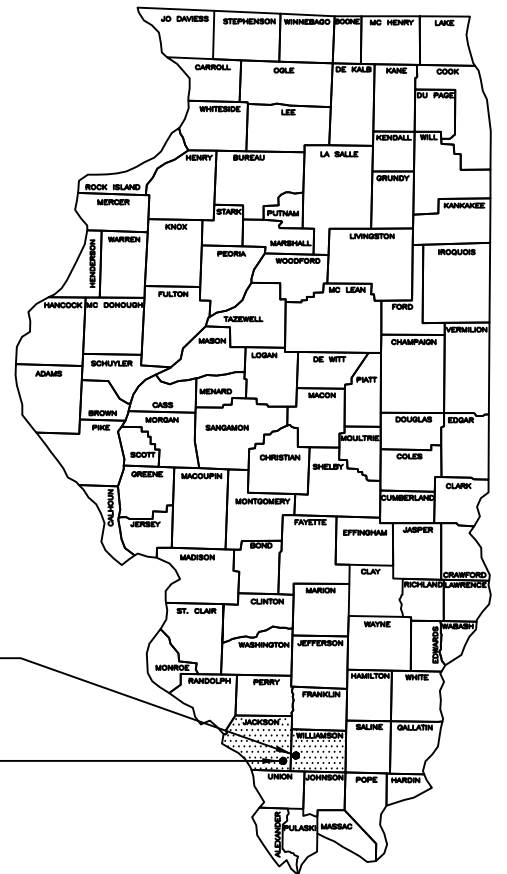


State of Illinois
Department of Natural Resources
 Office of Mines and Minerals
 Division of Abandoned Mined Lands Reclamation

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

Simco Carbon #1 Remedial & Unity Point Sinkholes
 Reclamation Project
 AML-GJkE-1402
 Jackson and Williamson Counties
 2LR



Simco Carbon #1 Remedial
 Williamson County

Unity Point Sinkholes
 Jackson County

Certified Copy

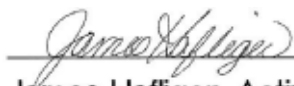
SCHEDULE OF DRAWINGS:

1. Cover Sheet
2. Summary of Quantities / General Notes / Location Map
3. Simco Carbon #1 Remedial Existing and Proposed Conditions
4. Unity Point Sinkholes Existing and Proposed Conditions

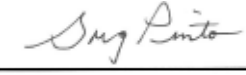
CONTRACT NO. M1402

Prepared By IDNR Staff

Approved for Bidding:


 James Hafliger, Acting Director
 Office of Mines and Minerals

Approved By:


 J. Gregory Pinto, Acting 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
				Simco Carbon	Unity Point	Total		
NRM20110	1	SPECIAL CLEARING	201	0.5	0.5	1	L SUM	
NRM20480	2	FURNISHED EXCAVATION	204	390	807	1,197	CU YD	COMPACTION IN ACCORDANCE WITH CONSTRUCTION NOTE BELOW
NRM21510	3	SPECIAL EXCAVATION	215	105	696	801	CU YD	
NRM25040	4	NITROGEN FERTILIZER NUTRIENT	250	120	100	220	POUND	100 LB/ACRE
NRM25050	5	PHOSPHOROUS FERTILIZER NUTRIENT	250	144	120	264	POUND	120 LB/ACRE
NRM25060	6	POTASSIUM FERTILIZER NUTRIENT	250	360	300	660	POUND	300 LB/ACRE
NRM25070	7	AGRICULTURAL GROUND LIMESTONE	250	6.0	5.0	11.0	TON	5 TON/ACRE
NRM25090	8	SEEDING	250	1.2	1.0	2.2	ACRE	
25100115	9	MULCH, METHOD 2, PROCEDURE 1	IDOT 251	1.2	1.0	2.2	ACRE	2 TON/ACRE
NRM28610	10	SPECIAL EXCELSIOR BLANKET	286	133	257	390	SQ YD	8 FOOT WIDTH
40200800	11	AGGREGATE SURFACE COURSE, TYPE B	IDOT 402	-	53.0	53.0	TON	CA-6
NRM67110	12	MOBILIZATION (MAX. 6% OF BID)	671	0.4	0.6	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 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

FURNISHED EXCAVATION – All borrow locations are subject to the environmental review requirements of Article 107.22 and must be approved by the Department prior to disturbance.

