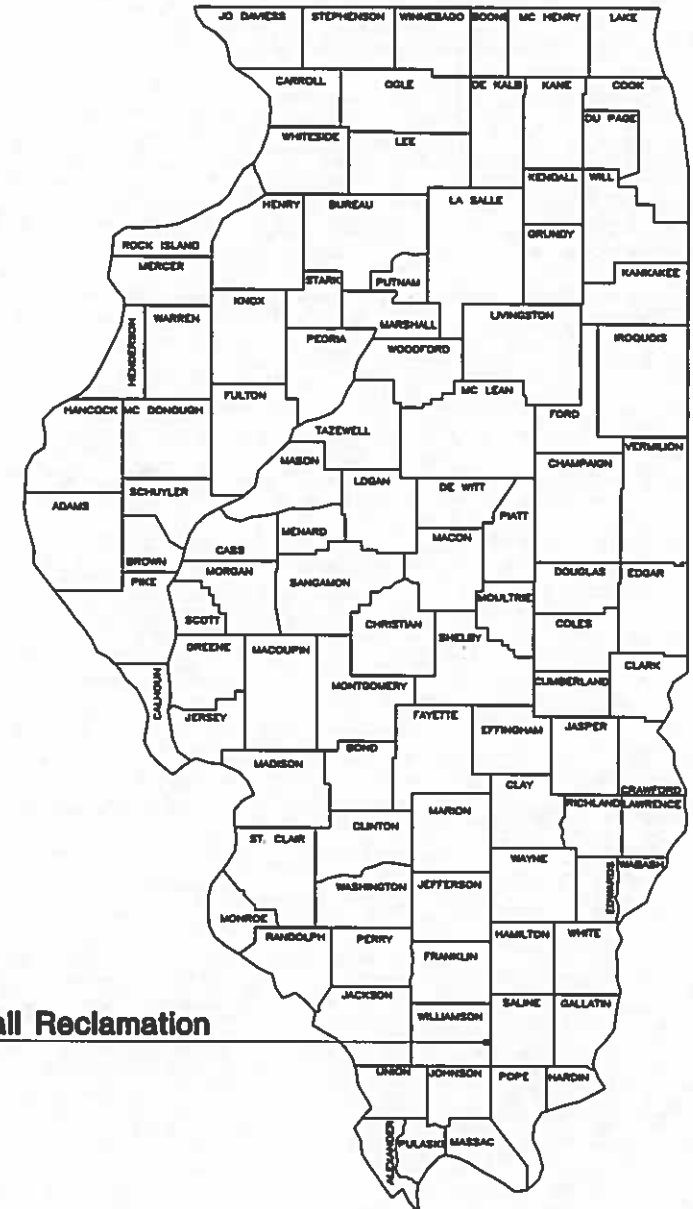


State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands Reclamation

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

**Thunderbird Highwall
 Reclamation Project
 AML-GWmE-2001
 Williamson County
 3LR**



**Thunderbird Highwall Reclamation
 Williamson County**

SCHEDULE OF DRAWINGS:

1. Cover Sheet
2. Summary of Quantities / General Notes / Location Map
3. Site Information / Existing Conditions
4. Proposed Conditions
- 5.-9. Cross Sections
10. Details

IDOT Standard 701006-05

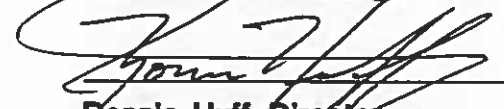
CONTRACT NO. M2001

PRE-BID MEETING

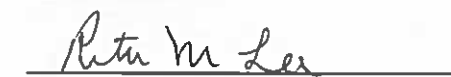
A PRE-BID MEETING IS SCHEDULED FOR THIS PROJECT ON WEDNESDAY, FEBRUARY 24, 2021, AT 1:00 p.m. AT THE PROJECT SITE (SEE SHEET 2). ALL PRIME AND SUBCONTRACTORS ARE ENCOURAGED TO ATTEND.

Prepared By IDNR Staff

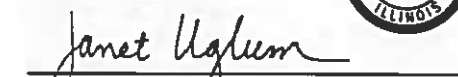
Approved for Bidding:


 Ronnie Huff, Director
 Office of Mines and Minerals

Approved By:

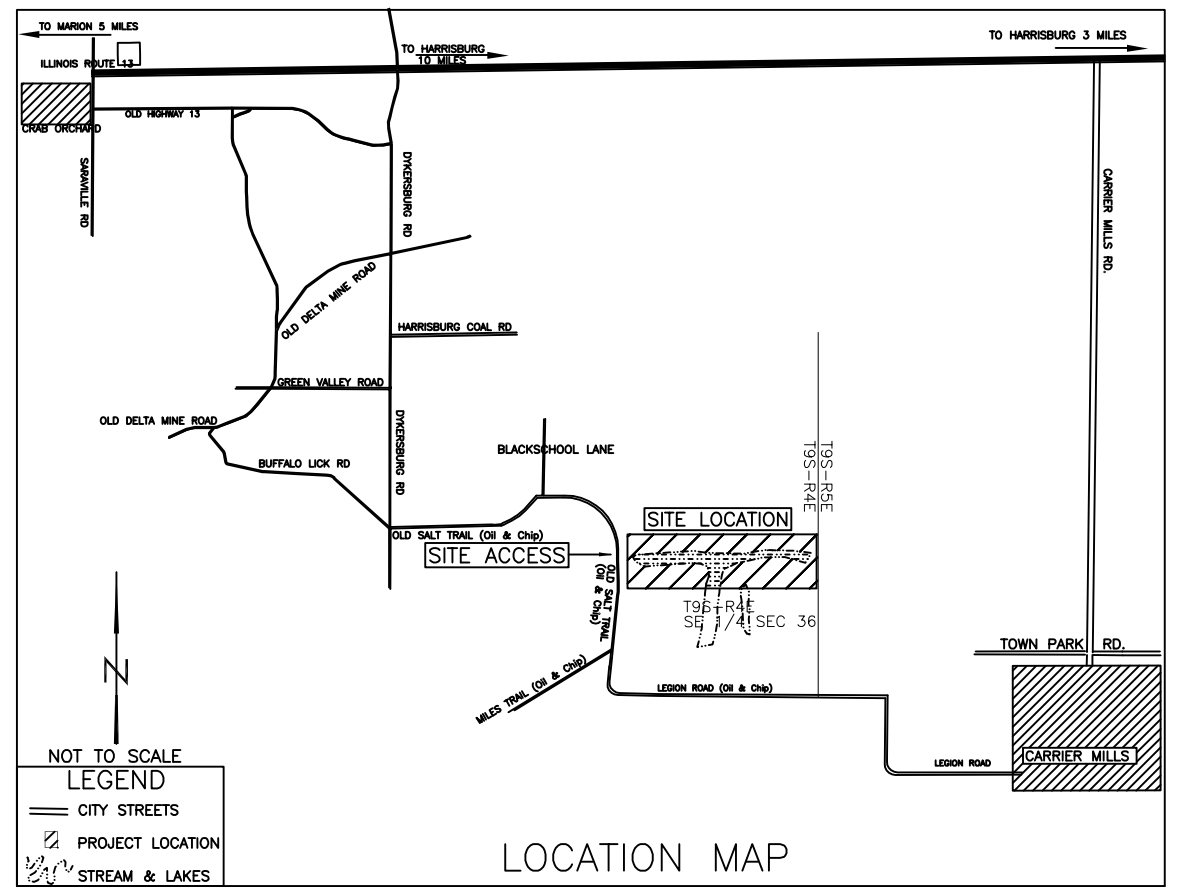

 Rita M. Lee, Manager
 AMLR Division

Approved By:


 Janet L. Uglum, P.E.
 IL Licensed Professional Engineer
 No. 062-054108



Summary of Quantities						
Item No.	#	Item	Section	Quantity	Unit	Rates/Remarks
NRM20110	1	SPECIAL CLEARING	201	1	L SUM	
NRM20210	2	EARTH EXCAVATION	202	87,911	CU YD	COMPACTION PER SECTION 205
NRM20213	3	CEMENT KILN DUST EXCAVATION	202	16,881	CU YD	
NRM20215	4	SEDIMENT EXCAVATION	202	1,500	CU YD	
NRM25040	5	NITROGEN FERTILIZER NUTRIENT	250	5,060	POUND	
NRM25050	6	PHOSPHOROUS FERTILIZER NUTRIENT	250	3,289	POUND	SEE SCHEDULE BELOW
NRM25060	7	POTASSIUM FERTILIZER NUTRIENT	250	2,530	POUND	
NRM25070	8	AGRICULTURAL GROUND LIMESTONE	250	126.5	TON	5.0 TON / ACRE
NRM25090	9	SEEDING	250	15.3	ACRE	
NRM25092	10	INTERSEEDING	250	3.3	ACRE	POLLINATOR SEEDING
25000314	11	SEEDING CLASS 4B	IDOT 250	6.7	ACRE	WETLAND SEEDING
25000350	12	SEEDING CLASS 7	IDOT 250	15.3	ACRE	TEMPORARY SEEDING AS REQUIRED
25100115	13	MULCH METHOD 2	IDOT 251	25.3	ACRE	PROCEDURE 1, 2 TON/ACRE
A2002720	14	TREE, CARYA OVATA, 2 1/2" BALL & BURLAP	IDOT 253	20	EACH	SHAGBARK HICKORY
A2006420	15	TREE, QUERCUS ALBA, 2 1/2" BALL & BURLAP	IDOT 253	20	EACH	WHITE OAK
NRM25810	16	MOWING	258	15.3	ACRE	
28100105	17	STONE RIPRAP, CLASS A3	IDOT 281	333	SQ YD	FILTER FABRIC REQUIRED
NRM28610	18	SPECIAL EXCELSIOR BLANKET	286	7343	SQ YD	8 FOOT WIDE STRIPS
NRM61410	19	DEWATERING IMPOUNDMENTS	614	1	L SUM	WATER TREATMENT NOT REQUIRED
NRM61610	20	COFFERDAM	616	1	L SUM	
NRM66510	21	BARBED WIRE FENCE	665	380	FOOT	5 STRAND 4 POINT
NRM67110	22	MOBILIZATION (MAX 6% OF BID)	671	1	L SUM	



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 damaged 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 shall be disposed of per Section 201 and 202 of the Special Provisions.

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.

Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing				
ITEM (unit)	INITIAL APPLICATION AUG. 20-SEPT. 30 2021	FINAL APPLICATION MAR. 15-MAY 15 2022	SPRING MAY 15-JUNE 15, 2022	TOTAL QUANTITY
SEEDING AND INTERSEEDING (acres)	18.6			18.6
SEEDING 4B (acres)	6.7			6.7
AGRICULTURAL GROUND LIMESTONE (tons)	126.5			126.5
NITROGEN FERTILIZER NUTRIENT (pounds)	2,530 100 Lb./A	2,530 100 Lb./A		5,060
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	3,289 130 Lb./A			3,289
POTASSIUM FERTILIZER NUTRIENT (pounds)	2,530 100 Lb./A			2,530
MULCH, METHOD 2 PROCEDURE 1 (acres)	25.3 2 T/A			25.3
MOWING (acres)			15.3	15.3

**State of Illinois
Department of Natural Resources**

**Thunderbird Highway
Reclamation Project
AML-GWmE-2001
Williamson County**

Drawn By : _____ Date: 7/15/2020
Checked By : _____

**Summary of Quantities/
General Notes/Location Map**

Sheet 2 of 10



Drawn By: AW
Checked By:
Date: 7/11/2020

- Notes**
1. THE COFFERDAMS SHALL BE INSTALLED, MAINTAINED AND REMOVED AS REQUIRED TO KEEP AREAS FREE OF WATER FOR ALL CONTRACT WORK.
 2. DEWATERING IMPOUNDMENTS SHALL BE PERFORMED AT A CONTROLLED RATE WHICH WILL PREVENT DOWNSTREAM FLOODING, EROSION OF EXISTING STREAM CHANNELS, TRANSPORTATION OF SEDIMENT OUTSIDE THE CONSTRUCTION LIMITS AND DAMAGE TO AQUATIC LIFE AND ITS HABITAT.

