

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

Simco Carbon C.C.#1 Phase II
Reclamation Project
AML-GWmE-1902
Williamson County
2LR

SCHEDULE OF DRAWINGS:

1. Cover Sheet
2. Summary of Quantities / General Notes / Location Map
3. Existing Conditions
4. Proposed Conditions
- 5-8. Cross Sections
9. Details

IDOT STANDARD 280001-07

CONTRACT NO. M1902

Prepared By IDNR Staff

Approved for Bidding:



Donald Stewart, Director
 Office of Mines and Minerals

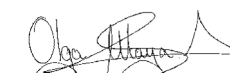
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Approved By:

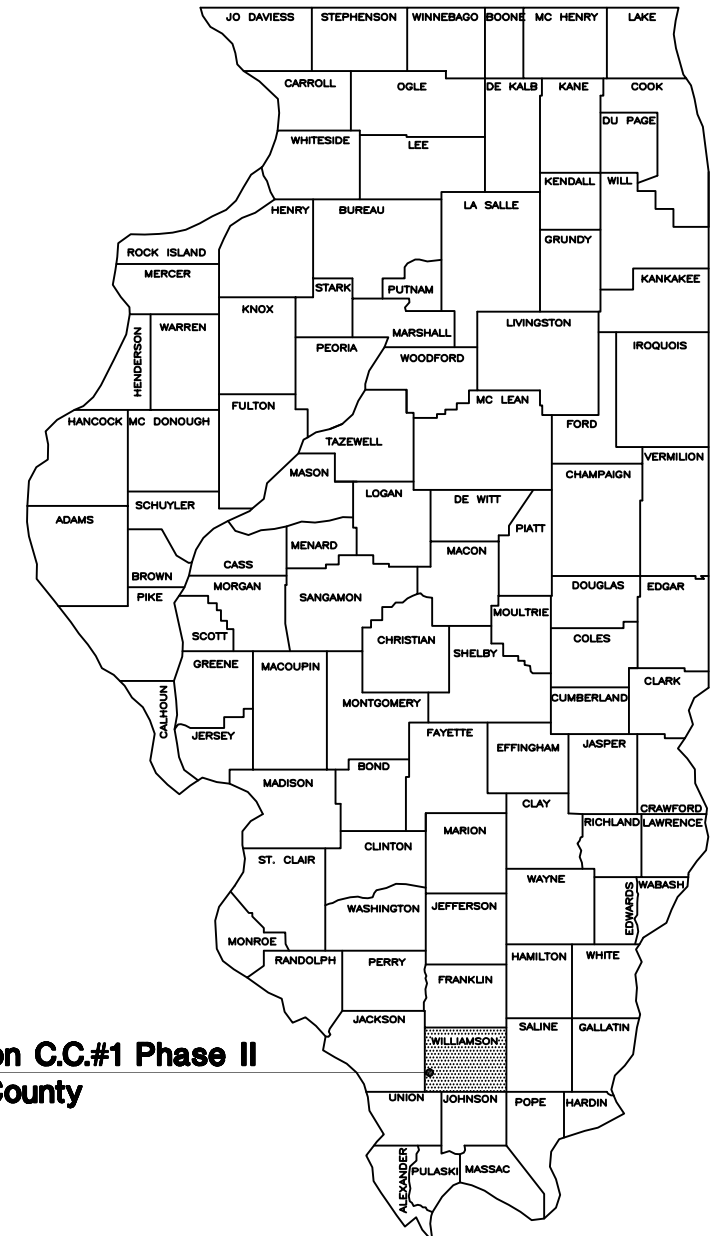


Rita M. Lee, Manager
 AMLR Division

Approved By:



Olga Moya Aranzubia, P.E.
 IL Licensed Professional Engineer
 No. 062-062471



Simco Carbon C.C.#1 Phase II
Williamson County



Summary of Quantities

Item No.	#	Bid Item Description	Section	Quantity	Unit	Rates\Remarks
NRM20110	1	SPECIAL CLEARING	201	1	L SUM	
NRM20210	2	EARTH EXCAVATION	202	21,437	CU YD	COMPACTION PER SECTION 205
NRM20230	3	MINE REFUSE EXCAVATION	202	1,067	CU YD	
NRM25040	4	NITROGEN FERTILIZER NUTRIENT	250	2,240	POUND	100 LB/ACRE
NRM25050	5	PHOSPHOROUS FERTILIZER NUTRIENT	250	1,534	POUND	130 LB/ACRE
NRM25060	6	POTASSIUM FERTILIZER NUTRIENT	250	1,416	POUND	120 LB/ACRE
NRM25070	7	AGRICULTURAL GROUND LIMESTONE	250	59	TON	5 TON/ACRE
NRM25090	8	SEEDING	250	10.6	ACRE	
25000314	9	SEEDING CLASS 4B	IDOT 250	1.2	ACRE	
25100115	10	MULCH METHOD 2	IDOT 251	10.6	ACRE	PROCEDURE 1, 2 TON/ACRE
NRM28040	11	PERIMETER EROSION BARRIER	280	575	FOOT	SILT FENCE PER IDOT 280001-07
NRM28610	12	SPECIAL EXCELSIOR BLANKET	286	2,185	SQ YD	8 FEET WIDE STRIPS
28100105	13	STONE RIPRAP, CLASS A3	IDOT 281	1,369	SQ YD	
28100207	14	STONE RIPRAP, CLASS A4	IDOT 281	45.0	TON	
40200800	15	AGGREGATE SURFACE COURSE, TYPE B	IDOT 402	151.0	TON	CA-6
NRM61410	16	DEWATERING IMPOUNDMENTS	614	1	L SUM	WATER TREATMENT NOT REQUIRED
NRM67110	17	MOBILIZATION	671	1	L SUM	MAX 6% OF BID

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.

