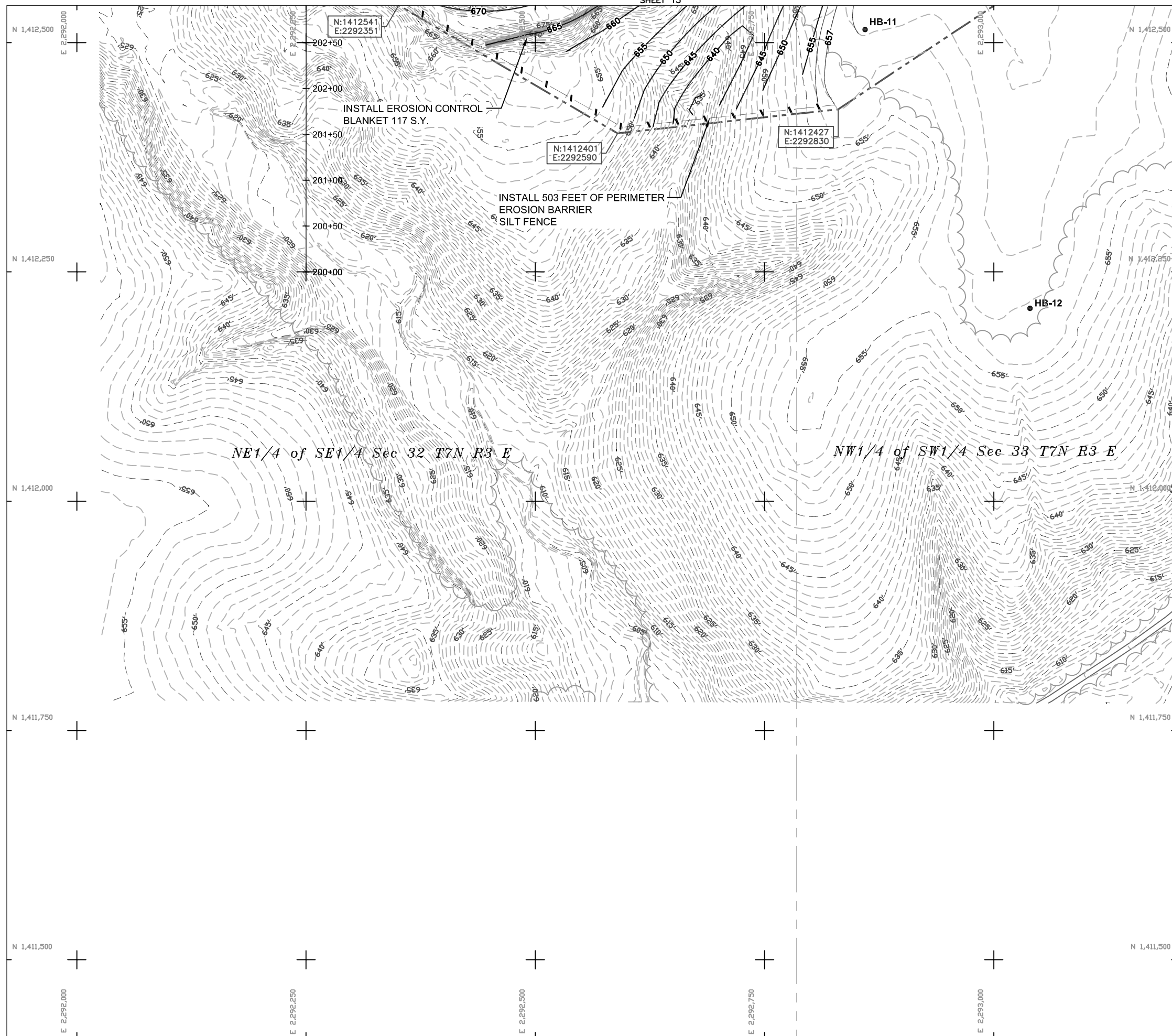


State of Illinois
Department of Natural Resources

Red Ember - Central
Reclamation Project
AML-GFuE-1304
Fulton County

Drawn By: _____
Checked By: _____
Date: 8/2013
V.P. _____

Existing & Proposed
Conditions
Sheet
15 of 62

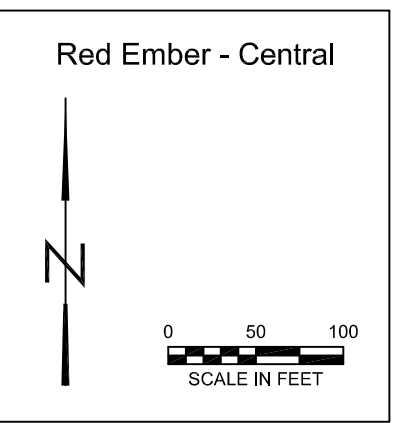


		4
	5	6
7	8	9
10	11	12
13	14	15
16		

Sheet Layout

--- 400 ---	EXISTING CONTOUR
— 400 —	PROPOSED CONTOUR
---	CONSTRUCTION LIMITS
---	EDGE OF ROAD
~~~~~	TREELINE
---	EDGE OF WATER
● 12B-1	AML BORING
● AB-1	ANDREWS ENG. BORING
● HB-1	HOLCOMB FOUNDATION BORING
⊕	SURVEY CONTROL POINT

Legend



State of Illinois  
Department of Natural Resources

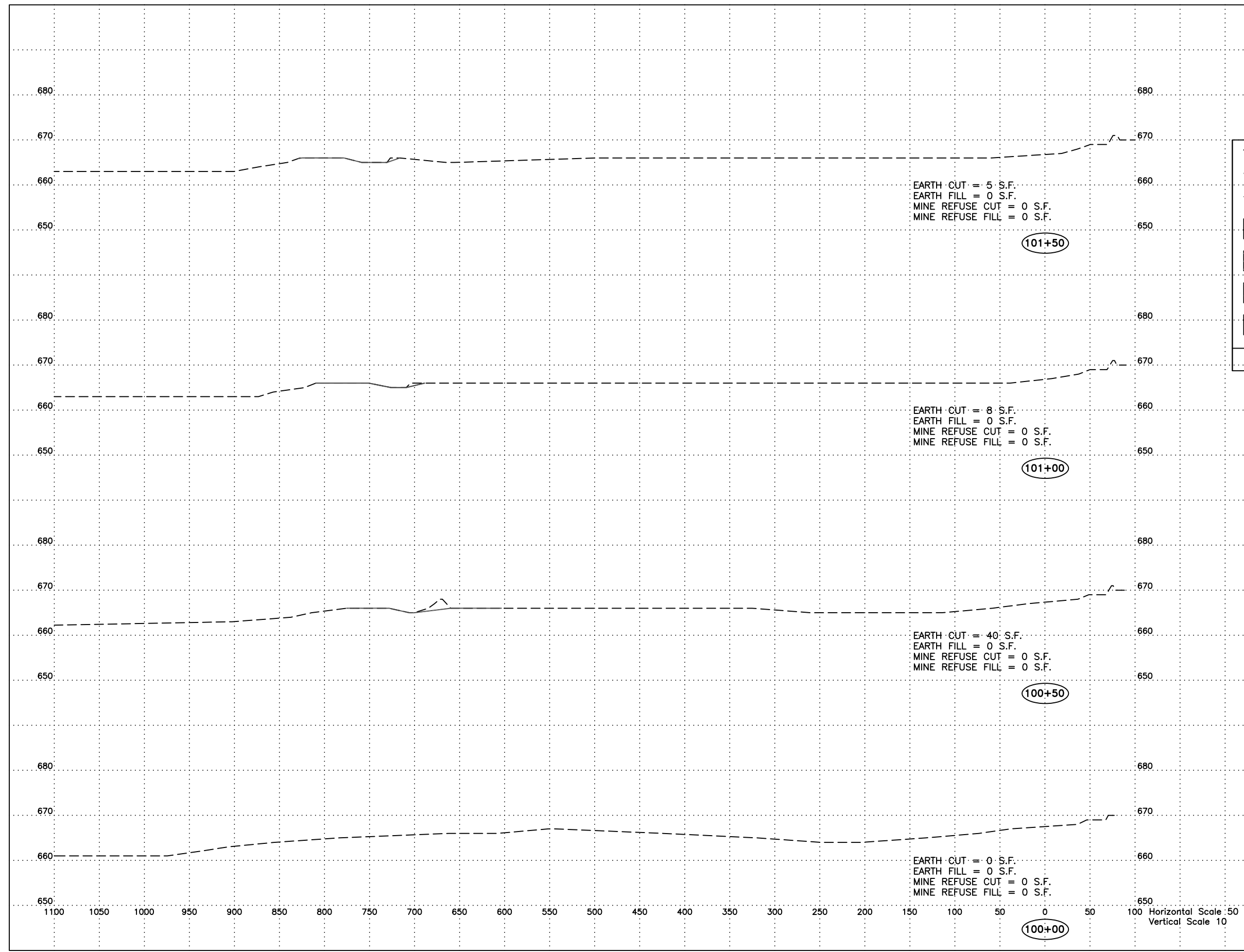
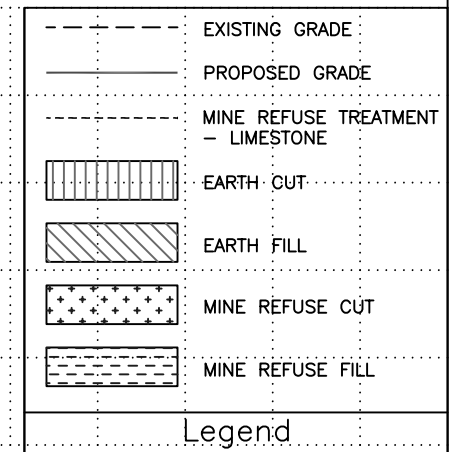
Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

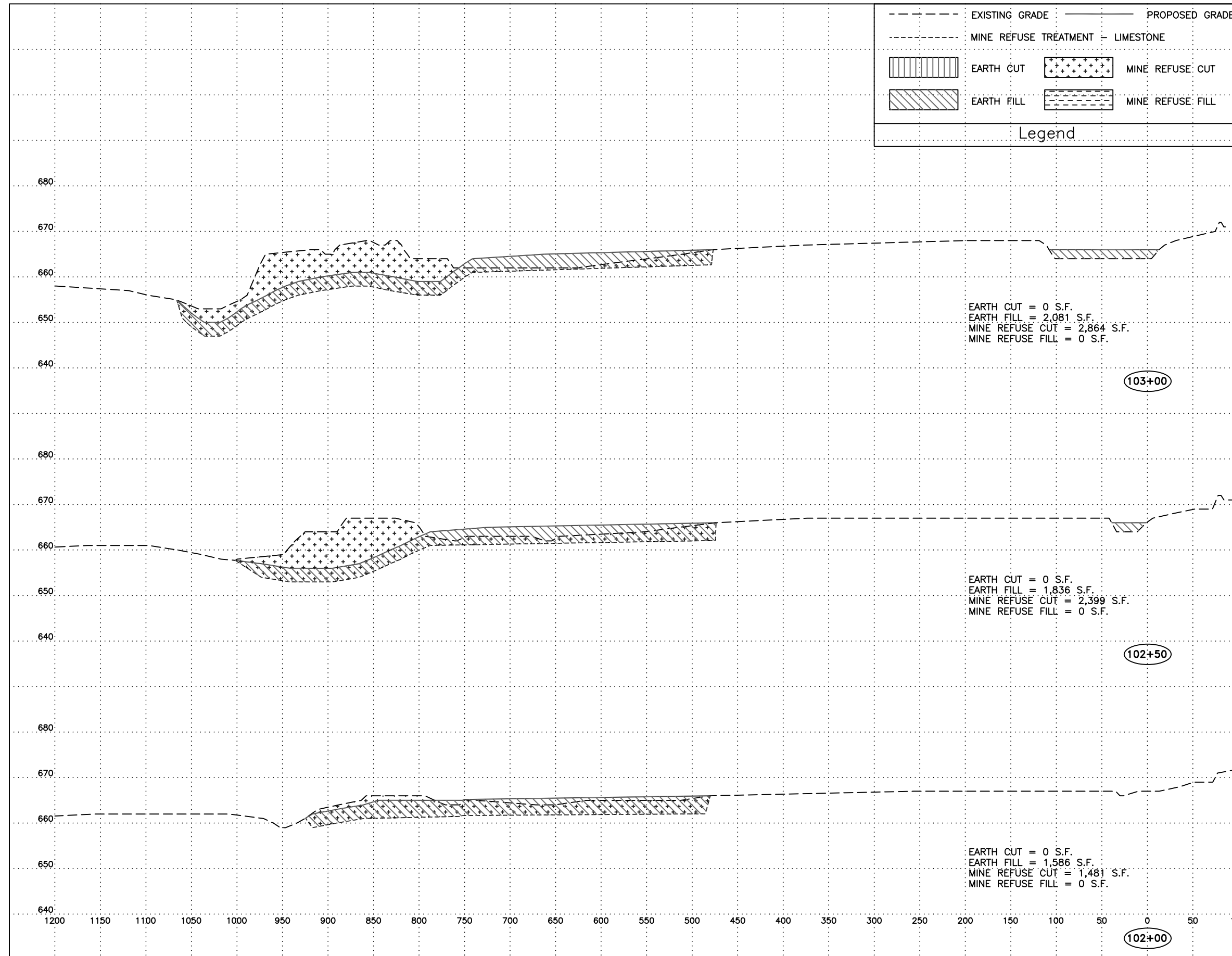
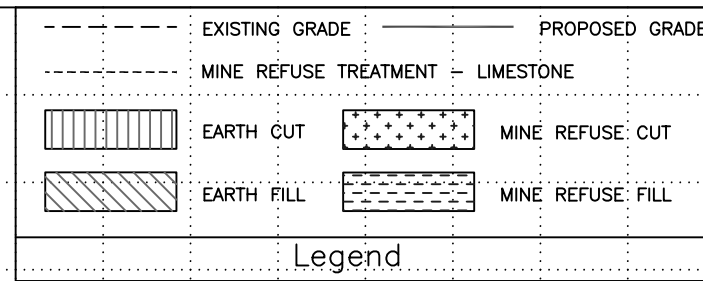
Drawn By: _____ V.P. _____ Date: 8/2013  
Checked By: _____

Existing & Proposed  
Conditions  
Sheet  
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Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County





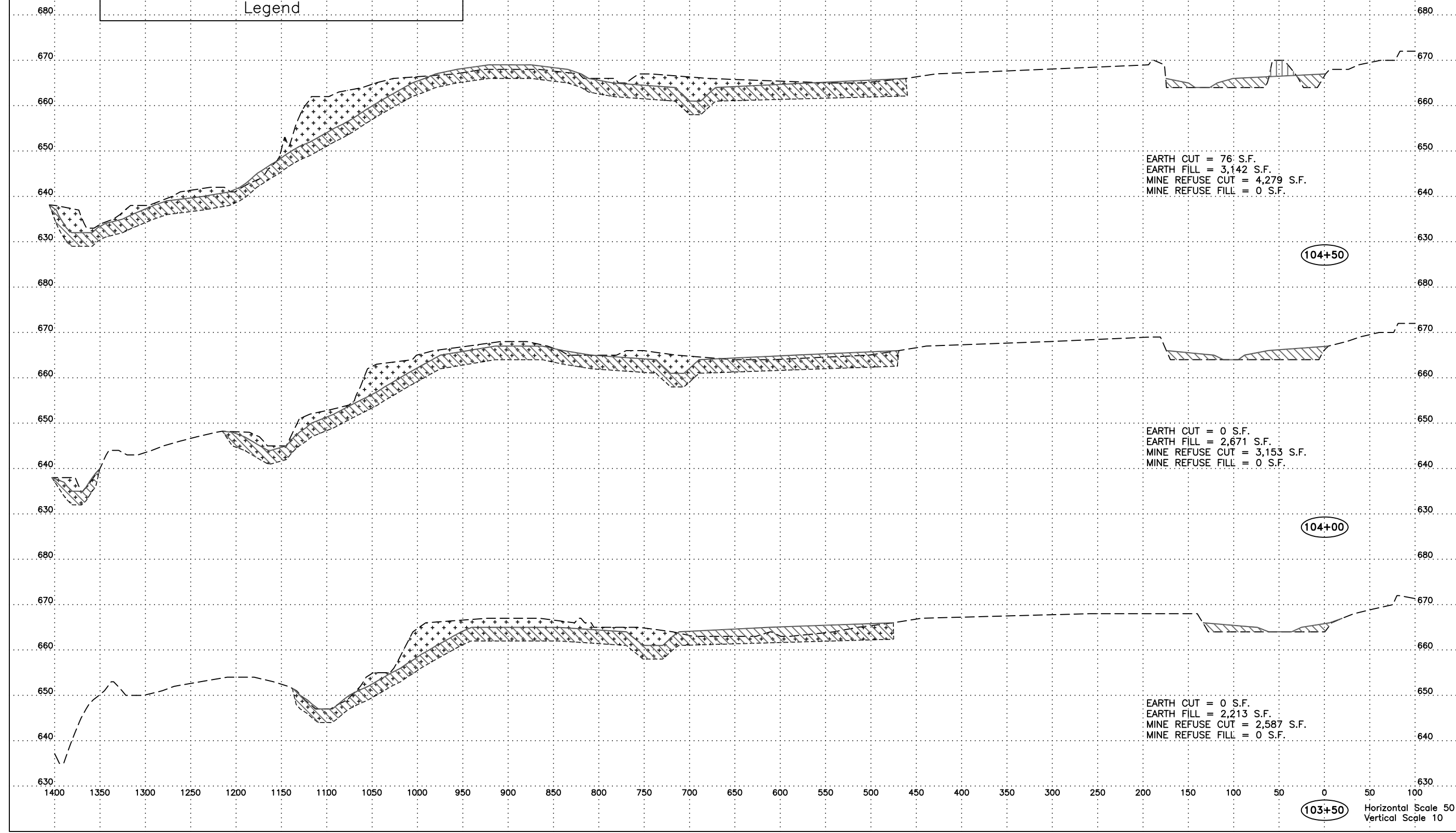
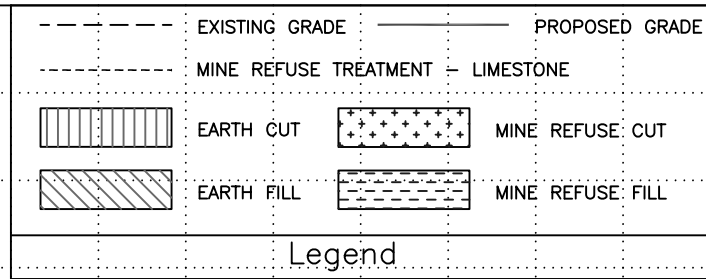
103+00

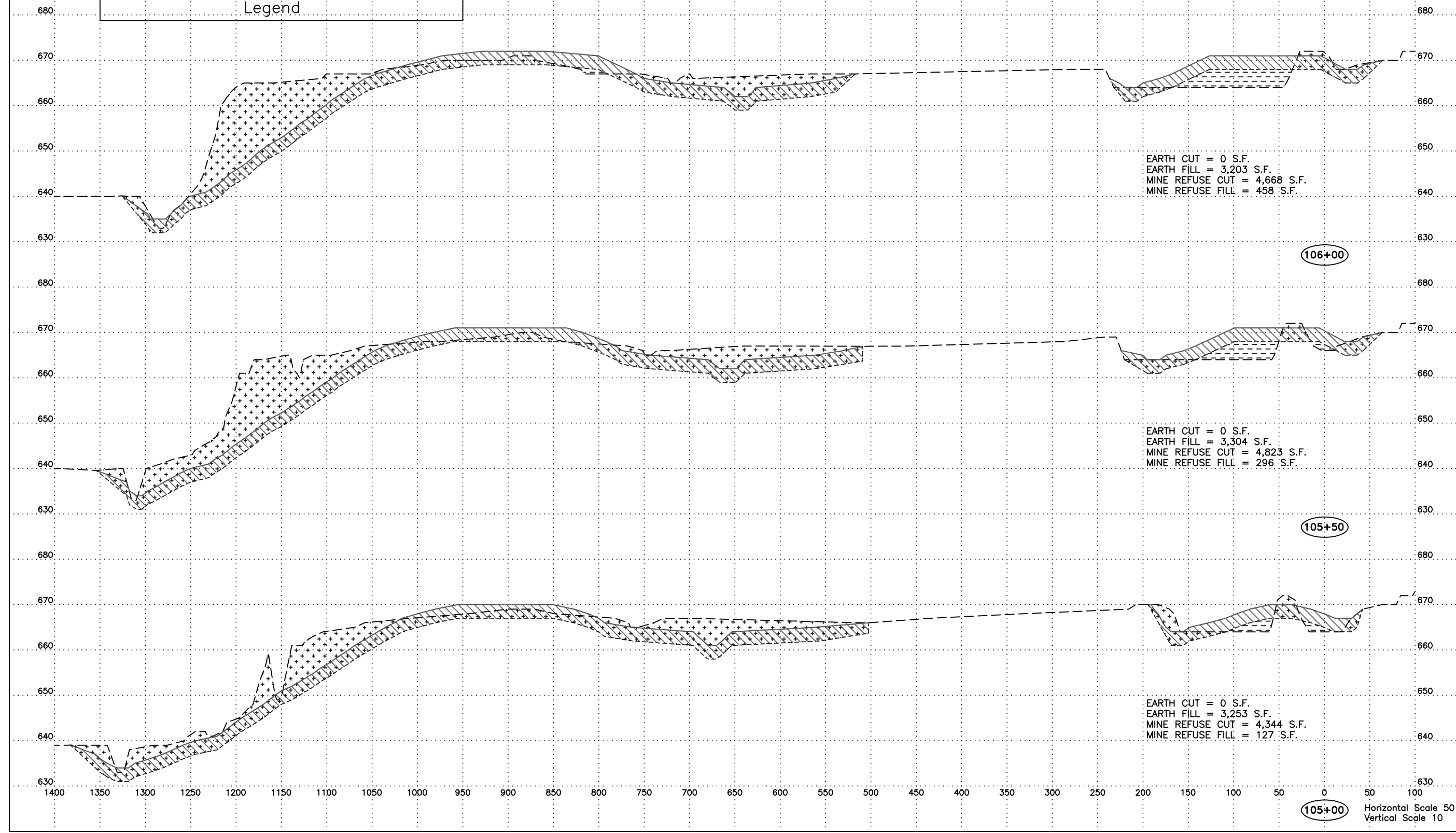
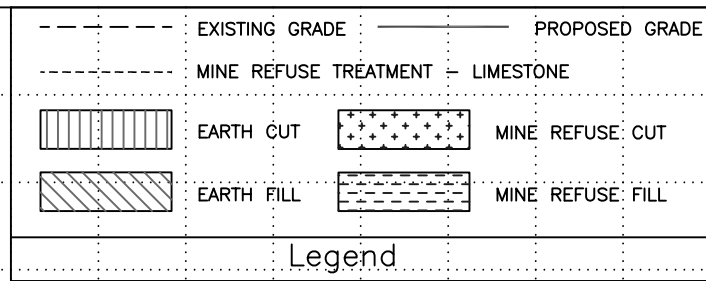
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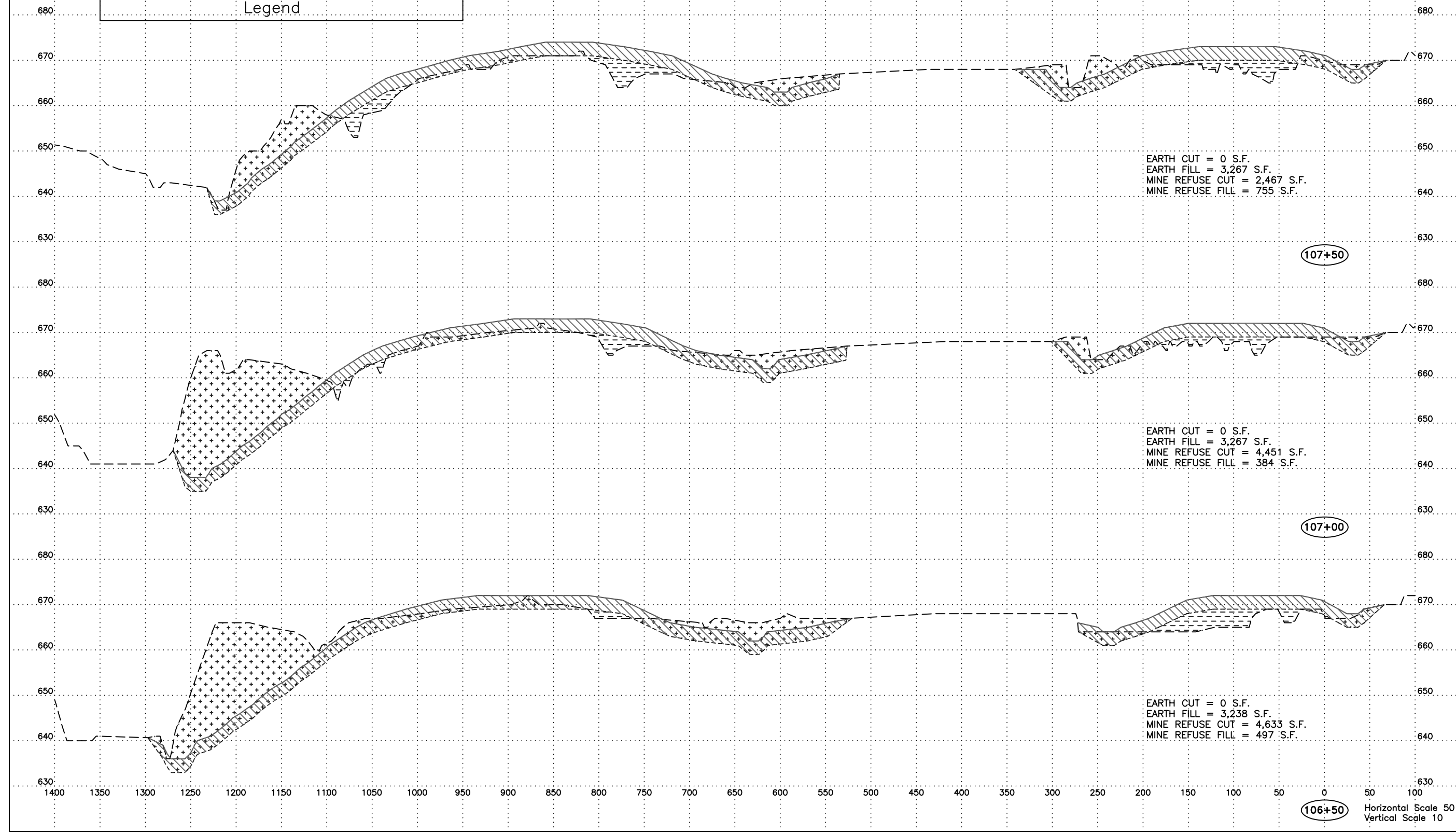
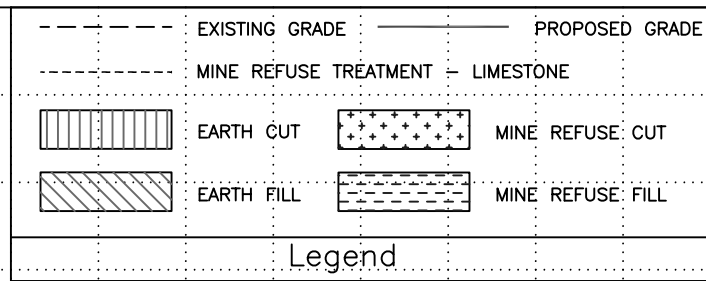
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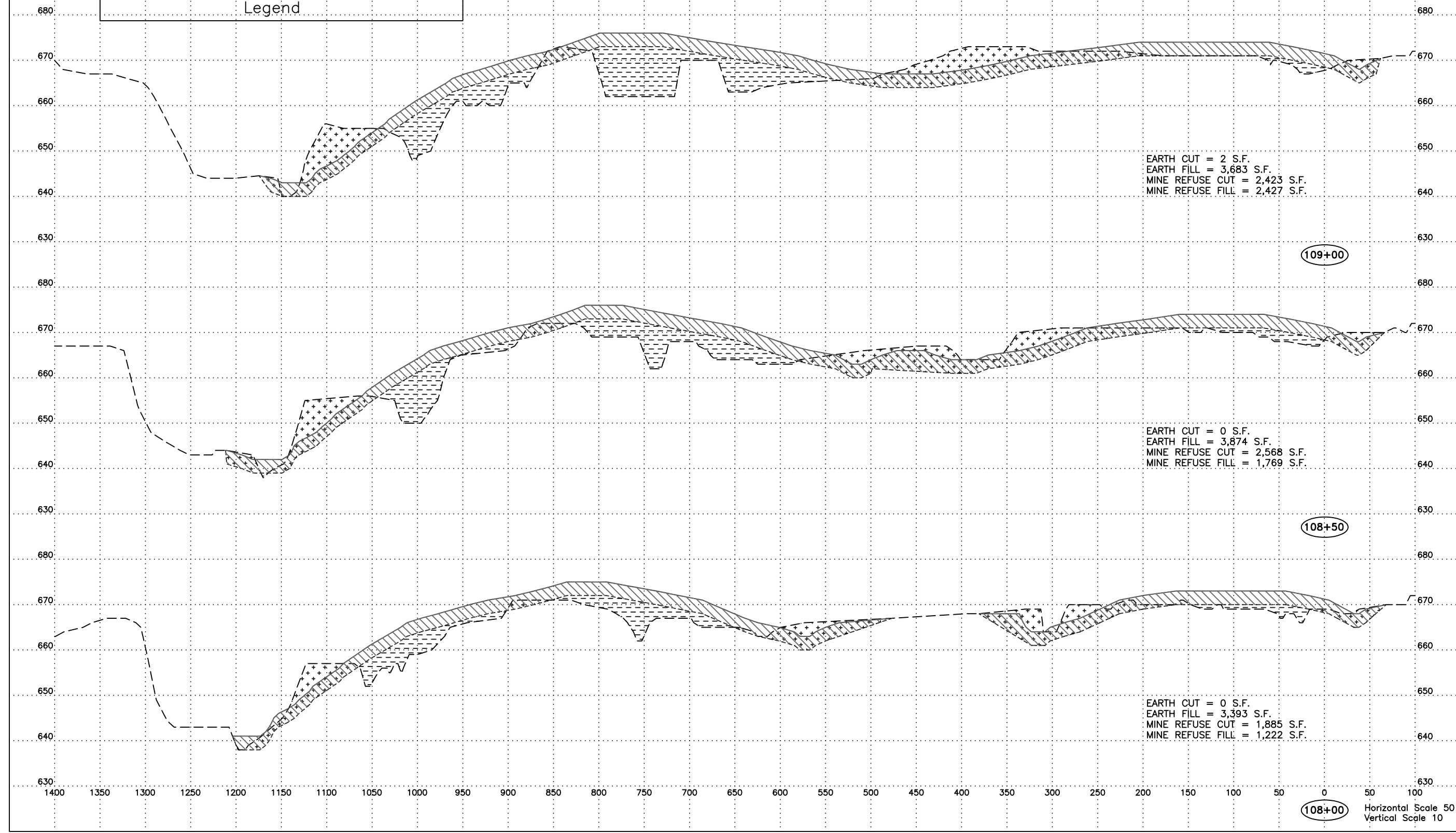
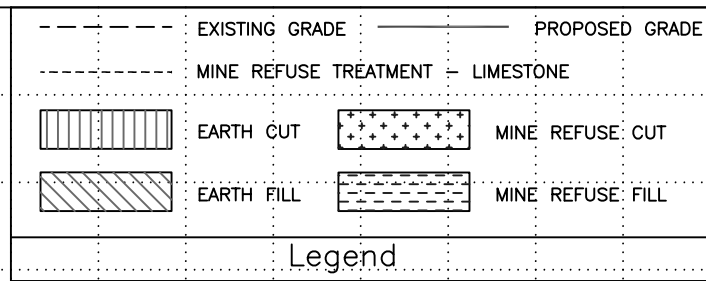
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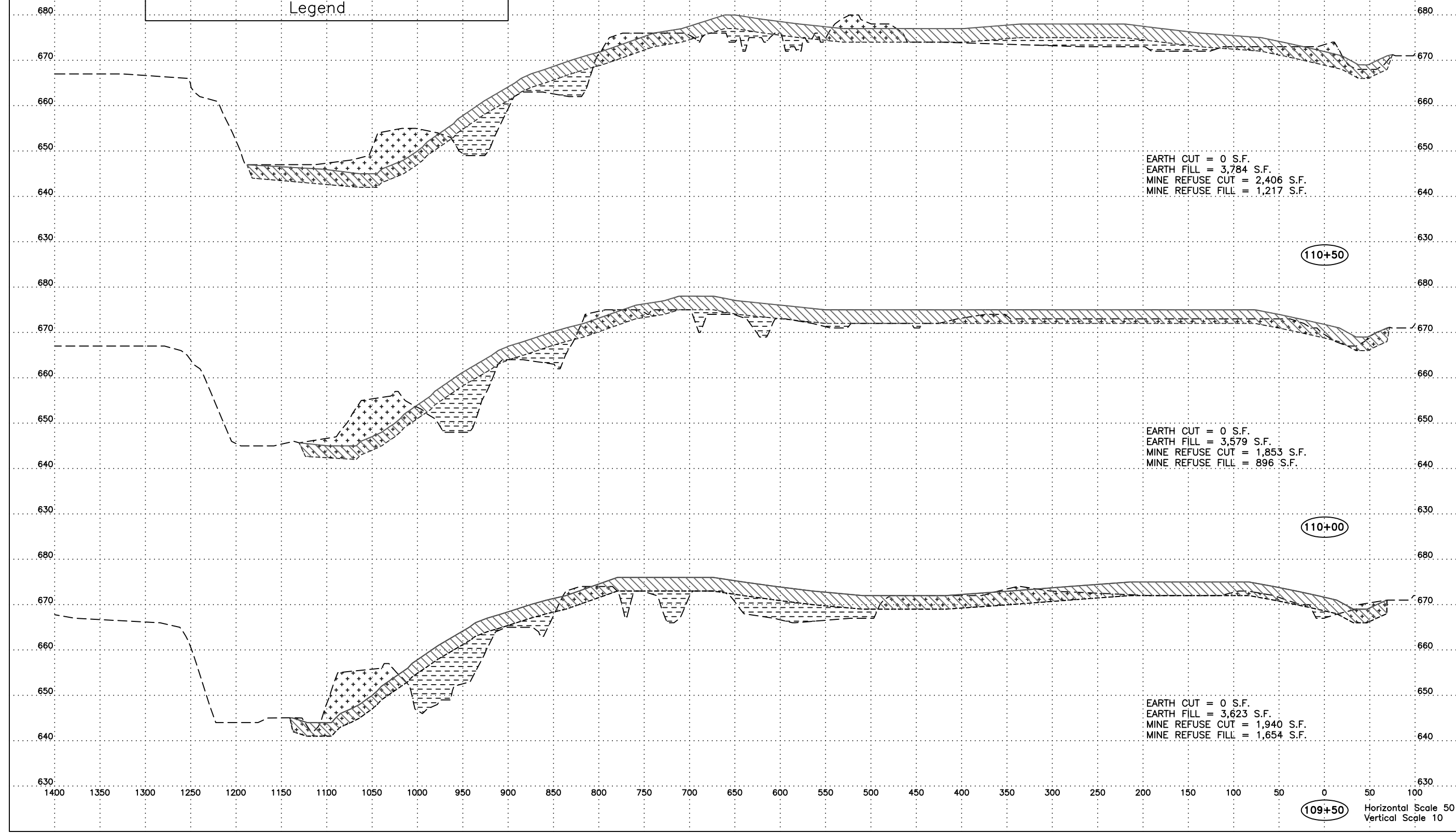