LEGEND

--- 440 ---	EXISTING CONTOUR
---	PROPOSED CONSTRUCTION LIMITS
---	BASELINE FOR CROSS SECTIONS
~~~~~	TREE LINE
---	SECTION LINE
—OHE—OHE—	OVERHEAD ELECTRIC LINE
---	EDGE OF WATER
---	EXISTING ROAD/DRIVING SURFACE
△	CONTROL POINT

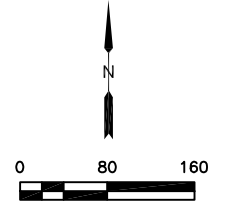
**GROUND CONTROL POINTS**

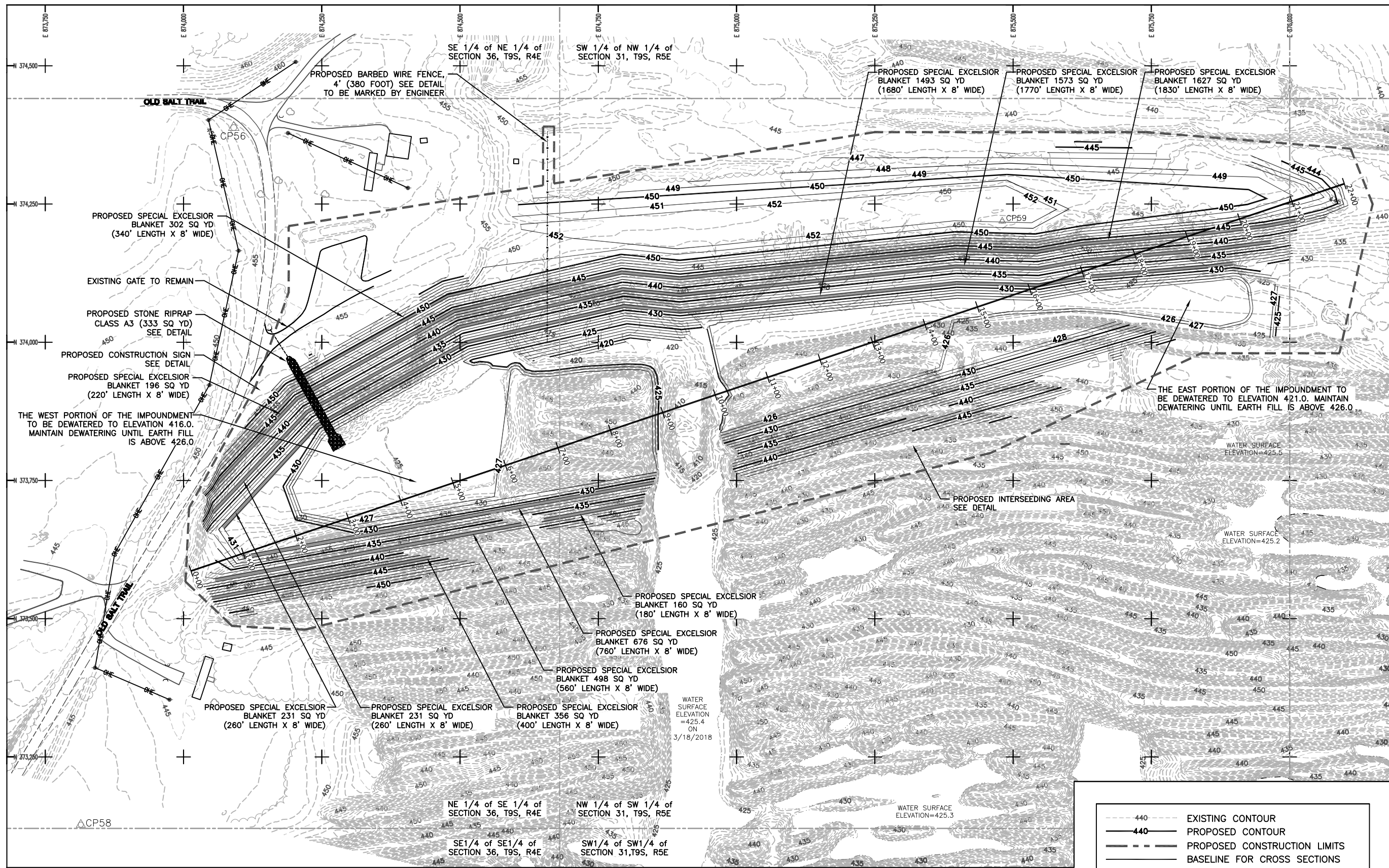
#	NORTHING	EASTING	ELEV.	TYPE
56	374388.21	874090.74	457.68	REBAR
58	373127.47	873814.25	449.33	REBAR
59	374218.85	875480.22	451.16	REBAR

**BASELINE INFORMATION**

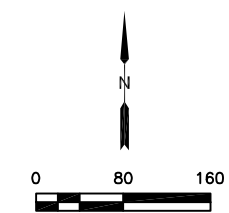