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

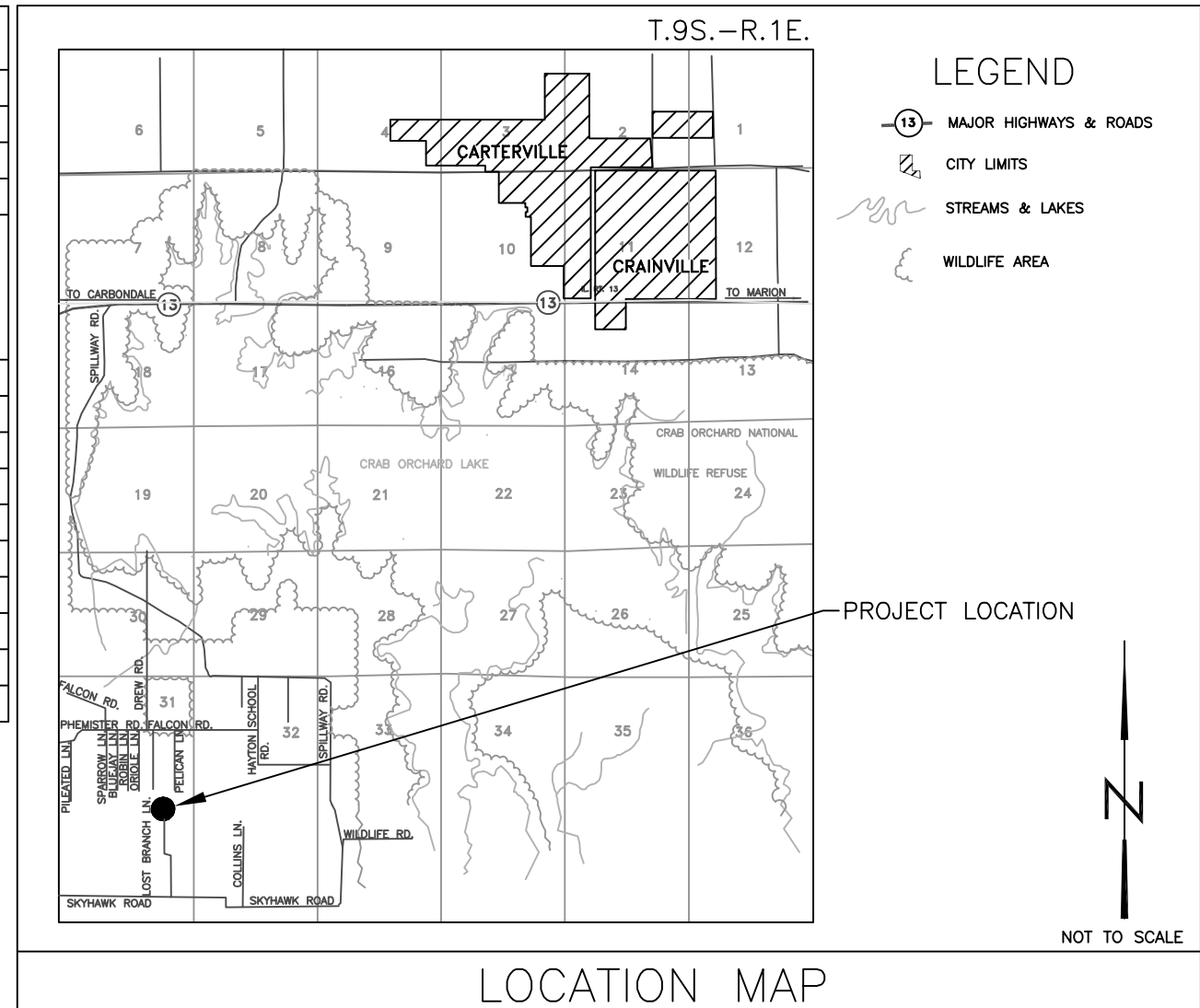
BURIAL/REMOVAL OF MATERIAL—Concrete and masonry debris designated for burial by the engineer shall be buried at least three feet below proposed final grade. Onsite organic debris and trash shall be disposed of in an engineer approved offsite landfill in accordance with Sections 201 and 501 of the Special Provisions. Mine refuse excavation shall be buried at the toe of highwall #3 and covered with material from earth excavation while backfilling.

TREE REMOVAL—Trees removed shall be disposed of onsite per Section 201 of the Special Provisions. Clearing shall be done only to the extent necessary to complete the work.

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 FALL 2020 AUG. 20- SEPT. 30	SECOND APPLICATION SPRING 2021 JAN. 1-MAR. 15	TOTAL QUANTITY
SEEDING (acres)	10.6		10.6
WETLAND SEEDING (acres)	1.2		1.2
AGRICULTURAL GROUND LIMESTONE (tons)	59 5 T/A		59
NITROGEN FERTILIZER NUTRIENT (pounds)	1,180 100 LB./A	1,060 100 LB./A	2,240
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	1,534 130 LB./A		1,534
POTASSIUM FERTILIZER NUTRIENT (pounds)	1,416 120 LB./A		1,416
MULCH, METHOD 2 PROCEDURE 1 (acre)	10.6 2 T/A		10.6

