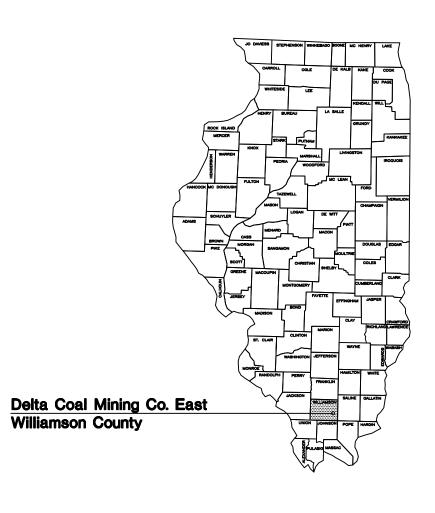
# State of Illinois Department of Natural Resources

Office of Mines and Minerals Division of Abandoned Mined Lands

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

Delta Coal Mining Company East **Reclamation Project** AML-GWmE-1001 Williamson County 2LR





PRE-BID MEETING

A PRE-BID MEETING IS SCHEDULED FOR THIS PROJECT AT 10:00 A.M. WEDNESDAY, JUNE 8TH, 2011. ALL INTERESTED PARTIES ARE ENCOURAGED TO MEET AT THE PROJECT'S ROAD SITE ALONG MILES TRAIL ROAD.

## **SCHEDULE OF DRAWINGS:**

- **Cover Sheet**
- Summary of Quantities / General Notes / Location Map
- Site Information
- **Existing Conditions Road Site**
- **Existing Conditions East Site**
- **Proposed Conditions Road Site**
- **Proposed Conditions East Site**
- 10.-17. Cross Sections
- 18.-19. Details

**IDOT STANDARD 701006-03 IDOT STANDARD 701306-03 IDOT STANDARD BLR 17-4** 

## Prepared By IDNR Staff

Approved for Bidding:

Lower Room Outo

Joseph R. Angleton, Director Office of Mines and Minerals Approved By:

Greg Pinto, Acting Manager

Sug Pinto

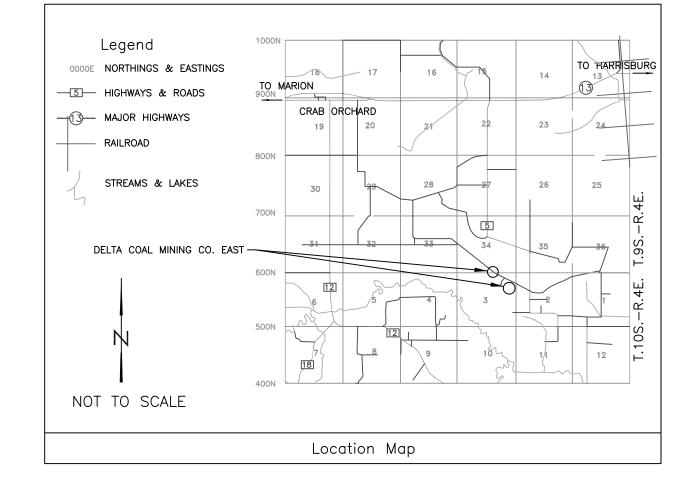
AML Division

Approved By:

Lawrence L. Lewis, P.E. IL Licensed Professional Engineer

No. 0062-038880

#	ltem	Section	Quantities  Quantity			Unit	Rates/Remarks
<i>II</i>	1101111	00001011	ROAD			01110	reaces/ remarks
1	Special Clearing	201	0.5	0.5	101AL	L.S.	
2	Earth Excavation	202		28,119	73,288	C.Y.	COMPACTION IN ACCORDANC WITH SECTION 205
3	Cement Grout	216	5.0	_	5.0	C.Y.	
	Polyethylene	216	47	_	47	S.Y.	10 MIL THICKNESS
5	Coarse Aggregate Fill, CA-5	216	2.6	_	2.6	TON	
6	Riprap Fill, C-3	216	7.2	_	7.2	TON	
7	Seeding	250	13.8	5.1	18.9	ACRE	
8	Nitrogen Fertilizer Nutrient	250	2,760	1,020	3,780	POUND	100 LB / ACRE - TWIC
9	Phosphorus Fertilizer Nutrient	250	2,070	765			150 LB / ACRE
0	Potassium Fertilizer Nutrient	250	4,830	1,785	6,615	POUND	350 LB / ACRE
	Agricultural Ground Limestone	250	69.0		69.0	TON	5 TON / ACRE
2	Mulch, Method 2, Procedure 1	IDOT 251	13.8	5.1	18.9	ACRE	2 TON / ACRE
3	Seedlings	253	_	0.75		UNIT	
4	Incorporation - Limestone	256	_	102.0			20 TON / ACRE
5	Mowing	258	13.8	5.1	18.9	ACRE	
6	Riprap Ditch Check	280	1	3	4	EACH	
7	Perimeter Erosion Barrier	280	430	180	610	FOOT	
8	Outlet Filter, CA-11	280	1	_	1	EACH	
9	Stone Riprap, A-3	IDOT 281	608	_	608	S.Y.	
20	Stone Riprap, A-4	IDOT 281	4,587	_	4,587	S.Y.	
21	Stone Riprap, A-5	IDOT 281	189	_	189	S.Y.	
22	Filter Fabric	IDOT 282	4,440	_	4,440	S.Y.	
23	Special Excelsior Blanket	286	2,205	1,835	4,040	S.Y.	8 FT WIDTH
24	Aggregate Surface Course, CA-6, Type B	IDOT 402	124.0	_	124.0	TON	
25	Bituminous Materials (Prime Coat)	IDOT 403	1,056	_	1,056	GALLON	
26	Bituminous Materials (Cover and Seal Coats)	IDOT 403	2,111	_	2,111	GALLON	
27	Cover Coat Aggregate	IDOT 403	26.4	_	26.4	TON	
28	Seal Coat Aggregate	IDOT 403	26.4	_	26.4	TON	
ŏ	Pine Culverts, Aluminized Steel Corrugated Pine	542	292	-	292	FOOT	
0	42" Diameter, Type 6 Pipe Culverts, Corrugated Polyethylene 30" Diameter, Type 3 Pipe Culverts, Corrugated Polyethylene	542	110	-	110	FOOT	WITH SMOOTH INTERIOR
	I 18 Digmeter, Type 2	542	60	-	60		WITH SMOOTH INTERIOR
32	Pipe Tee, Corrugated Polyethylene, 36"x30" Dias.	542	1	_	1	EACH	36" MAIN, 30" SIDE
33	Steel End Section, 42" Diameter	542	1	_	1	EACH	WITH FLARED WALLS
	Dewatering Impoundment	614	_	1	1	L.S.	
	Cofferdams	616	1	_	1	L.S.	
	Mobilization	671	0.7	0.3	1	L.S.	
57	Traffic Control and Protection STANDARD 701306	IDOT 701	1	_	1	L.S.	



#### 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. Access roads to the site as designated on 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 foot 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 cleared from the Road Site shall be removed from the site in accordance with Sections 201 and 202 of the Special Provisions. Trees cleared from the East Site shall be disposed of onsite per Section 201 of the Special Provisions. Clearing of all trees from the East Site and marked trees from the Road Site may only occur from October 1st to March 31st. These trees may not be removed from outside this window.

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.