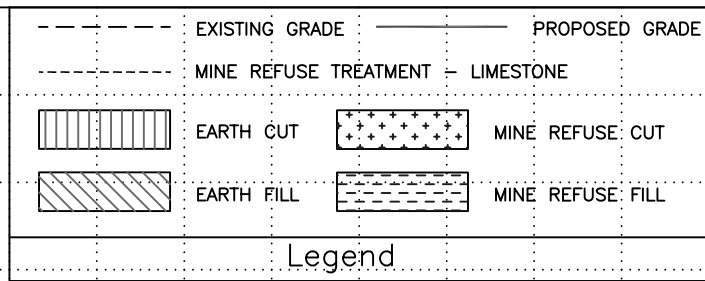
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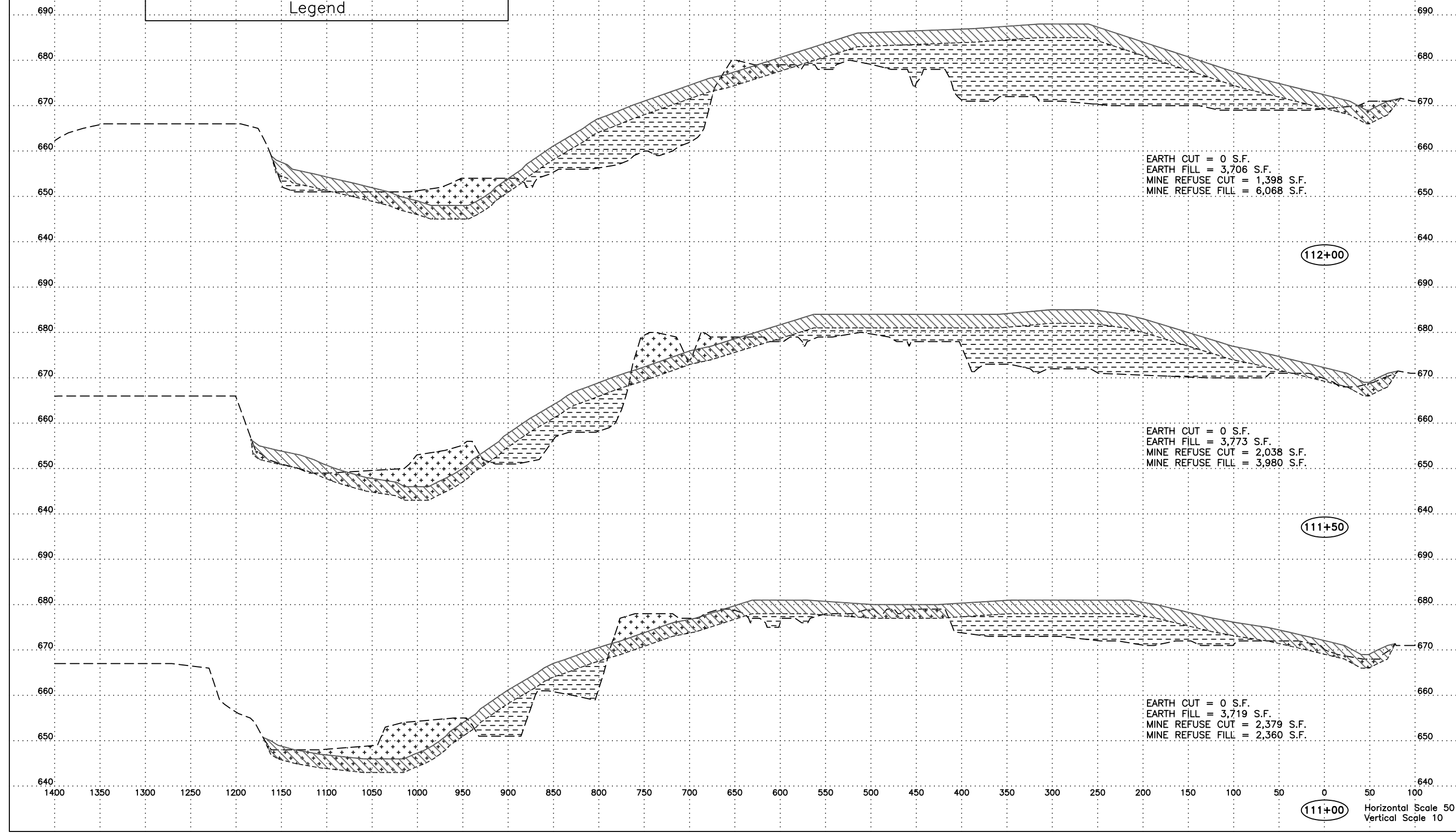
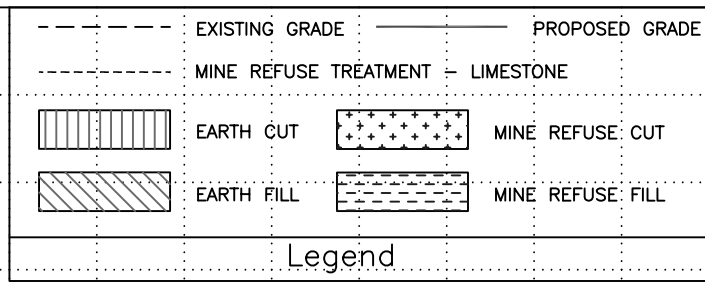










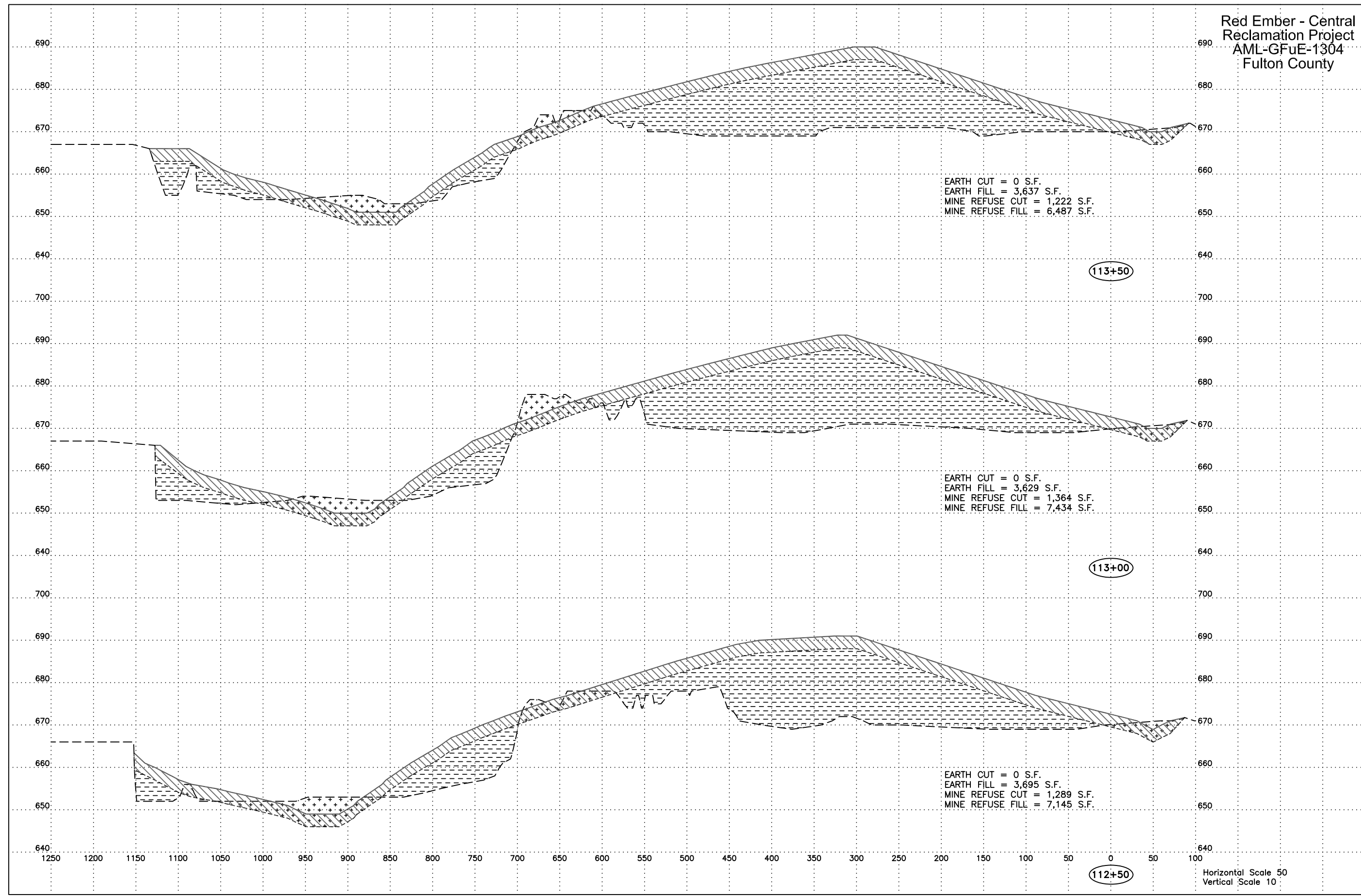


112+00

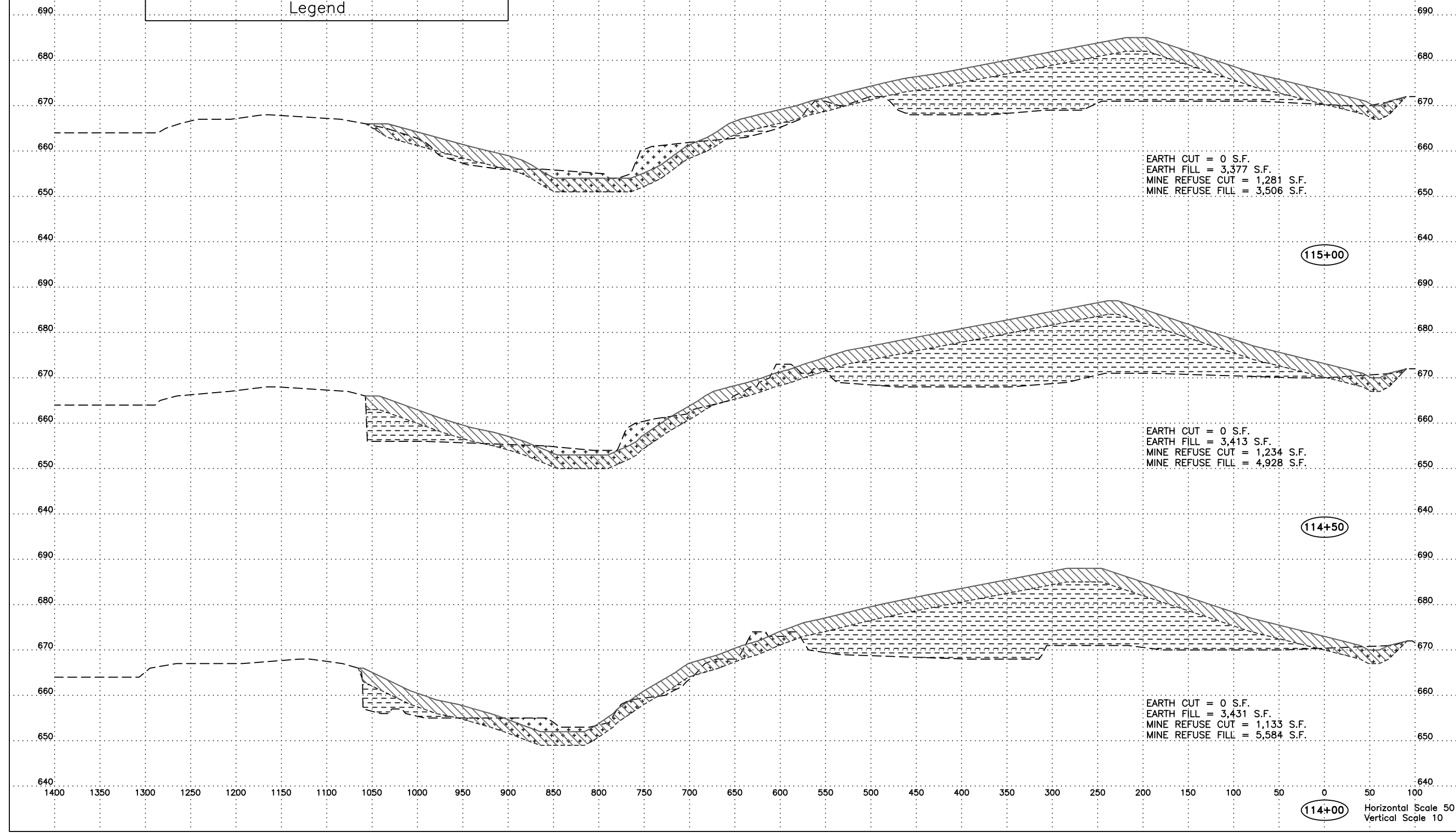
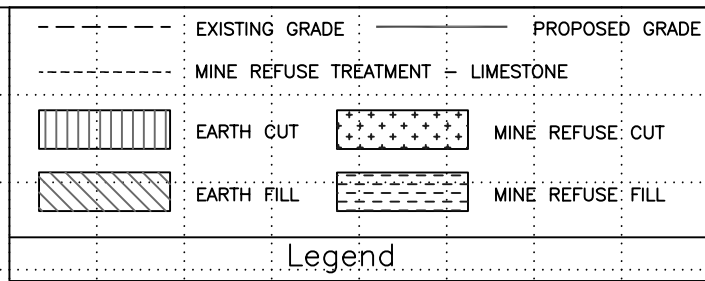
111+50

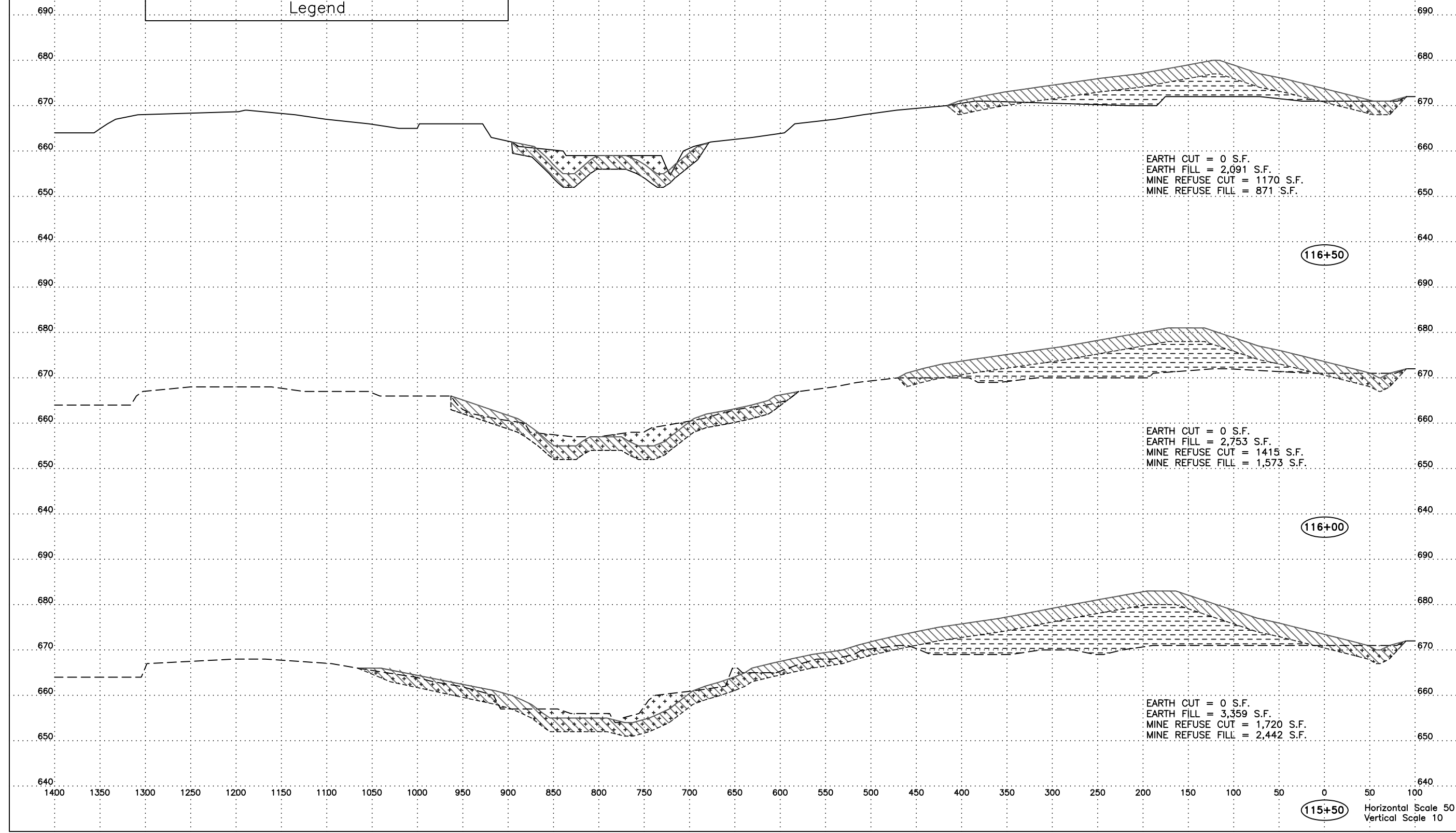
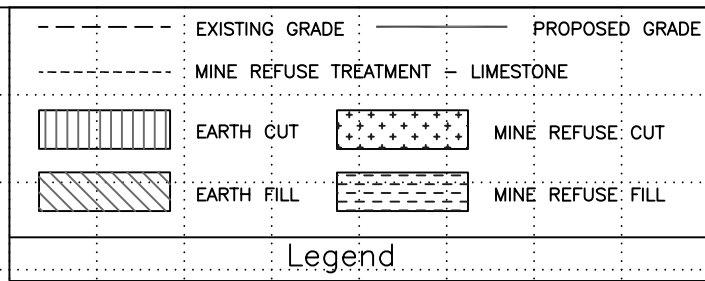
111+00





Horizontal Scale 50  
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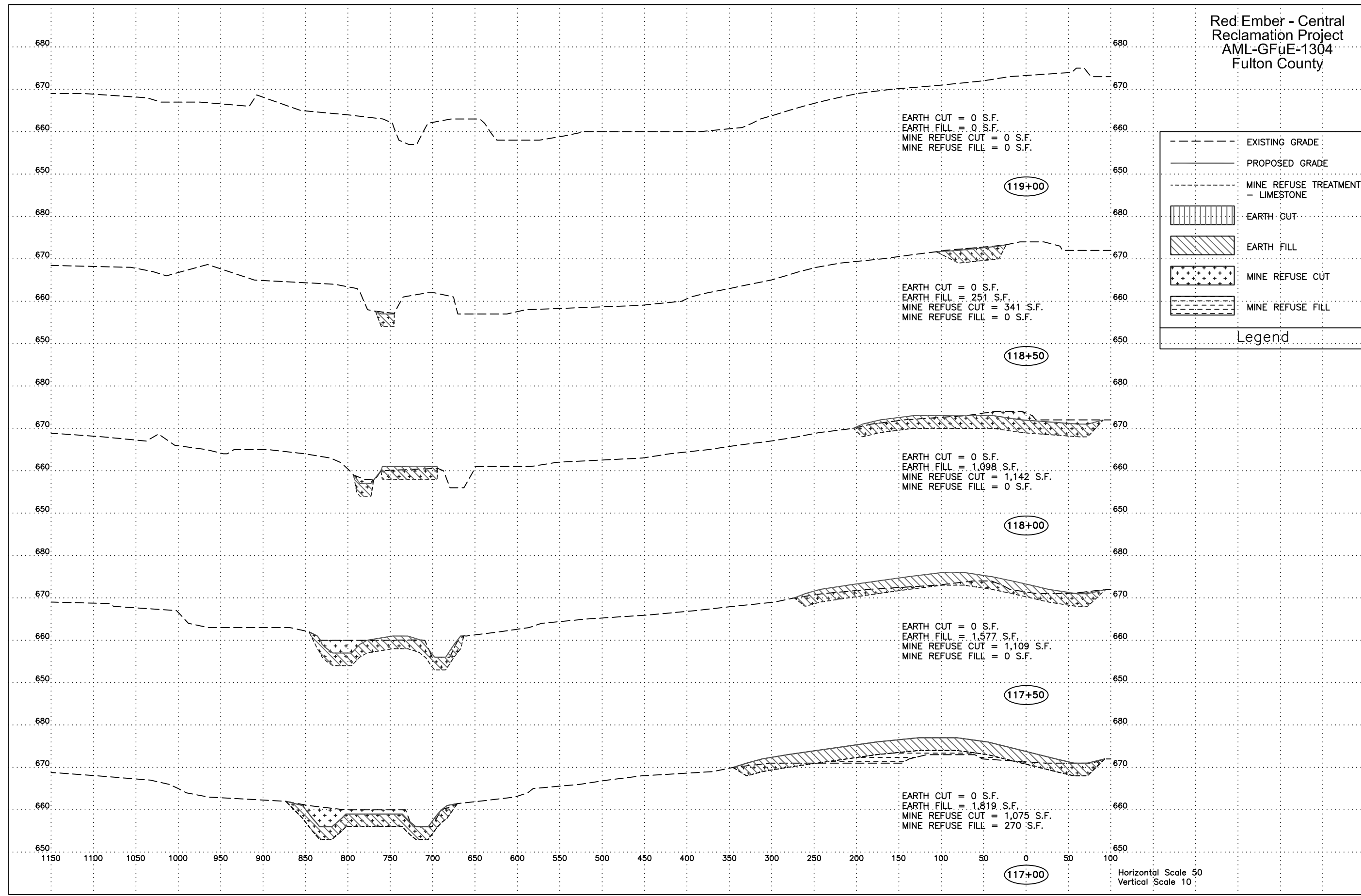


116+50

116+00

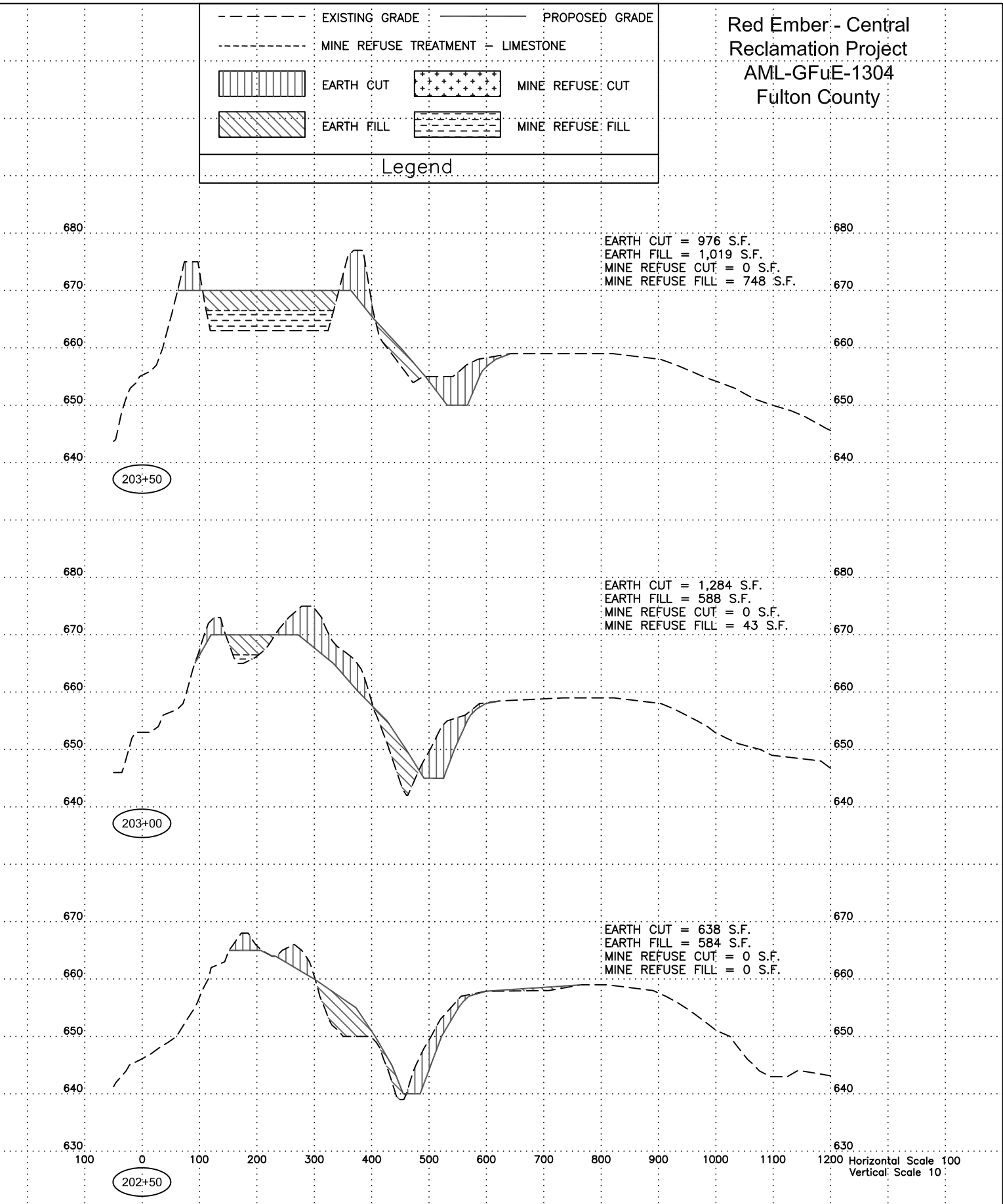
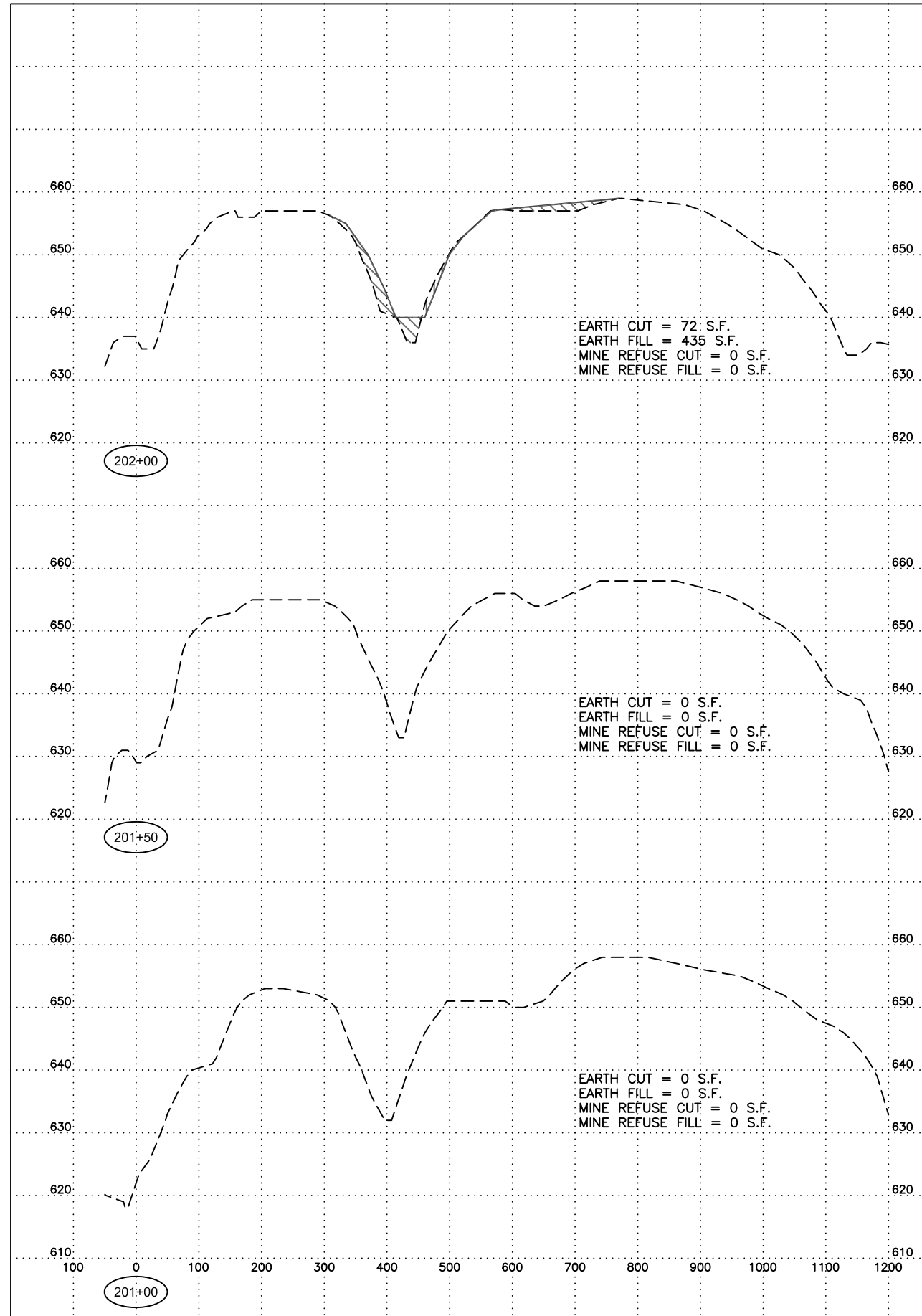
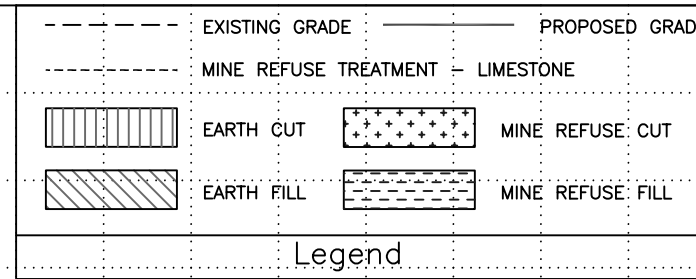
115+50

Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County



Horizontal Scale 50  
Vertical Scale 10

Red Ember - Central  
Reclamation Project  
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Fulton County



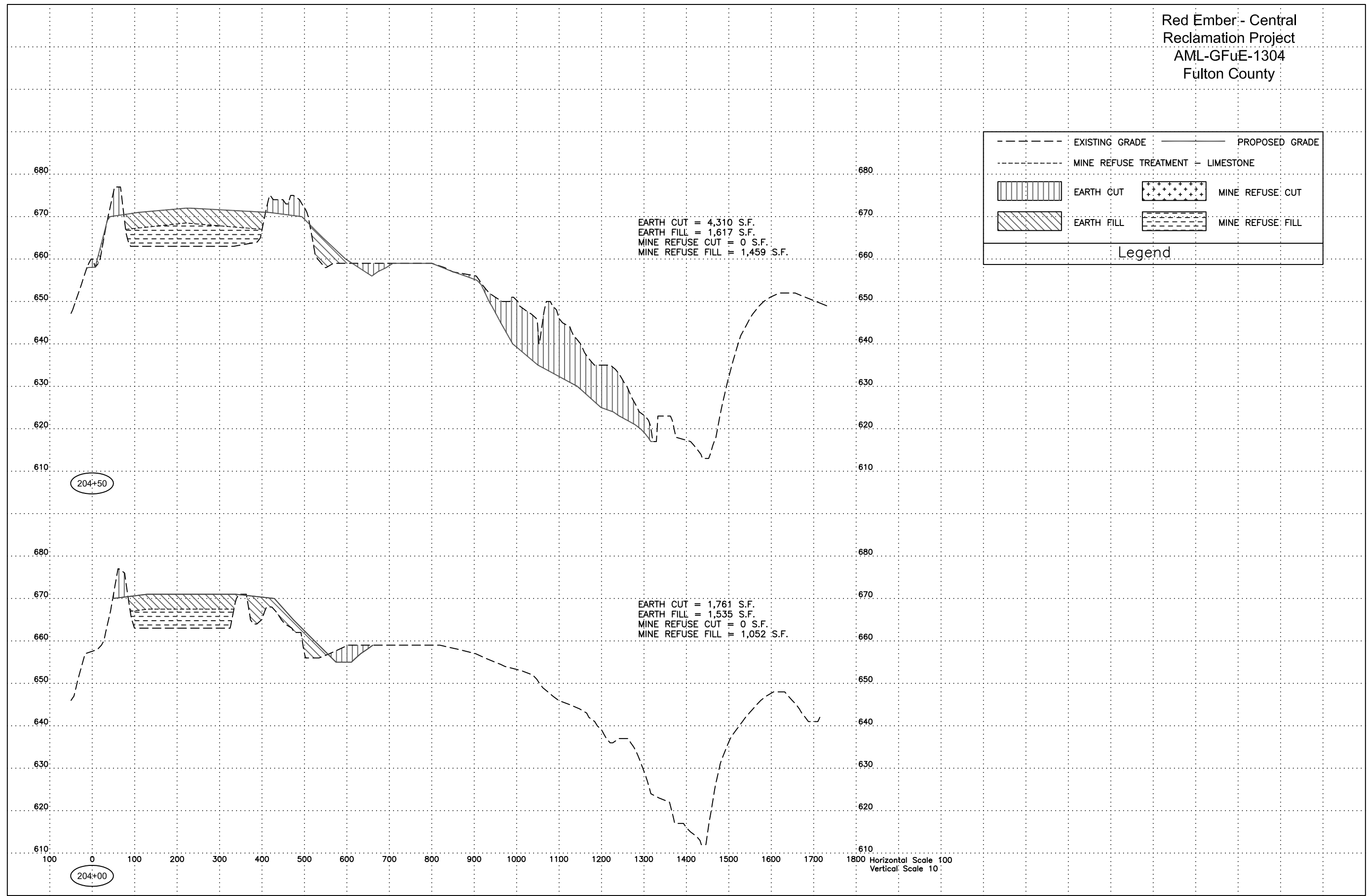
Red Ember - Central  
 Reclamation Project  
 AML-GFuE-1304  
 Fulton County

---	EXISTING GRADE	---	PROPOSED GRADE
---	MINE REFUSE TREATMENT - LIMESTONE	---	
[Vertical Lines]	EARTH CUT	[Stars]	MINE REFUSE CUT
[Diagonal Lines]	EARTH FILL	[Dashed]	MINE REFUSE FILL

Legend

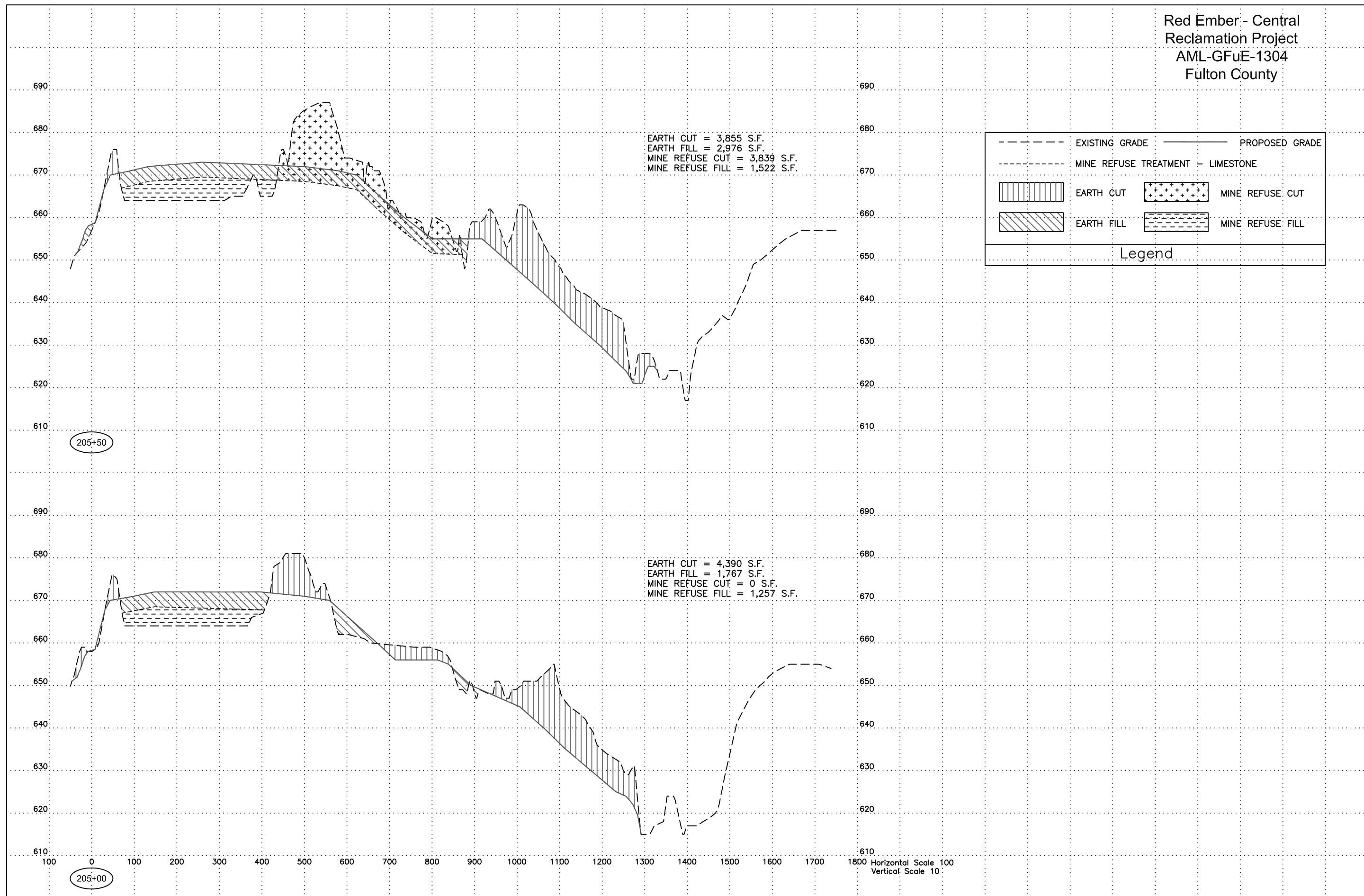
EARTH CUT = 4,310 S.F.  
 EARTH FILL = 1,617 S.F.  
 MINE REFUSE CUT = 0 S.F.  
 MINE REFUSE FILL = 1,459 S.F.

EARTH CUT = 1,761 S.F.  
 EARTH FILL = 1,535 S.F.  
 MINE REFUSE CUT = 0 S.F.  
 MINE REFUSE FILL = 1,052 S.F.



Horizontal Scale 100  
 Vertical Scale 10'

Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

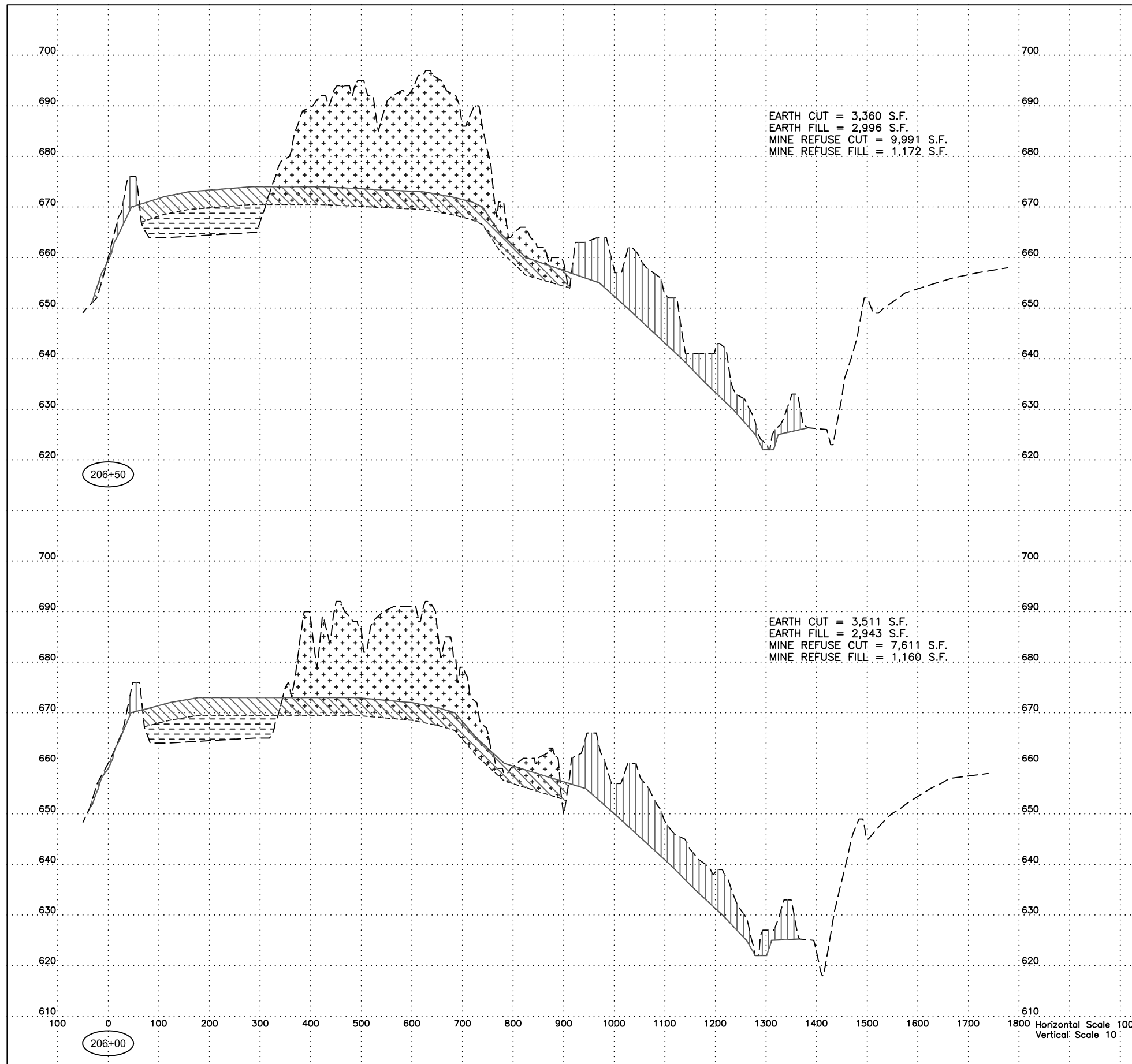