COMPACTION – All earth materials placed as fill shall be placed in lifts not to exceed 12 inches and shall be compacted to the Engineer's satisfaction. Earth fill materials placed within the excavation shall be compacted using the excavator bucket. Earth fill material placed above grade shall be compacted using the excavator bucket or by multiple passes of on-site equipment.

BURIAL/REMOVAL OF MATERIAL – Concrete and masonry debris designated for burial by the engineer shall be buried at least two 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.

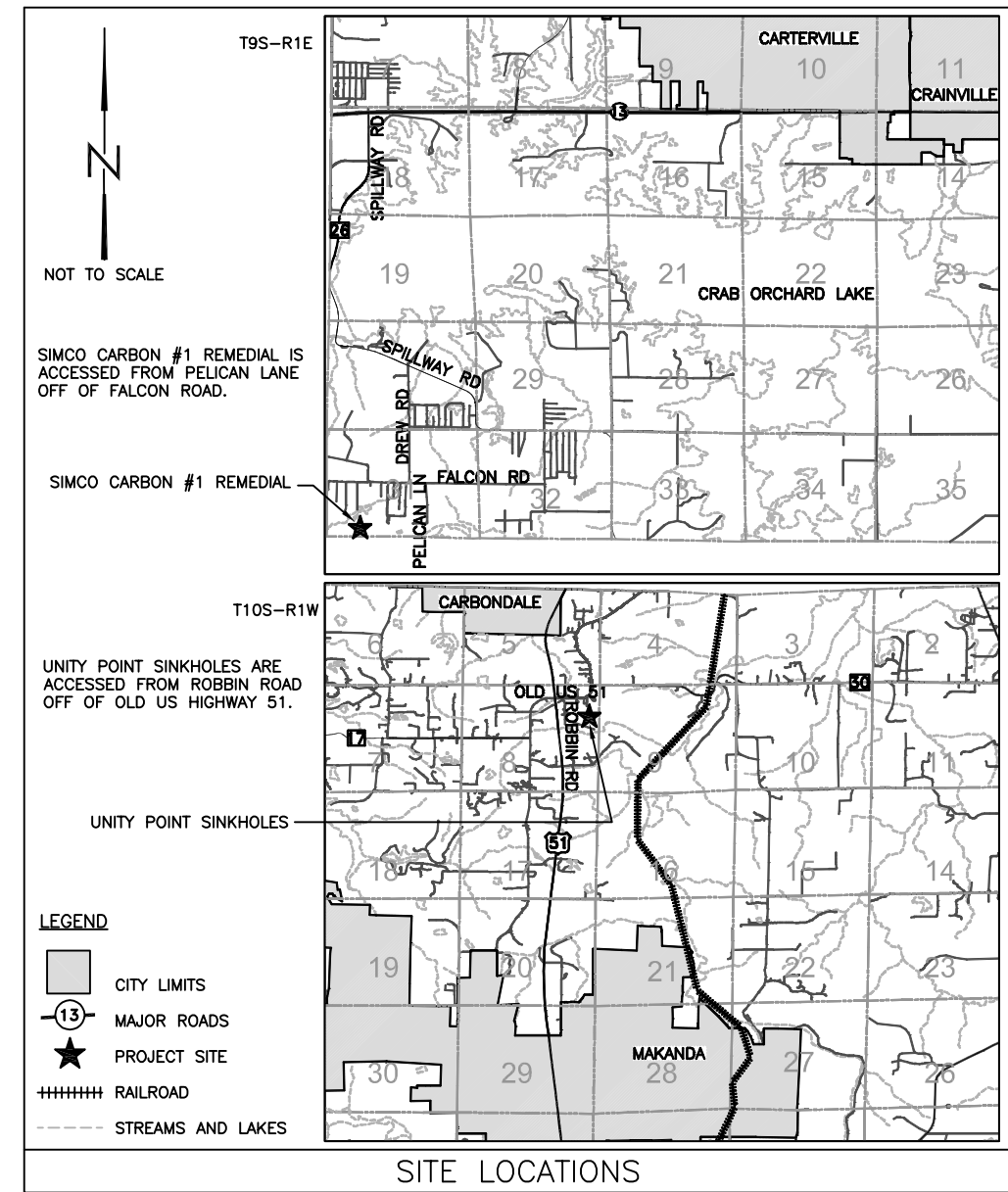
TREE REMOVAL – Trees cleared from the site shall be disposed of onsite per Section 201 of the Special Provisions. No clearing of trees outside the construction limits may occur.