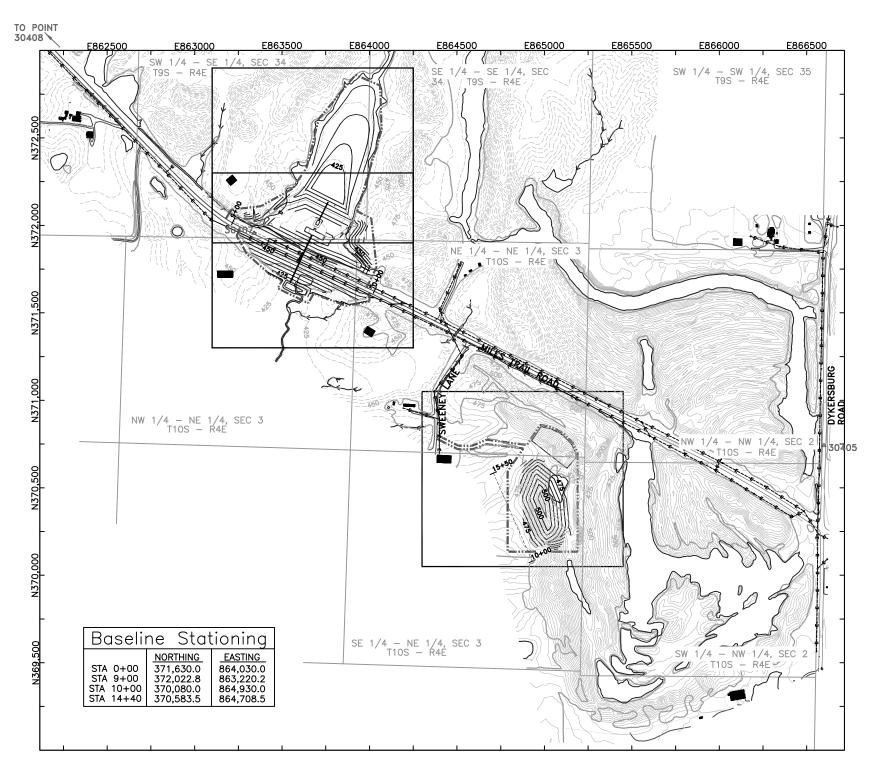
MULCHING—Within 24 hours from the time seeding has been performed, the seeded area shall be given a covering of mulch at the rates specified in the plans. The mulch is to be anchored into the soil in accordance with the requirements for method 2, procedure 1 of Article 251.03 of the Standard Specifications.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

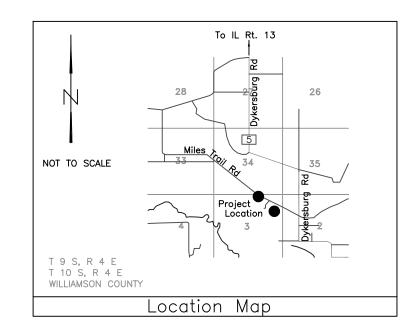
Schedul	e of Se	eding, f	ertilizer	Nutrien <sup>-</sup>	ts and Mulc	:h
ITEM (unit)	INITIAL AP SPRING JAN 1 –	2012	012 FALL 2012		MOWING	TOTAL QUANTITY
SEEDING (acres)	13.8	5.1	ROAD	EAST	EXACT DATE TO BE SET BY ENGINEER	18.9
NITROGEN FERTILIZER NUTRIENT (pounds)	1,380	510	1,380	510		3,780
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	2,070	765				2,835
POTASSIUM FERTILIZER NUTRIENT (pounds)	4,830	1,785				6,615
AGRICULTURAL GROUND LIMESTONE (tons)	69.0					69.0
INCORPORATION — LIMESTONE (tons)		102.0				102.0
MULCH, METHOD 2 PROCEDURE 1 (acres)	13.8	5.1				18.9
MOWING (acres)					18.9	18.9

State of Illinois Department of Natural Resource

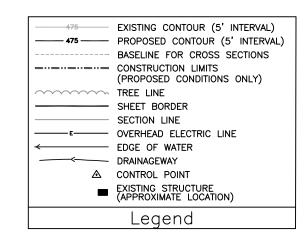
Delta Coal Mining Co. East Reclamation Project AML-GWmE-1001 Williamson County

Summary of Quantities/ General Notes/Location Map Sheet 2 of 19





	C	Control		
30407	NORTHING 370,742.58 371,956.60 373,520.42	EASTING 866,598.25 863,339.87 861,701.42	469.95 453.49	DESCRIPTION PK NAIL SET IN ROAD IRON PIN WITH RED CAP IRON PIN WITH RED CAP



THE CONTRACTOR SHALL WORK WITH THE WILLIAMSON COUNTY HIGHWAY DEPARTMENT TO COORDINATE ALL ROAD CLOSURES, WHICH SHALL BE KEPT TO A MINIMUM. THE CONTRACTOR SHALL PROVIDE TWO WEEKS NOTIFICATION TO THE HIGHWAY DEPARTMENT SO A PUBLIC NOTICE OF THE ROAD CLOSURE MAY BE ISSUED. THE COAL VALLEY WATER DISTRICT HAS A 3" WATER MAIN, SERVING FIVE RESIDENCES, RUNNING ALONG THE NORTH SIDE OF MILES TRAIL ROAD. OTHER UNDERGROUND UTILITIES MAY ALSO BE PRESENT. THE CONTRACTOR SHALL WORK WITH ALL UTILITY COMPANIES TO ENSURE SERVICES ARE UNINTERRUPTED.

AFTER REMOVAL OF THE EXISTING STRUCTURE, INSTALLATION OF THE PROPOSED PIPE CULVERT AND AFTER MAJOR CONSTRUCTION ACTIVITIES ARE COMPLETED, THE MILES TRAIL ROAD SUBGRADE SHALL BE REPAIRED PER SECTION 358 OF THE SPECIAL PROVISIONS (INCIDENTAL TO THE TO THE ROAD RESURFACING ITEMS). THE CONTRACTOR SHALL USE 100.0 TON AGGREGATE SURFACE COURSE, CA-6, TYPE B FOR THE SURFACE OF MILES TRAIL ROAD TO KEEP THE ROAD OPERABLE UNTIL RESURFACING CAN BE COMPLETED.

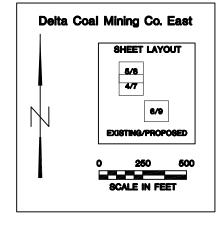
AFTER MAJOR CONSTRUCTION ACTIVITIES ARE COMPLETED, THE MILES TRAIL ROAD SHALL BE RESURFACED PER IDOT STANDARD SPECIFICATION 403, BITUMINOUS SURFACE TREATMENT, CLASS A-2. MILES TRAIL ROAD = 950 FOOT LENGTH x 20 FOOT WIDTH = 2,111 S.Y.

APPLY 0.5 GALLONS/S.Y. FOR EACH OF THE THREE BITUMINOUS MATERIAL LAYERS
APPLY 25 POUND/S.Y. FOR EACH OF THE TWO COAT AGGREGATE LAYERS

THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL DURING CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD 701006-03. PER IDOT STANDARD SPECIFICATION 701, THIS WORK SHALL NOT BE MEASURED FOR PAYMENT. THEREFORE, IT SHALL BE CONSIDERED INCIDENTAL TO THE EARTH EXCAVATION.

DURING REMOVAL OF THE EXISTING STRUCTURE, DURING INSTALLATION OF THE PROPOSED PIPE CULVERT AND IF DANGEROUS CONDITIONS ARISE, THE CONTRACTOR SHALL CLOSE MILES TRAIL ROAD TO TRAFFIC. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH IDOT STANDARD B.L.R. 17-4. THIS WORK SHALL NOT BE MEASURED BUT SHOULD BE CONSIDERED INCIDENTAL TO THE PIPE CULVERTS, ALUMINIZED STEEL CORRUGATED PIPE.

DURING RESURFACING OPERATIONS, THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH IDOT STANDARD 701306-03. PER IDOT STANDARD SPECIFICATION 701, THIS WORK SHALL BE PAID AS LUMP SUM.

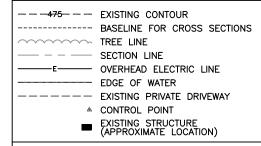


Resources Department of Natural Illinois ð State

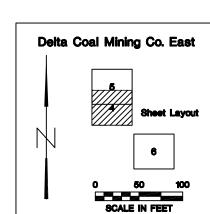
Delta Coal Mining Co. East Reclamation Project AML-GWmE-1001 Williamson County

Site Information ₹ (1) Sheet

- 1. THE WATER SURFACE ELEVATION OF THE IMPOUNDMENT FLUCTUATES. THE EDGE OF WATER LINE SHOWN IS ELEVATION 441.7, AS WAS SURVEYED ON DECEMBER 15, 2009.
- 2. ADDITIONAL RESIDENCES AND STRUCTURES HAVE BEEN COMPLETED SINCE THE SITE WAS MAPPED. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE AREA.
- 3. ALL CONTROL POINTS AND THE PROPERTY PIN SHALL BE PRESERVED DURING CONSTRUCTION.
- 4. THE EXISTING DOCK TO BE REMOVED SHALL BE REMOVED IN A MANNER TO ALLOW FOR REUSE BY THE LANDOWNER.
- 5. THAT PORTION OF THE LOWER ELEVATION EXISTING CULVERT EXPOSED DURING THE INSTALLATION OF THE PROPOSED PIPE CULVERT SHALL BE CUT FLUSH WITH THE EXCAVATED EMBANKMENT AND REMOVED (INCIDENTAL TO THE PIPE CULVERT). THE REMAINING SECTION, IF ANY, AND ANY ADDITIONAL UNCOVERED CONDUITS SHALL BE SEALED IN ACCORDANCE WITH SECTION 216 OF THE SPECIAL PROVISIONS. SEE DETAIL F-19.
- 6. AFTER DEWATERING IS COMPLETED, THE UPSTREAM AND DOWNSTREAM FACES OF THE ROAD EMBANKMENT SHALL BE STRIPPED OF ALL VEGETATION. ALL ANIMAL HOLES SHALL BE SEALED IN ACCORDANCE WITH SECTION 216 OF THE SPECIAL PROVISIONS. SEE DETAIL G-19.