State of Illinois
Department of Natural Resources

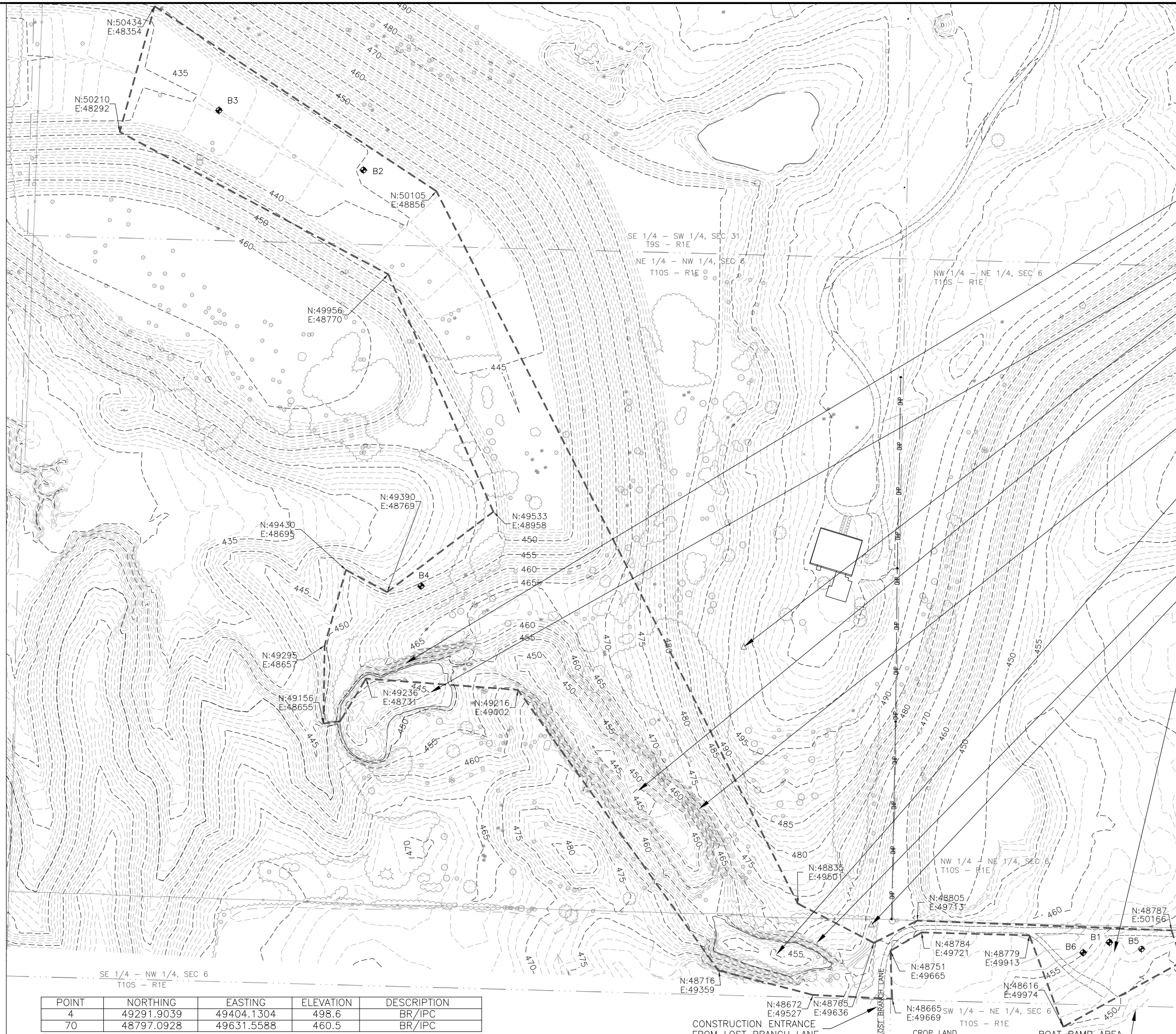
Simco Carbon C.C.#1 Phase II
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Williamson County

Date : 07/20/2019

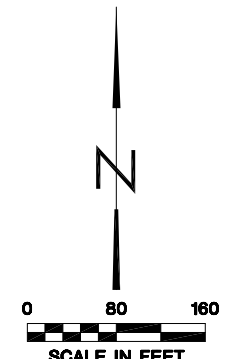
AW

Checked By :

Summary of Quantities/
General Notes/Location Map
Sheet 2 of 9



- HIGHWALL #2
- EXISTING IMPOUNDMENT #2 TO REMAIN
SURFACE WATER ELEVATION 448.1
pH 6.4 (8-22-2016)
- CONTROL POINT 4
- EXISTING IMPOUNDMENT #1
TO BE DEWATERED
SURFACE WATER ELEVATION 455.0
ESTIMATED VOLUME TO BE
DEWATERED 1,700,000 GALLONS
pH 6.8 (8-22-2016)
- DANGEROUS HIGHWALL #1
- EXISTING IMPOUNDMENT #3
TO BE DEWATERED
SURFACE WATER ELEVATION 459.0
ESTIMATED VOLUME TO BE
DEWATERED 200,000 GALLONS
pH 7.3 (8-22-2016)
- HIGHWALL #3
- CONTROL POINT 70
- EXISTING SCATTERED MINE REFUSE
(0.5 ACRE)