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 and Mulch			
ITEM (unit)	FALL 2014 (AUG 20 TO NOV 15)		TOTAL QUANTITY
	SIMCO CARBON	UNITY POINT	
SEEDING (acres)	1.2	1.0	2.2
AGRICULTURAL GROUND LIMESTONE (tons)	6.0	5.0	11.0
NITROGEN FERTILIZER NUTRIENT (pounds)	120	100	220
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	144	120	264
POTASSIUM FERTILIZER NUTRIENT (pounds)	360	300	660
MULCH, METHOD 2, PROCEDURE 1 (acres)	1.2	1.0	2.2

State of Illinois
Department of Natural Resources

Simco Carbon #1 Remedial & Unity Point Sinkholes Reclamation Project
AML-GJkE-1402
Jackson & Williamson Counties

Drawn By: MJD Date: 06/25/2014
Checked By:

Summary of Quantities/
General Notes/Location Map

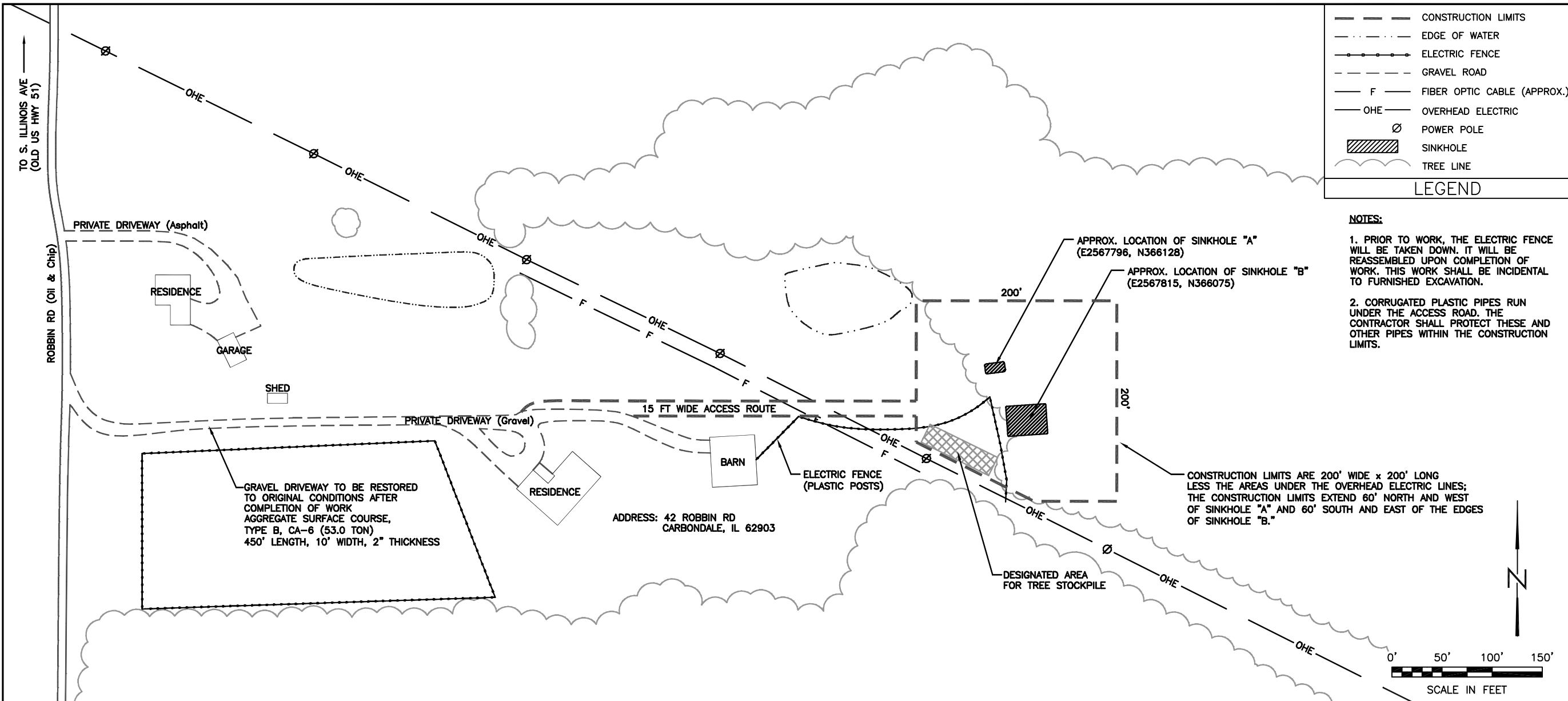
Sheet 2 of 4

LEGEND

- CONSTRUCTION LIMITS
- - - - EDGE OF WATER
- ELECTRIC FENCE