Legend

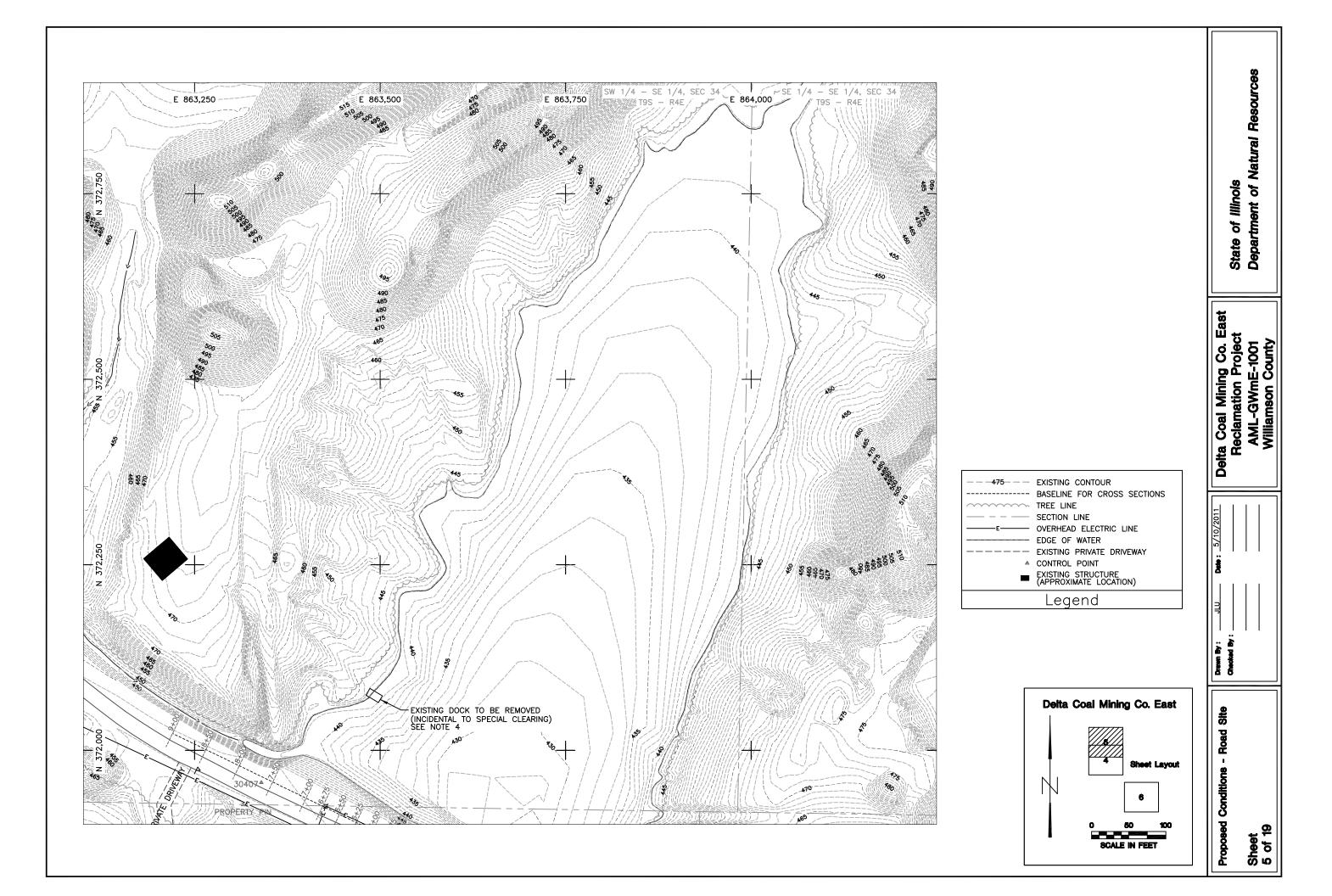


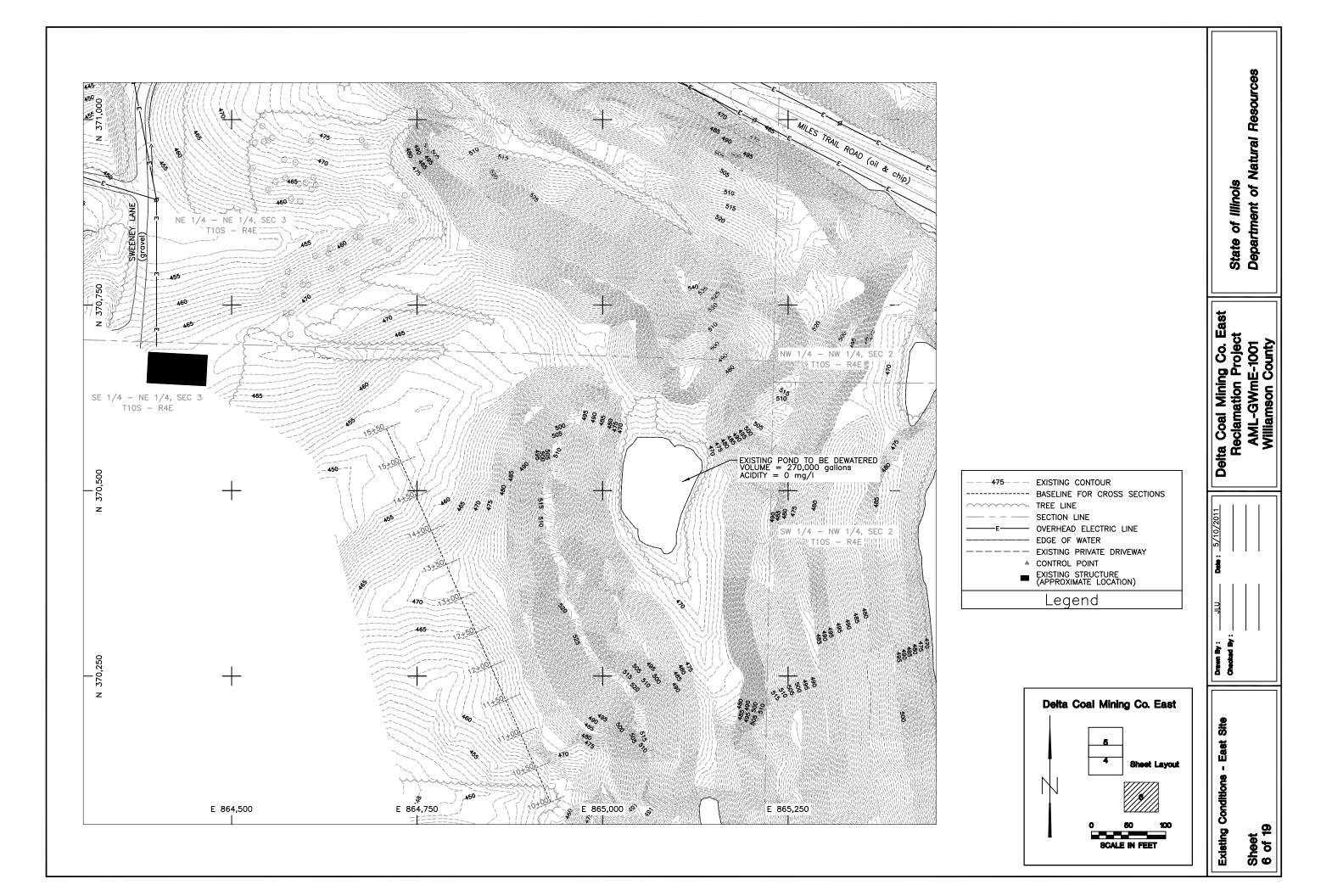
Pelta Coal Mining Co. East
Reclamation Project
AML-GWmE-1001
Williamson County

