

**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

**Saline County V.O. Group**  
**Reclamation Project**  
**AML-GSIE-2106**  
**Saline County**  
**2LR**



**SCHEDULE OF DRAWINGS:**

1. Cover Sheet
2. Summary of Quantities/General Notes/Location Map
3. Van Meter Brothers Site Layout
4. Peabody C.C. #42 Site Layout
5. O'Gara C.C. #5 Site Layout
6. Van Meter Brothers Sinkhole Details
7. Peabody C.C. #42 & O'Gara C.C. #5 Shaft Details
8. Peabody C.C. #42 Concrete Cap Detail
9. Van Meter Brothers Detail

CONTRACT NO. M2106

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:

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



SUMMARY OF QUANTITIES						
Item No.	#	Item	Section	Quantity	Unit	Rates/Remarks
NRM20110	1	SPECIAL CLEARING	201	1	L SUM	
NRM20480	2	FURNISHED EXCAVATION	204	1768	CU YD	
20300100	3	CHANNEL EXCAVATION	IDOT 203	28	CU YD	
NRM21510	4	SPECIAL EXCAVATION	215	2035	CU YD	
NRM21610	5	FILTER FABRIC FOR USE WITH RIPRAP	216	249	SQ YD	
NRM21621	6	CA-FILL, CA1	216	121.0	TON	
NRM21640	7	SHOT ROCK FILL	216	904.0	TON	
NRM21644	8	ROCK FILL, RR4	216	1087.0	TON	
NRM21661	9	CLASS SI CONCRETE PLUG	216	7	CU YD	
NRM21710	10	BENTONITE SOIL TREATMENT	217	1325	POUND	1,325 POUNDS SODIUM BENTONITE POWDER 5 POUNDS/SQ FT
NRM25040	11	NITROGEN FERTILIZER NUTRIENT	250	250	POUND	100 POUNDS/ACRE
NRM25050	12	PHOSPHOROUS FERTILIZER NUTRIENT	250	250	POUND	100 POUNDS/ACRE
NRM25060	13	POTASSIUM FERTILIZER NUTRIENT	250	250	POUND	100 POUNDS/ACRE
NRM25070	14	AGRICULTURAL GROUND LIMESTONE	250	12.5	TON	5.0 TONS/ACRE
NRM25090	15	SEEDING	250	2.5	ACRE	
25100115	16	MULCH, METHOD 2	IDOT 251	2.5	ACRE	PROCEDURE 1, 2.0 TONS/ACRE
28100105	17	STONE RIPRAP, CLASS A3	IDOT 281	121	SQ YD	
NRM42510	18	PORTLAND CEMENT CONCRETE CAP	425	8	CU YD	
NRM50101	19	REMOVAL OF EXISTING STRUCTURES	501	1	L SUM	
542D1081	20	PIPE CULVERT CLASS D, TYPE 2, 36"	IDOT 542	40	FOOT	GALVANIZED CORRUGATED STEEL
NRM67110	21	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 but 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 damage done to any area outside the construction limits.

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

The engineer shall observe the excavation of the mine openings and provide direction on the depth and extent of excavation. The engineer shall determine the method of backfill based on the plan details and calculate the required quantities of materials based on conditions encountered during excavation. The engineer reserves the right to increase, decrease, or delete any of the contract pay items. Quantities included in the contract are based on best available information and may be adjusted dependent upon the actual conditions encountered in the field.

**CONSTRUCTION NOTES**

**ROADS**—The contractor shall comply with the requirements of state and local roadway jurisdiction authorities as part of the satisfactory performance of the reclamation work.

**BURIAL/REMOVAL OF MATERIAL**—Concrete and masonry debris designated for burial by the engineer shall be buried at least three feet below the 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.