Red Ember - Central  
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AML-GFuE-1304  
Fulton County

EARTH CUT = 3,360 S.F.  
EARTH FILL = 2,996 S.F.  
MINE REFUSE CUT = 9,991 S.F.  
MINE REFUSE FILL = 1,172 S.F.

---	EXISTING GRADE	---	PROPOSED GRADE
---	MINE REFUSE TREATMENT	---	LIMESTONE
[Vertical Lines]	EARTH CUT	[Cross-hatch]	MINE REFUSE CUT
[Diagonal Lines]	EARTH FILL	[Horizontal Lines]	MINE REFUSE FILL

Legend





Red Ember - Central  
Reclamation Project  
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EARTH CUT = 2,867 S.F.  
EARTH FILL = 3,354 S.F.  
MINE REFUSE CUT = 11,878 S.F.  
MINE REFUSE FILL = 998 S.F.

---	EXISTING GRADE	---	PROPOSED GRADE
---	MINE REFUSE TREATMENT - LIMESTONE		
[Vertical Lines]	EARTH CUT	[Cross-hatch]	MINE REFUSE CUT
[Diagonal Lines]	EARTH FILL	[Horizontal Lines]	MINE REFUSE FILL

Legend

207+50

EARTH CUT = 3,521 S.F.  
EARTH FILL = 3,127 S.F.  
MINE REFUSE CUT = 11,655 S.F.  
MINE REFUSE FILL = 1,085 S.F.

207+00

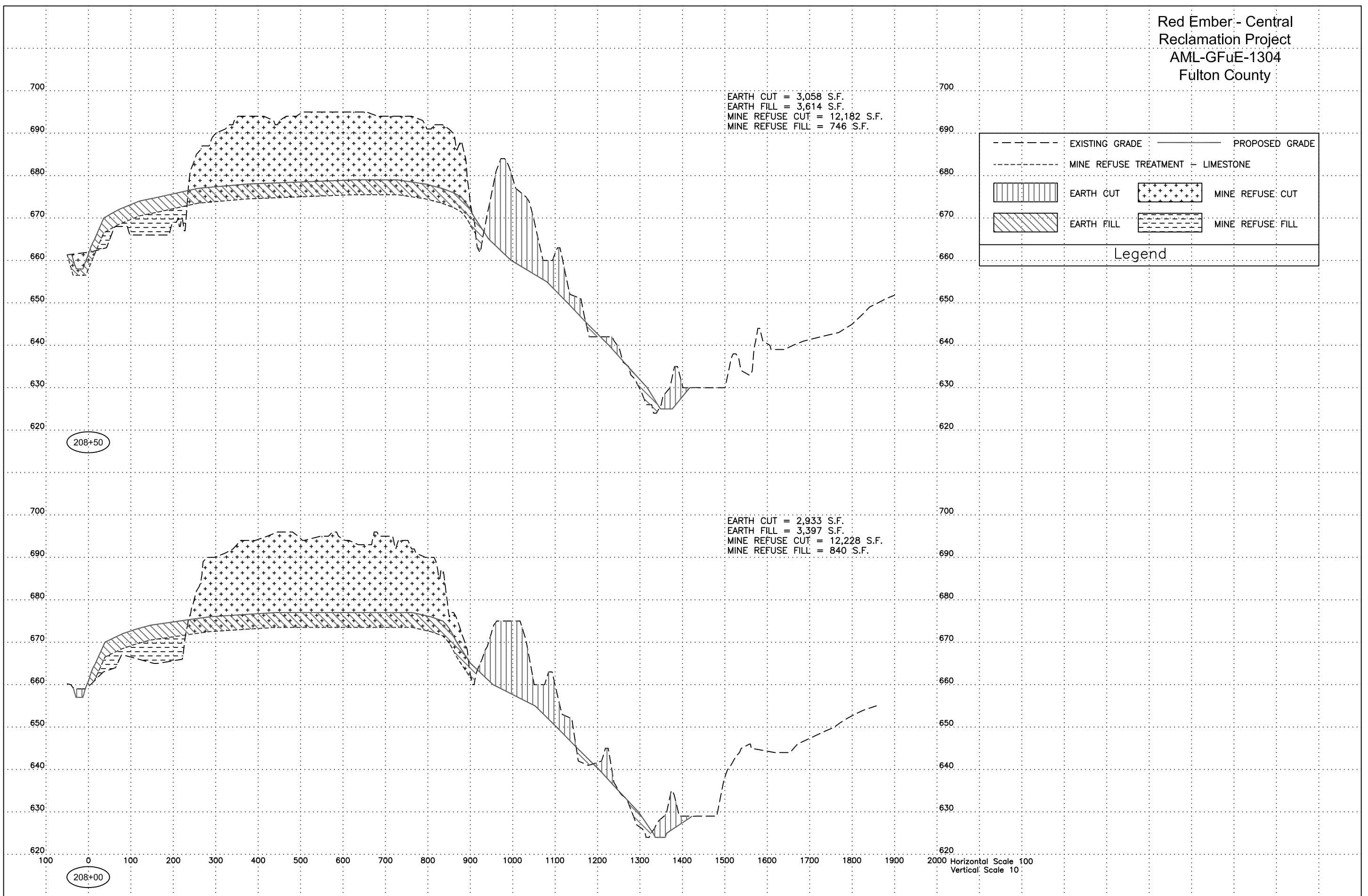
Horizontal Scale 100  
Vertical Scale 10

Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

EARTH CUT = 3,058 S.F.  
EARTH FILL = 3,614 S.F.  
MINE REFUSE CUT = 12,182 S.F.  
MINE REFUSE FILL = 746 S.F.

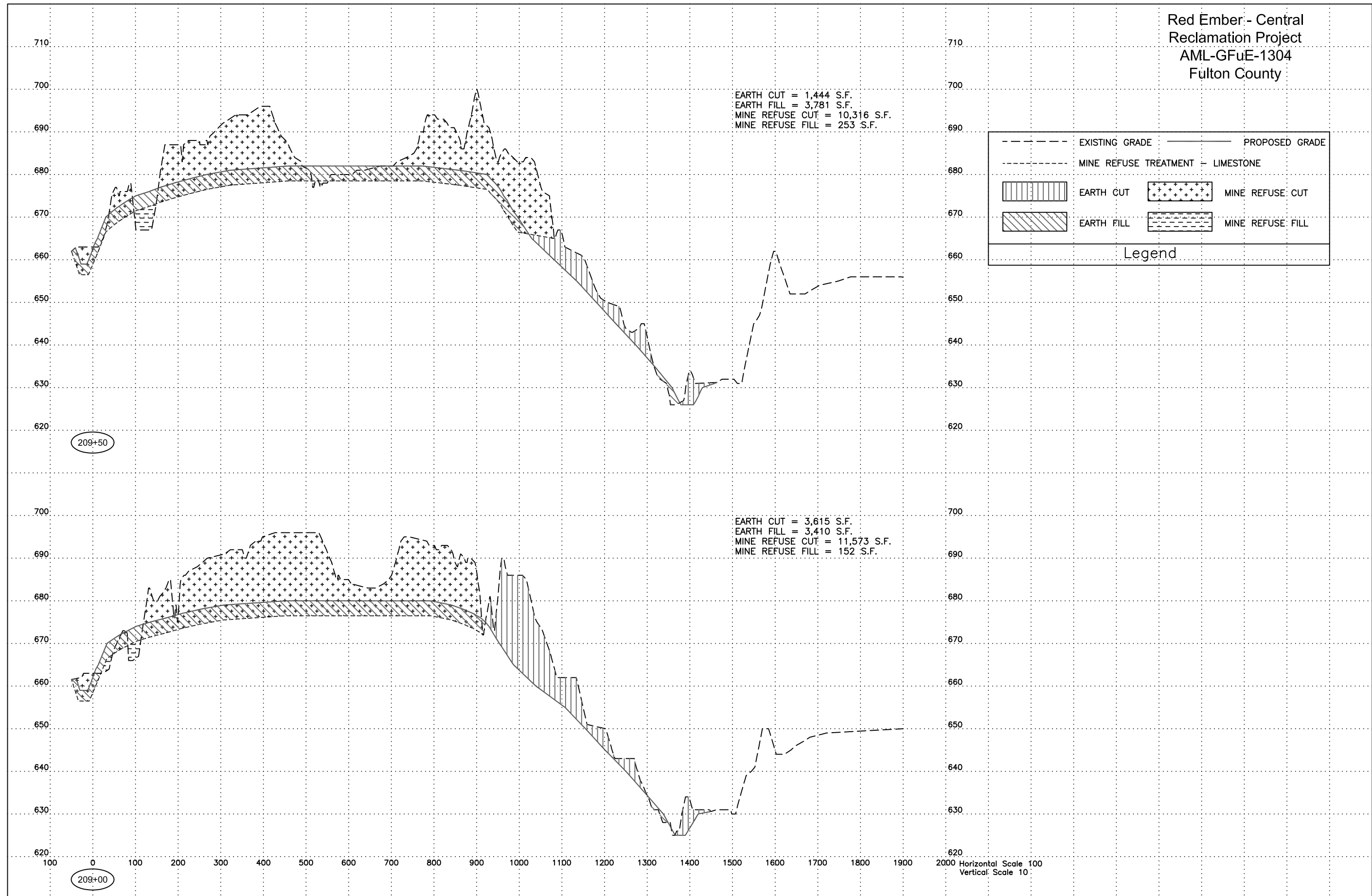
---	EXISTING GRADE	---	PROPOSED GRADE
---	MINE REFUSE TREATMENT - LIMESTONE		
[Vertical Lines]	EARTH CUT	[Cross-hatch]	MINE REFUSE CUT
[Diagonal Lines]	EARTH FILL	[Dashed]	MINE REFUSE FILL

Legend

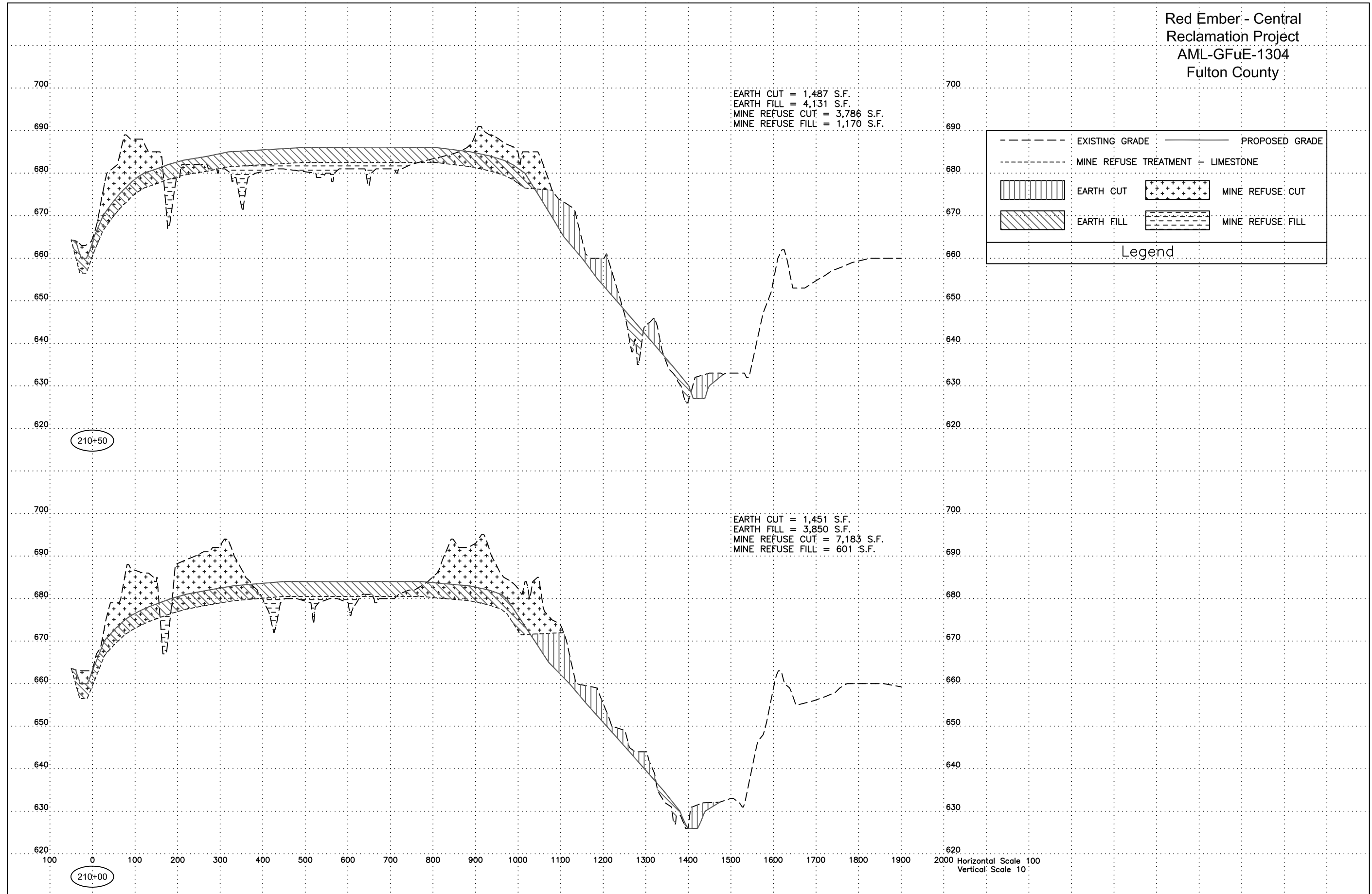


EARTH CUT = 2,933 S.F.  
EARTH FILL = 3,397 S.F.  
MINE REFUSE CUT = 12,228 S.F.  
MINE REFUSE FILL = 840 S.F.