State of Illinois Department of Natural Resources

Checked By: JLU Date: 5/1

Proposed Conditions - Road Site Sheet 4 of 19





- 1. A COFFERDAM OF SUFFICIENT SIZE AND ADEQUATE LOCATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 616 OF THE SPECIAL PROVISIONS TO FACILITATE THE INSTALLATION OF THE PIPE CULVERT WITHOUT UNCONTROLLED DOWNSTREAM FLOWS.
- 2. BEFORE INSTALLATION OF THE PIPE CULVERT, THE PLUNGE POOL SHALL BE CONSTRUCTED. THE EXISTING POOL SHALL REMAIN IN PLACE UNTIL DEWATERING IS COMPLETED.
- 3. THE EXISTING AND PROPOSED CULVERTS MAY BE UTILIZED TO DEWATER THE IMPOUNDMENT. THE FLOW DOWNSTREAM OF THE CONSTRUCTED PLUNGE POOL SHALL BE CONTROLLED AND MAY NOT EXCEED 75 CFS. DEWATERING OF THIS IMPOUNDMENT SHALL BE INCIDENTAL TO THE COFFERDAM.
- 4. PRIOR TO PLACEMENT, THE FOUNDATION OF THE PROPOSED STEEL END SECTION SHALL BE EXCAVATED TO STABLE MATERIAL AND BACKFILLED WITH COMPACTED EARTH. THIS WORK SHALL BE INCIDENTAL TO THE STEEL END SECTION.

EXISTING CONTOUR PROPOSED CONTOUR BASELINE FOR CROSS SECTIONS PROPOSED CONSTRUCTION LIMITS TREE LINE SECTION LINE OVERHEAD ELECTRIC LINE EDGE OF WATER PROPOSED RIPRAP PROPOSED SPECIAL EXCELSIOR BLANKET (8 FT WIDTH) PROPOSED PERIMETER EROSION EXISTING PRIVATE DRIVEWAY ▲ CONTROL POINT ■ EXISTING STRUCTURE (APPROXIMATE LOCATION)

Legend

Delta Coal Mining Co. East Sheet Layout SCALE IN FEET

**Natural** State of Illinois Department of I

Resources

Delta Coal Mining Co. East Reclamation Project AML-GWmE-1001 Williamson County

Site Road Conditions

- THE ENGINEER WILL SURVEY AND TAKE SOIL SAMPLES OF THE LAKE BED WHEN DEWATERING IS COMPLETED.
- 2. EARTH COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 205 OF THE SPECIAL PROVISIONS.
- 3. WHEN NO LONGER NEEDED, THE COFFERDAM SHALL BE REMOVED AND THE MATERIAL SHALL BE USED AT EARTH FILL.
- 4. CLEARED TREES FROM THE ROAD SITE SHALL BE REMOVED FROM THE SITE IN ACCORDANCE WITH SECTIONS 201 AND 202 OF THE SPECIAL PROVISIONS.
- 5. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING ON THE EMBANKMENT DUE TO UNSTABLE SLOPES.

Legend

Sheet Layout

9
0 50 100

SCALE IN FEET

Proposed Conditions - Road Site Sheet 8 of 19

State of Illinois Department of Natural Resources

Delta Coal Mining Co. East Reclamation Project AML-GWmE-1001 Williamson County

- CLEARED TREES FROM THE EAST SITE MAY
  BE STOCKPILED ON SITE IN ACCORDANCE
  WITH SECTION 201 OF THE SPECIAL
  PROVISIONS
- 2. INCORPORATION LIMESTONE SHALL BE APPLIED TO ALL DISTURBED AREAS OF THE EAST SITE.
- 3. THE SEEDLINGS ARE TO BE PLANTED IN FALL 2011 (250 SEEDLINGS), SPRING 2012 (250 SEEDLINGS) AND FALL 2012 (250 SEEDLINGS) FOR A TOTAL OF 750 SEEDLINGS.

Legend

Delta Coal Mining Co. East

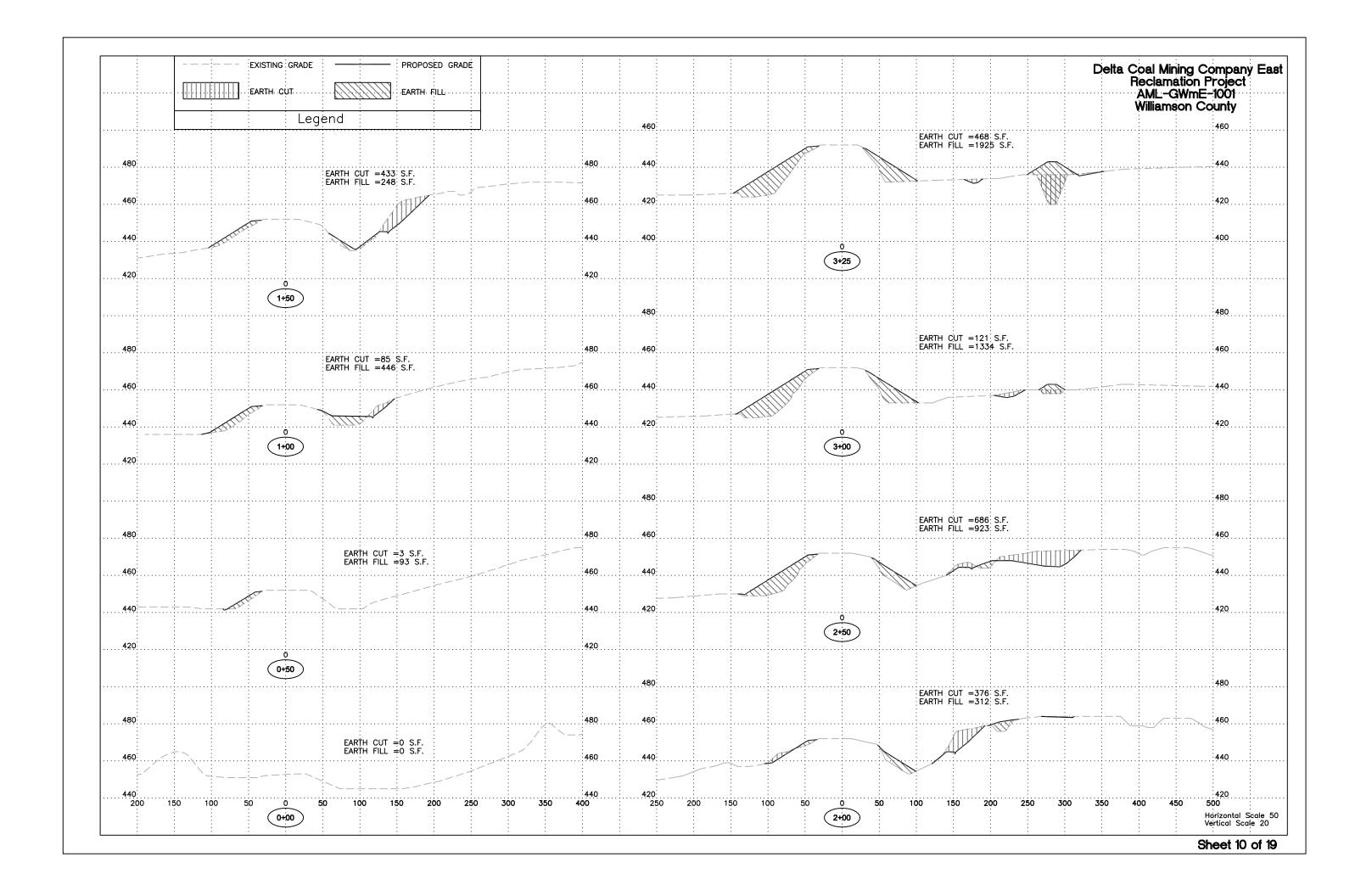
8
7 Sheet Layout
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SCALE IN FEET