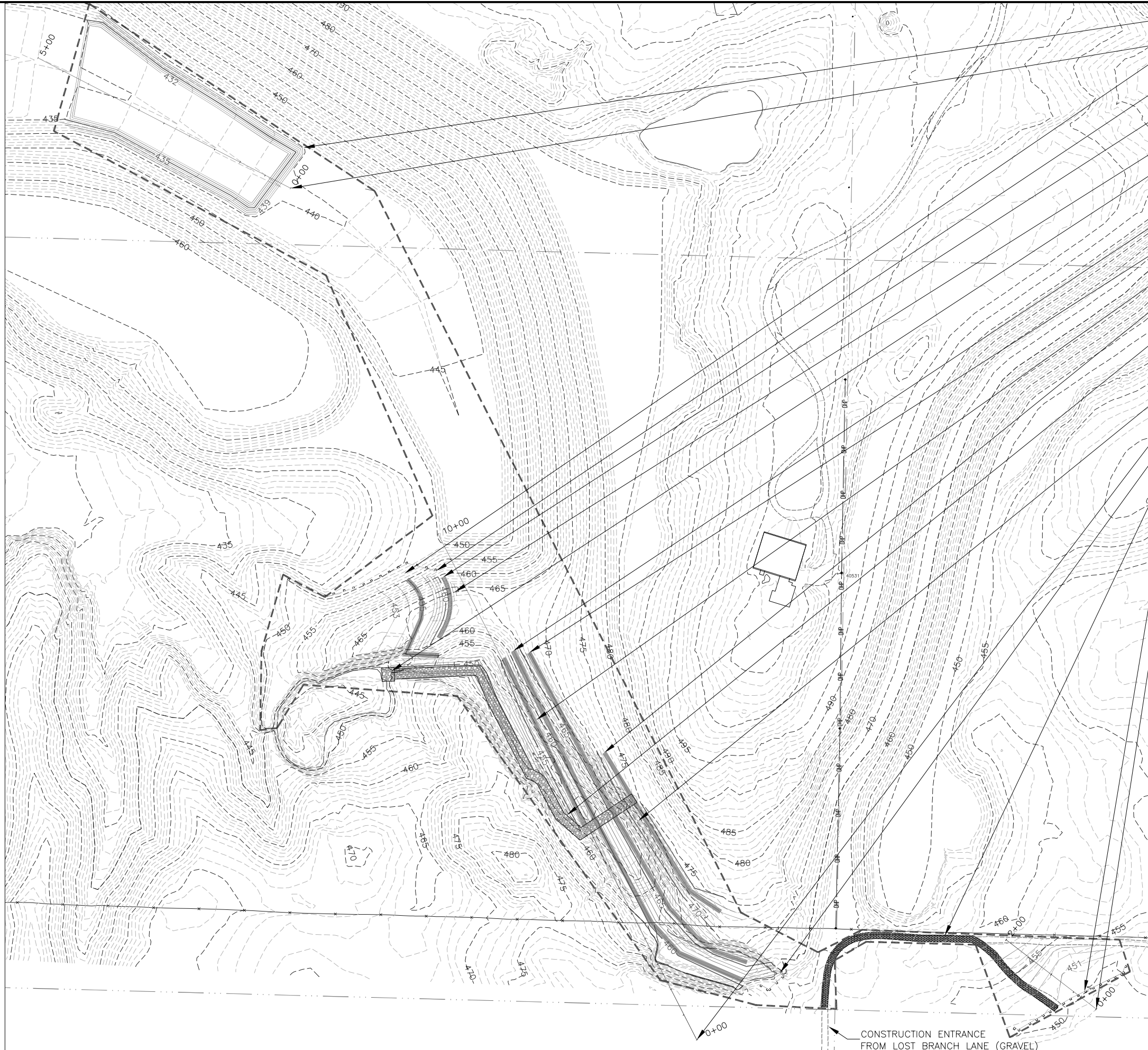
SIMCO CARBON C.C.#1 PHASE II

---	EXISTING CONTOUR
~~~~~	TREELINE
----	UNPAVED ROAD
----	SECTION LINE
---OP---	OVERHEAD POWER LINE
—+—	FENCE LINE
⊕	SOIL BORING
---	CONSTRUCTION LIMITS

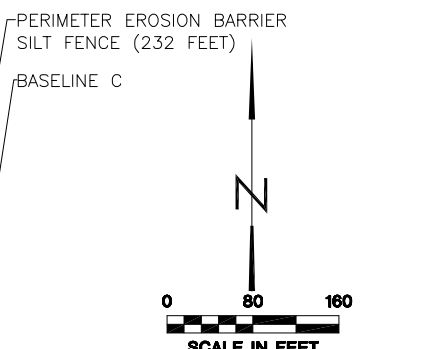
LEGEND

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
4	49291.9039	49404.1304	498.6	BR/IPC
70	48797.0928	49631.5588	460.5	BR/IPC

CONSTRUCTION ENTRANCE FROM LOST BRANCH LANE  
LOST BRANCH LANE  
CROP LAND  
BOAT RAMP AREA



- WETLAND SEEDING AT ELEVATION 435.0 AND BELOW
- BASELINE B
- PROPOSED SPECIAL EXCELSIOR BLANKET, 250 FEET X 8 FT. WIDE (222 SQ YD)
- PERIMETER EROSION BARRIER SILT FENCE (282 FEET)
- PROPOSED SPECIAL EXCELSIOR BLANKET 115 FEET X 8 FT. WIDE (102 SQ YD)