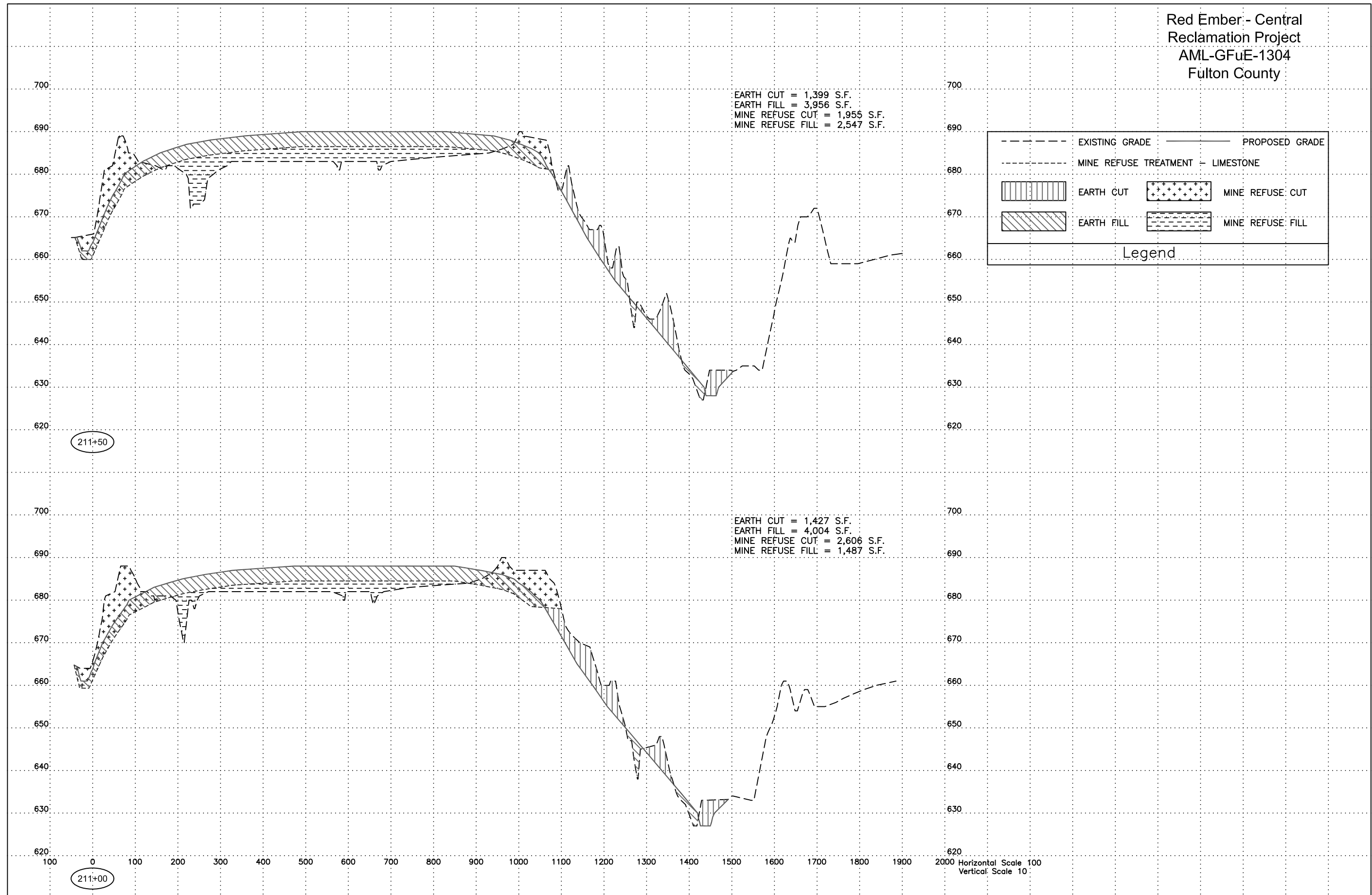
Red Ember - Central  
Reclamation Project  
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Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County



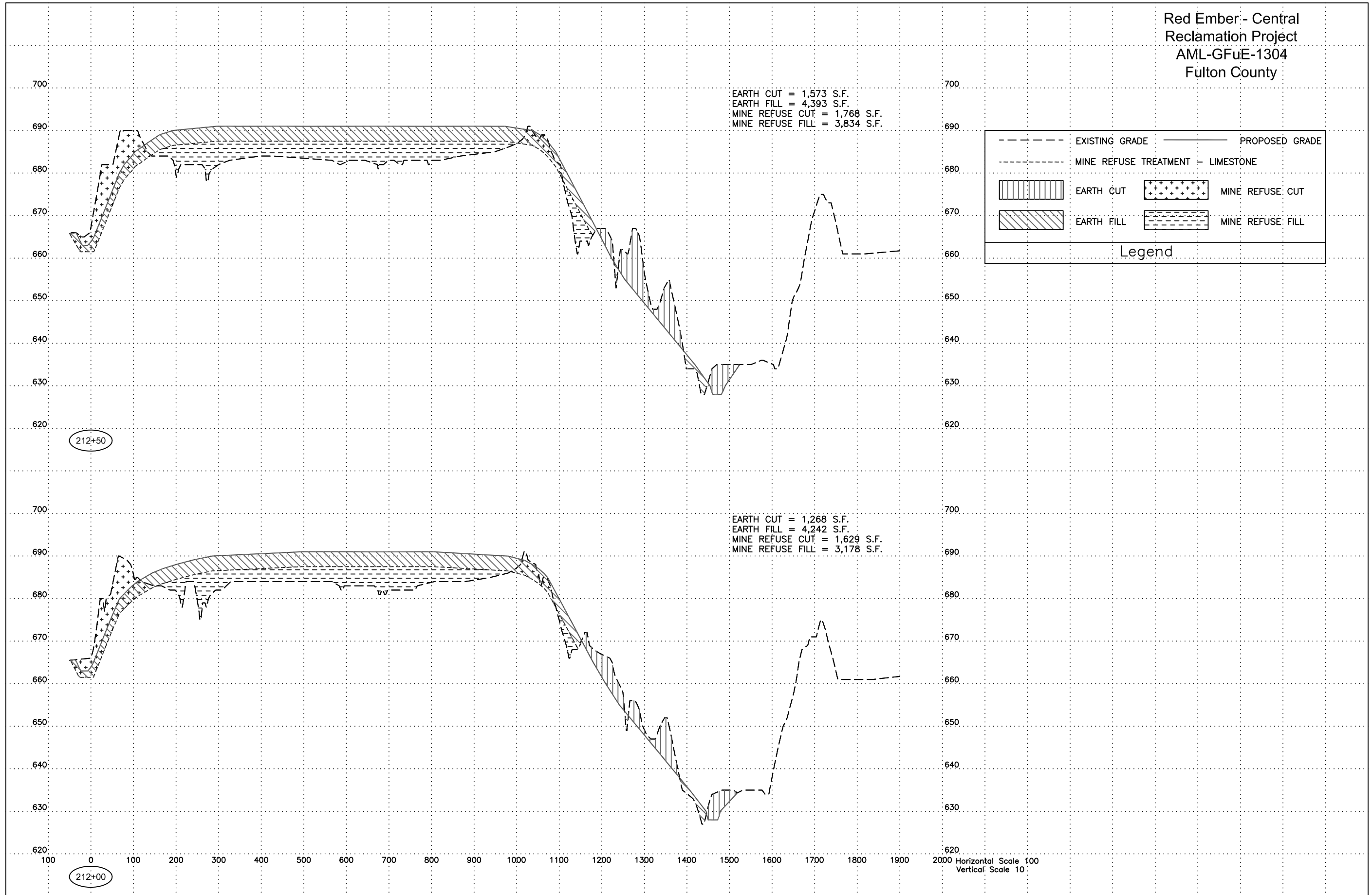
Red Ember - Central  
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EARTH CUT = 1,573 S.F.  
EARTH FILL = 4,393 S.F.  
MINE REFUSE CUT = 1,768 S.F.  
MINE REFUSE FILL = 3,834 S.F.

---	EXISTING GRADE	—	PROPOSED GRADE
- - -	MINE REFUSE TREATMENT - LIMESTONE		
[Vertical Lines]	EARTH CUT	[Stippled]	MINE REFUSE CUT
[Diagonal Lines]	EARTH FILL	[Horizontal Dashed]	MINE REFUSE FILL
Legend			

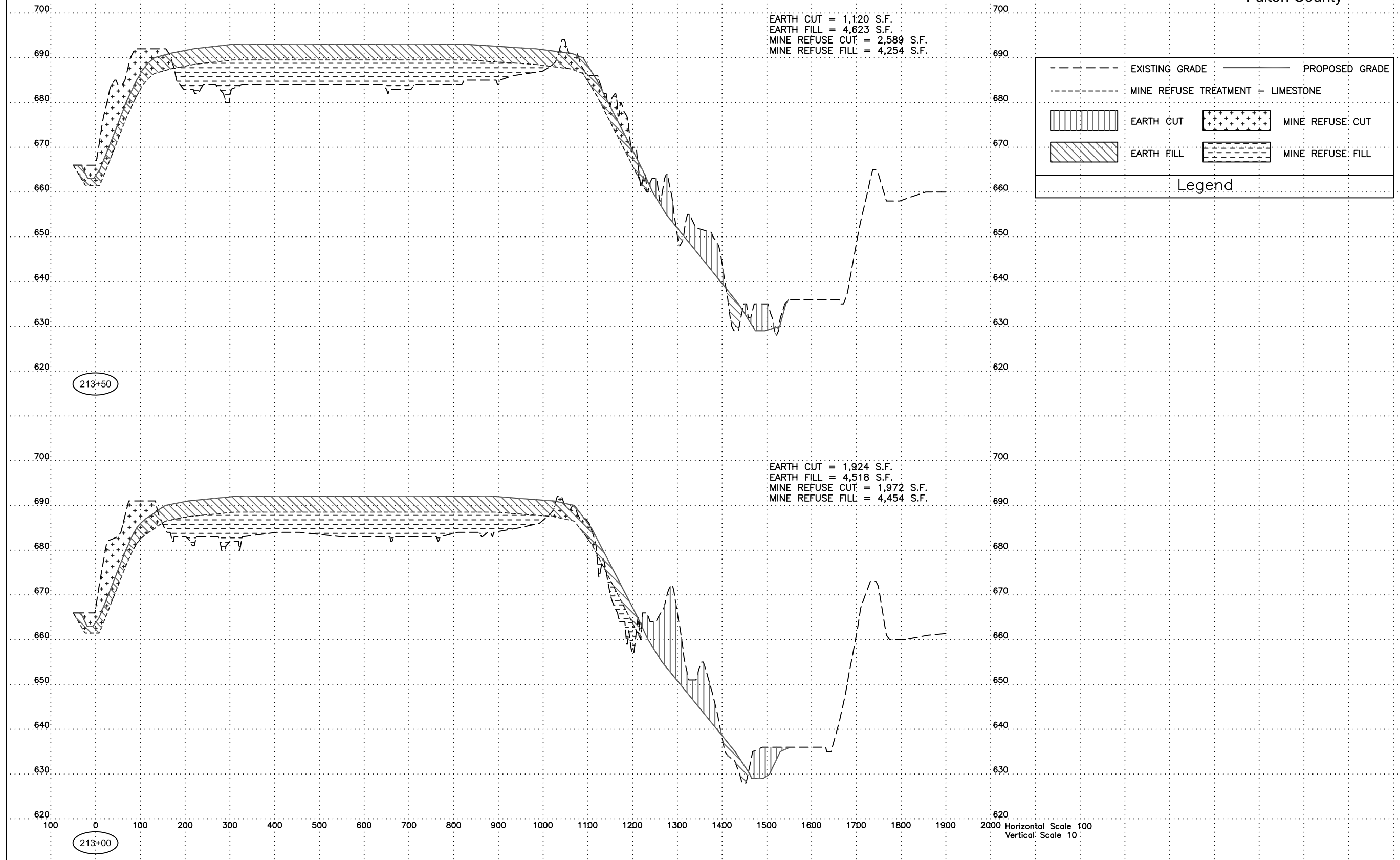


212+50

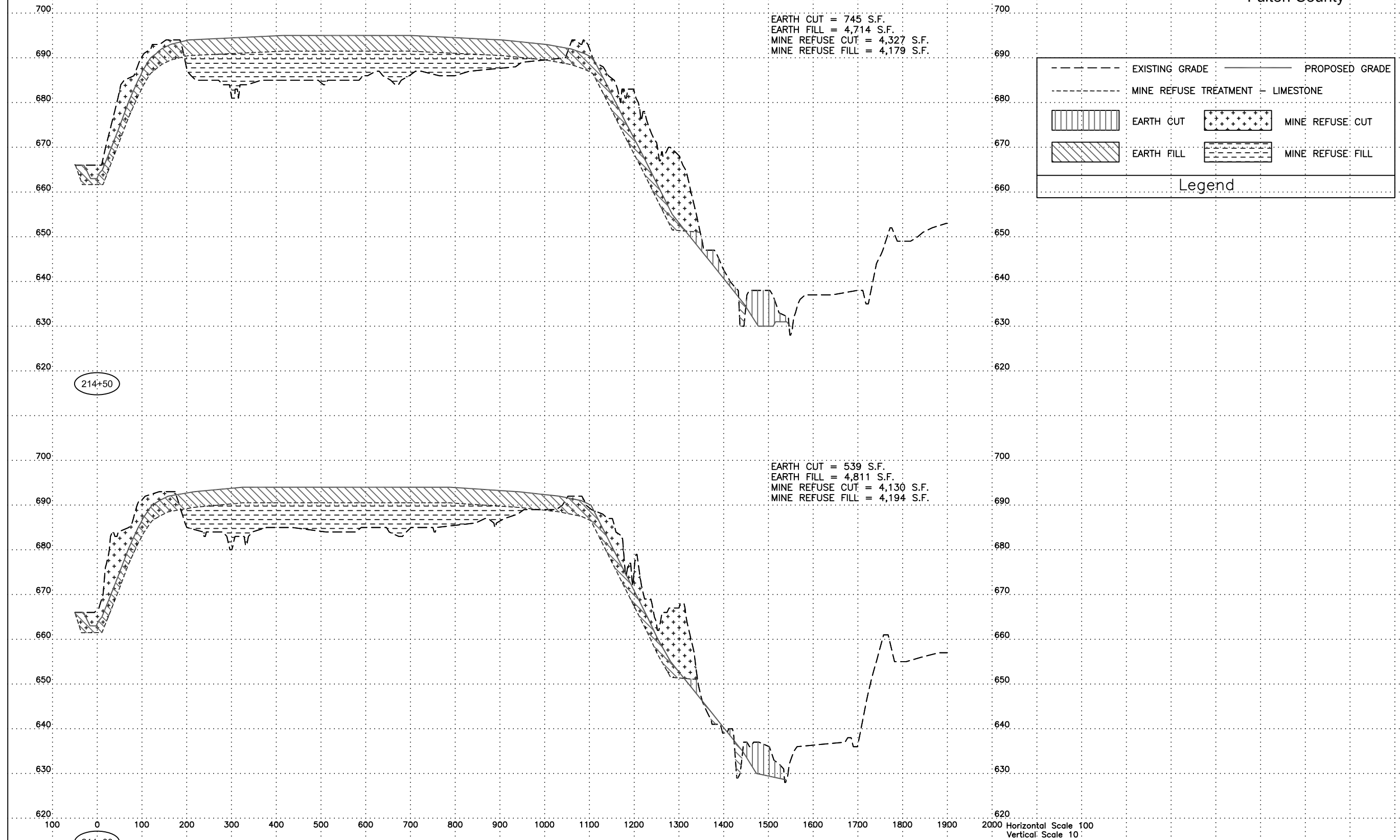
212+00

Horizontal Scale 100  
Vertical Scale 10

Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

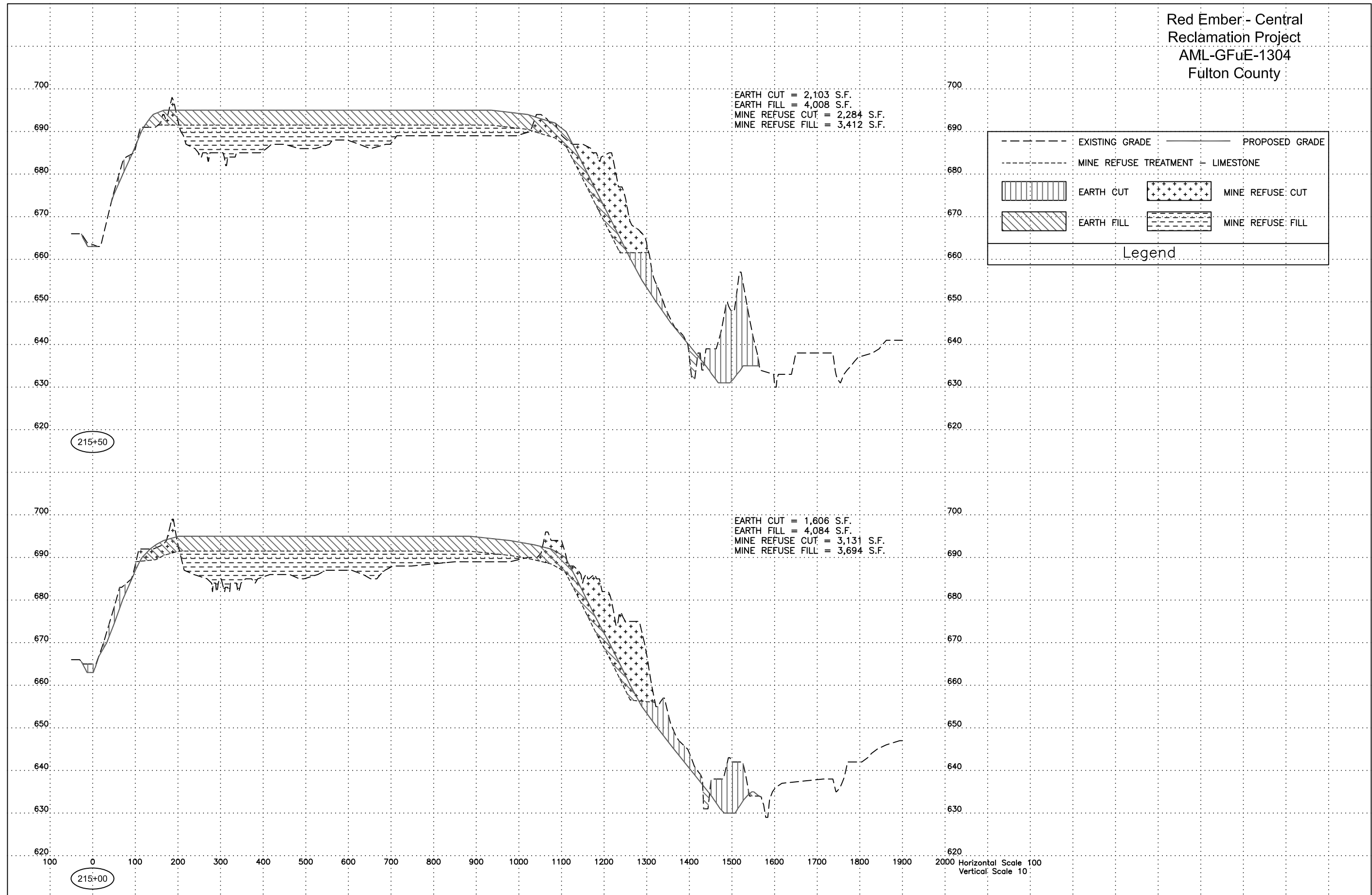


Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

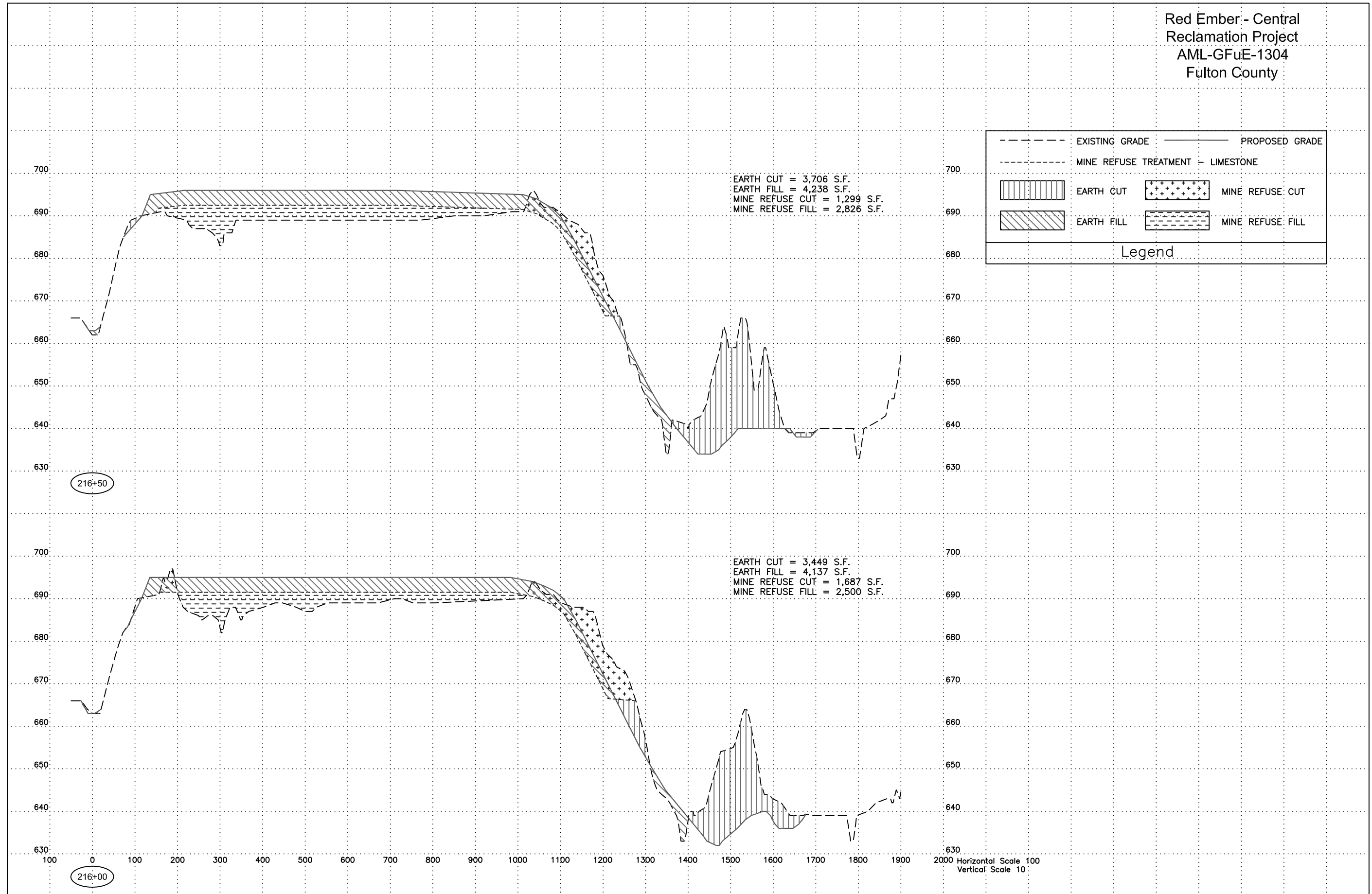




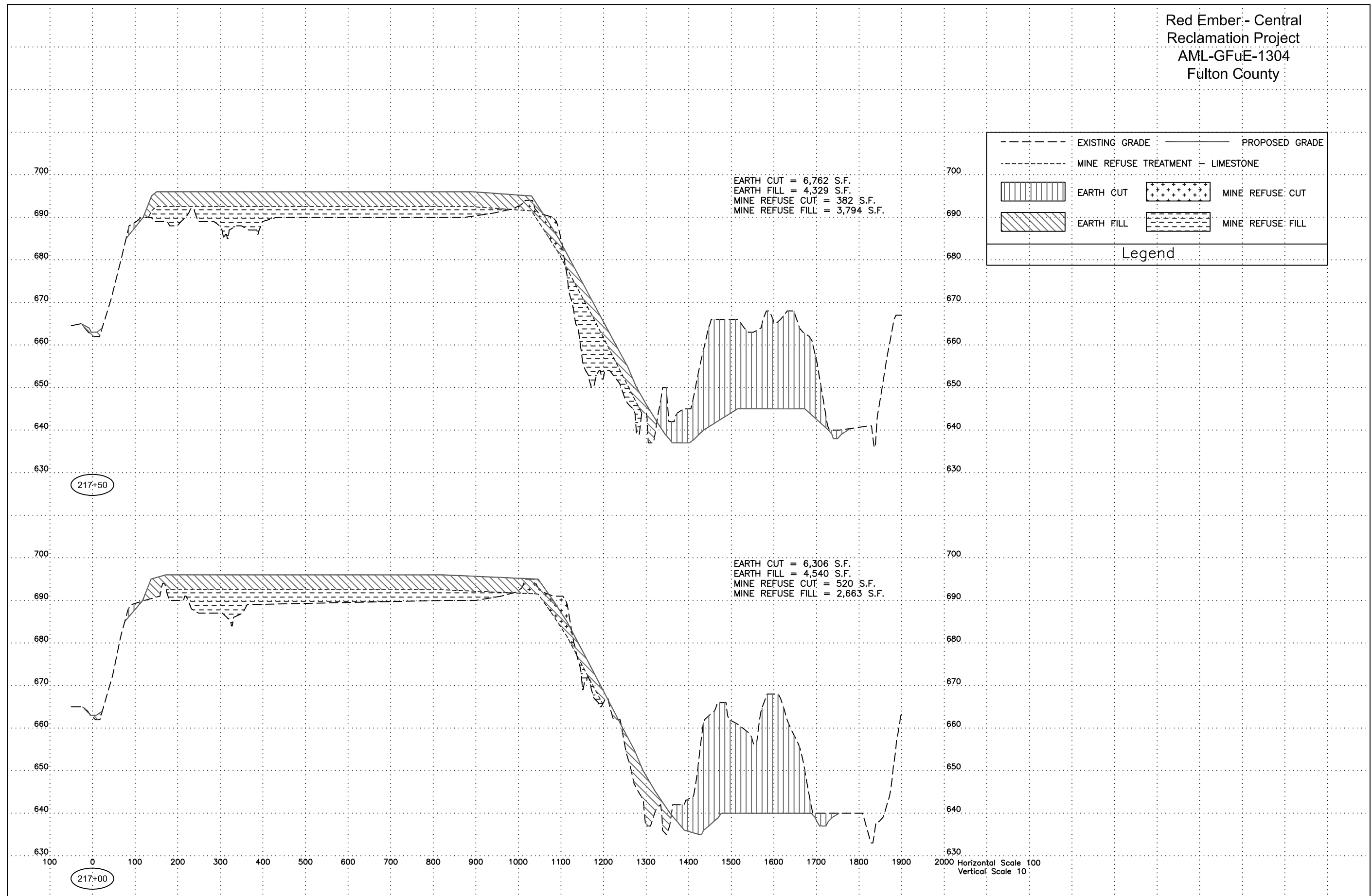
Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County



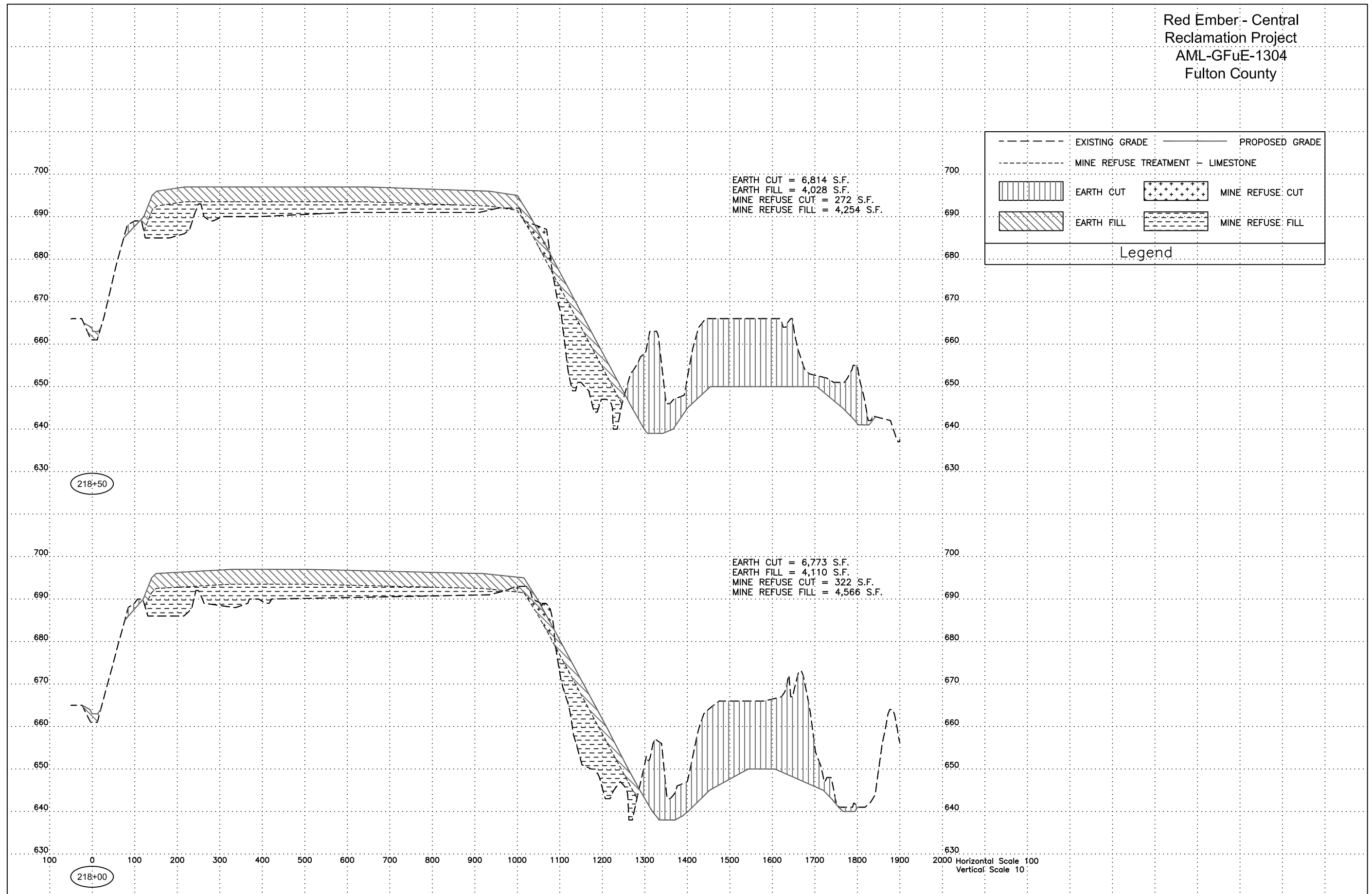
Red Ember - Central  
 Reclamation Project  
 AML-GFuE-1304  
 Fulton County

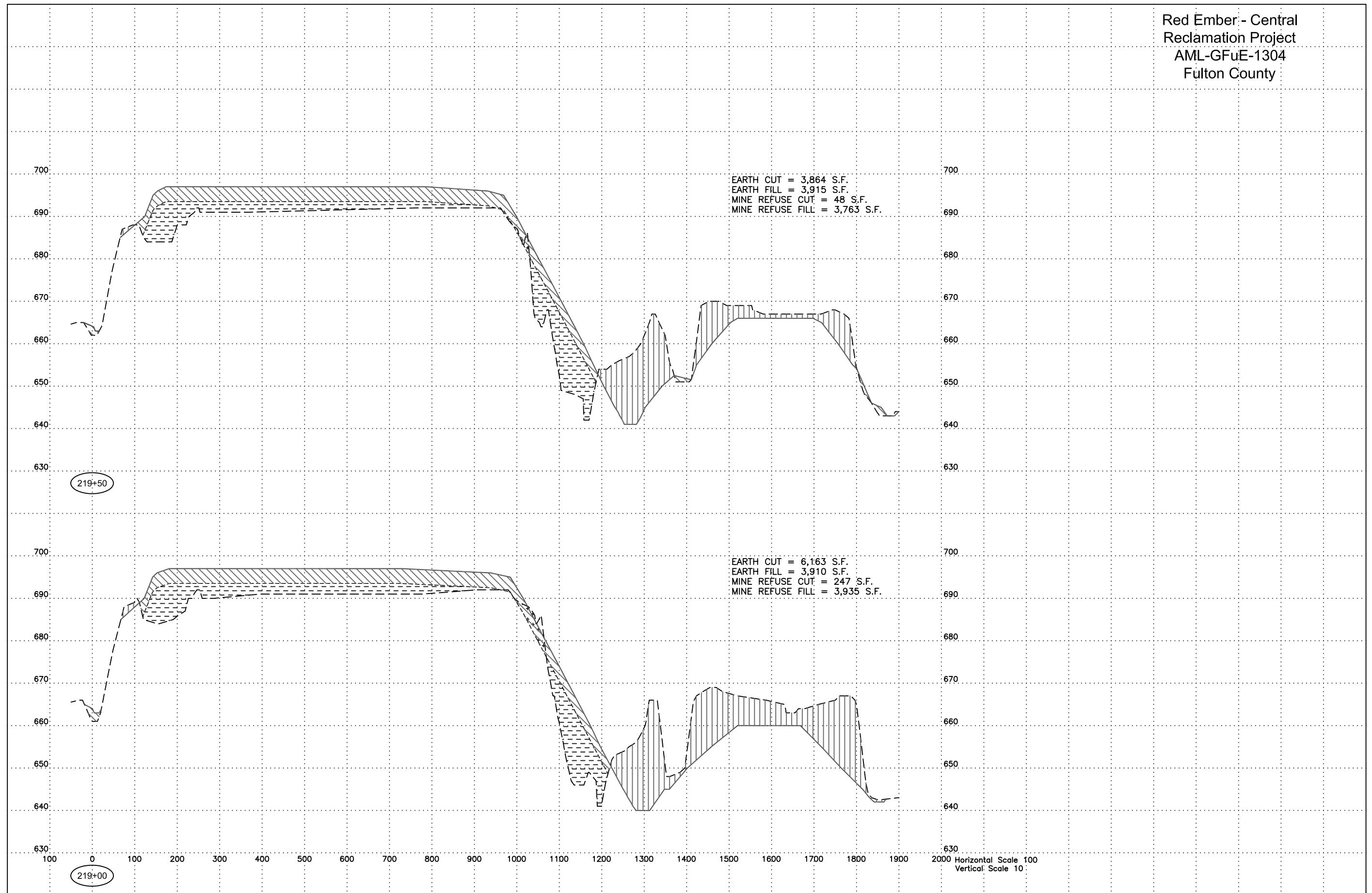


Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

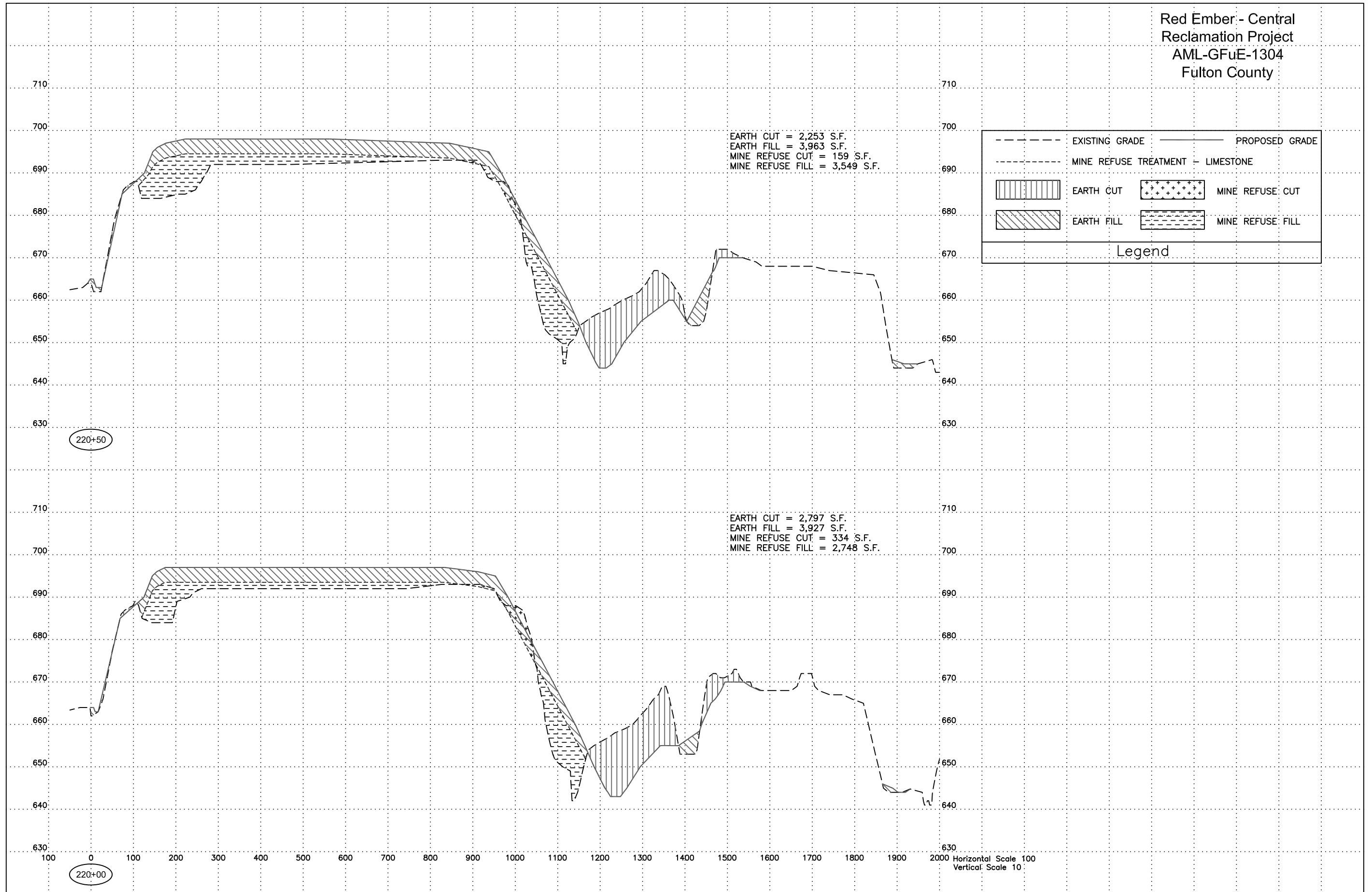


Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