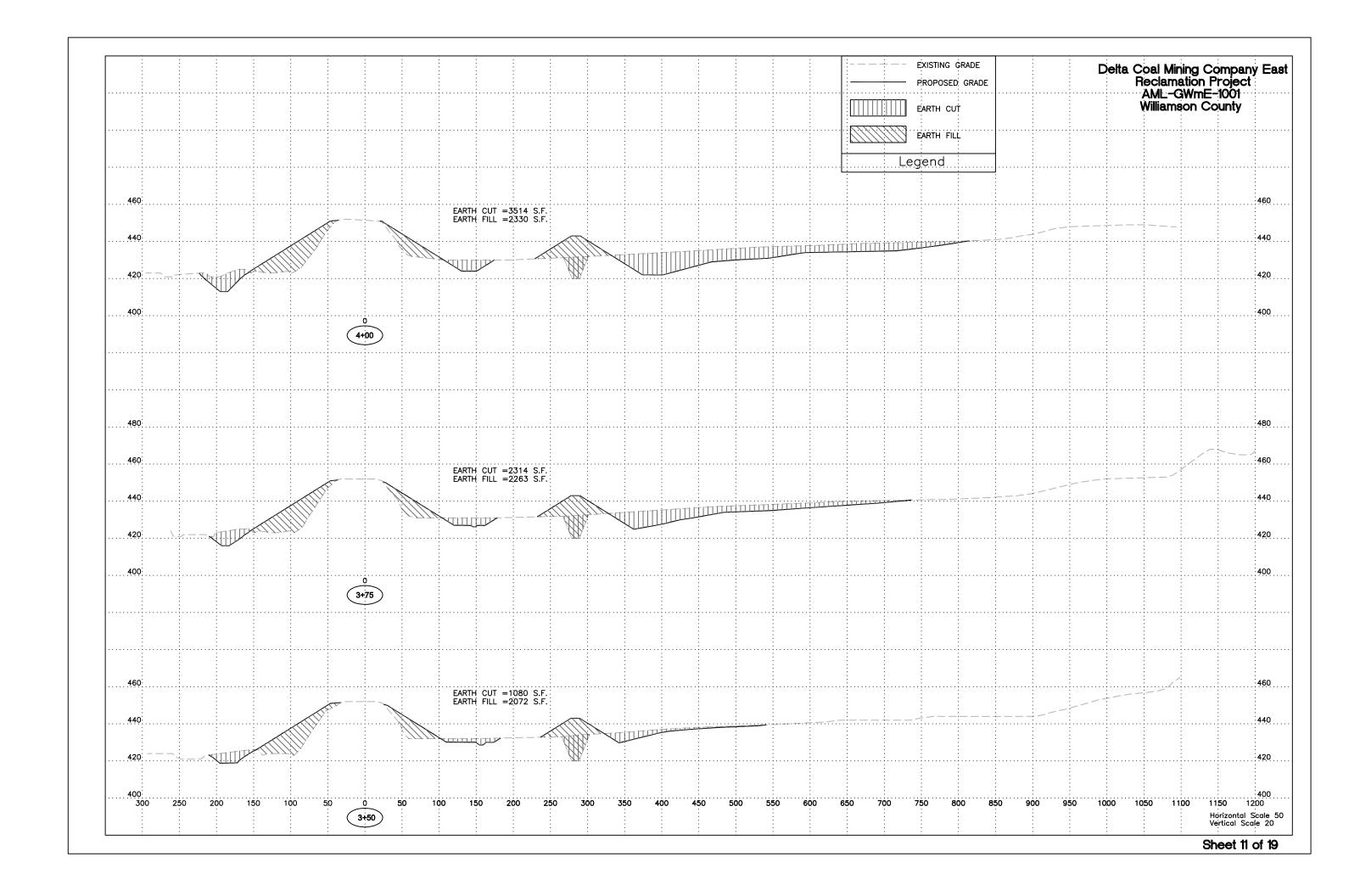
Delta Coal Mining Co. East Reclamation Project AML-GWmE-1001 Williamson County

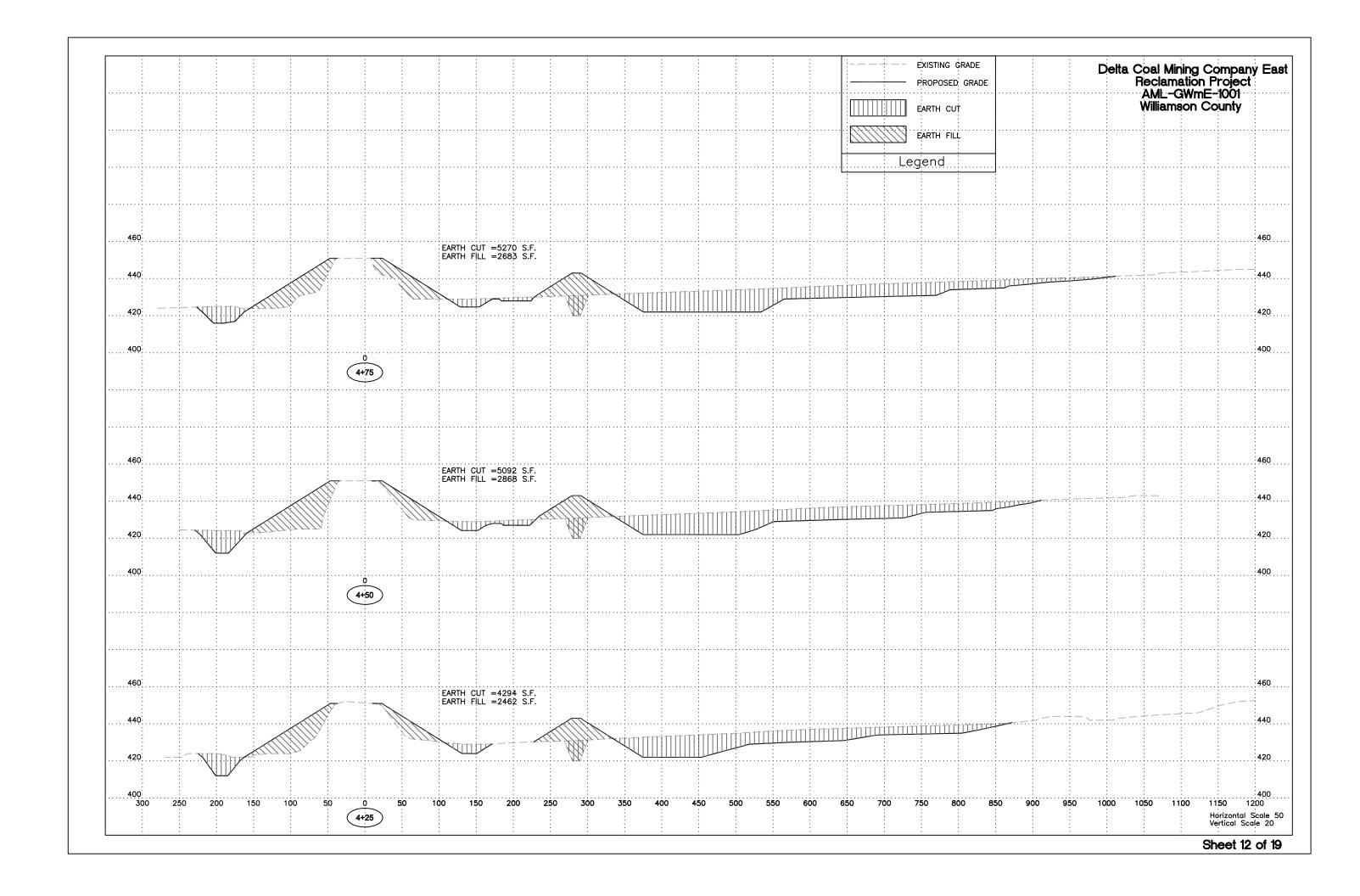
State of Illinois Department of Natural Resources