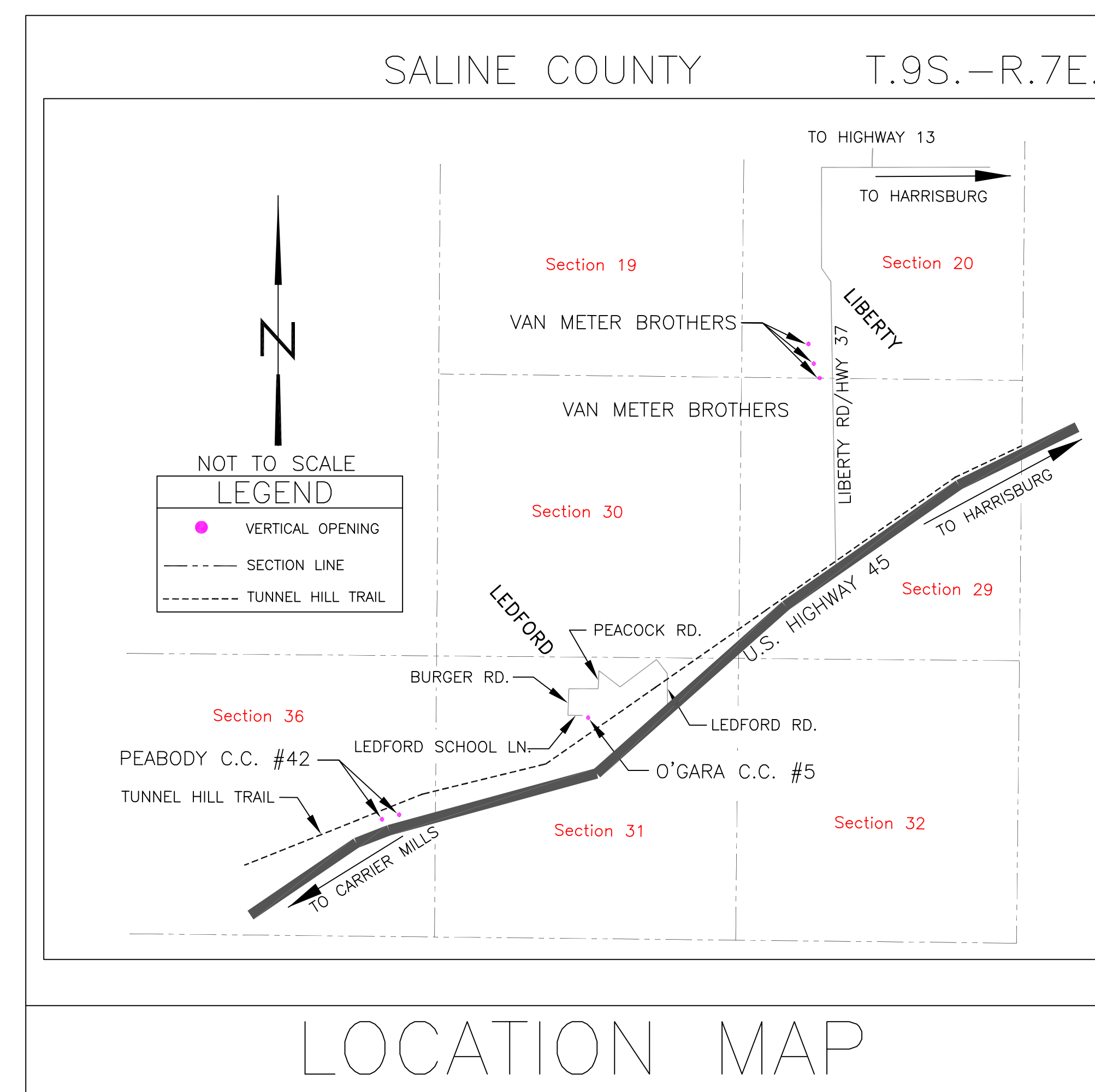
**TREE REMOVAL**—Trees removed shall be disposed of per Section 201 of the Special Provisions.

**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 completed, 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.