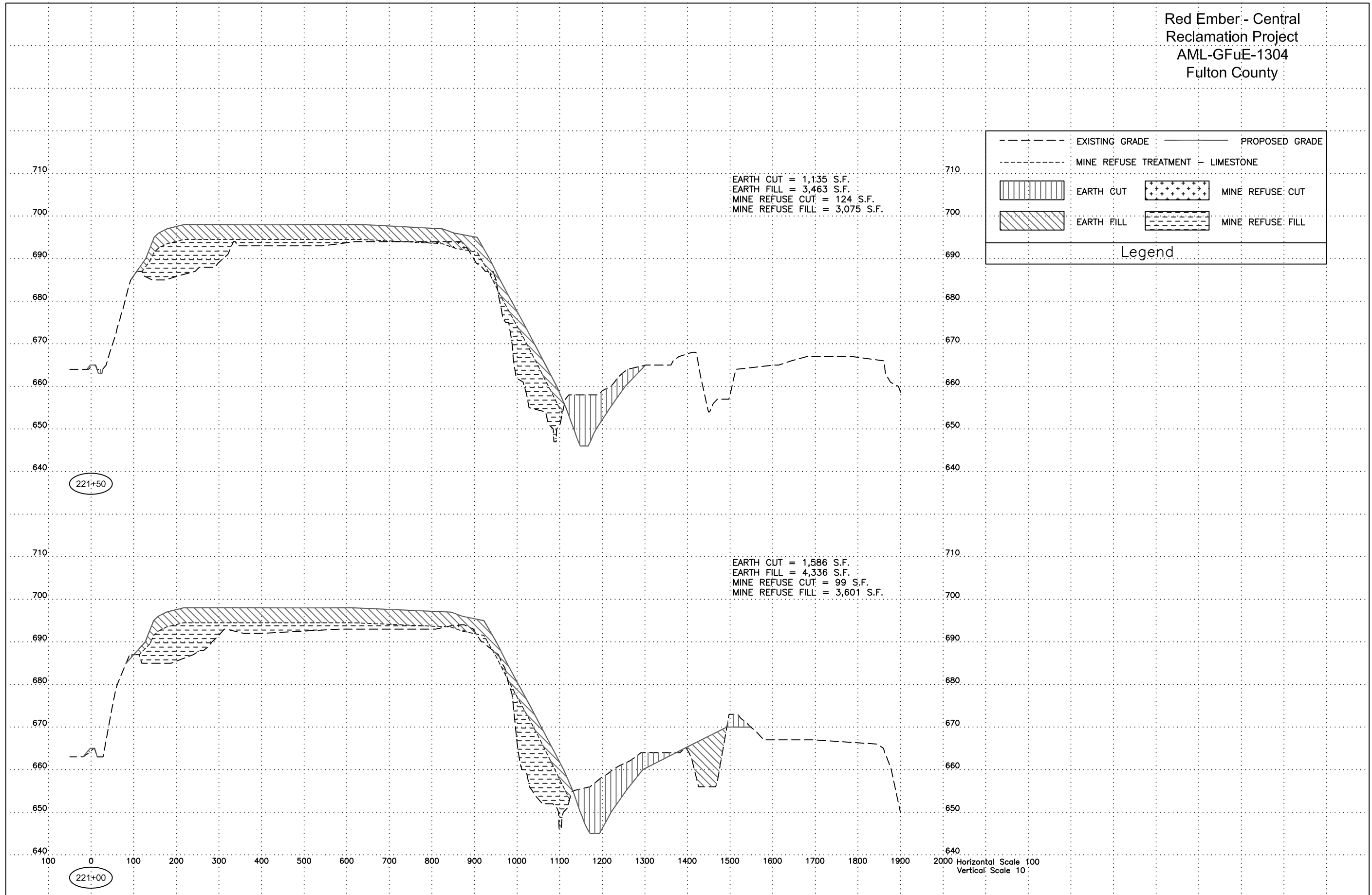




Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County



Red Ember - Central  
 Reclamation Project  
 AML-GFuE-1304  
 Fulton County



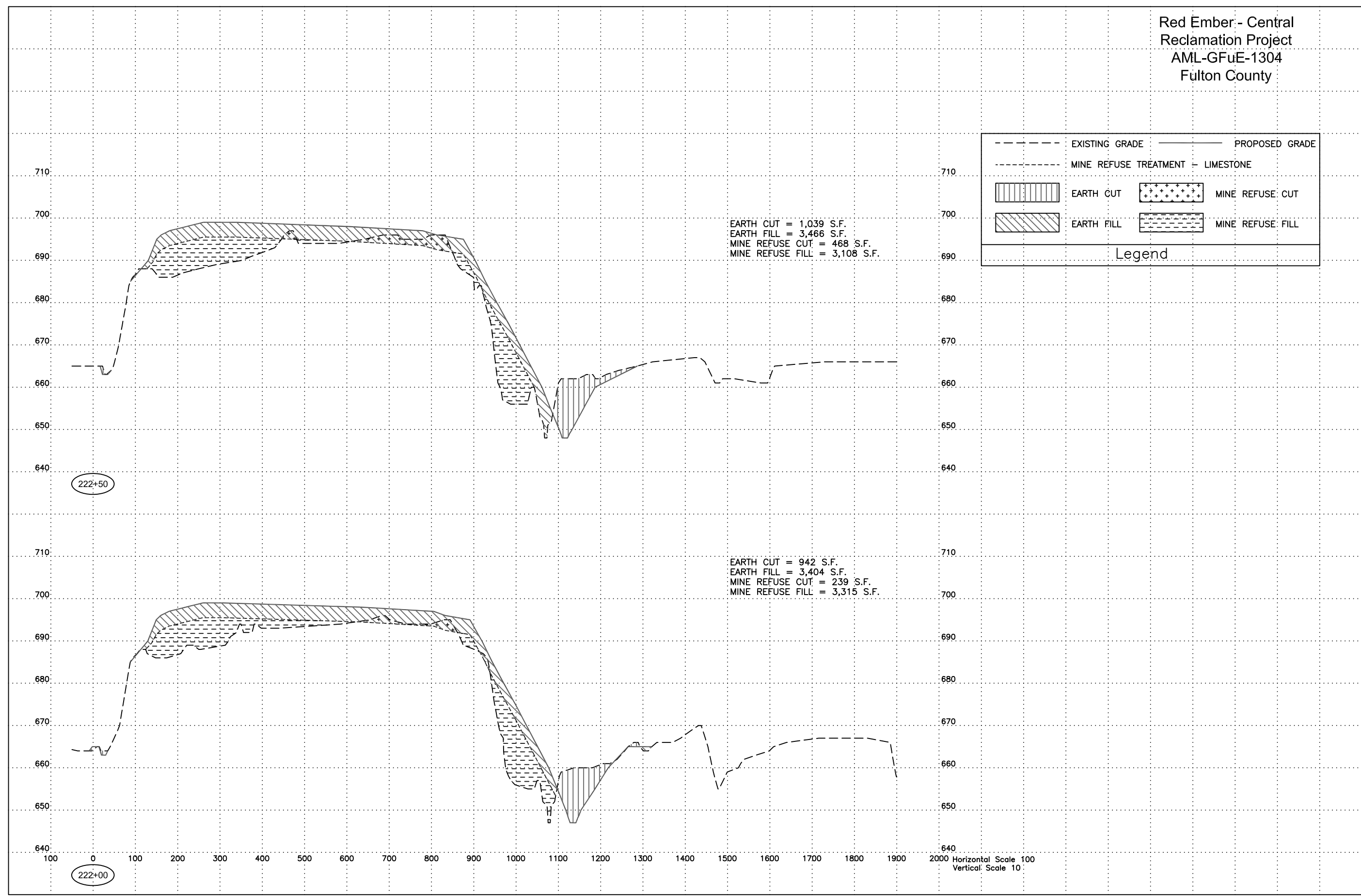
Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

---	EXISTING GRADE	---	PROPOSED GRADE
- - - -	MINE REFUSE TREATMENT - LIMESTONE		
[Vertical Lines]	EARTH CUT	[Cross-hatch]	MINE REFUSE CUT
[Diagonal Lines]	EARTH FILL	[Horizontal Dashed]	MINE REFUSE FILL

Legend

EARTH CUT = 1,039 S.F.  
EARTH FILL = 3,466 S.F.  
MINE REFUSE CUT = 468 S.F.  
MINE REFUSE FILL = 3,108 S.F.

EARTH CUT = 942 S.F.  
EARTH FILL = 3,404 S.F.  
MINE REFUSE CUT = 239 S.F.  
MINE REFUSE FILL = 3,315 S.F.



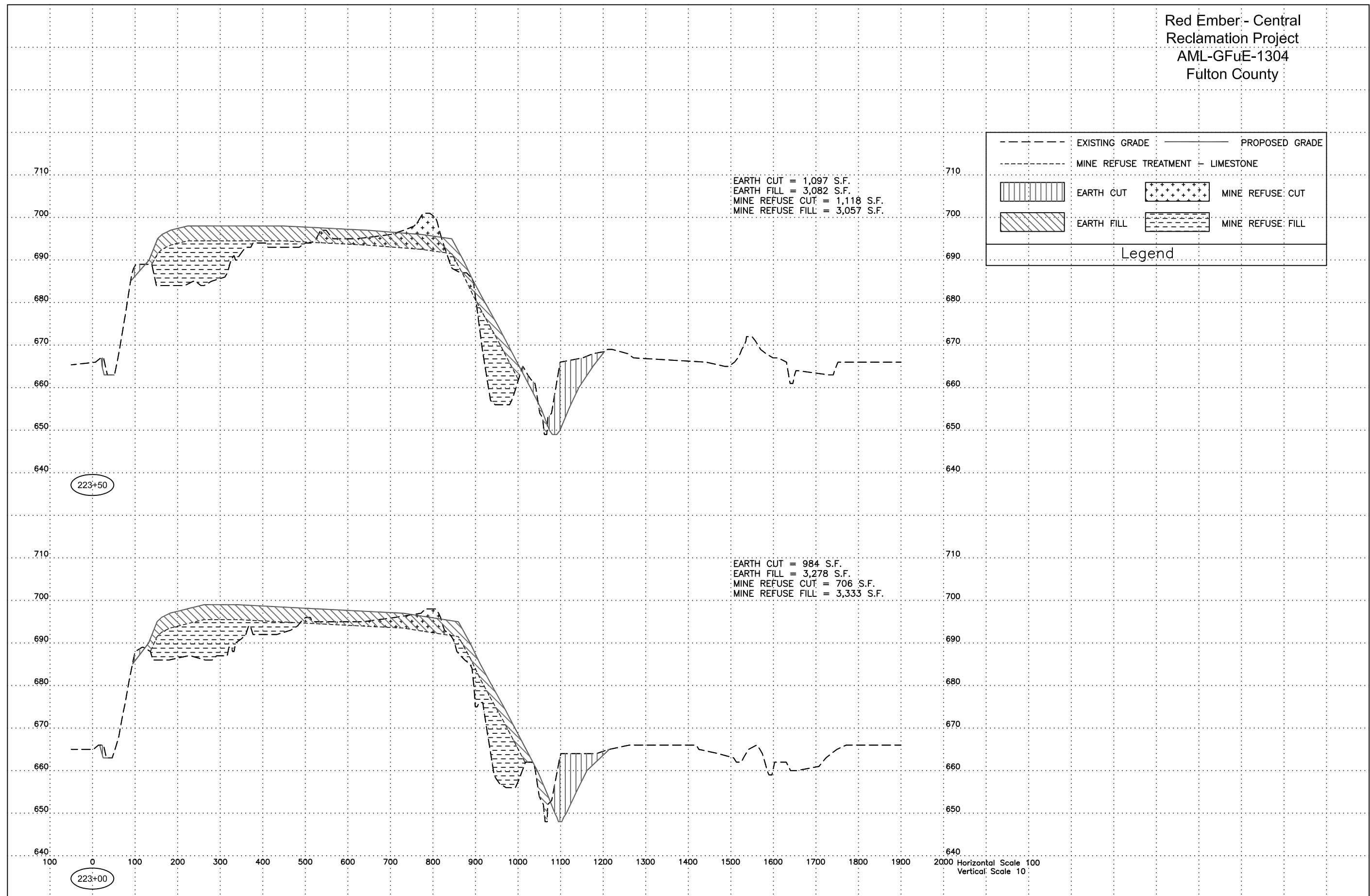
222+50

222+00

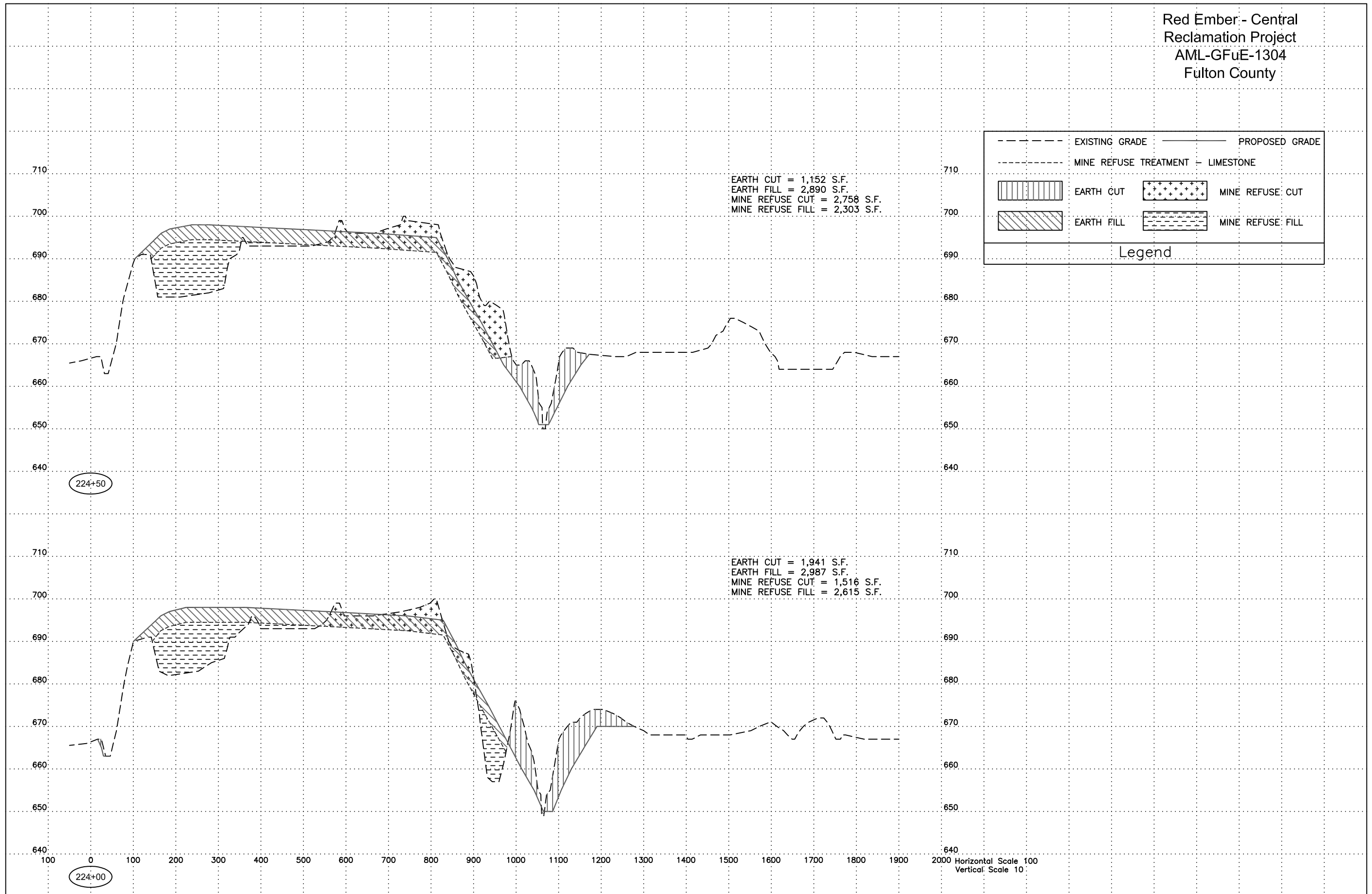
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Vertical Scale 10



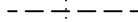
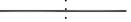
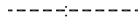
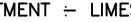

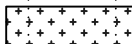

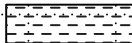
Red Ember - Central  
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Fulton County



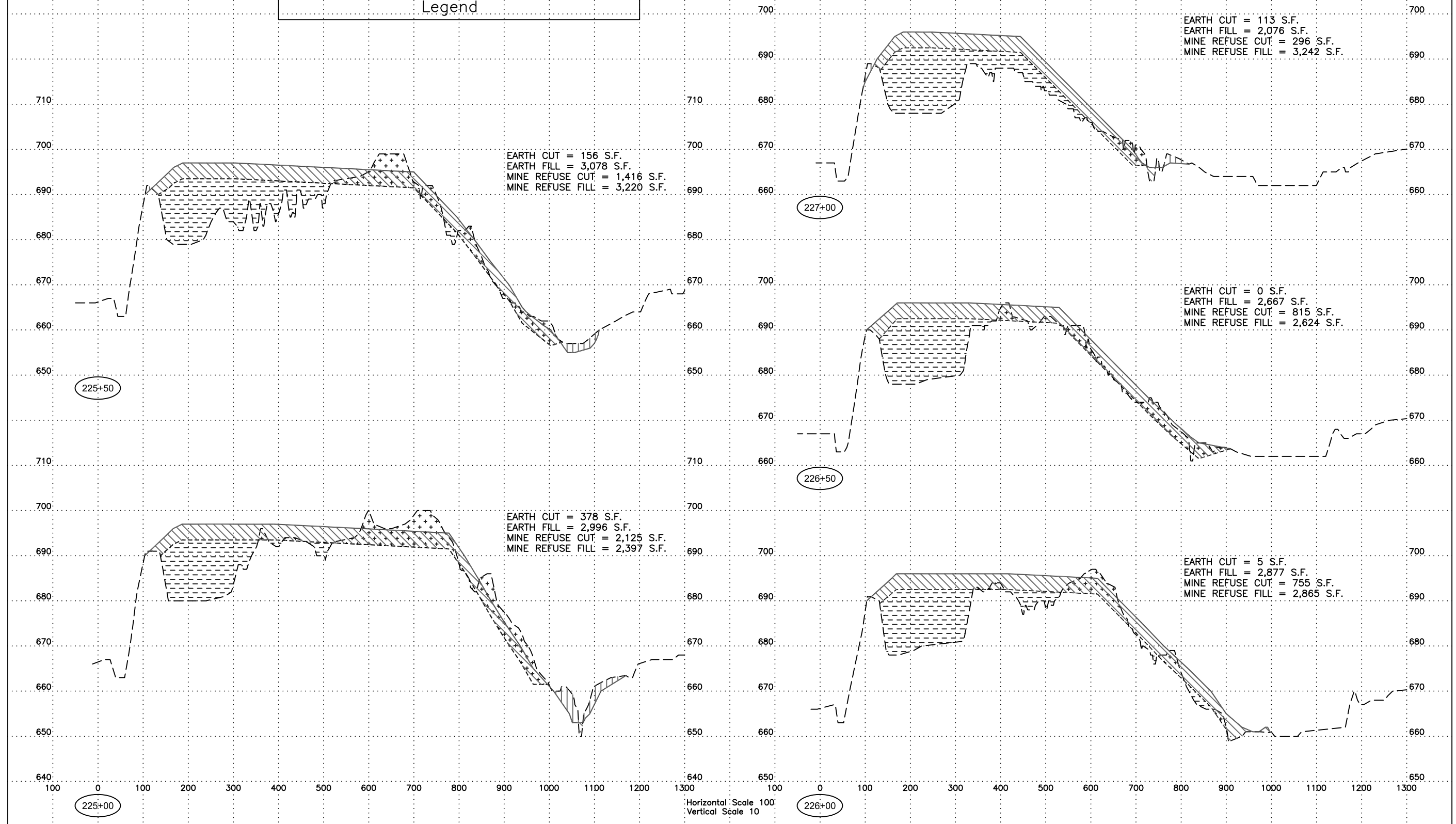
Red Ember - Central  
Reclamation Project  
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Fulton County