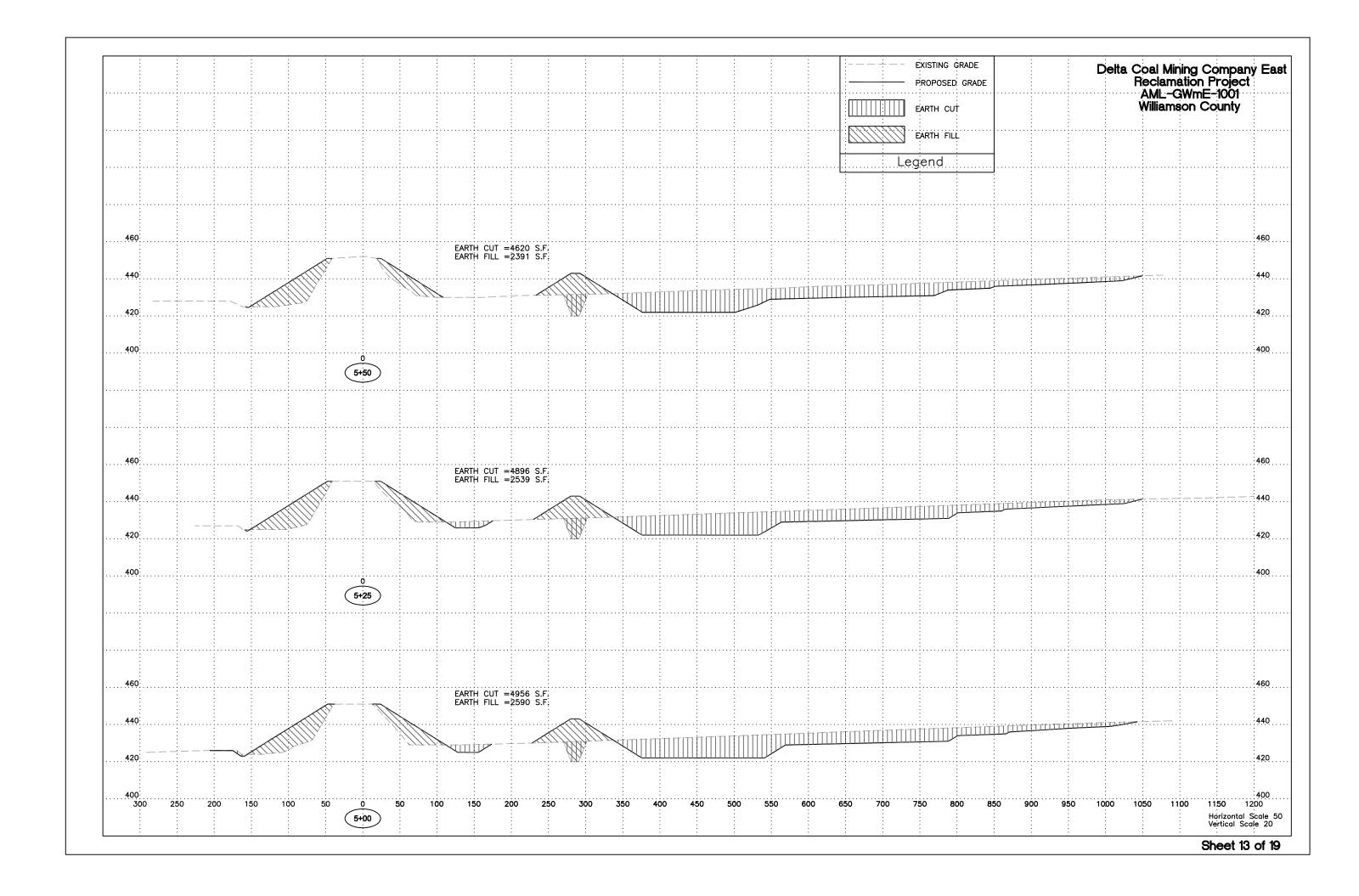
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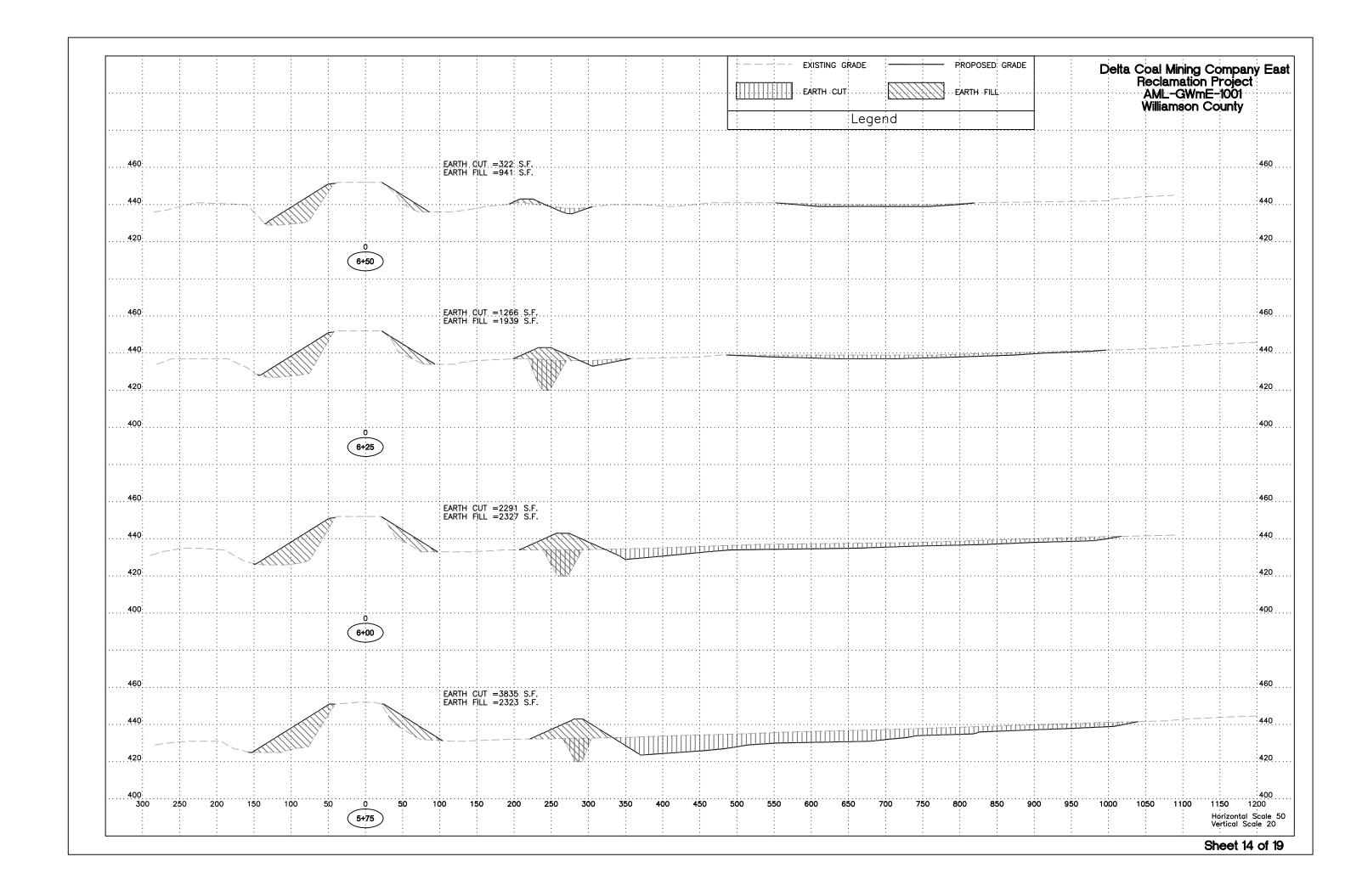
Proposed Conditions - East Site Sheet 9 of 19