- - - - GRAVEL ROAD
- - - - FIBER OPTIC CABLE (APPROX.)
- OHE --- OVERHEAD ELECTRIC
- POWER POLE
- ▨ SINKHOLE
- TREE LINE

NOTES:

- PRIOR TO WORK, THE ELECTRIC FENCE WILL BE TAKEN DOWN. IT WILL BE REASSEMBLED UPON COMPLETION OF WORK. THIS WORK SHALL BE INCIDENTAL TO FURNISHED EXCAVATION.
- CORRUGATED PLASTIC PIPES RUN UNDER THE ACCESS ROAD. THE CONTRACTOR SHALL PROTECT THESE AND OTHER PIPES WITHIN THE CONSTRUCTION LIMITS.



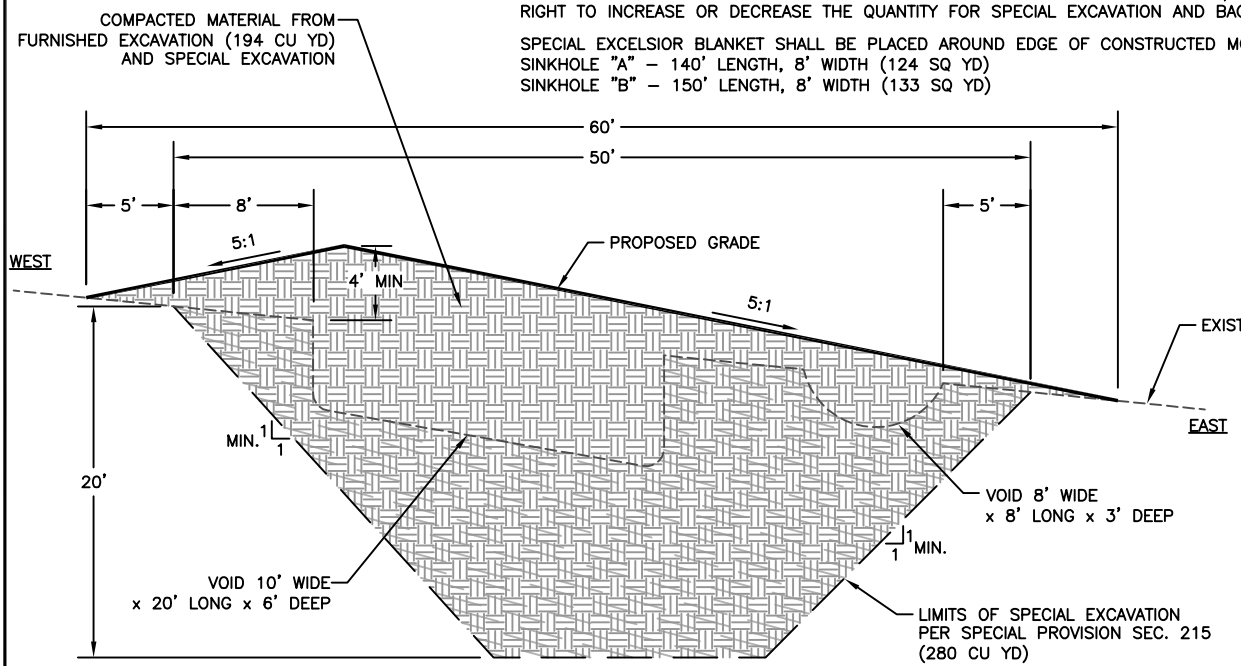
NOTES:

DUE TO THE UNKNOWN CONDITIONS THAT EXIST IN AND AROUND THE SINK HOLES, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN PERFORMING WORK NEAR THEM. THE ENGINEER RESERVES THE RIGHT TO INCREASE OR DECREASE THE QUANTITY FOR SPECIAL EXCAVATION AND BACKFILLING MATERIALS AS DETERMINED BY THE EXACT CONDITIONS ENCOUNTERED DURING SPECIAL EXCAVATION.