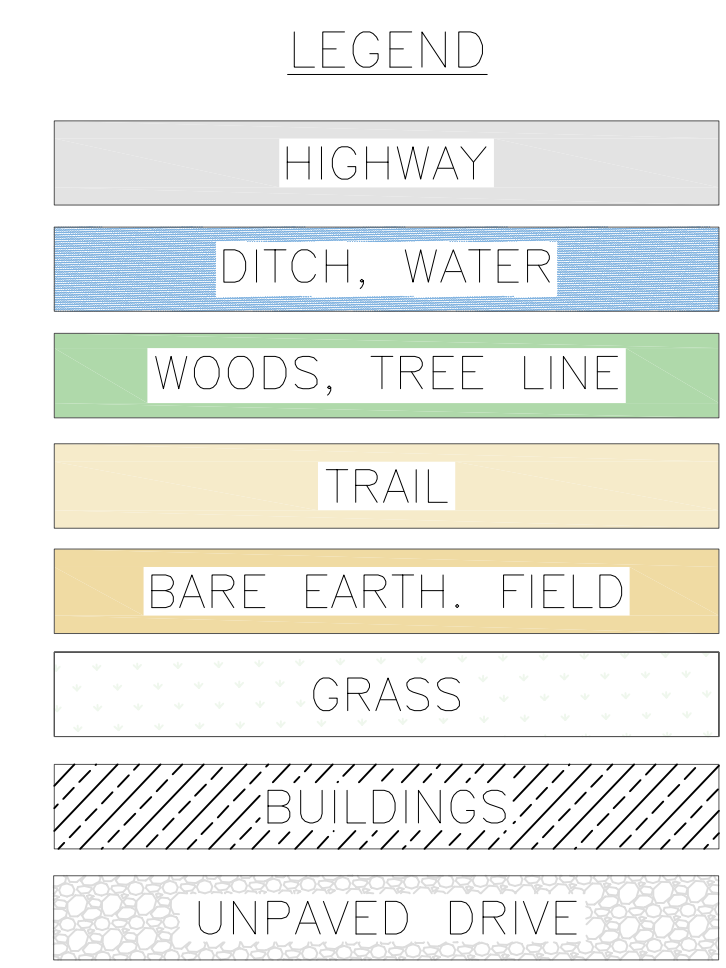
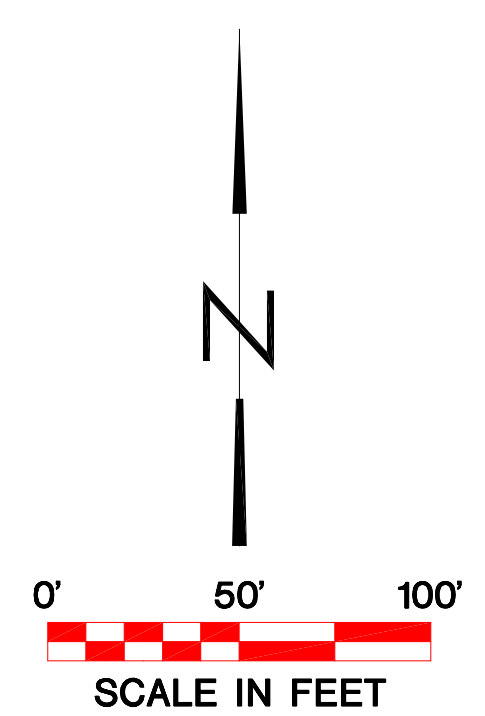
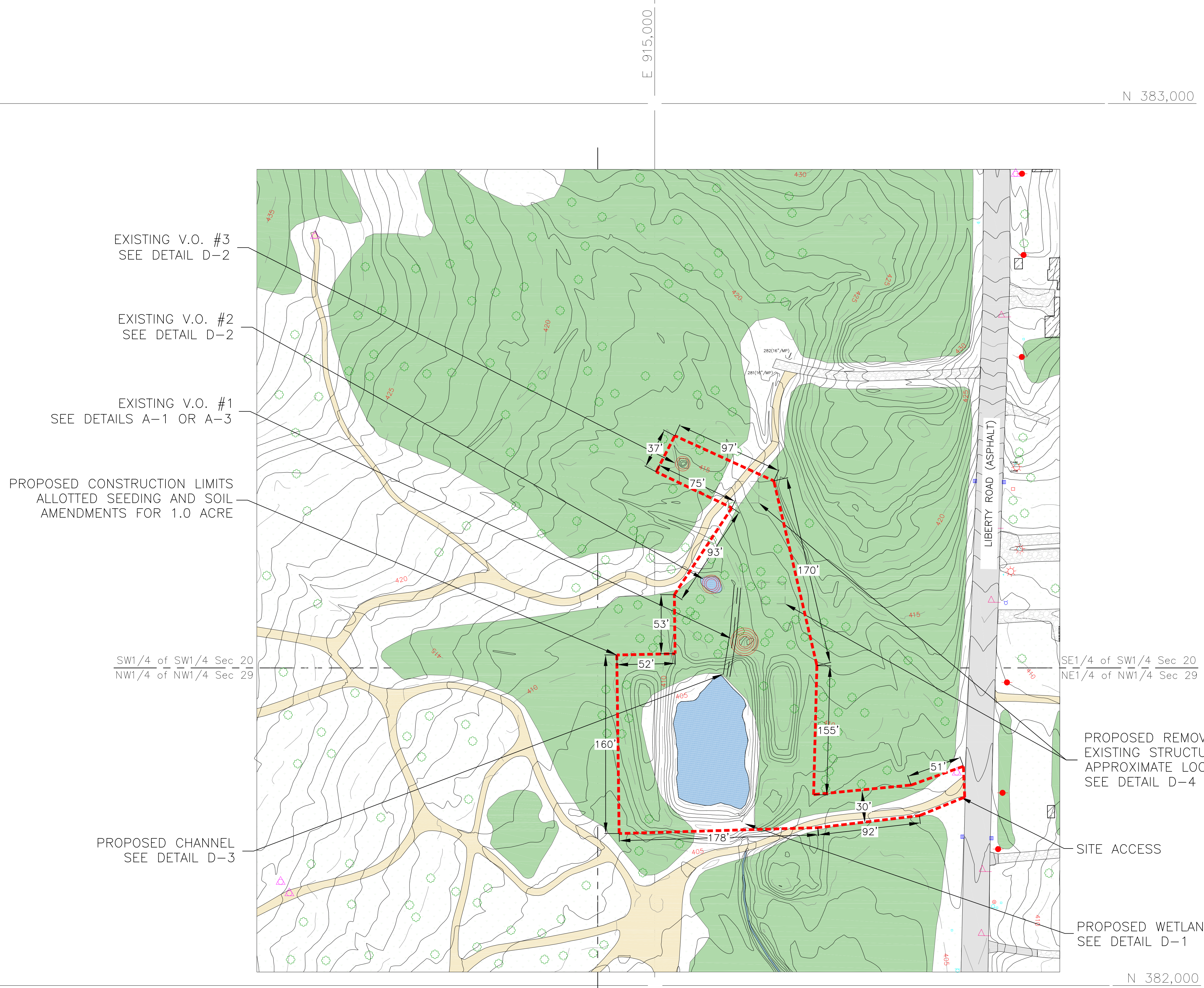
ITEM (unit)	FALL 2022 AUG. 20 – SEPT. 30	TOTAL QUANTITY
SEEDING (acres)	2.5	2.5
AGRICULTURAL GROUND LIMESTONE (tons)	12.5 5 T/A	12.5
NITROGEN FERTILIZER NUTRIENT (pounds)	250 100 LB./A	250
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	250 100 LB./A	250
POTASSIUM FERTILIZER NUTRIENT (pounds)	250 100 LB./A	250
MULCH, METHOD 2 PROCEDURE 1 (acre)	2.5 2 T/A	2.5