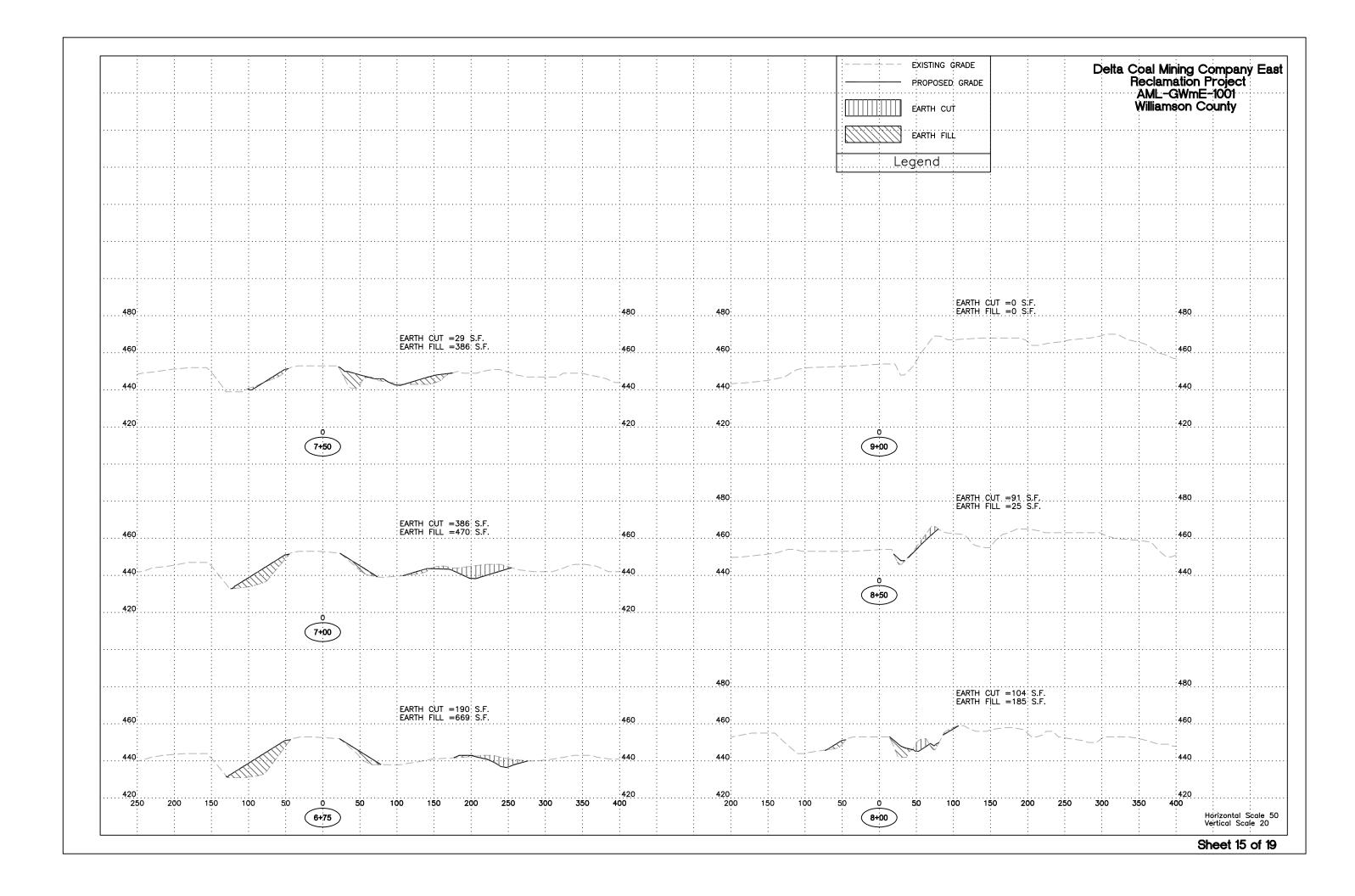


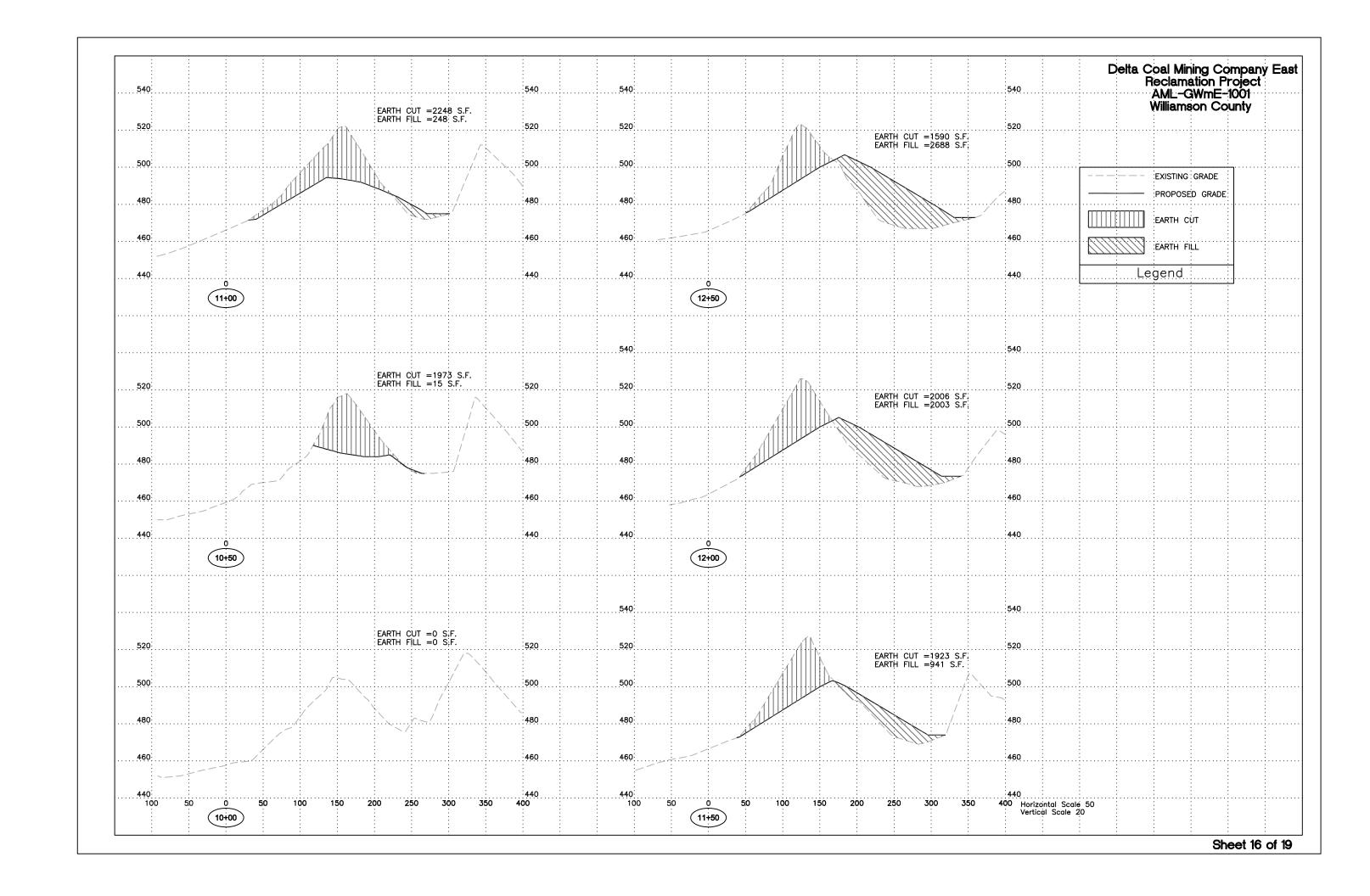


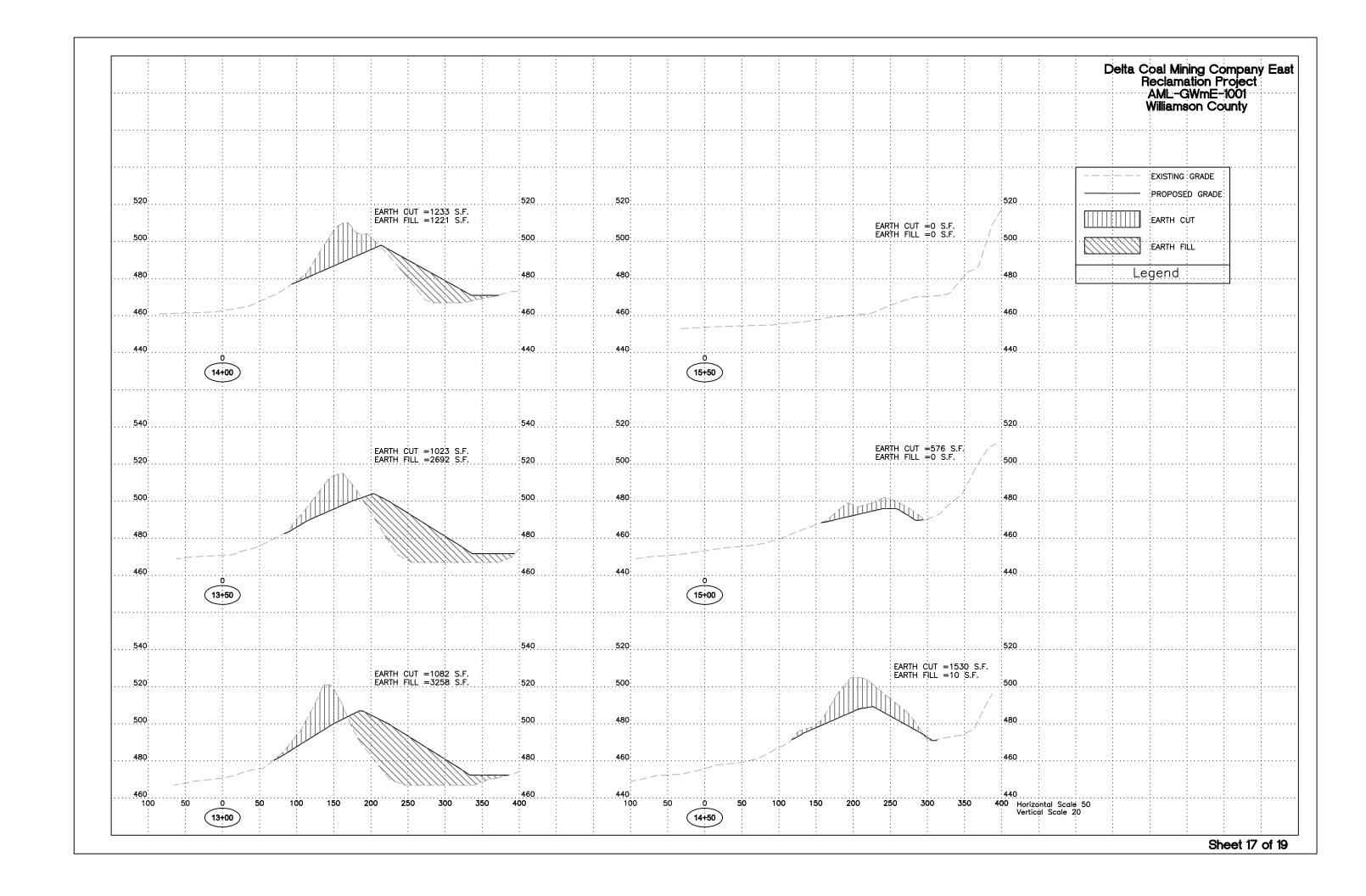








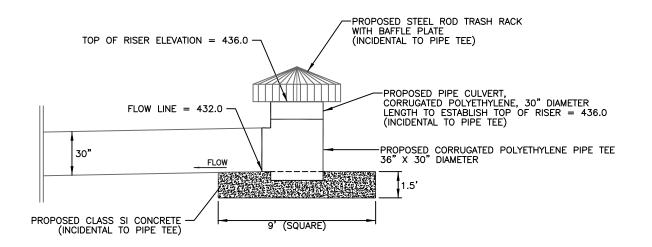




Sheet 18 of 19

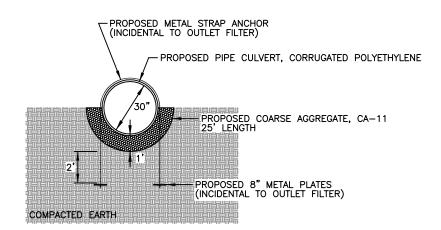
#### NOTES:

- 1. PRIOR TO THE SETTING OF THE CONCRETE, THE FOUNDATION OF THE PROPOSED CONCRETE PAD SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO THE PIPE TEE.
- 2. THE CONNECTION OF THE PIPE TEE TO THE PIPE CULVERT SHALL BE IN ACCORDANCE WITH SECTION 542 OF THE STANDARD PROVISIONS. THE PIPE TEE SHALL BE SET A MINIMUM OF 8" INTO THE CONCRETE PAD.
- 3. THE MATERIALS AND CONSTRUCTION OF THE TRASH RACK AND OUTLET ANCHOR SHALL BE APPROVED BY THE ENGINEER.



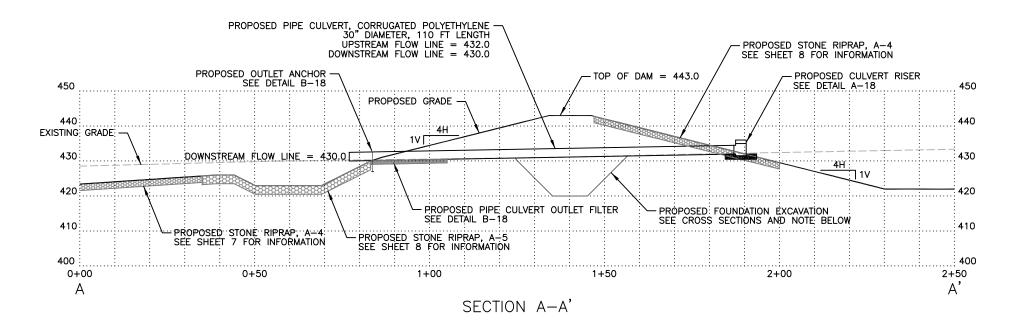
A CULVERT RISER DETAIL

NOT TO SCALE



B PIPE CULVERT OUTLET FILTER AND ANCHOR DETAIL

NOT TO SCALE



NOTE:

THE ENGINEER RESERVES THE RIGHT TO INCREASE OR DECREASE THE VOLUME OF FOUNDATION EXCAVATION AND BACKFILL. THE ENGINEER SHALL MAKE THE DETERMINATION DURING CONSTRUCTION BASED UPON THE CONDITIONS ENCOUNTERED DURING THE FOUNDATION EXCAVATION.

Sheet 19 of .

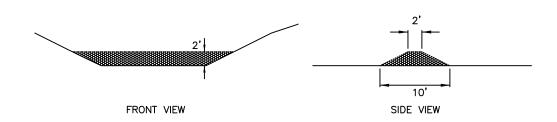
1' THICKNESS MIN.

FRONT VIEW

SIDE VIEW



RIPRAP, A-4
CROSS SECTIONAL AREA = 23 S.F.
LENGTH = 30 FT





RIPRAP, A-3
CROSS SECTIONAL AREA = 12 S.F.
DAM #2, LENGTH = 60 FT
DAM #3, LENGTH = 50 FT
DAM #4, LENGTH = 45 FT

PER SECTION 280 OF THE SPECIAL PROVISIONS, THE RIPRAP CHECKS SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS AND APPROVED BY THE ENGINEER. THE ESTIMATED DIMENSIONS ARE LISTED, BUT THE WORK WILL BE PAID FOR AS EACH.