- PROPOSED 5:1 SLOPE HIGHWALL #2
- STONE RIPRAP, CLASS A-4 AT OUTLET 22 FEET X 20 FEET AVERAGE WIDTH X 2 FEET DEPTH (45.0 TON) SEE DETAIL B-9
- PROPOSED SPECIAL EXCELSIOR BLANKET 327 FEET X 8 FT. WIDE (291 SQ YD)
- PROPOSED SPECIAL EXCELSIOR BLANKET 683 FEET X 8 FT. WIDE (607 SQ YD)
- PROPOSED SPECIAL EXCELSIOR BLANKET 731 FEET X 8 FT. WIDE (650 SQ YD)
- PROPOSED SPECIAL EXCELSIOR BLANKET 352 FEET X 8 FT. WIDE (313 SQ YD)
- STA 4+15 BEGIN STONE RIPRAP, CLASS A-3 610 FEET X 18 FEET AVERAGE WIDTH X 1.5 FEET DEPTH (1,369 SQ YD) SEE DETAIL A-9
- PROPOSED 5:1 SLOPE HIGHWALL #1 & #3
- BASELINE A
- PERIMETER EROSION BARRIER SILT FENCE (60 FEET)
- PROPOSED AGGREGATE SURFACE COURSE, TYPE B, (151.0 TON) 540 L.F. X 12' WIDE X 4" DEEP BEGIN AND END AT CONSTRUCTION LIMITS