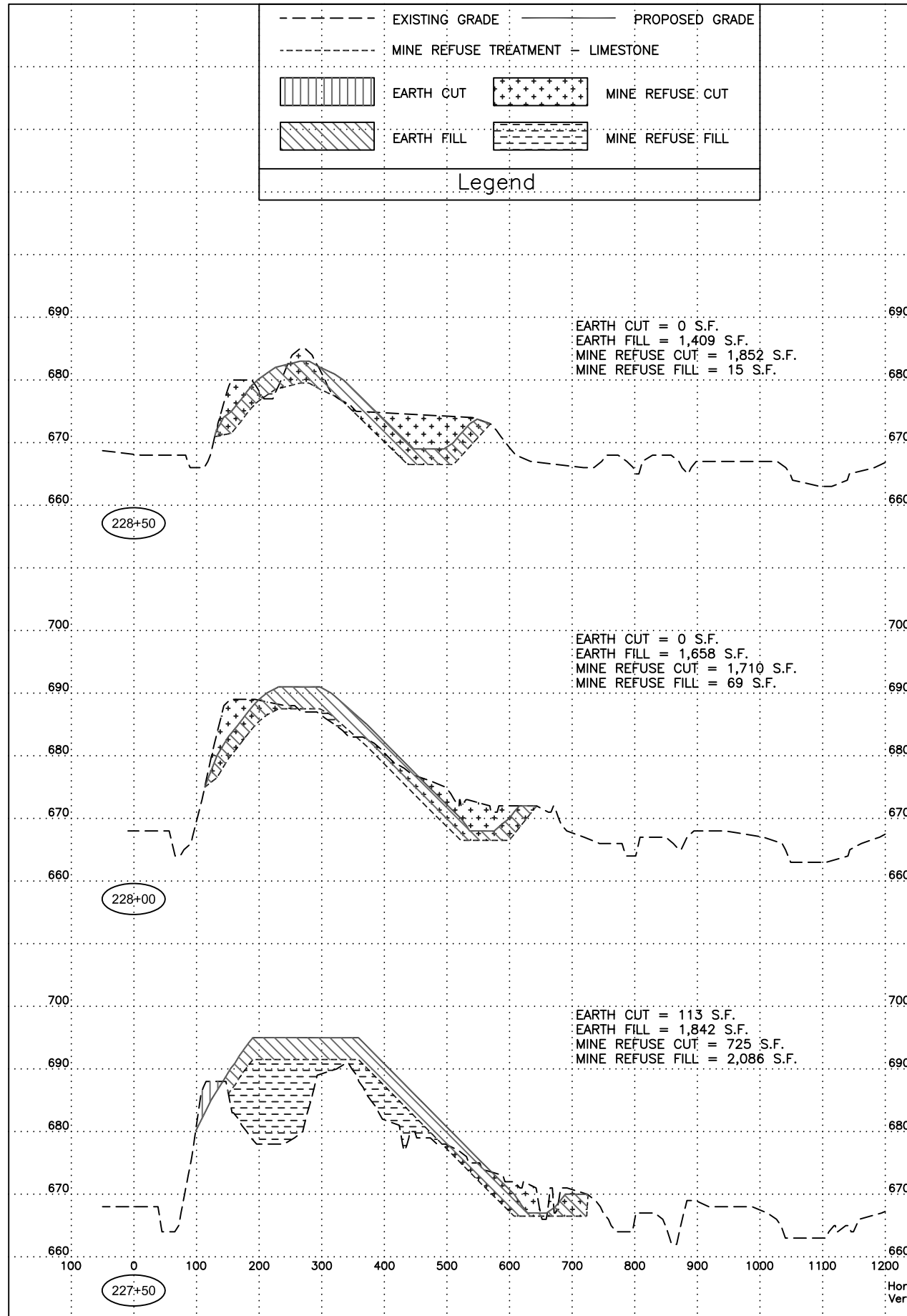
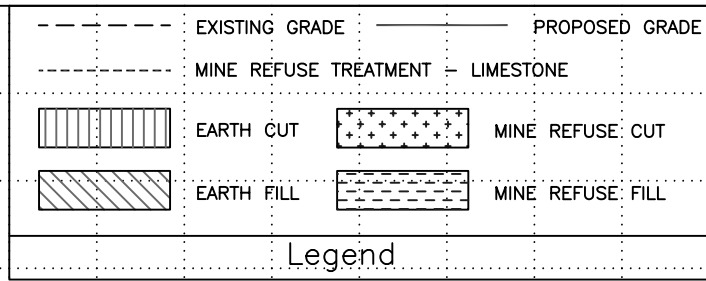
Red Ember - Central  
Reclamation Project  
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Fulton County

	EXISTING GRADE		PROPOSED GRADE
	MINE REFUSE TREATMENT		LIMESTONE
	EARTH CUT		MINE REFUSE CUT
	EARTH FILL		MINE REFUSE FILL

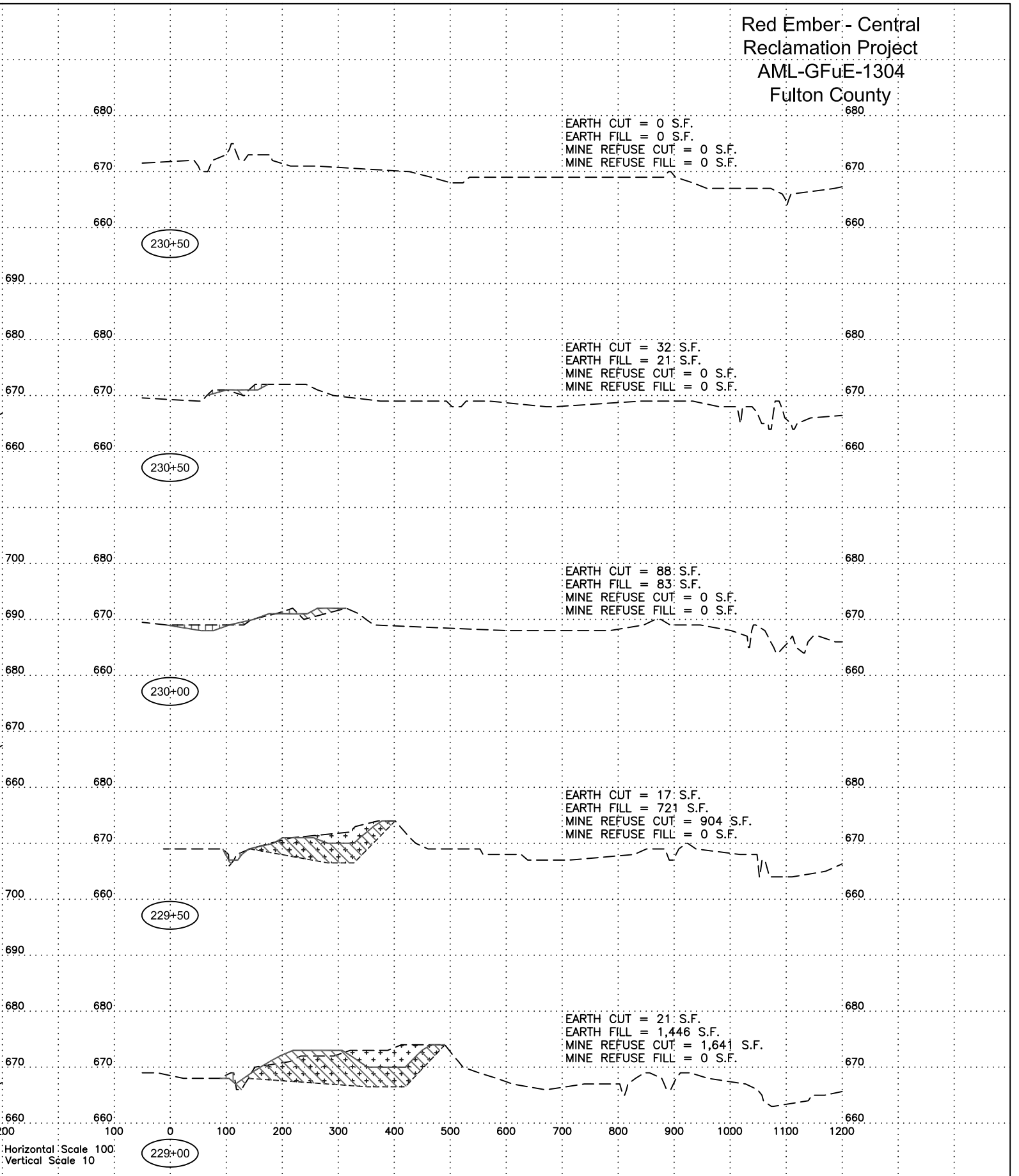
Legend



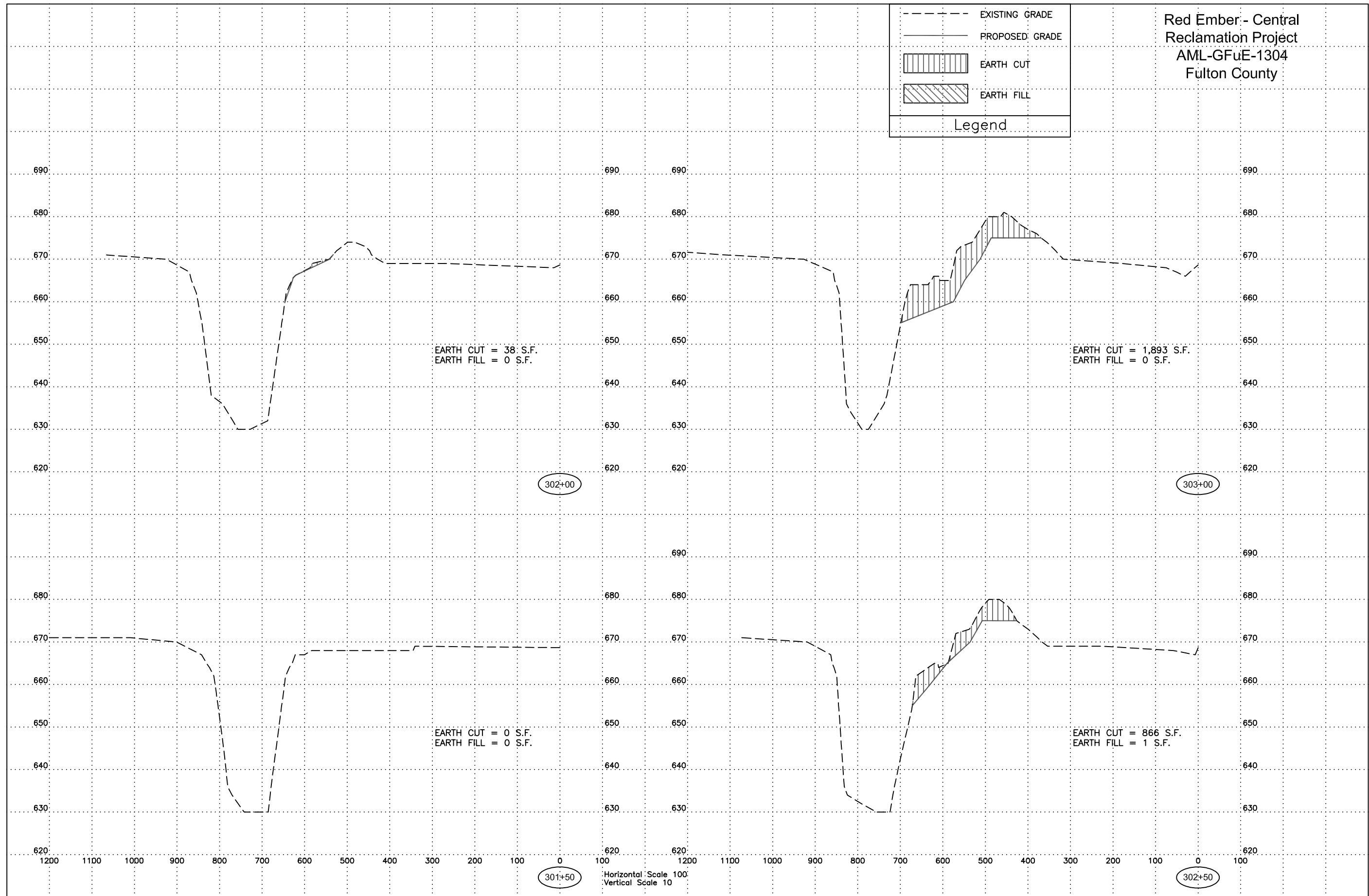
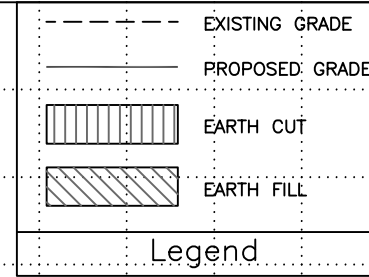
Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County



Horizontal Scale 100'  
Vertical Scale 10'

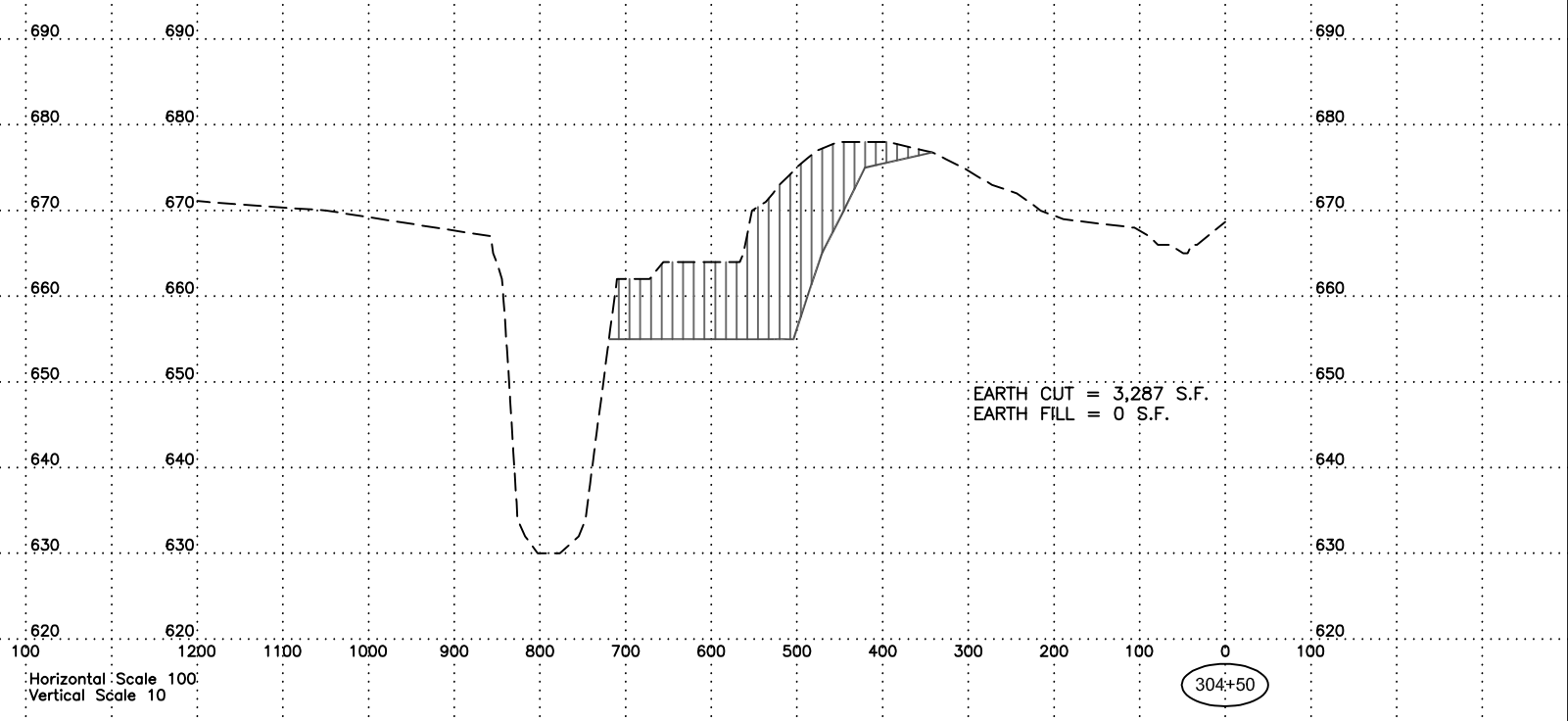
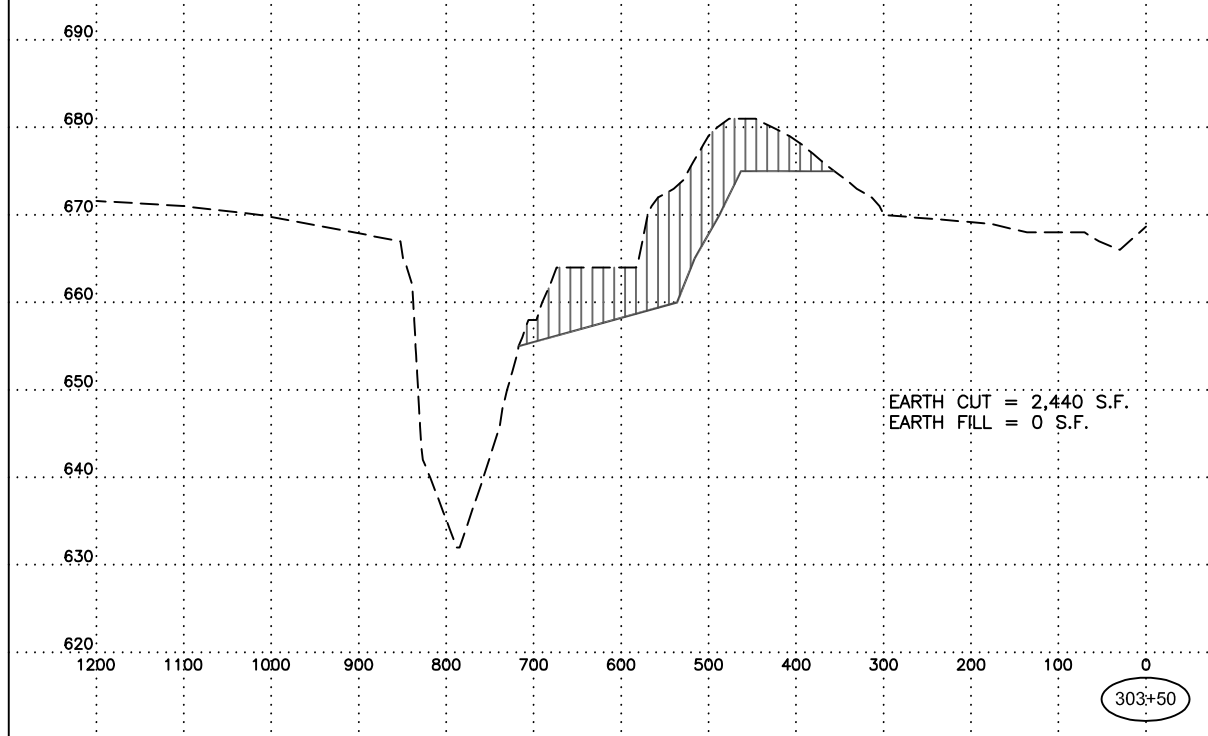
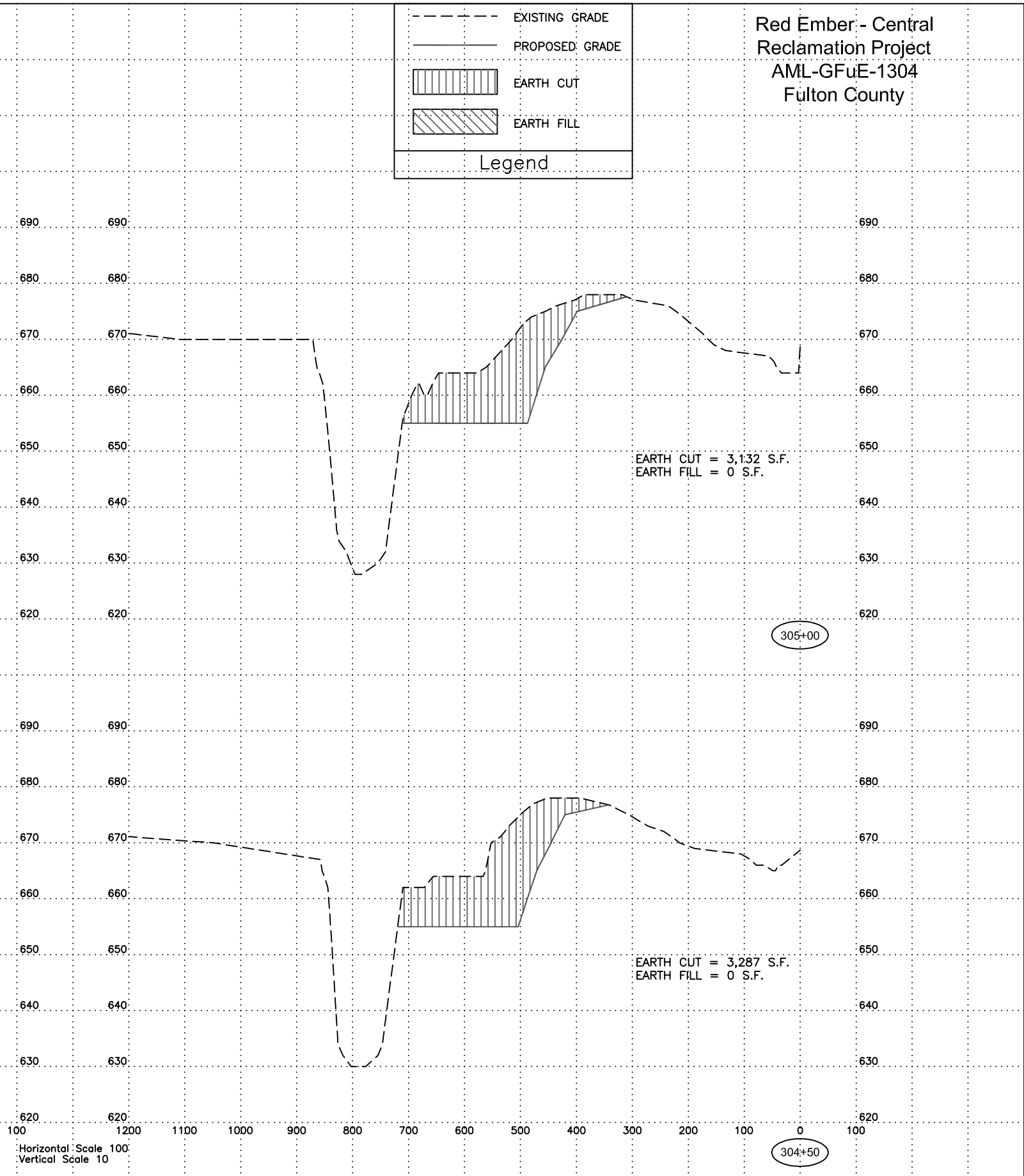
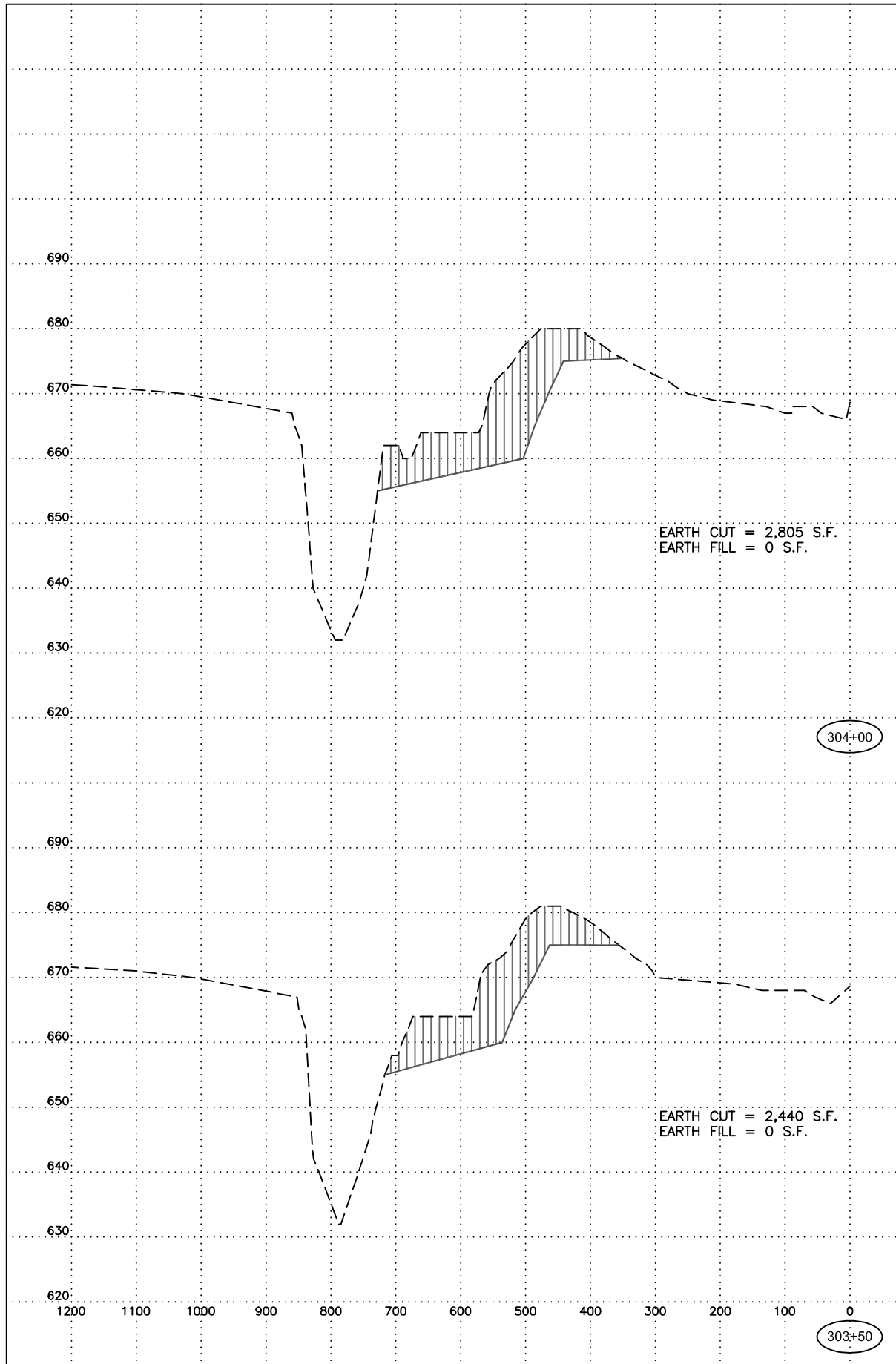
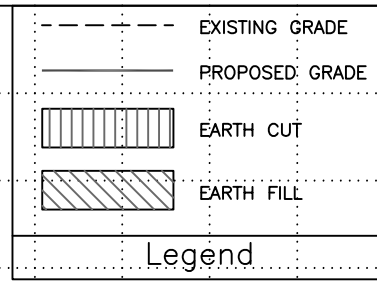


Red Ember - Central  
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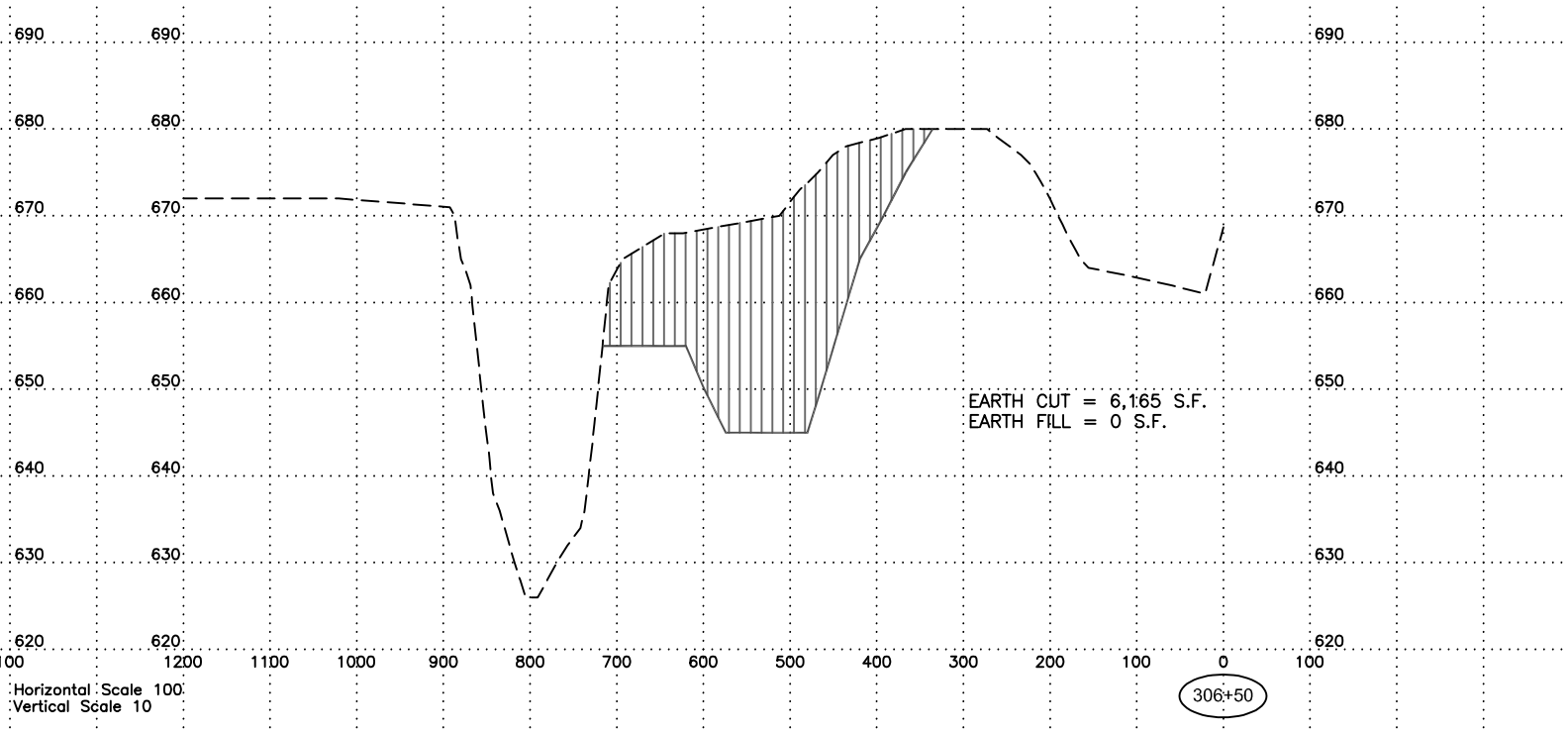
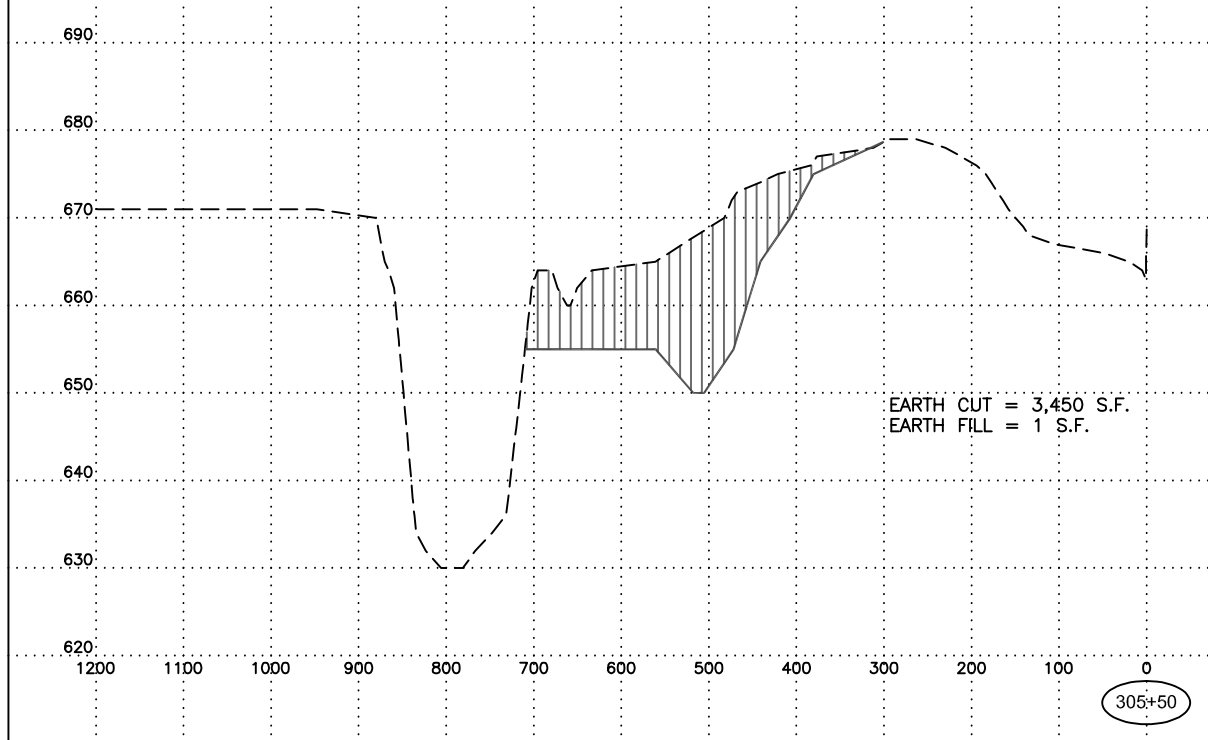
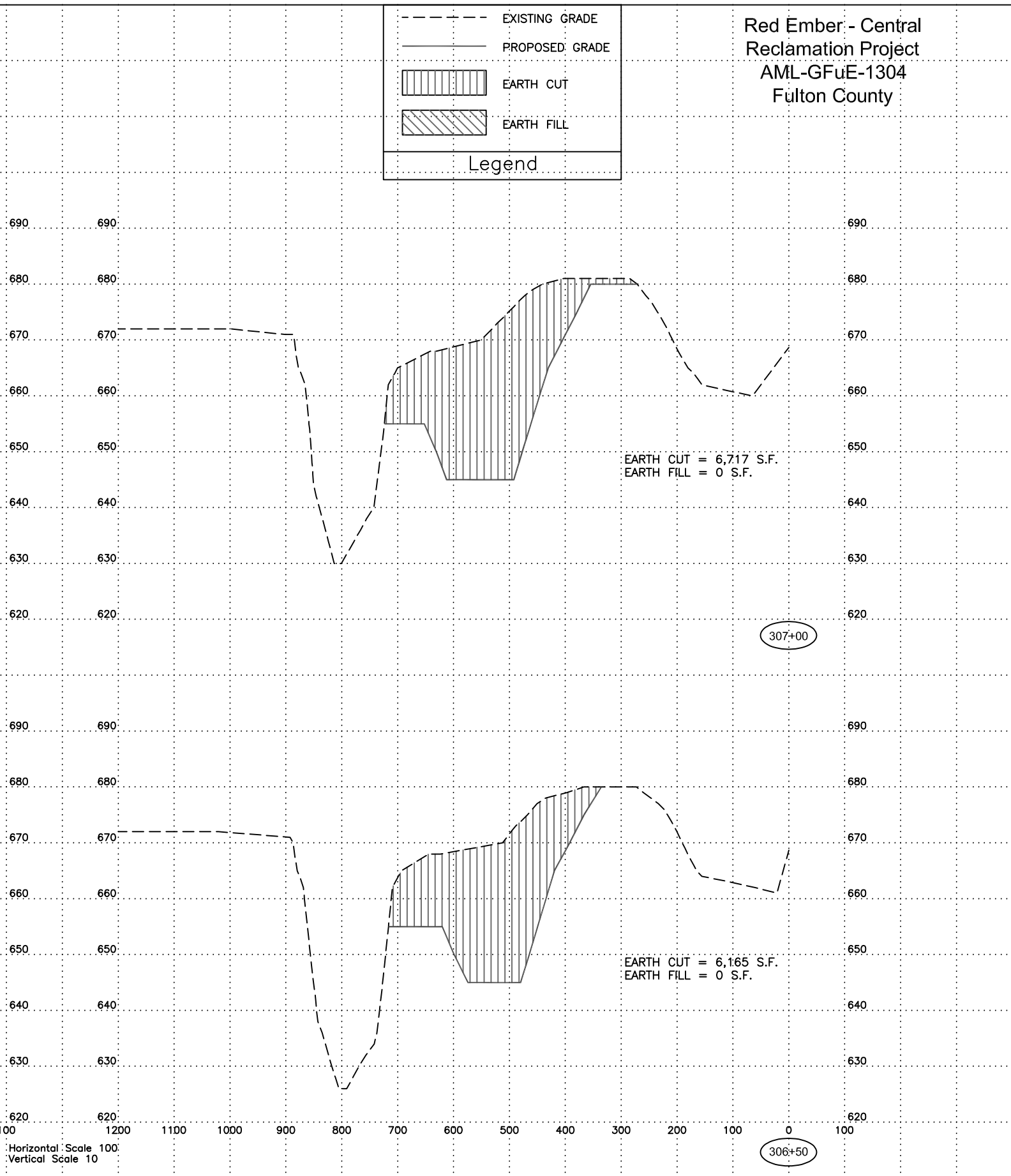
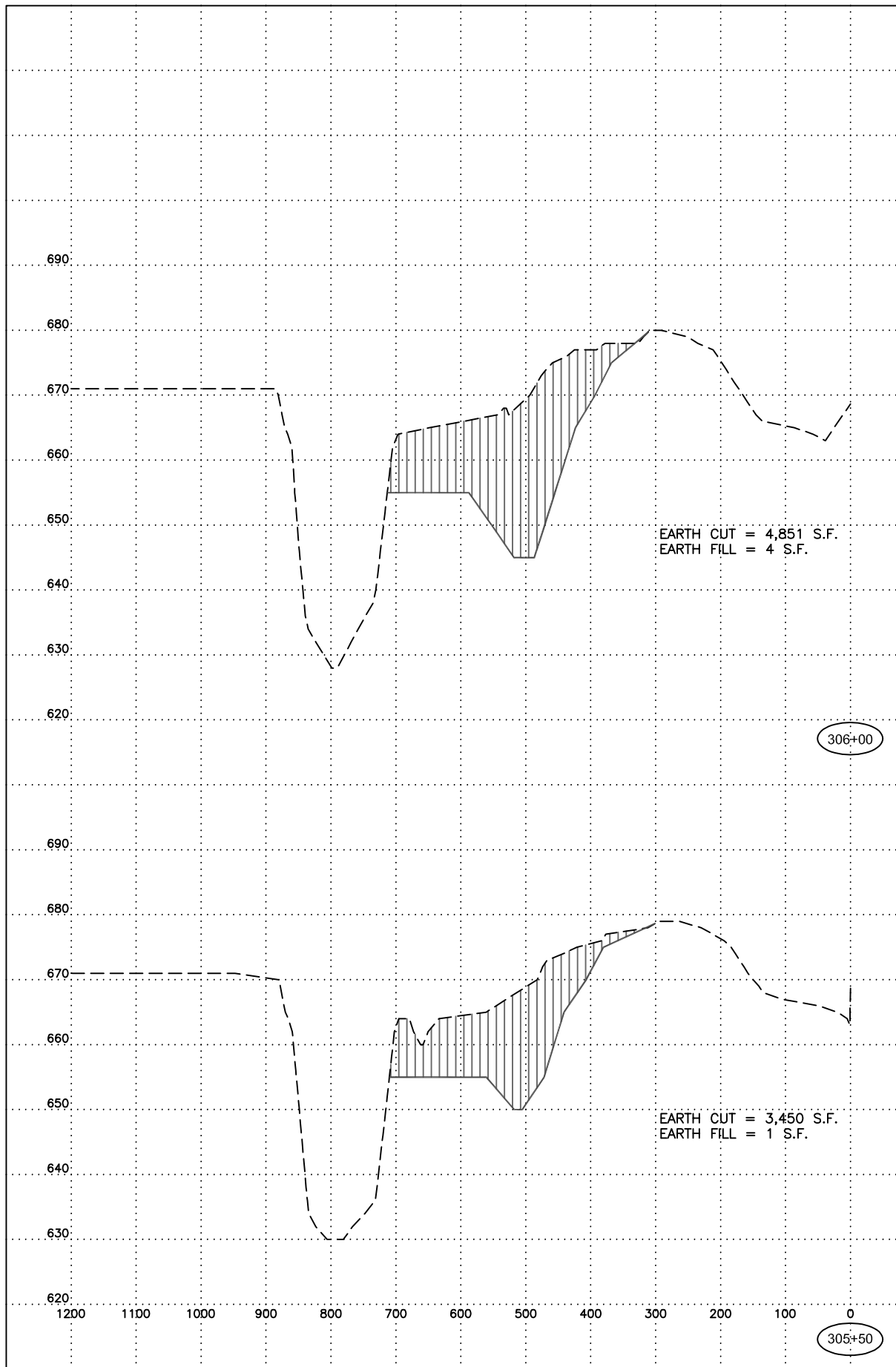
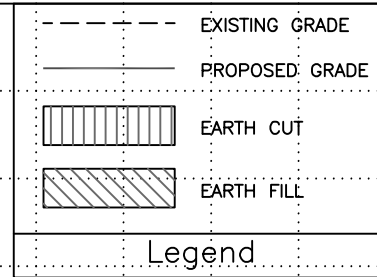
Horizontal Scale 100  
Vertical Scale 10

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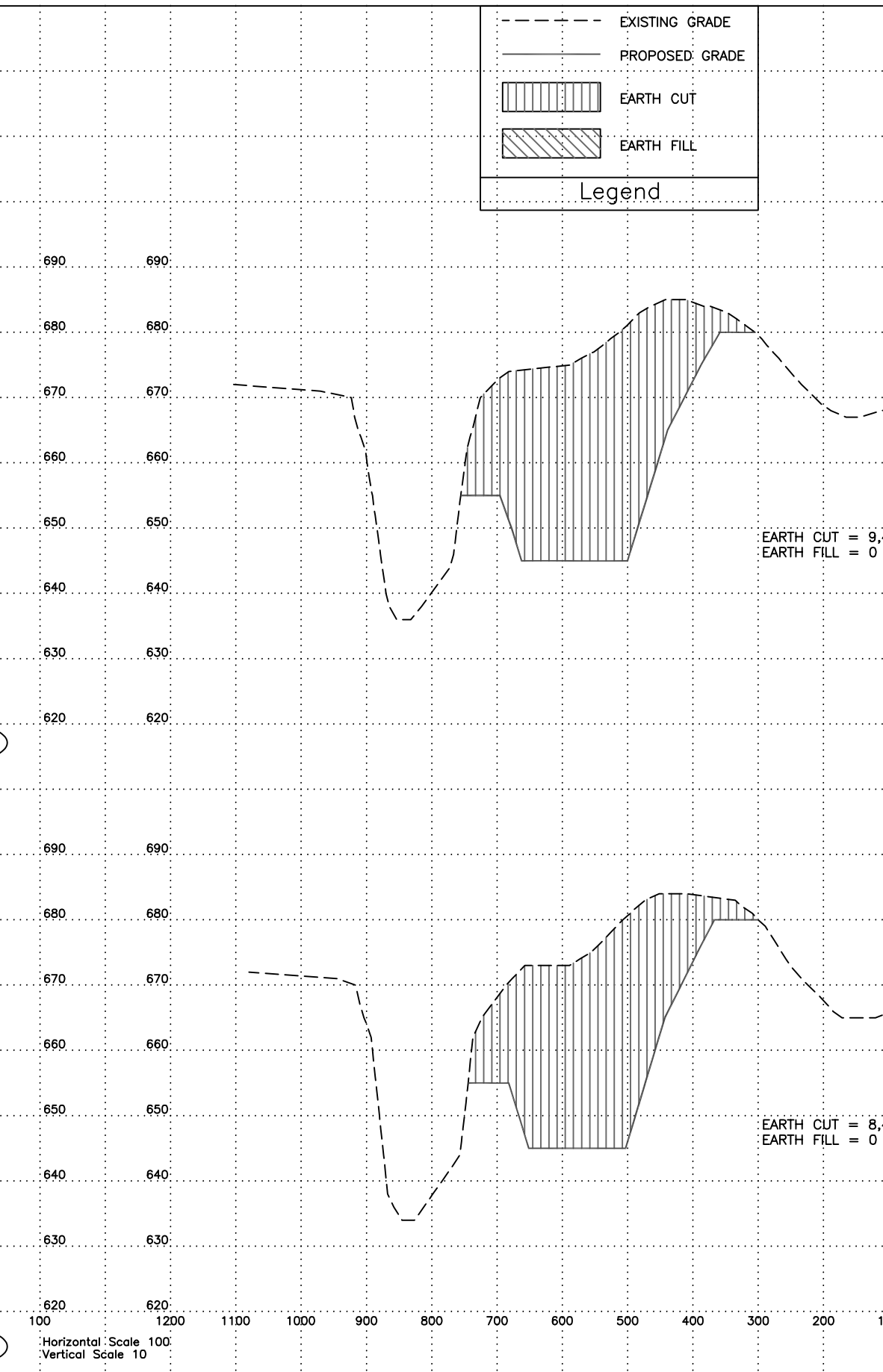
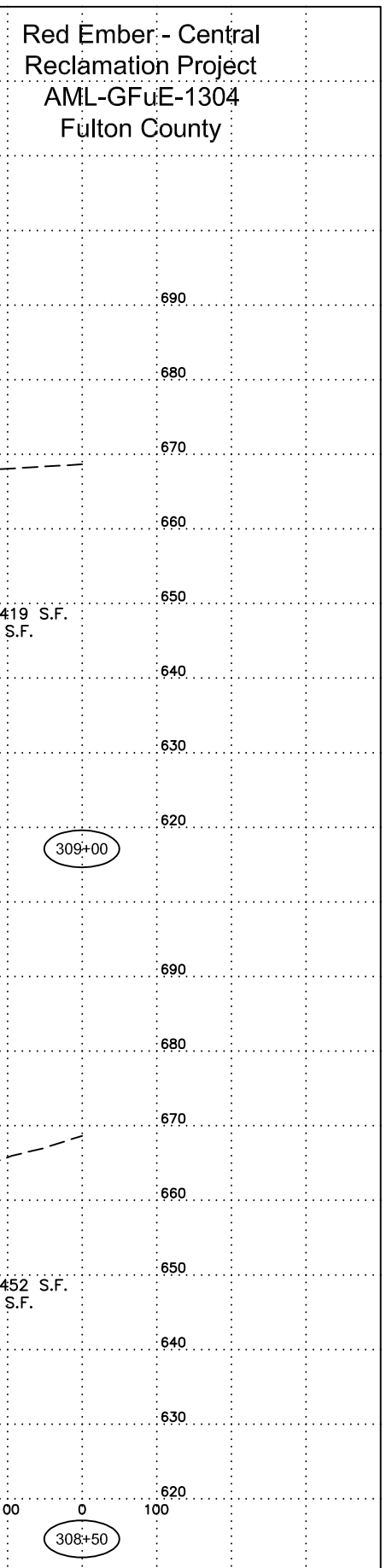
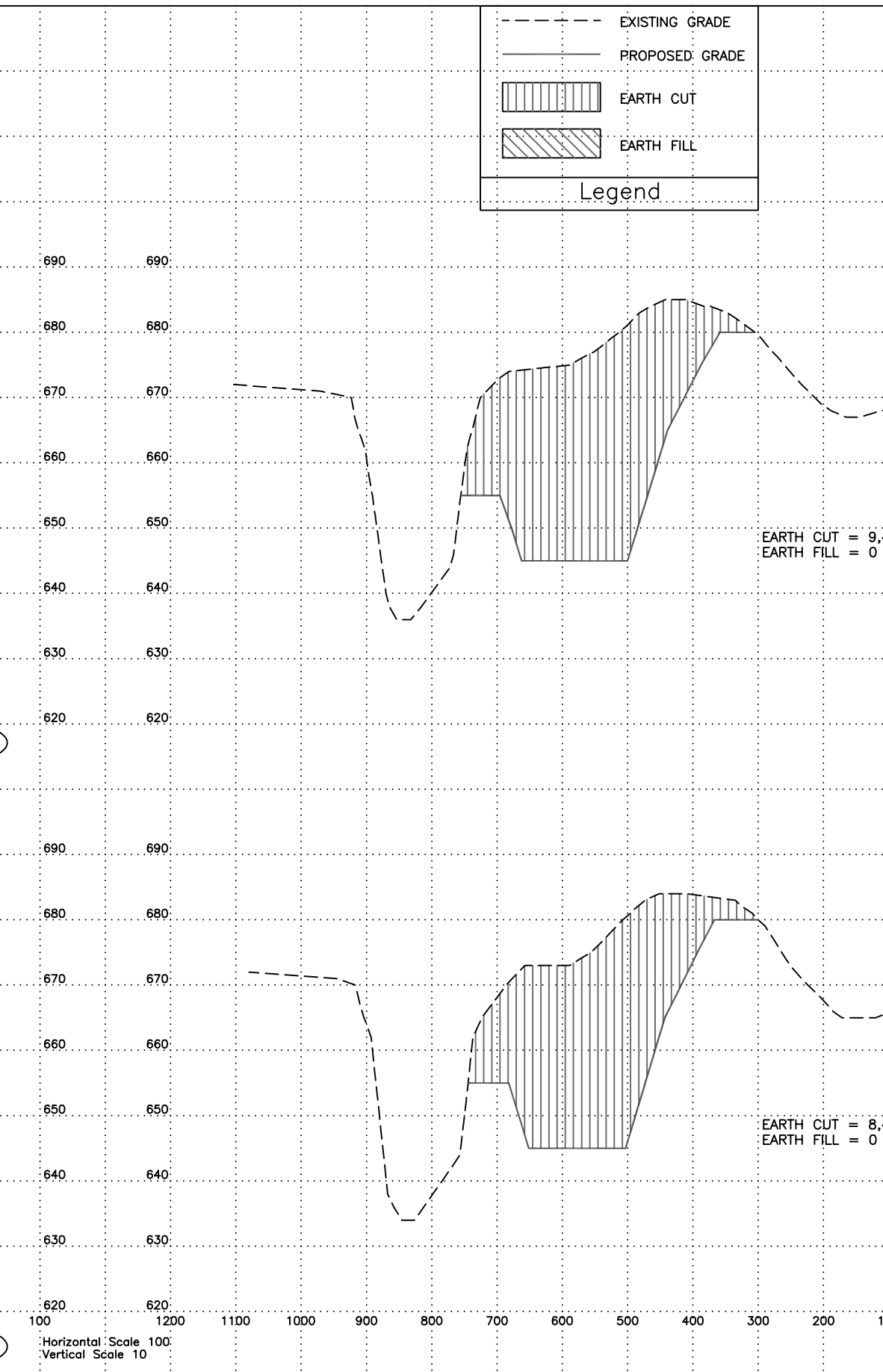
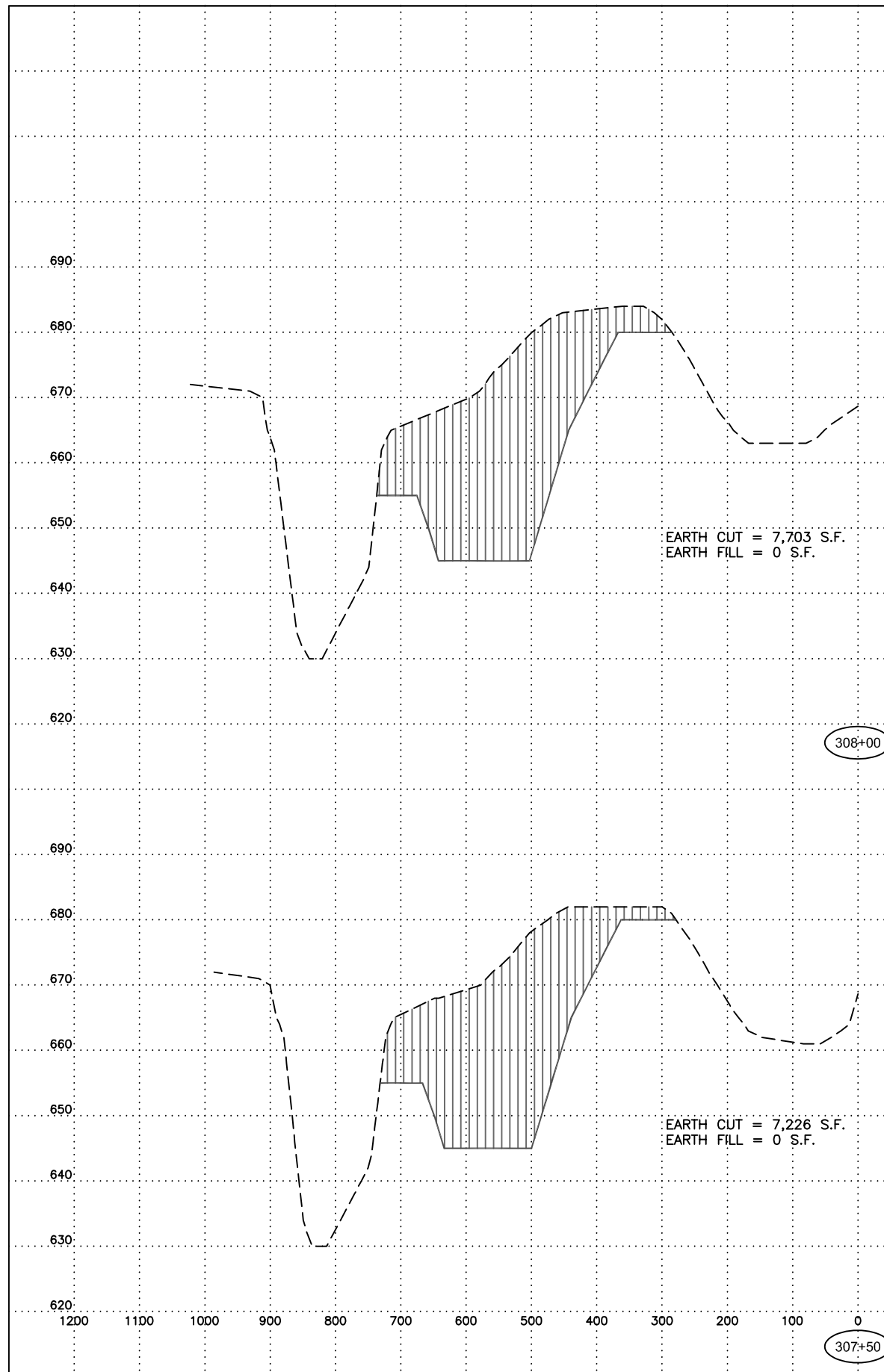
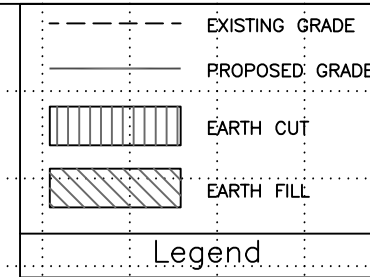