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 Reclamation Project  
 AML-GSIE-2106  
 Saline County

Drawn By: T.K. \_\_\_\_\_ Date: 05-13-2021  
 Checked By: OMA \_\_\_\_\_ Date: 03-13-2022

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



CONTOUR INTERVAL 1 FOOT  
ILLINOIS STATE PLANE COORDINATE SYSTEM (NAD83)  
NORTH AMERICAN VERTICAL DATUM 1988  
EAST ZONE

- HYDRANT
- ROAD SIGN
- UTILITY
- DRAIN
- CULVERT
- UTILITY POLE
- LIGHT POLE
- POST
- GROUND CONTROL PT.
- MAIL BOX

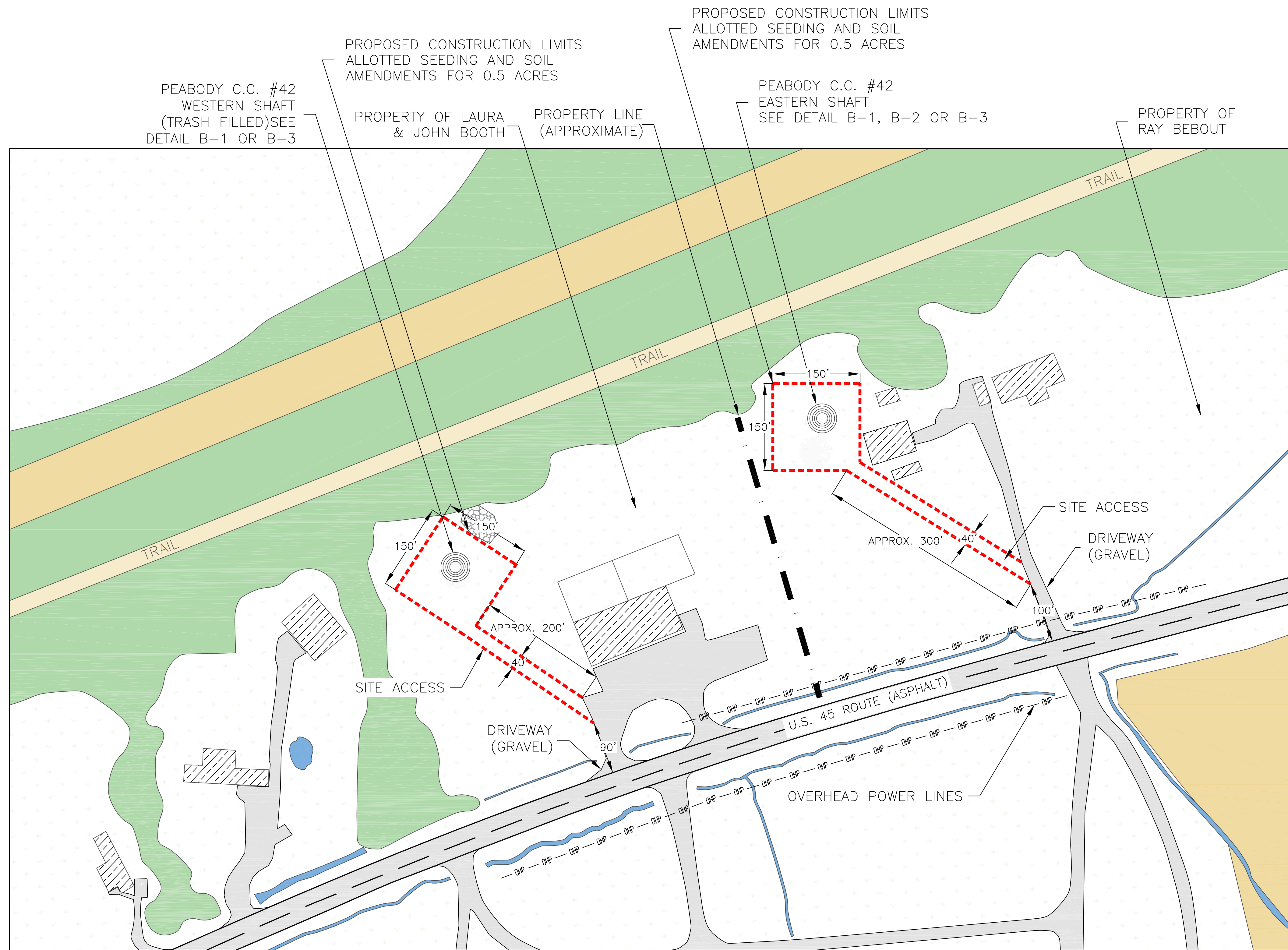
# Van Meter Brothers

State of Illinois  
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Abandoned Mined Lands Reclamation Division

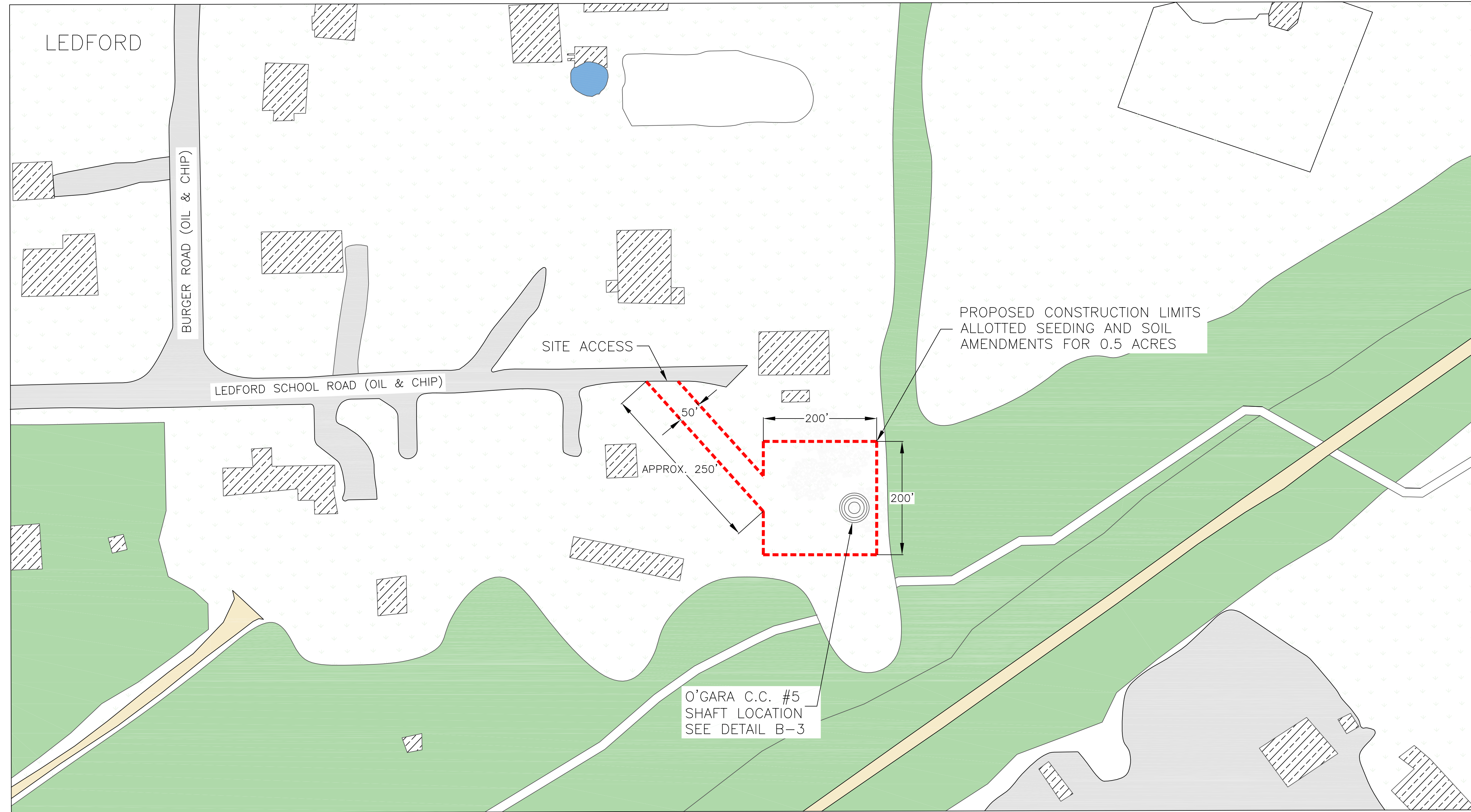
Saline County V.O. Group  
Reclamation Project  
AML-GSIE-2106  
Saline County