- PERIMETER EROSION BARRIER SILT FENCE (232 FEET)
- BASELINE C



**BASELINE LAYOUT DATA**

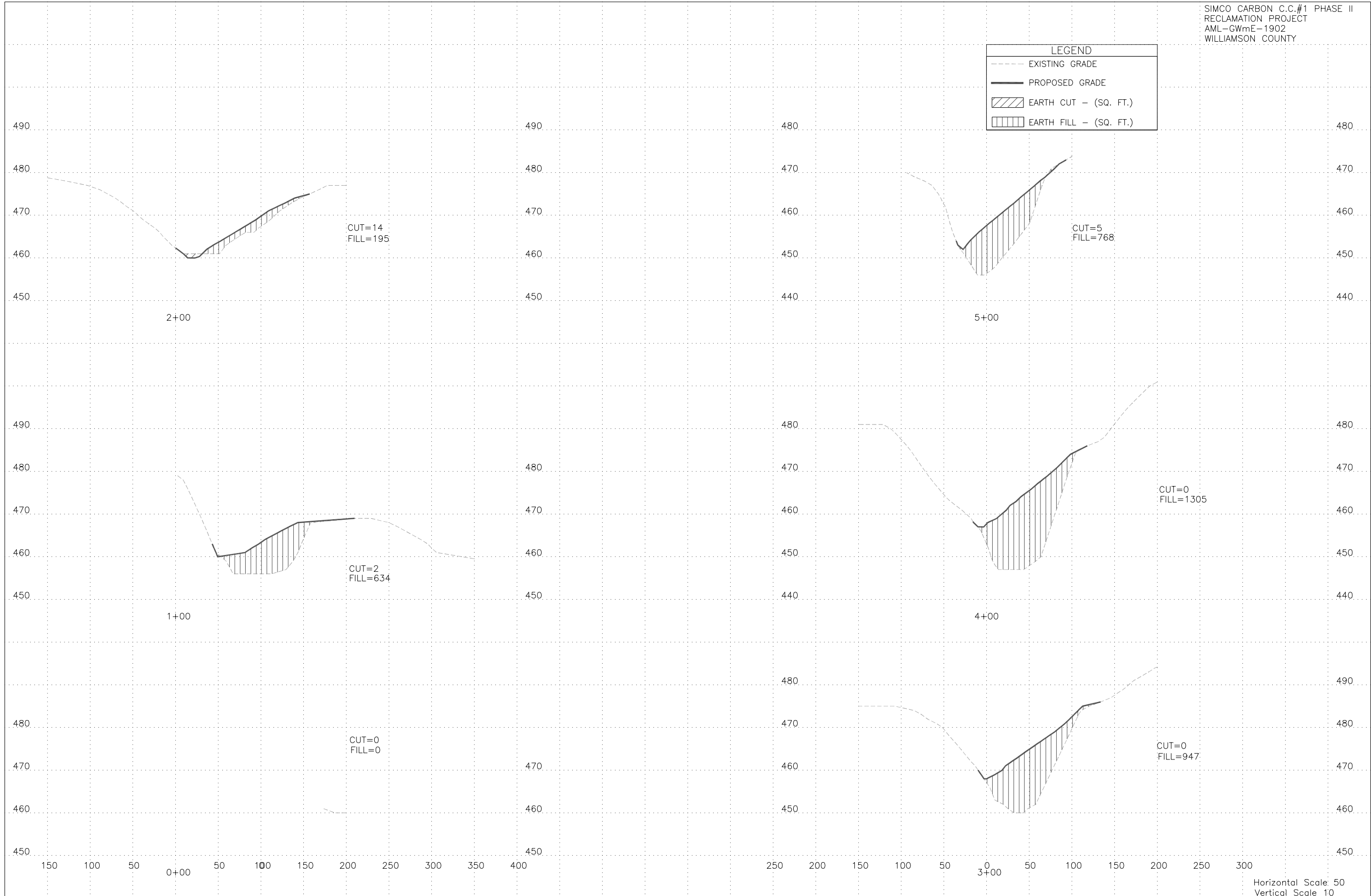
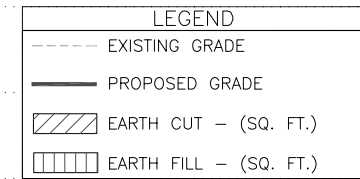
BASELINE	STATION	NORTHING	EASTING
A	0+00	48610.93	49423.07
	10+00	49501.21	48967.67
B	0+00	50109.60	48708.20
	5+00	50338.71	48263.78
C	0+00	48665.30	50125.57
	2+00	48787.19	49967.00

**SIMCO CARBON C.C.#1 PHASE II**



	EXISTING CONTOUR
	PROPOSED CONTOUR
	UNPAVED ROAD
	SECTION LINE
	OVERHEAD POWER LINE
	FENCE LINE
	CONSTRUCTION LIMITS
	EXCELSIOR BLANKET

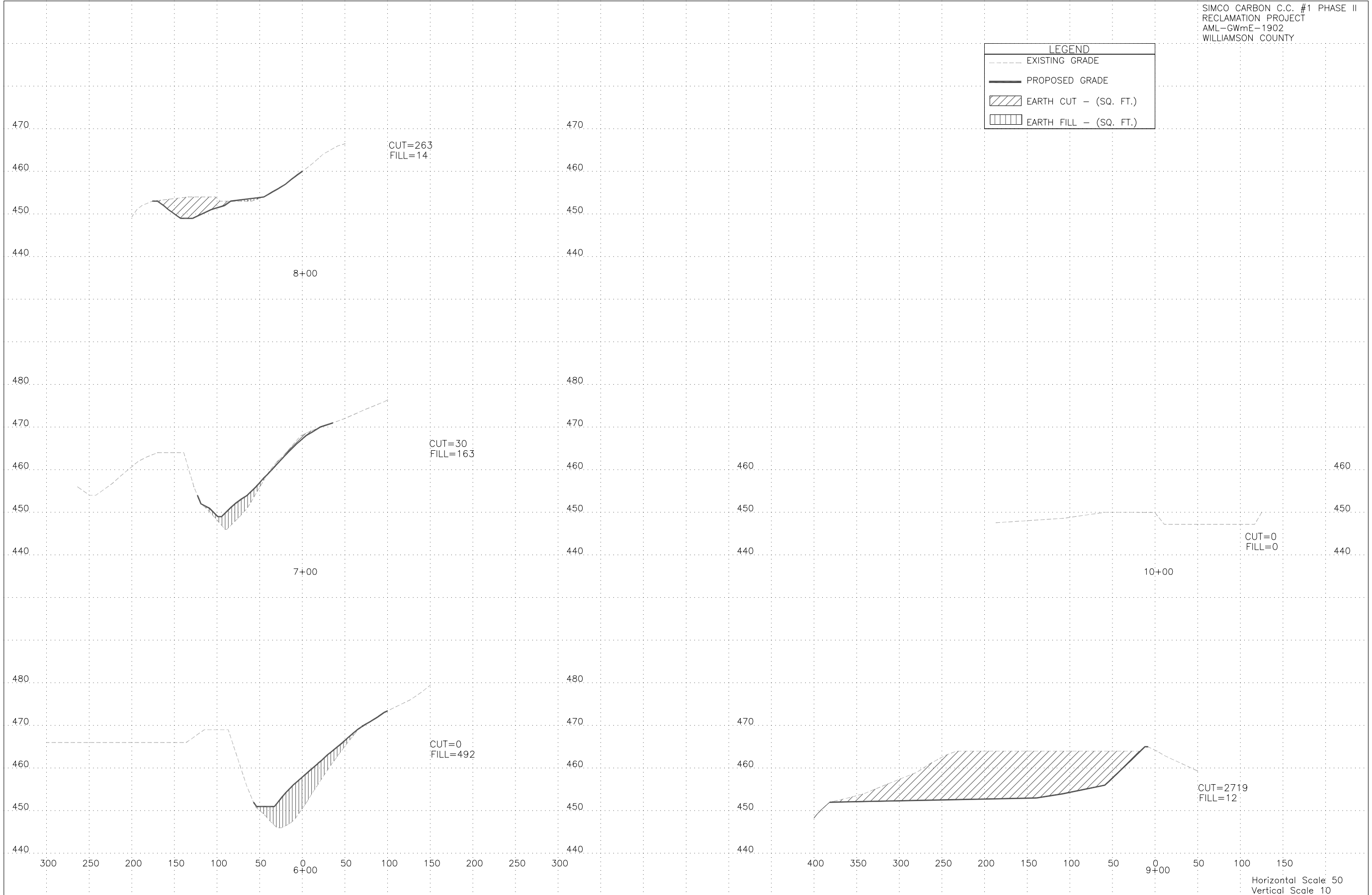
**LEGEND**

Drawn By: AW Date: 01/26/2019  
 Checked By: _____







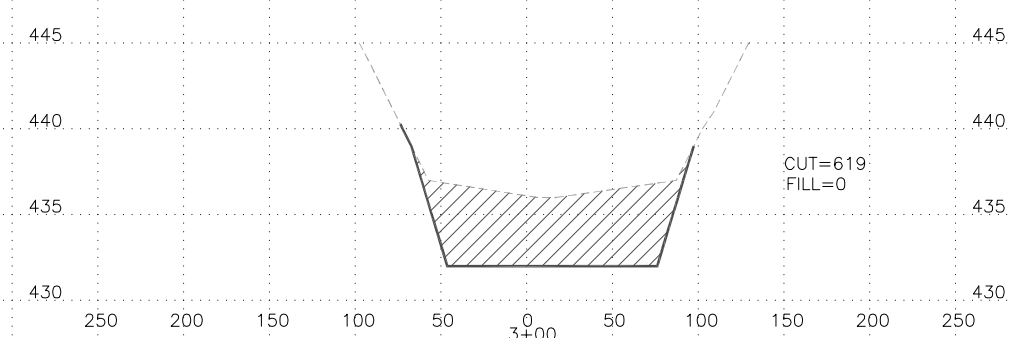