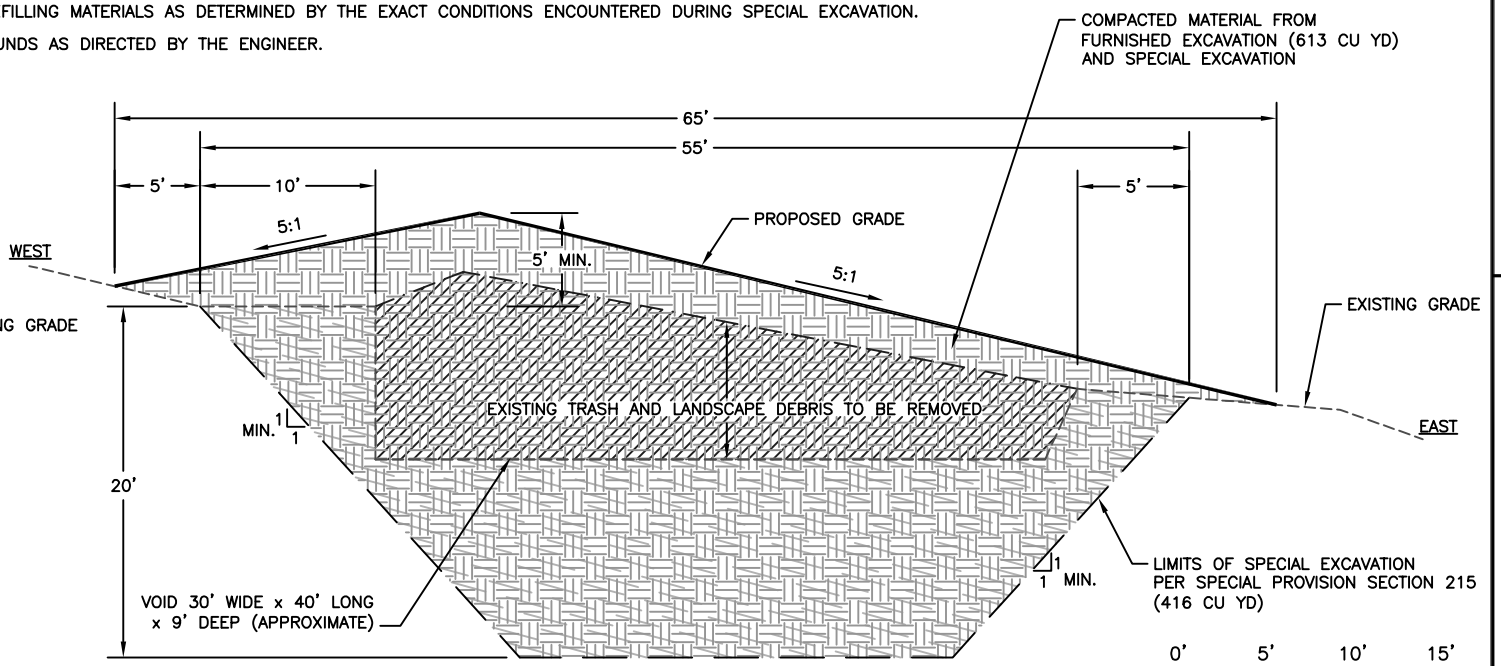
SPECIAL EXCELSIOR BLANKET SHALL BE PLACED AROUND EDGE OF CONSTRUCTED MOUNDS AS DIRECTED BY THE ENGINEER.

SINKHOLE "A" - 140' LENGTH, 8' WIDTH (124 SQ YD)

SINKHOLE "B" - 150' LENGTH, 8' WIDTH (133 SQ YD)



SINKHOLE "A" FILLING DETAIL



SINKHOLE "B" FILLING DETAIL