Horizontal Scale 100  
Vertical Scale 10

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Horizontal Scale 100'  
Vertical Scale 10'

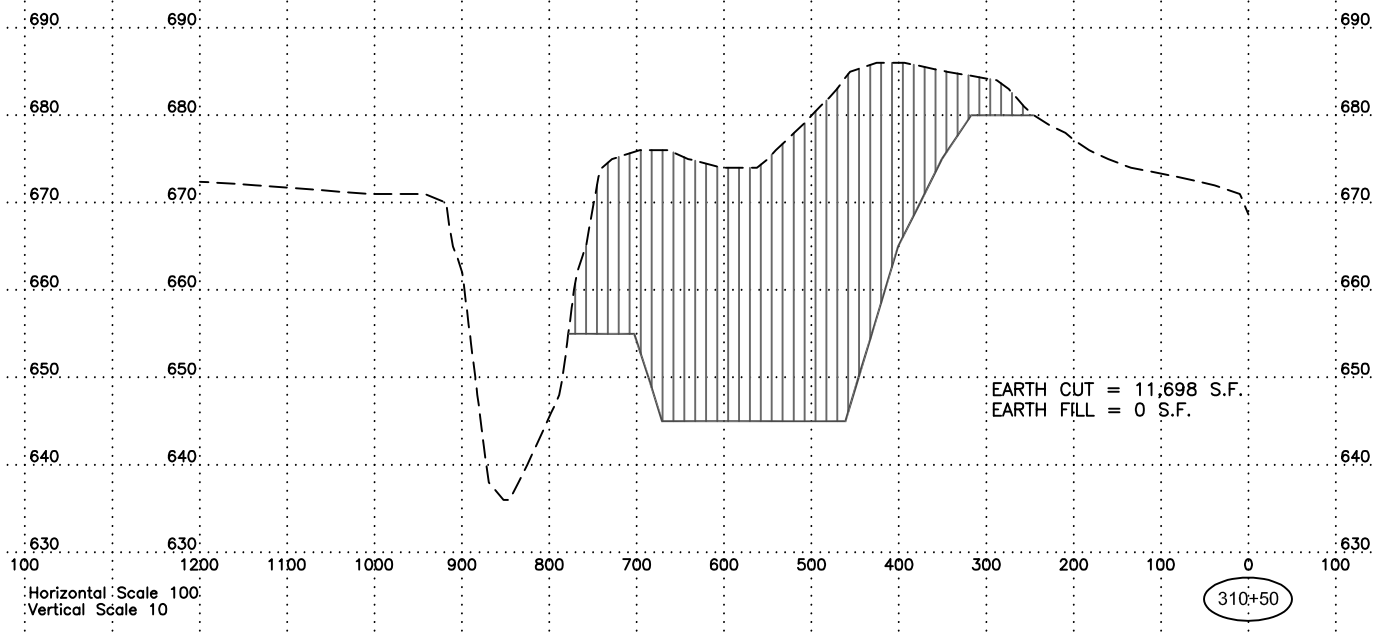
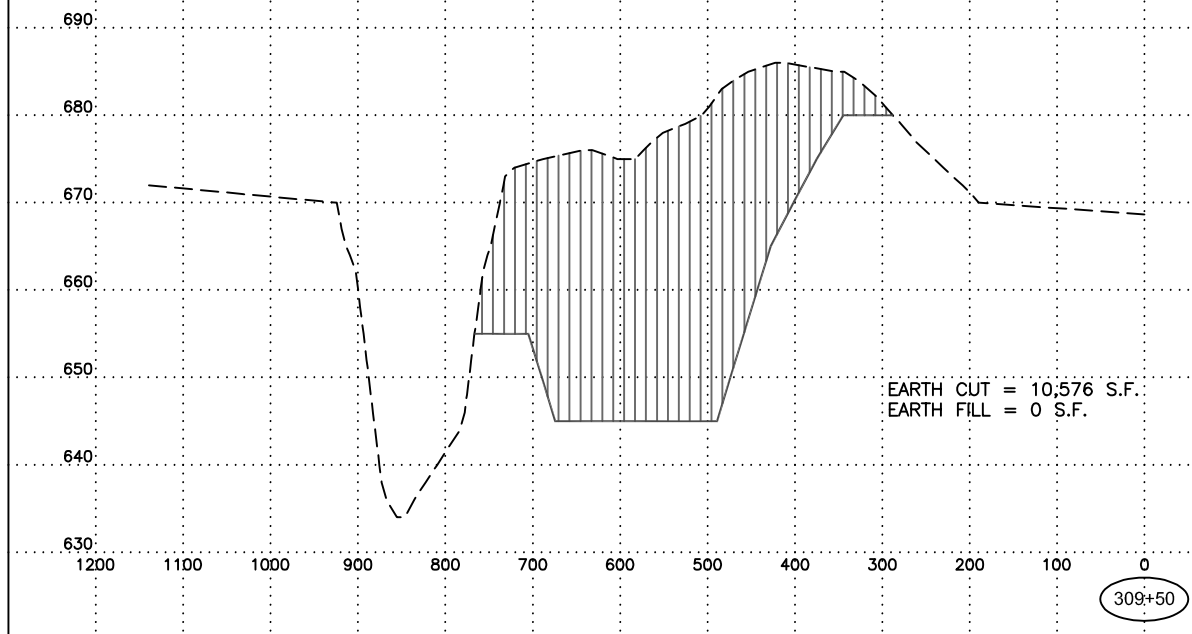
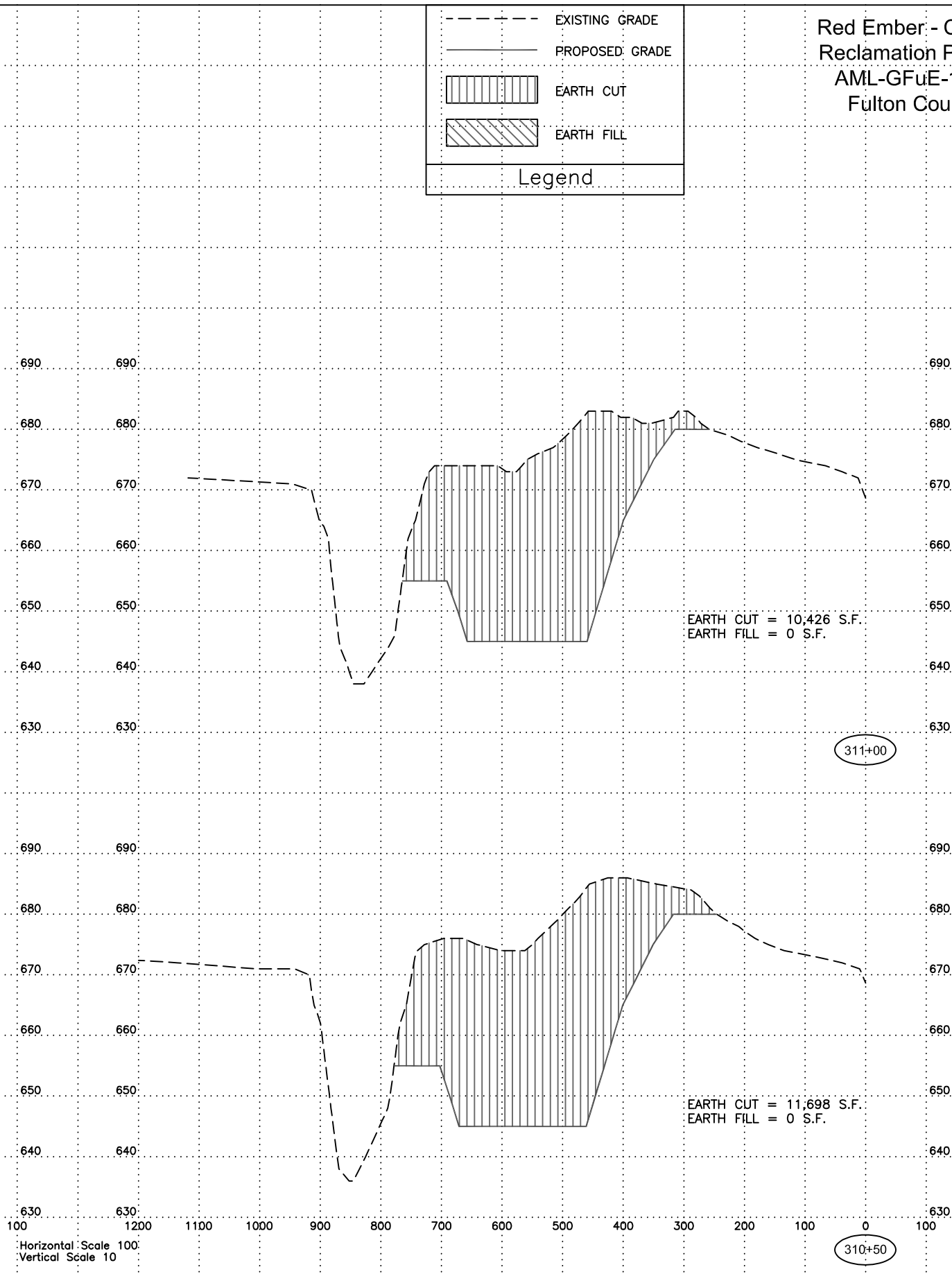
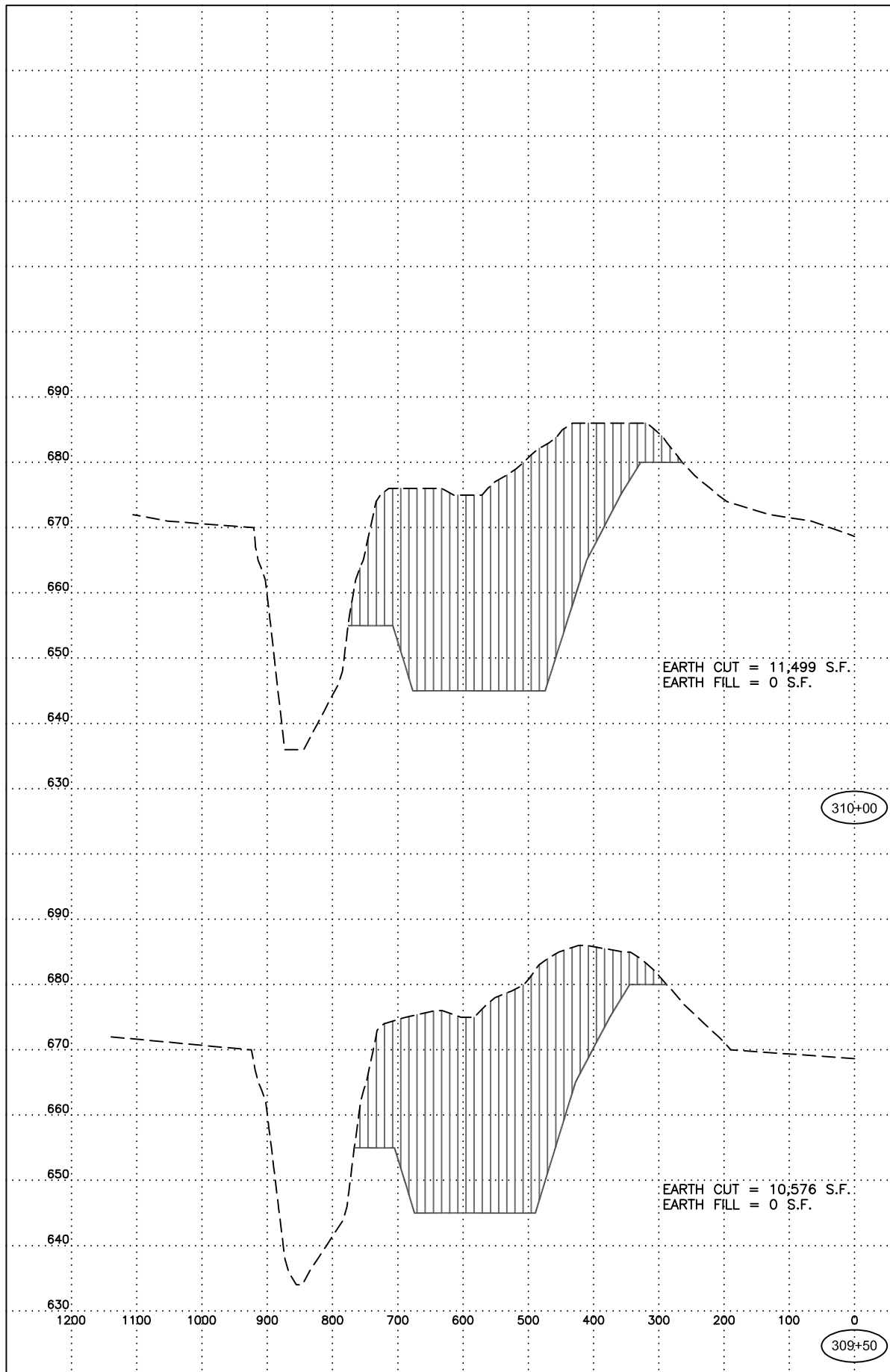
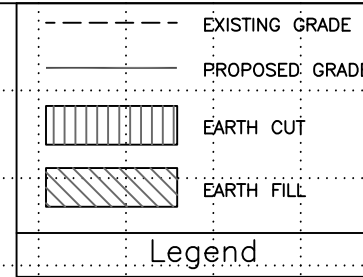
Red Ember - Central  
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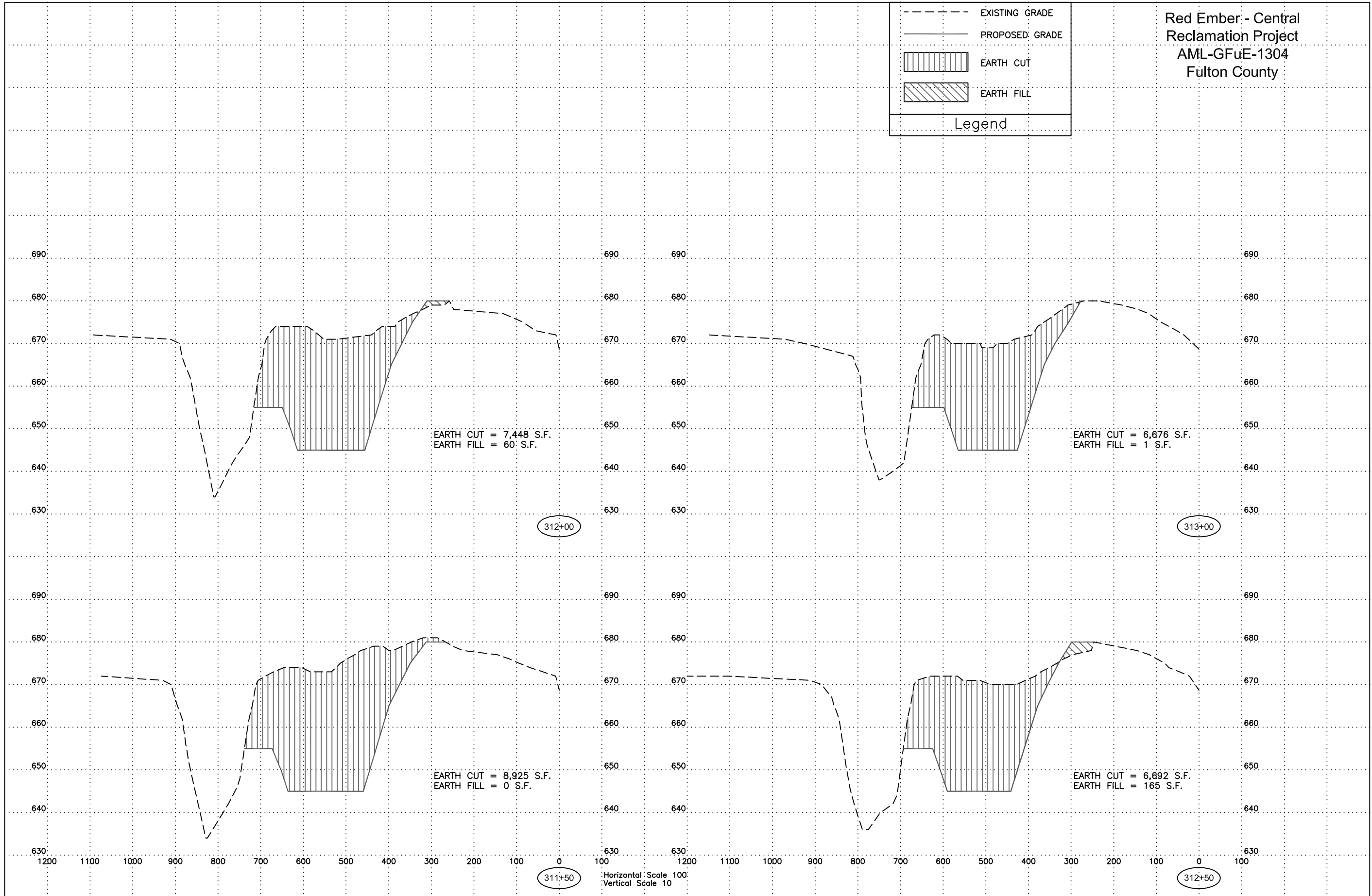
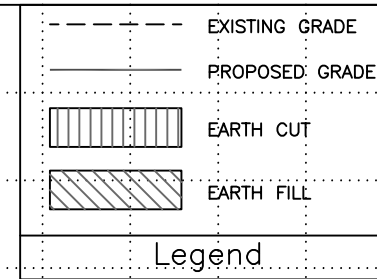
Horizontal Scale 100'  
Vertical Scale 10'



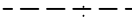


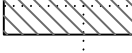
Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County

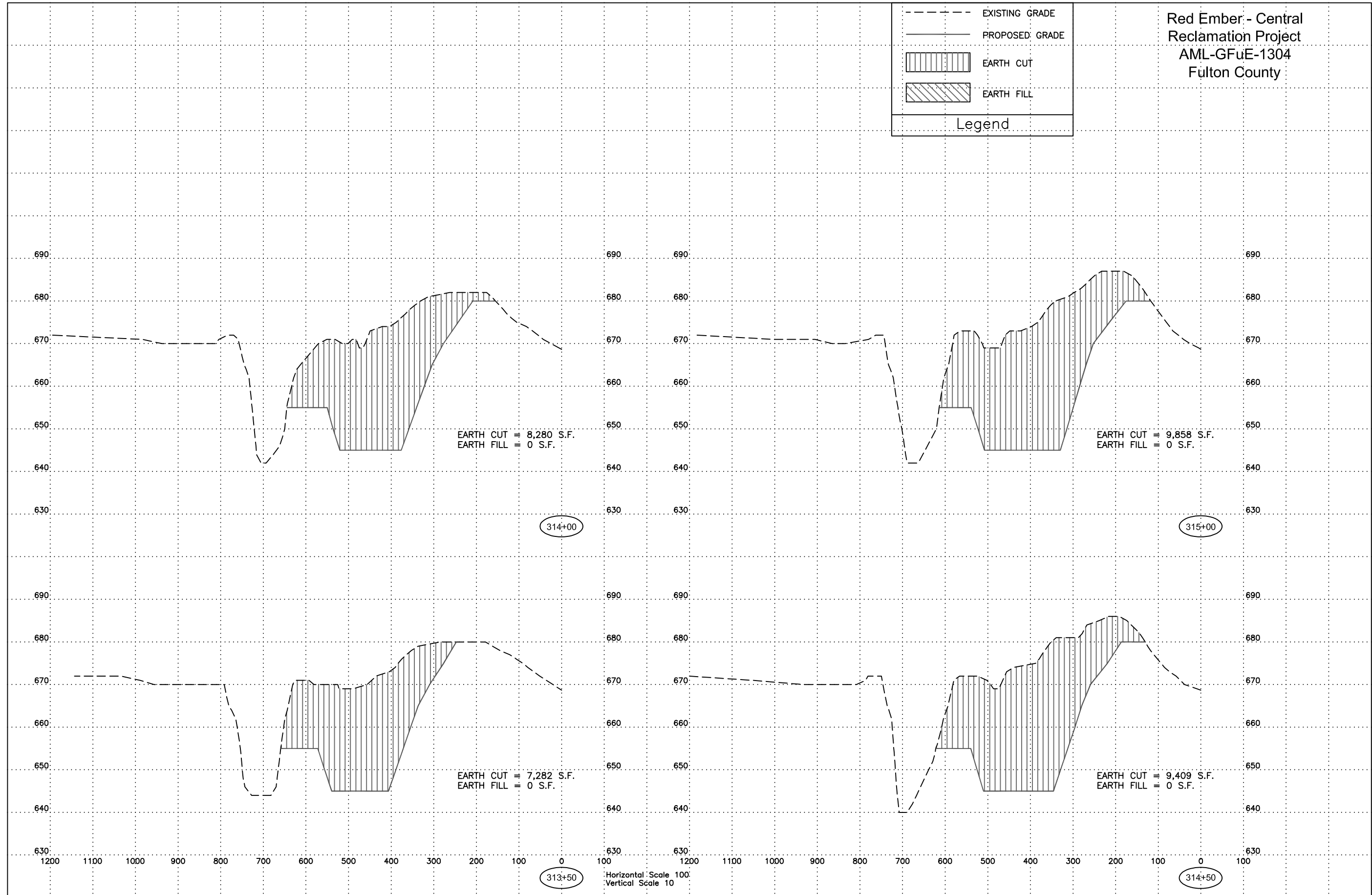


Red Ember - Central  
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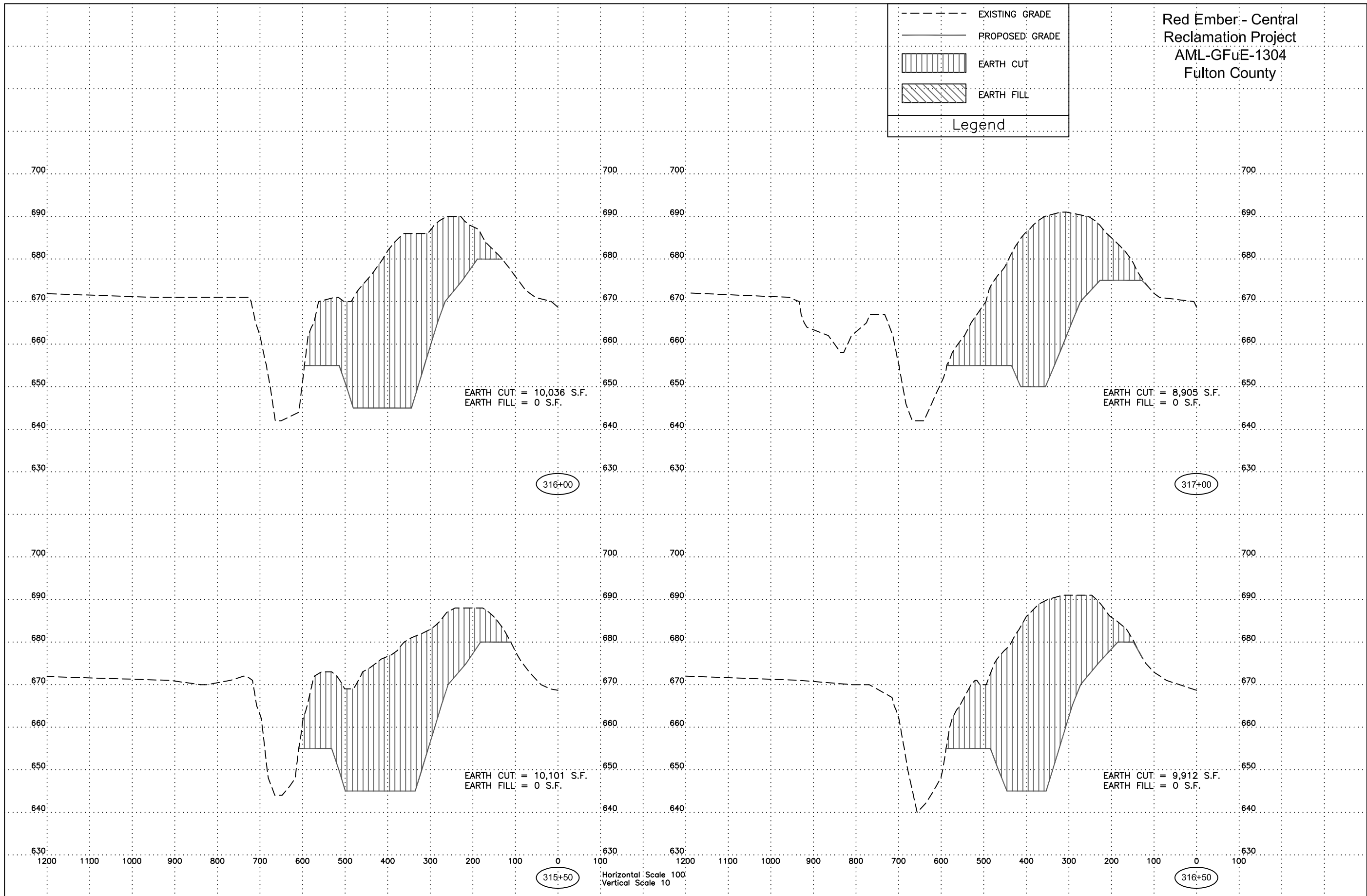
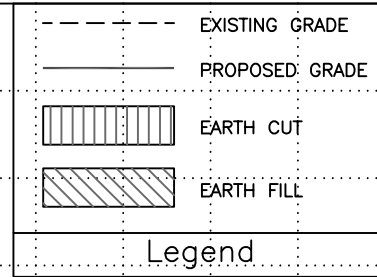


Red Ember - Central  
Reclamation Project  
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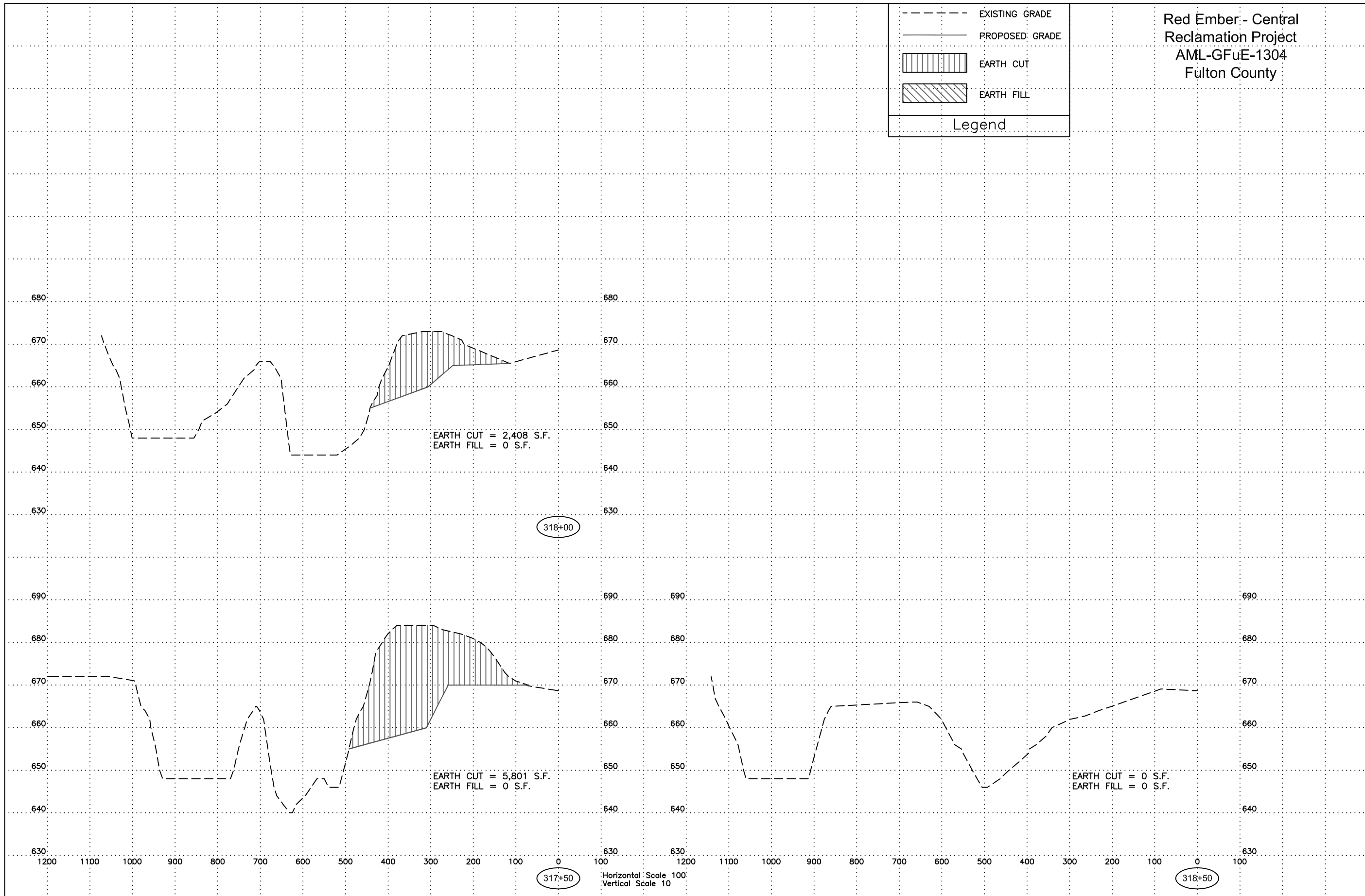
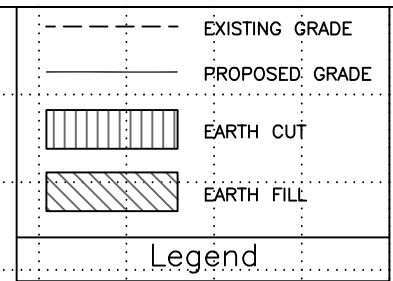
	EXISTING GRADE
	PROPOSED GRADE
	EARTH CUT
	EARTH FILL
Legend	

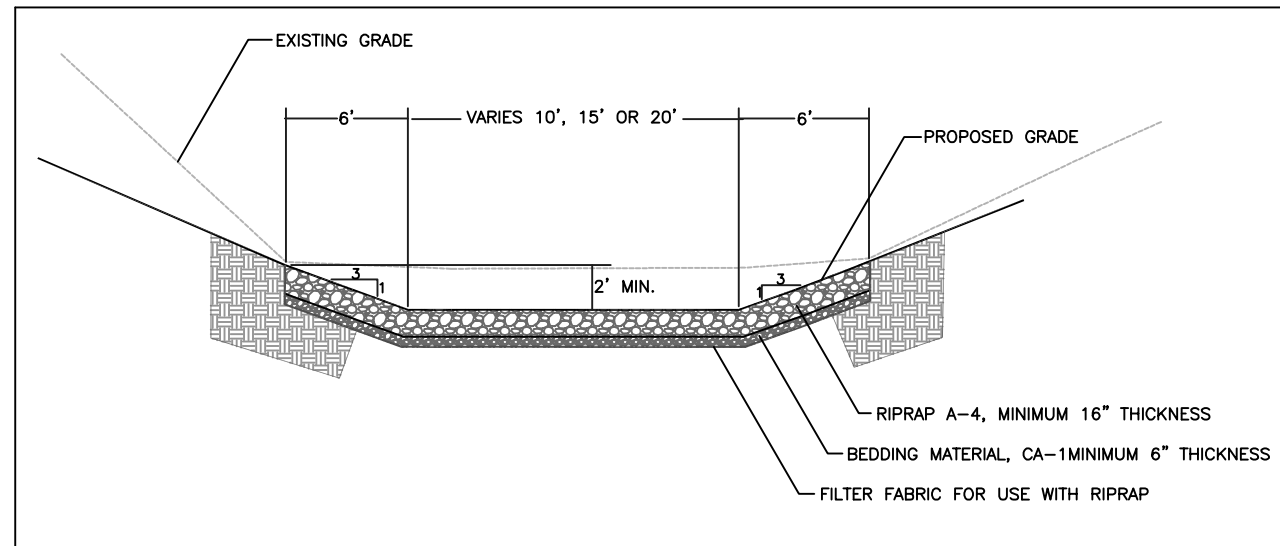


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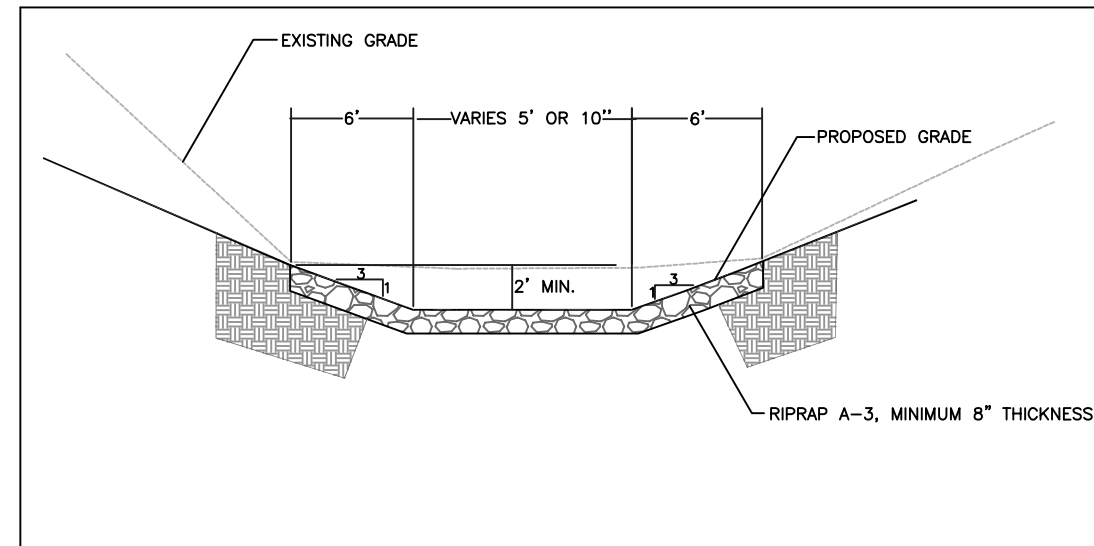


Red Ember - Central  
Reclamation Project  
AML-GFuE-1304  
Fulton County