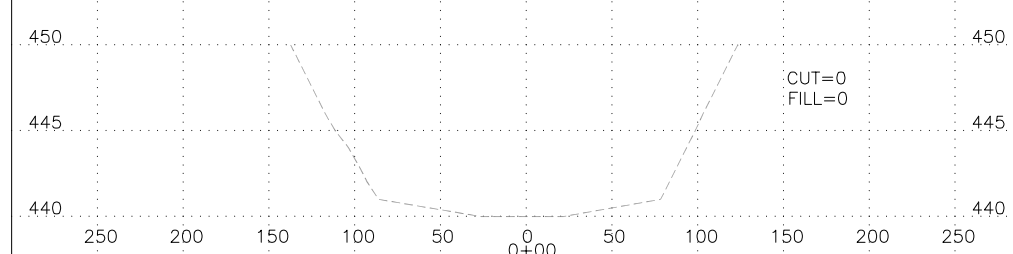
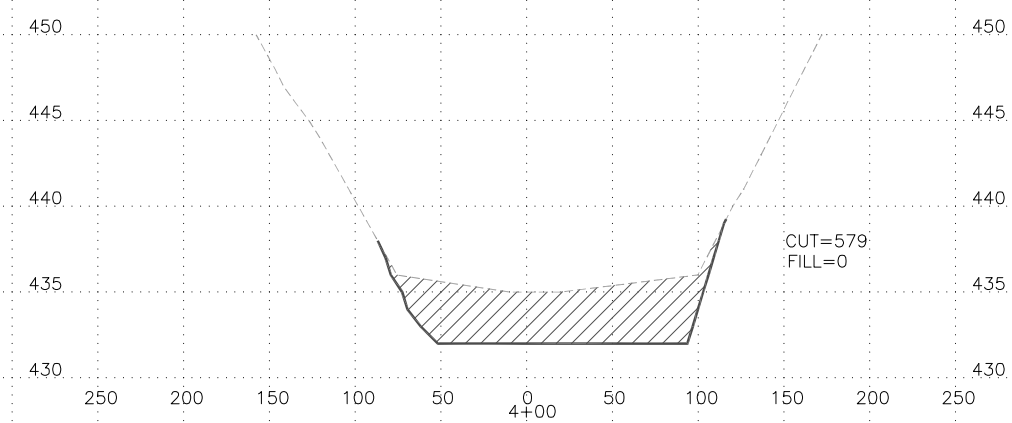
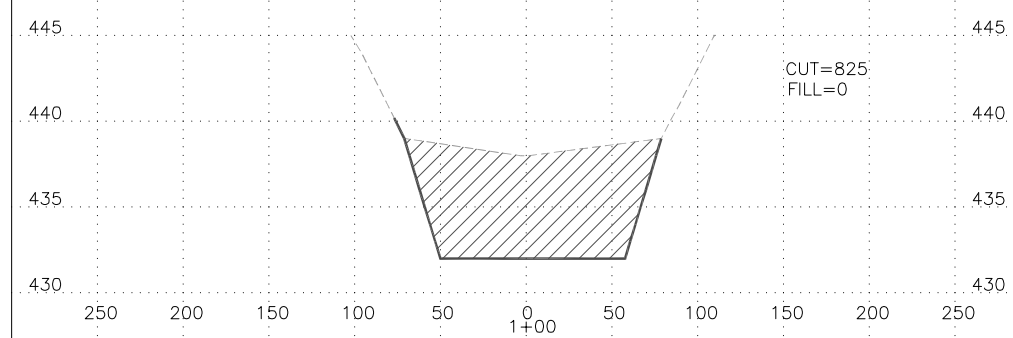
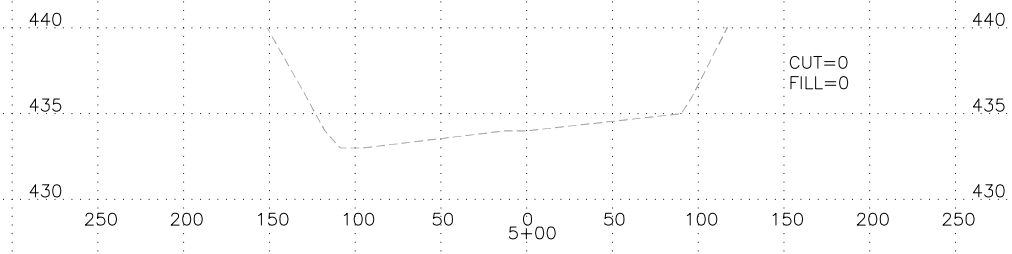
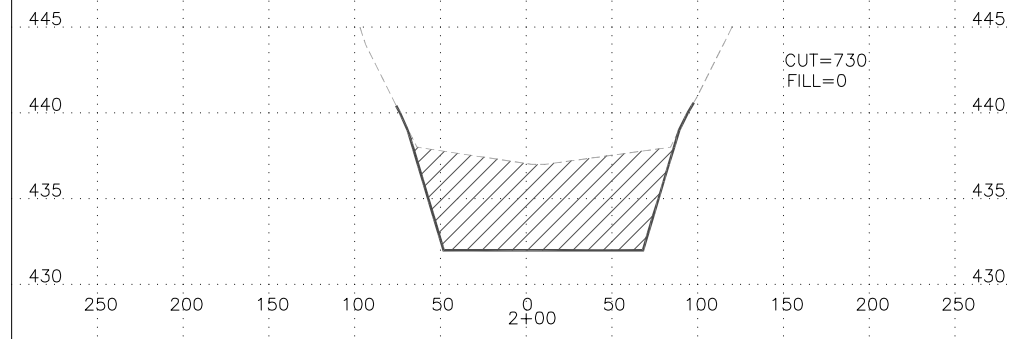
Horizontal Scale: 50  
 Vertical Scale: 10

LEGEND	
---	EXISTING GRADE
—	PROPOSED GRADE
	EARTH CUT - (SQ. FT.)
	EARTH FILL - (SQ. FT.)



Horizontal Scale 50  
Vertical Scale 10

LEGEND	
	EXISTING GRADE
	PROPOSED GRADE
	EARTH CUT - (SQ. FT.)
	EARTH FILL - (SQ. FT.)



Horizontal Scale 50  
 Vertical Scale 5

**LEGEND**

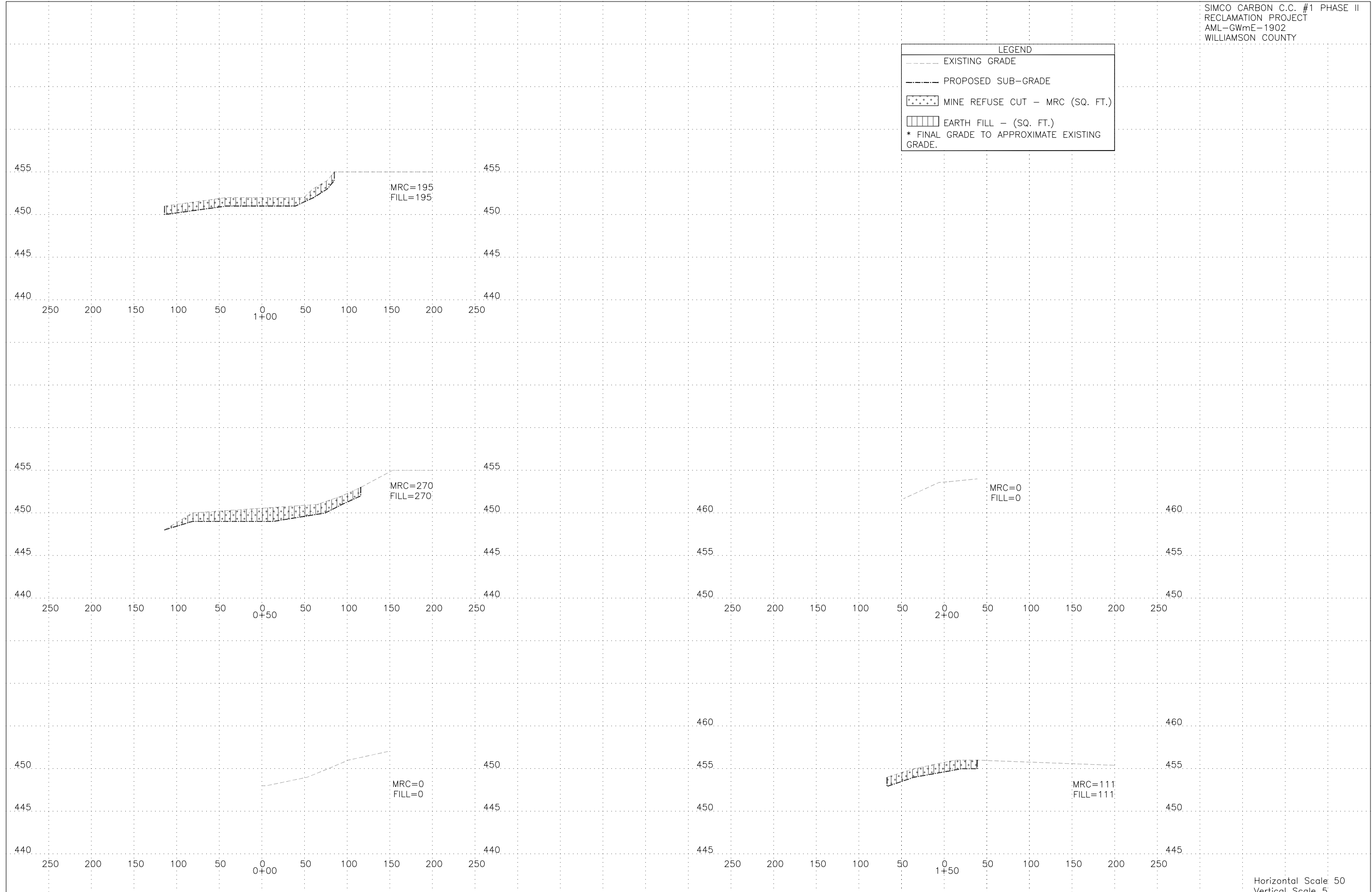
----- EXISTING GRADE

----- PROPOSED SUB-GRADE

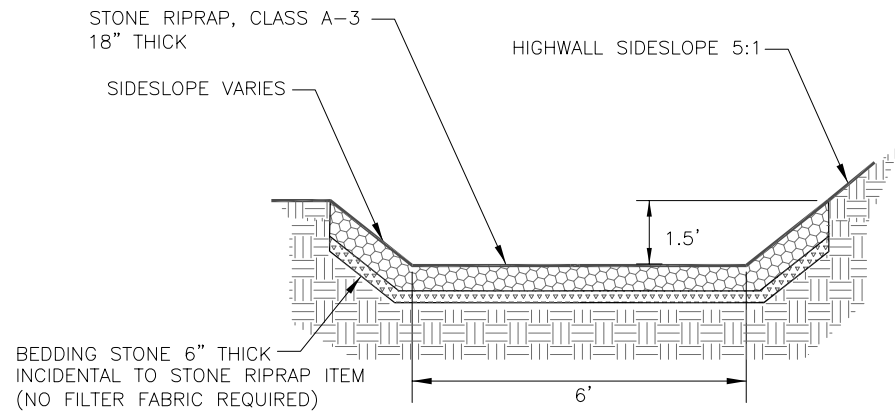
▨ MINE REFUSE CUT - MRC (SQ. FT.)

▩ EARTH FILL - (SQ. FT.)