	NORTHING	EASTING
0+00	373586.24	874013.35
22+00	374286.67	876098.87

ILLINOIS STATE PLANE EAST ZONE NAD 83/NAVD 88



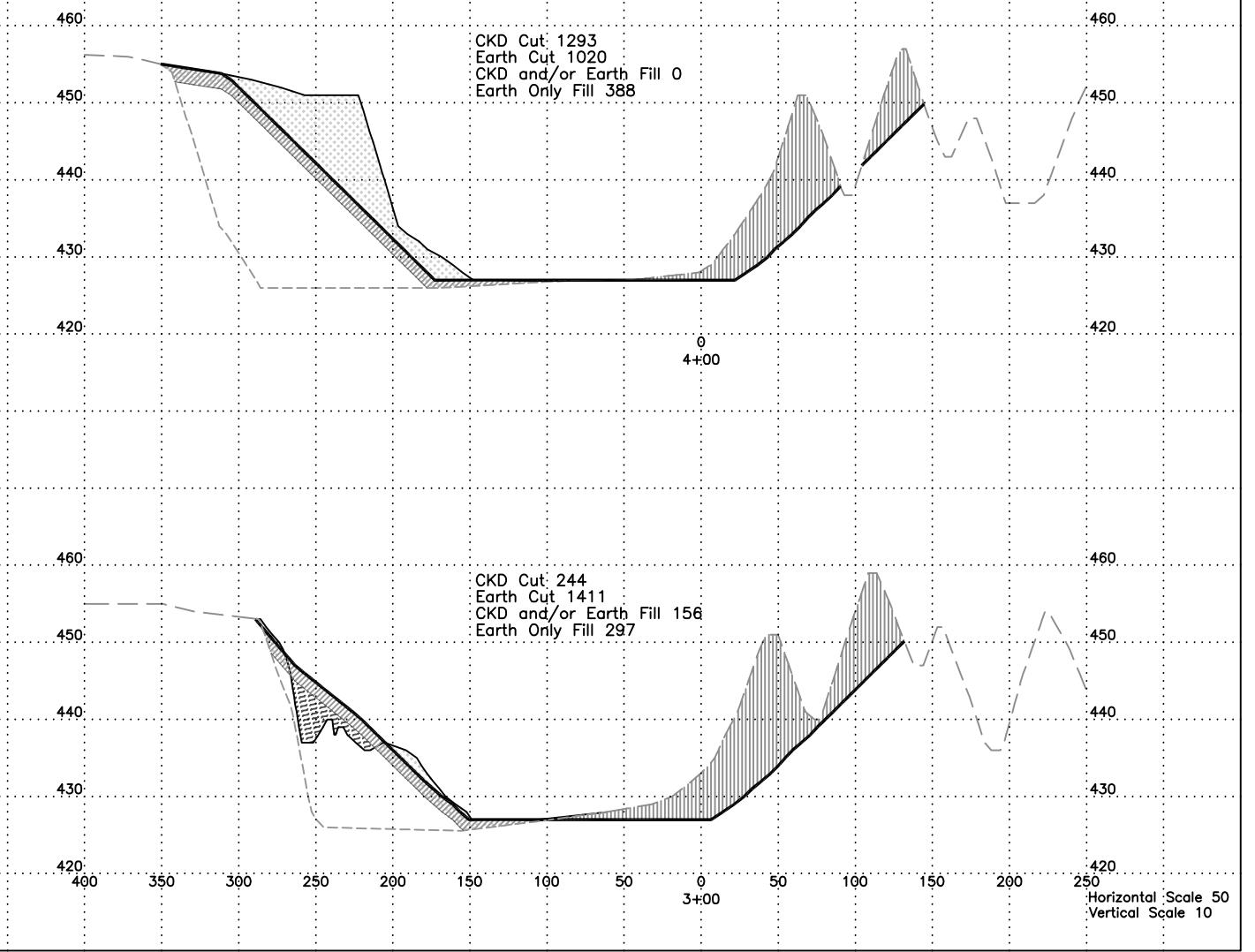
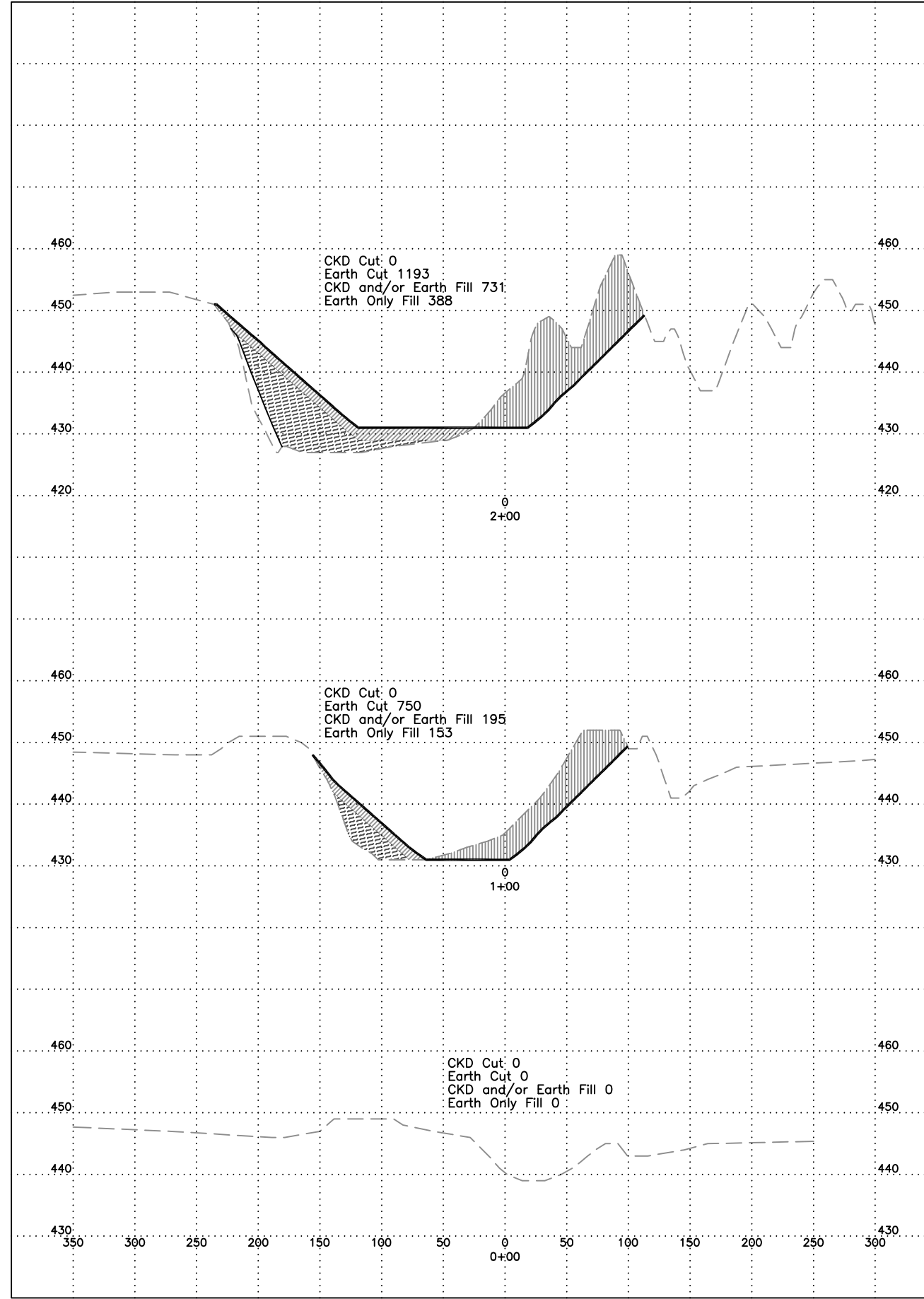
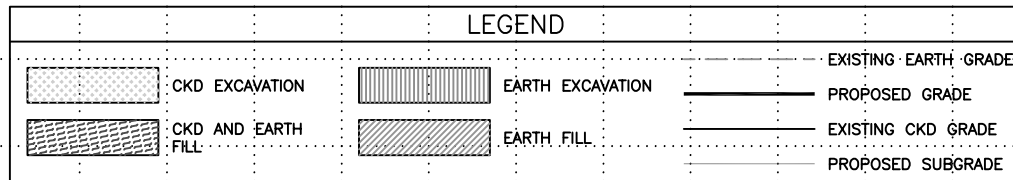


**NOTE:**  
 CLEARED TREES AND BRUSH SHALL BE DISPOSED OF PER SECTION 201 AND 202 OF THE SPECIAL PROVISIONS AND PLACED IN PILES. PRIOR TO COMMENCEMENT OF CLEARING THE CONTRACTOR SHALL SUBMIT IN WRITING TO THE ENGINEER A MAP WITH THE LOCATIONS OF THE PLANNED BRUSH PILES FOR