**A**  
62 **STONE RIPRAP A-4 DETAIL**  
NOT TO SCALE



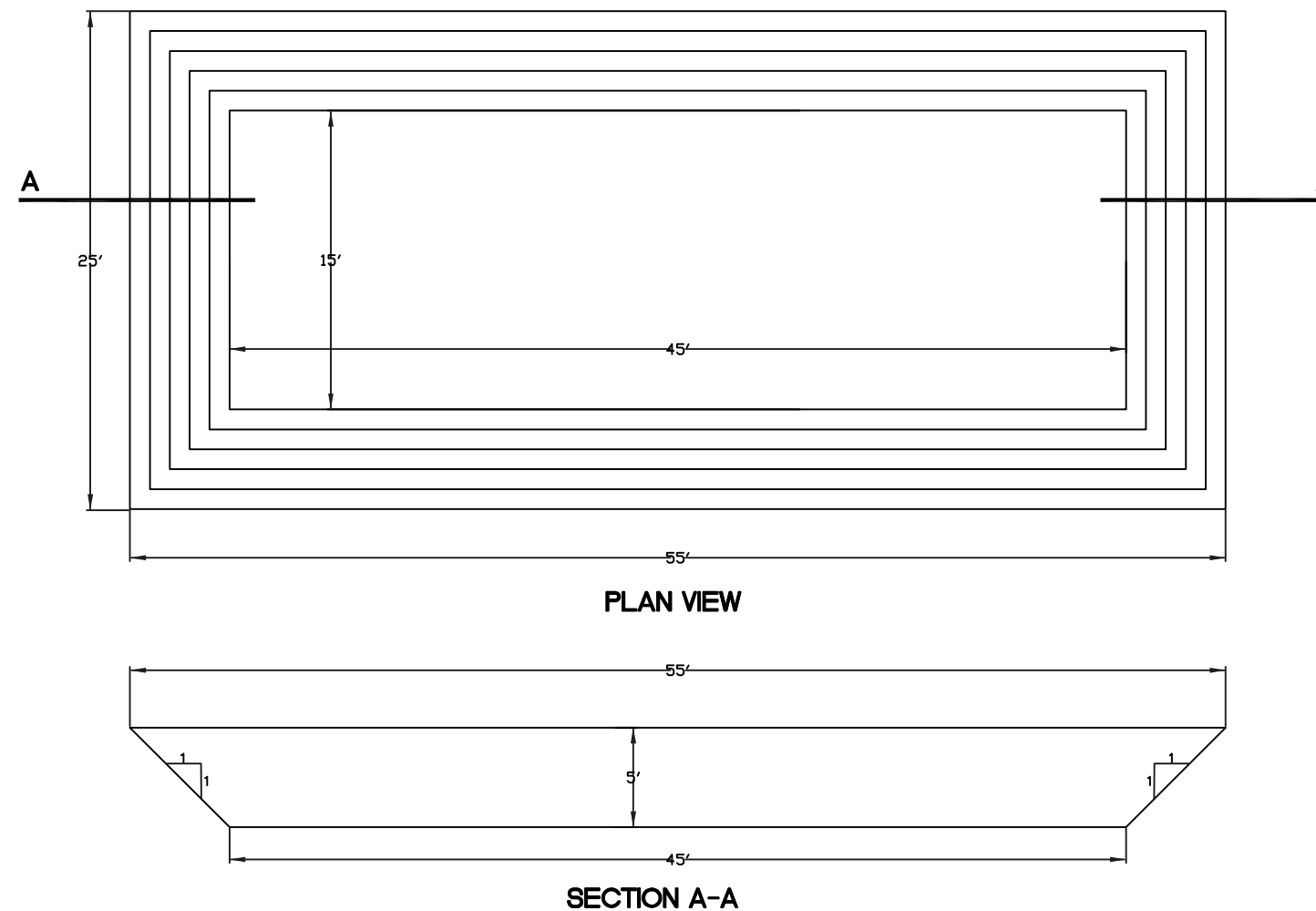
**B**  
62 **STONE RIPRAP A-3 DETAIL**  
NOT TO SCALE

SPACING LETTERS	
2.0"	3.5"
1.5"	3.5"
1.5"	3.5"
1.5"	3.5"
3.5"	3.0"
3.5"	2.5"
1.5"	2.5"
3.5"	2.0"
1.5"	2.0"
2.0"	2.0"

RECLAMATION PROJECT  
of the  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF ILLINOIS  
PAT QUINN, GOVERNOR  
Marc Miller, Director  
Department of Natural Resources  
In cooperation with the Office of Surface Mining  
United States Department of the Interior

- Furnishing, erecting and removing the sign shall be incidental to the contract.
- The sign shall be painted on 1/2" or thicker exterior plywood (4' x 8'), color shall be black on white, and a 10" diameter Illinois state seal shall be provided by the D.N.R.
- The posts shall be made of 4" x 4" wood or 2.5" metal pipe, and shall be 10' long. The sign shall be securely fastened to the posts with six 2.5" long, round head wood screws (for wood posts) or four 5" long, 3/8" diameter carriage bolts (for wood or metal posts).
- The top of the sign shall be level with the top of the posts, and the posts shall be 1' from the edges of the sign. The posts shall be set in the ground 3', so that the bottom of the sign is 3' from the ground.

**C**  
62 **CONSTRUCTION SIGN DETAIL**  
NOT TO SCALE



**D**  
62 **SEDIMENT POND DETAIL**  
NOT TO SCALE