* FINAL GRADE TO APPROXIMATE EXISTING GRADE.

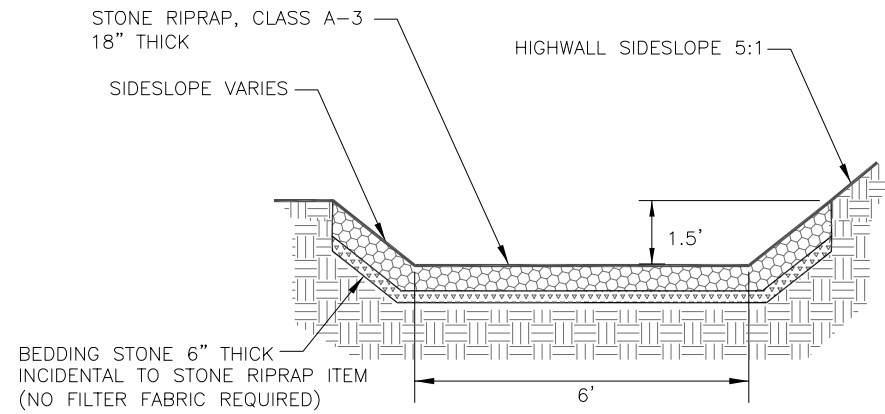






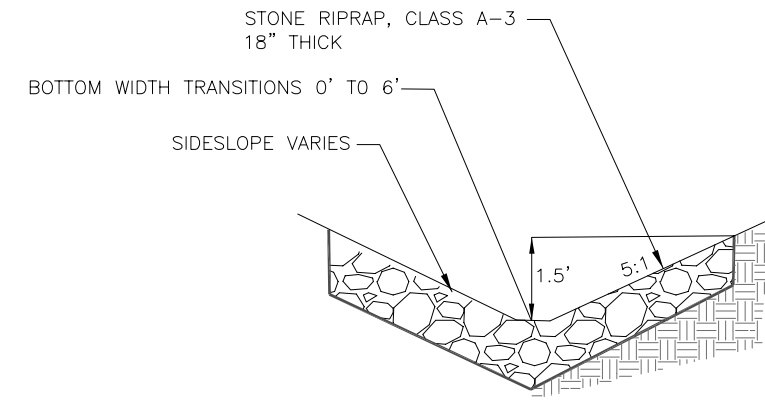
**TRAPEZOIDAL CHANNEL**

DOWN DRAIN FROM STA 4+20 14' LT TO STA 4+28 100' RT



**TRAPEZOIDAL CHANNEL**

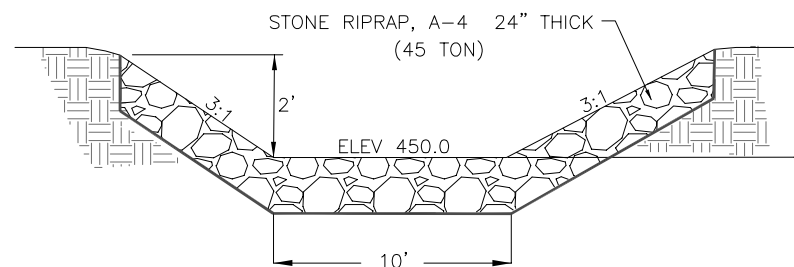
FROM STA 7+00 50' LT TO STA 8+14 180' LT



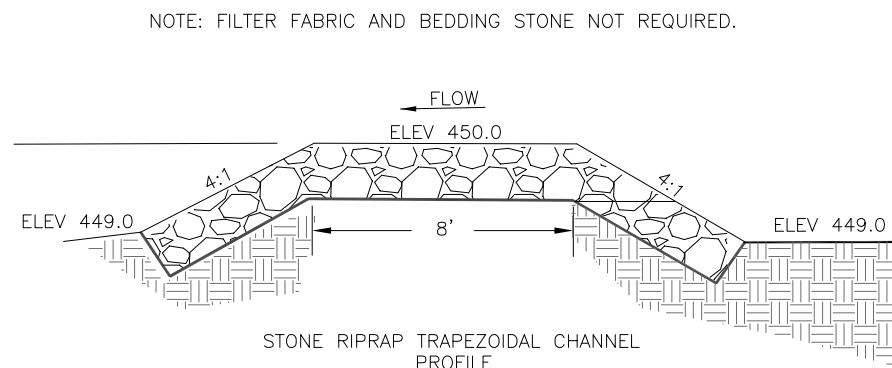
**TRANSITIONAL CHANNEL**

FROM STA 4+20 14' LT TO STA 7+00 50' LT

**A**  
**9** **CHANNEL- STONE RIPRAP, CLASS A3,**  
TYPICAL SECTIONS, NOT TO SCALE



**STONE RIPRAP TRAPEZOIDAL CHANNEL  
CROSS SECTION**



**STONE RIPRAP TRAPEZOIDAL CHANNEL  
PROFILE**

**B**  
**9** **CHANNEL OUTLET- STONE RIPRAP, CLASS A4**  
TYPICAL SECTION, NOT TO SCALE

Drawn By : AW Date : 07/28/2018

Checked By :