APPROVAL. THE TREES SHALL BE PLACED IN PILES WITH THE TRUNKS LYING PARALLEL AND EARTH SHALL BE SHAKEN FROM THE ROOTS TO CREATE ORDERLY AND CONDENSED BRUSH PILES.  
 PROPOSED SEEDING CLASS 4B TO BE APPLIED BETWEEN ELEVATIONS 425.0 AND 428.0 (6.7 ACRE). NO SEEDING, SOIL AMENDMENTS, OR MULCH BELOW ELEVATION 425.0.

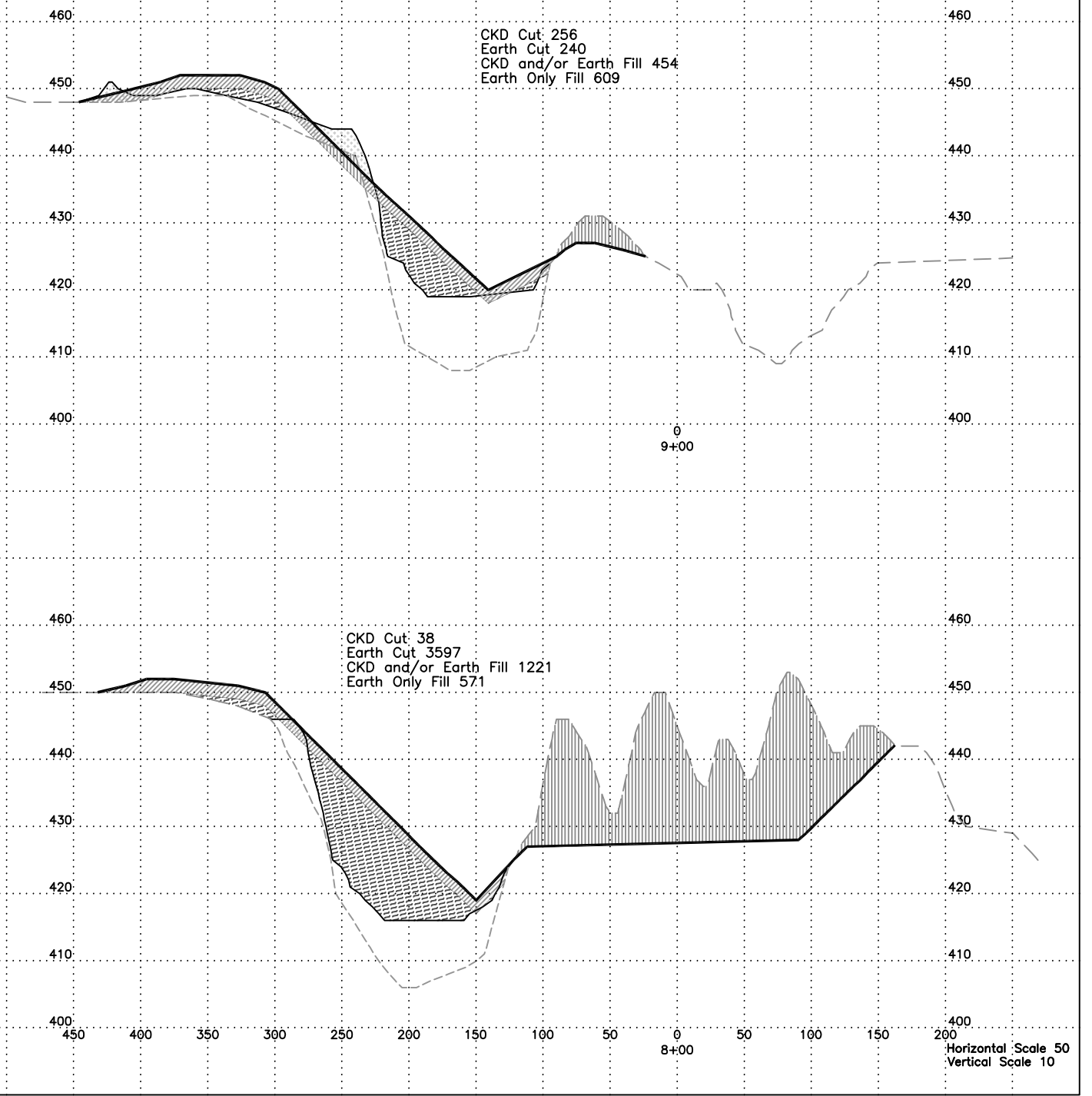
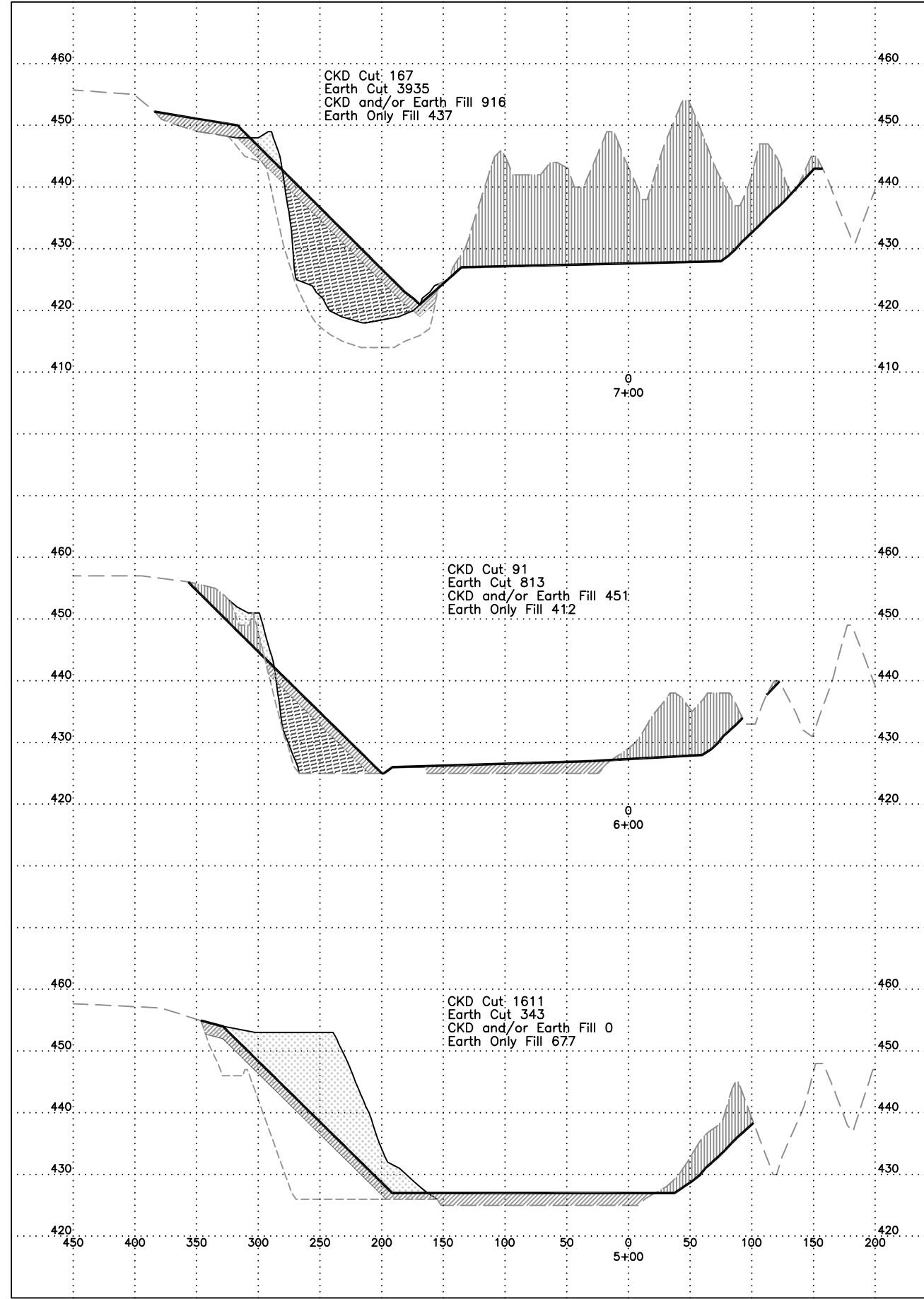
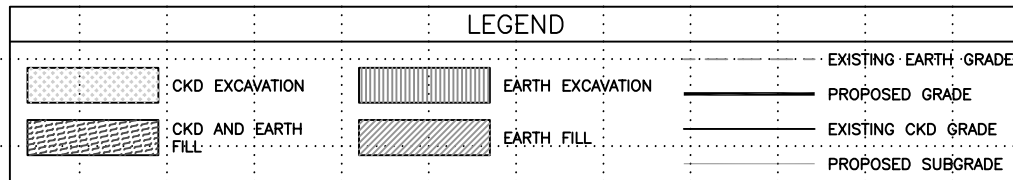


	440	EXISTING CONTOUR
	440	PROPOSED CONTOUR
		PROPOSED CONSTRUCTION LIMITS
		BASELINE FOR CROSS SECTIONS