	LETTERS	
2.0"		
	3.5"	
1.5"		ı
	3.5"	
1.5"		_ ا
	3.5"	I L
1.5"		-
	3.5"	
3.5"		l

RECLAMATION PROJECT of the DEPARTMENT OF NATURAL RESOURCES STATE OF ILLINOIS

PAT QUINN, GOVERNOR

Marc Miller, Director Illinois Dept. of Natural Resources

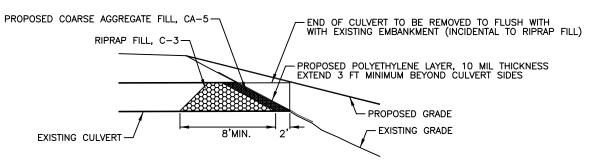
In cooperation with the Office of Surface Mining United States Department of the Interior

- 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.
- on white.

  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).

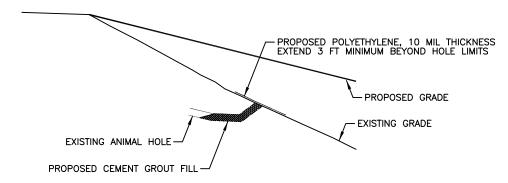
  4. The top of the sign shall be level with the top of the posts, and the posts shall be 1' from the edges of the sign. The posts shall be set in the ground 3', so that the bottom of the sign is 3' from the ground.





THE NUMBER AND SIZE OF CONDUITS IN THE EMBANKMENT ARE NOT KNOWN, BUT IT IS ESTIMATED BOTH ENDS OF ONE 48" CULVERT WILL BE REQUIRED TO BE SEALED. FOR THESE DIMENSIONS, EACH CULVERT END WILL REQUIRE 3.6 TON OF RIPRAP, C-3; 1.3 TON COARSE AGGREGATE, CA-5; AND 11 S.Y. OF POLYETHLENE. SEE NOTE BELOW.





THE NUMBER AND SIZE OF ANIMAL HOLES IN THE EMBANKMENT ARE NOT KNOWN, BUT IT IS ESTIMATED FIVE ANIMAL HOLES WILL BE REQUIRED TO BE SEALED. EACH.



THE ENGINEER RESERVES THE RIGHT TO INCREASE OR DECREASE THE VOLUME OF CULVERT AND ANIMAL HOLE SEALING MATERIALS REQUIRED. THE ENGINEER SHALL MAKE THE DETERMINATION DURING CONSTRUCTION BASED UPON THE CONDITIONS ENCOUNTERED AFTER CLEARING OF THE EMBANKMENT FACES IS COMPLETED.