		TREE LINE
		SECTION LINE
		OVERHEAD ELECTRIC LINE
		EDGE OF WATER
		PROPOSED SPECIAL EXCELSIOR BLANKET
		EXISTING ROAD/DRIVING SURFACE
		CONTROL POINT

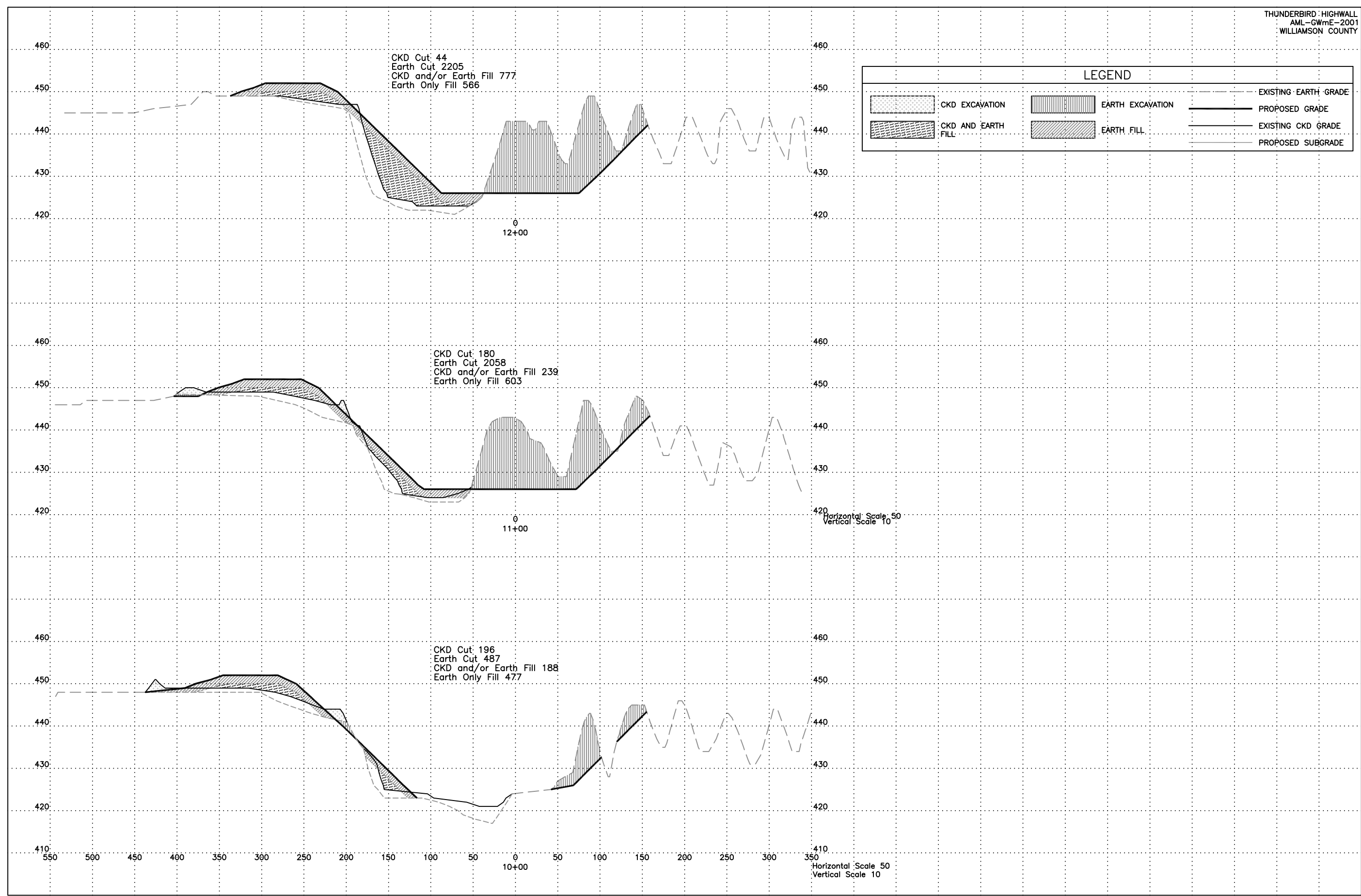
**LEGEND**

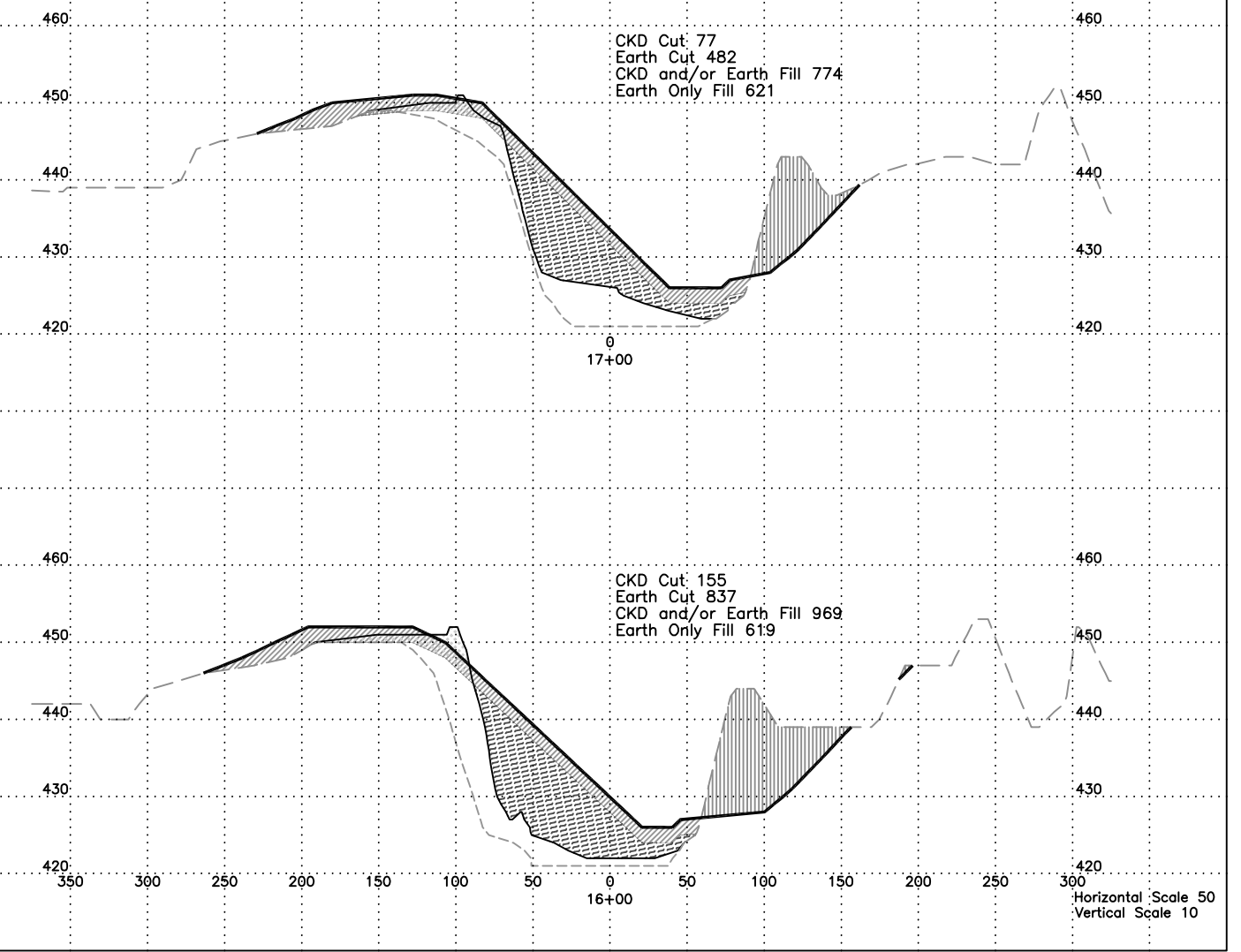
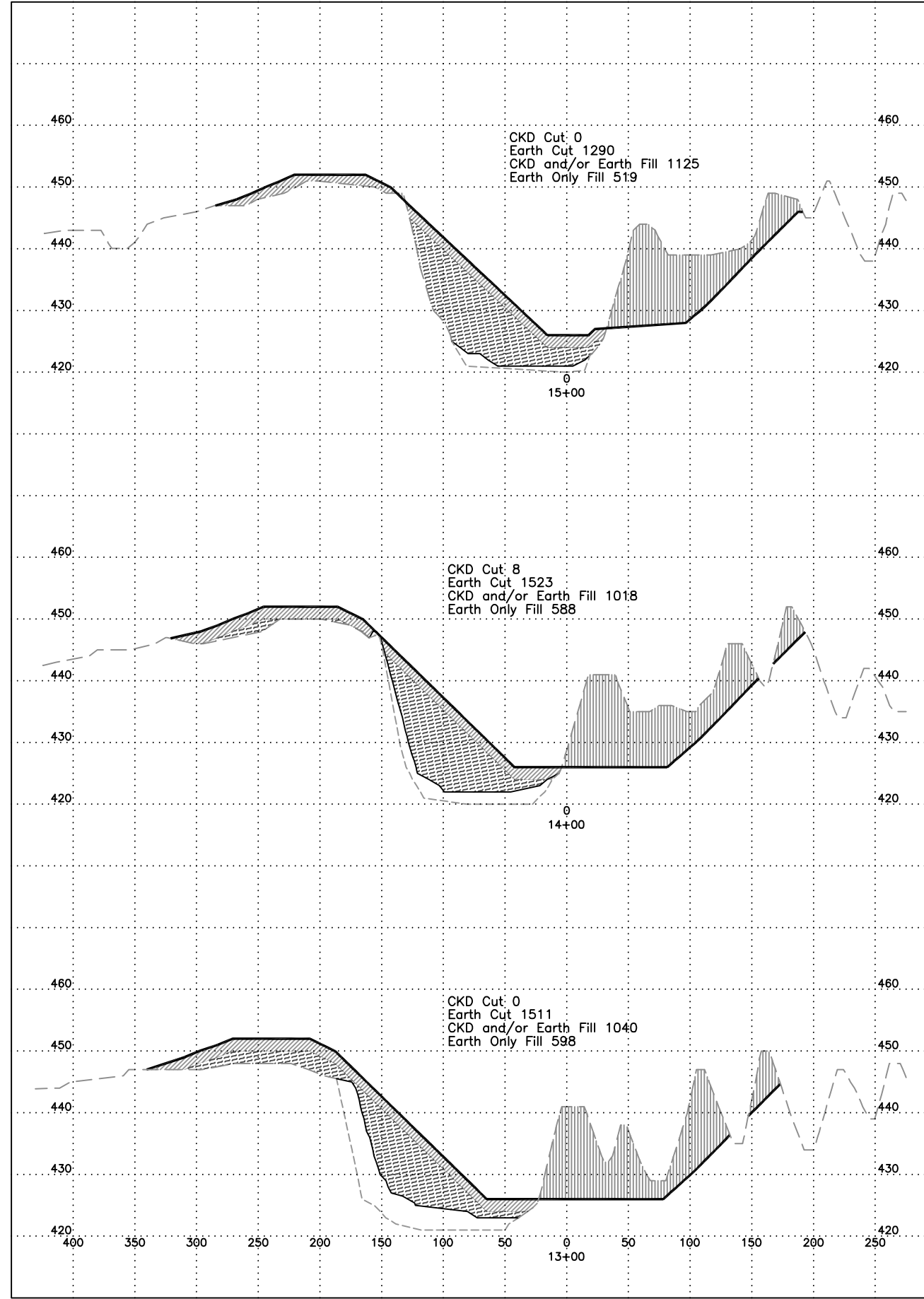
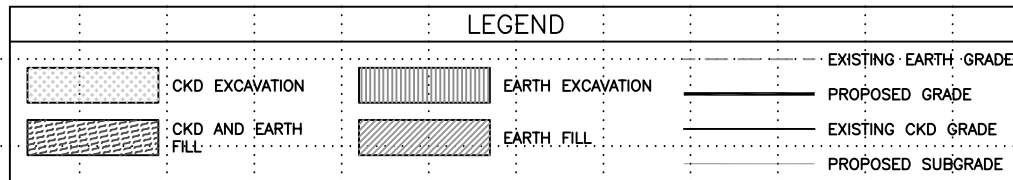


Horizontal Scale 50  
 Vertical Scale 10



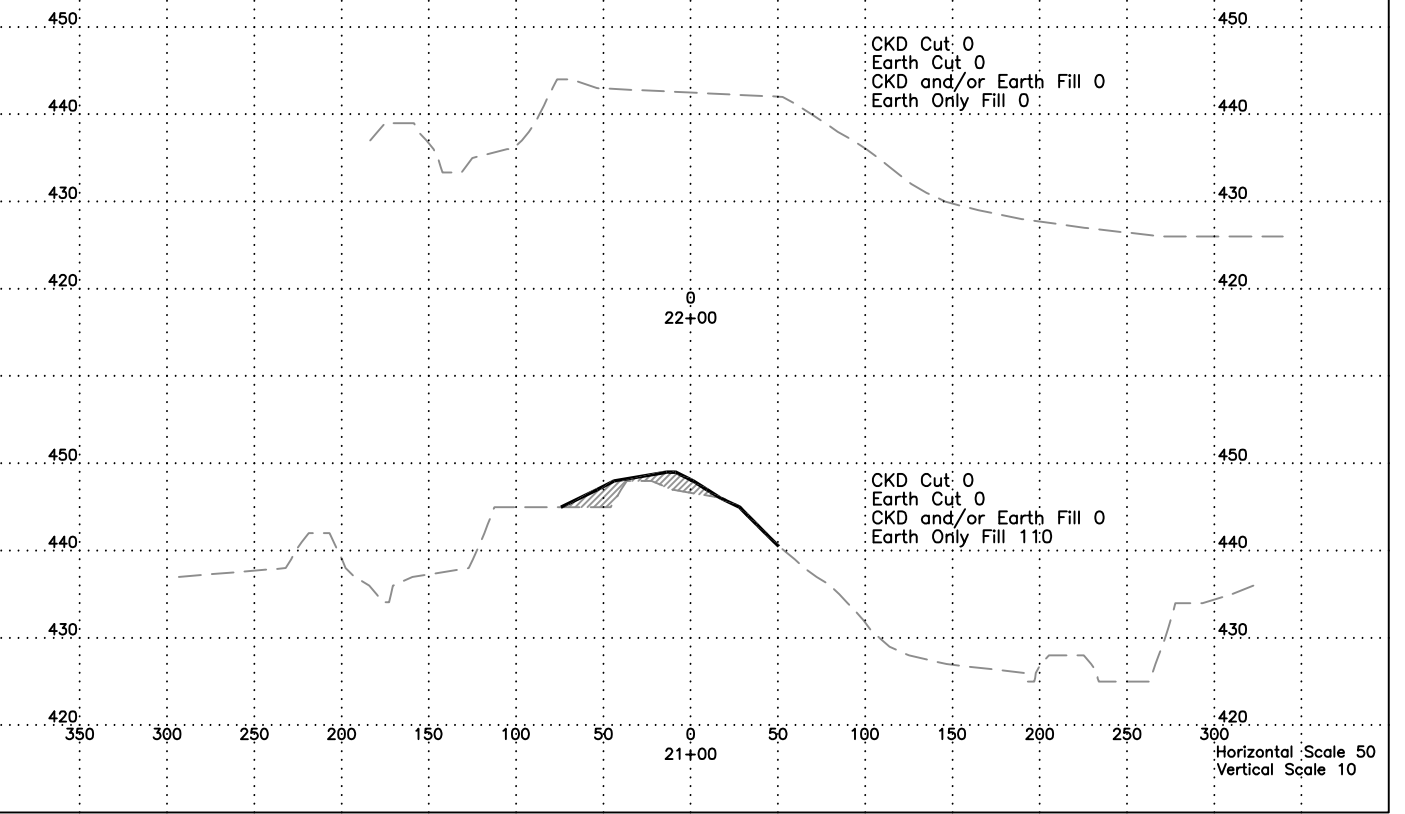
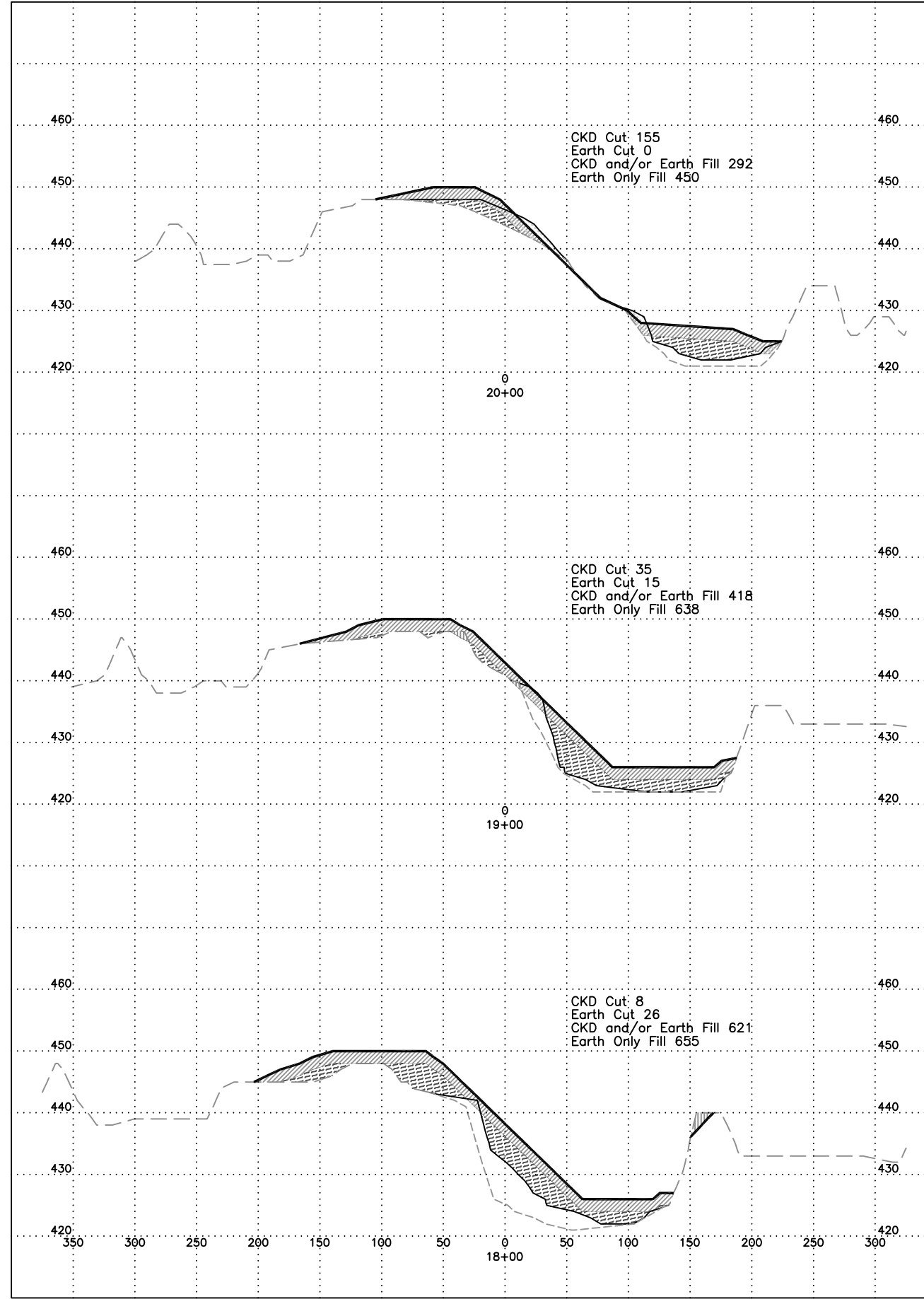
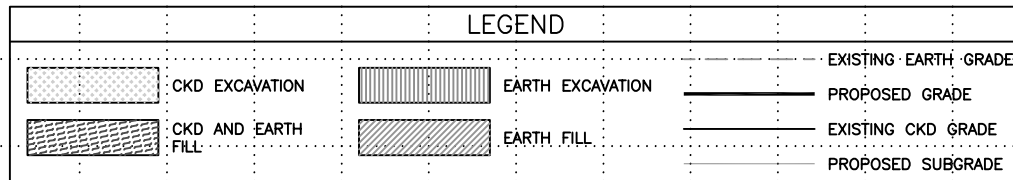
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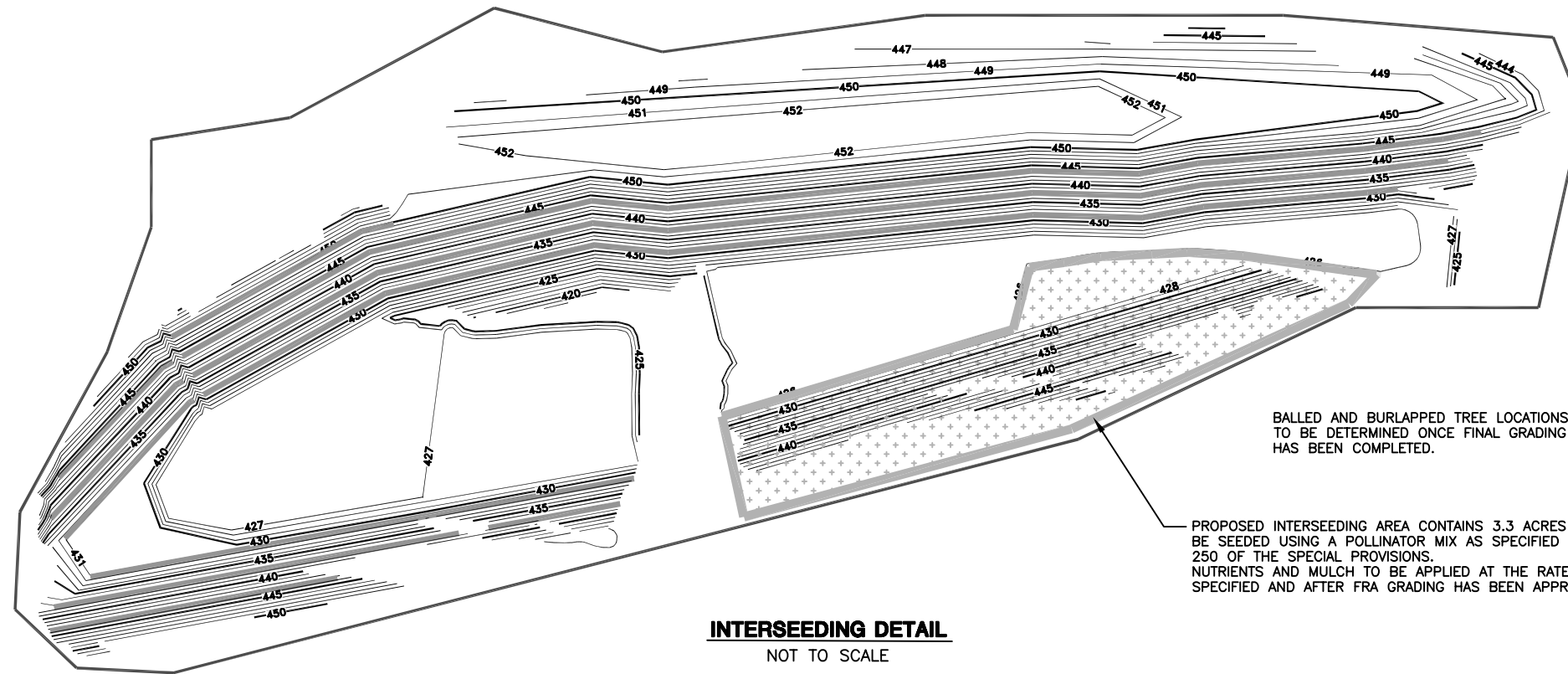


Horizontal Scale 50  
 Vertical Scale 10

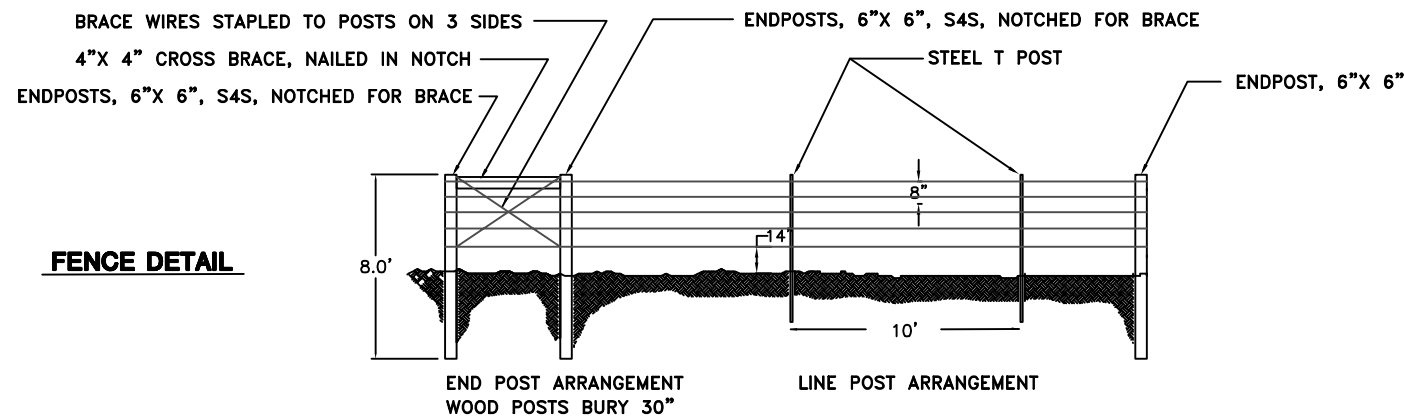




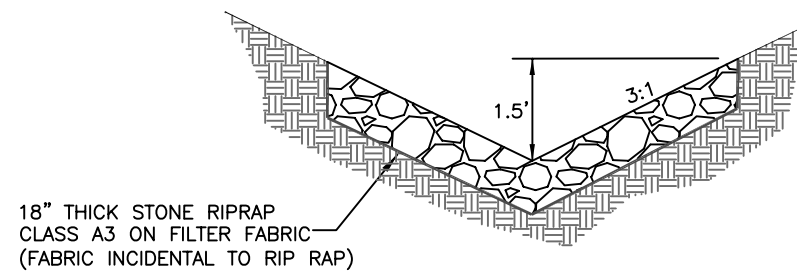
Horizontal Scale 50  
 Vertical Scale 10



**INTERSEEDING DETAIL**  
NOT TO SCALE



**FENCE DETAIL**



**V DITCH- STONE RIPRAP, CLASS A3**  
TYPICAL SECTION, NOT TO SCALE

SPACING LETTERS

4.5"
3.5"
1.5"
3.5"
2.5"
3.5"
3.5"
2.5"
3.5"
1.5"
2.5"
3.0"
1.5"
2.0"
4.5"

**ABANDONED MINED LANDS  
RECLAMATION PROJECT  
STATE OF ILLINOIS**

J.B. PRITZKER, GOVERNOR

Department of Natural Resources  
Colleen Callahan, Director

Funding provided by the US Department of the Interior  
Office of Surface Mining, with fees paid by the Coal Industry

1. Furnishing, erecting and removing the sign shall be incidental to the contract.
2. 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.
3. 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).
4. 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.

**CONSTRUCTION SIGN DETAIL**  
EXACT LOCATION TO BE SET BY ENGINEER