Drawn By: TK  
Checked By: OMA  
Date: 06-18-2021  
03-19-2022

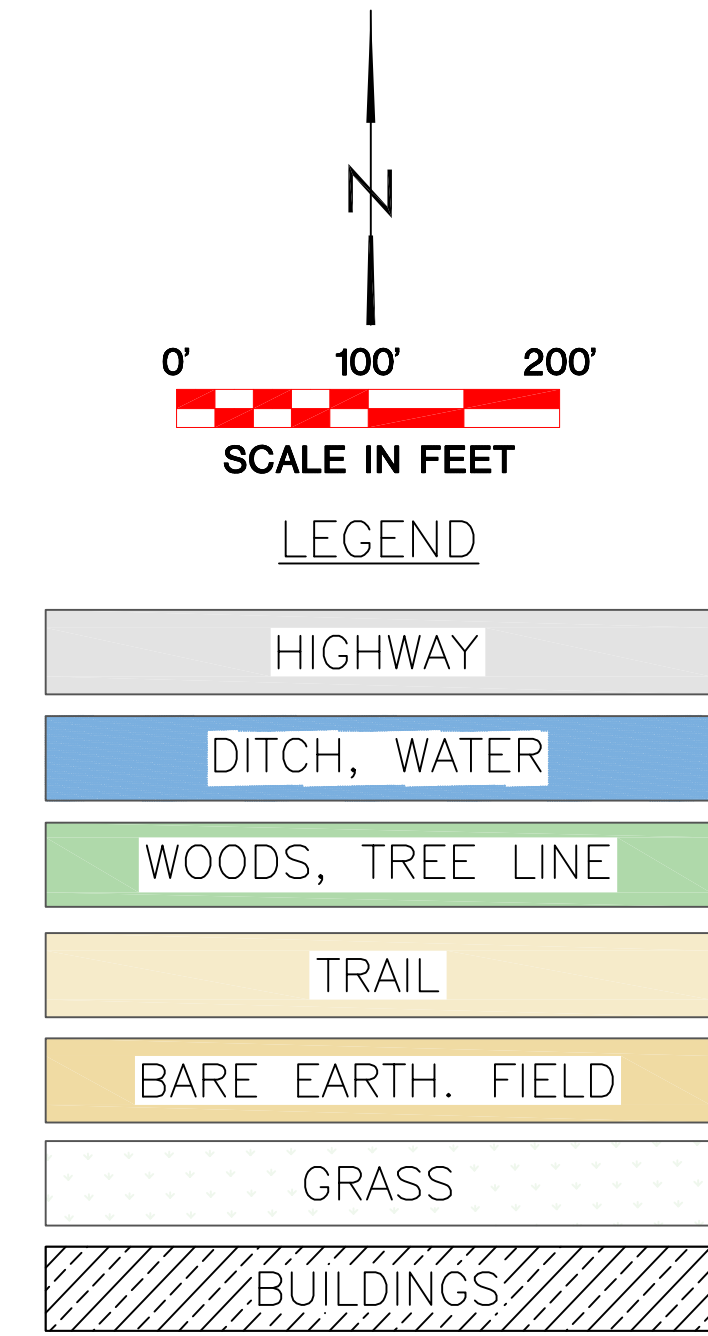
Van Meter Brothers  
Site Layout  
Sheet 3 of 9



**Peabody C.C. #42**

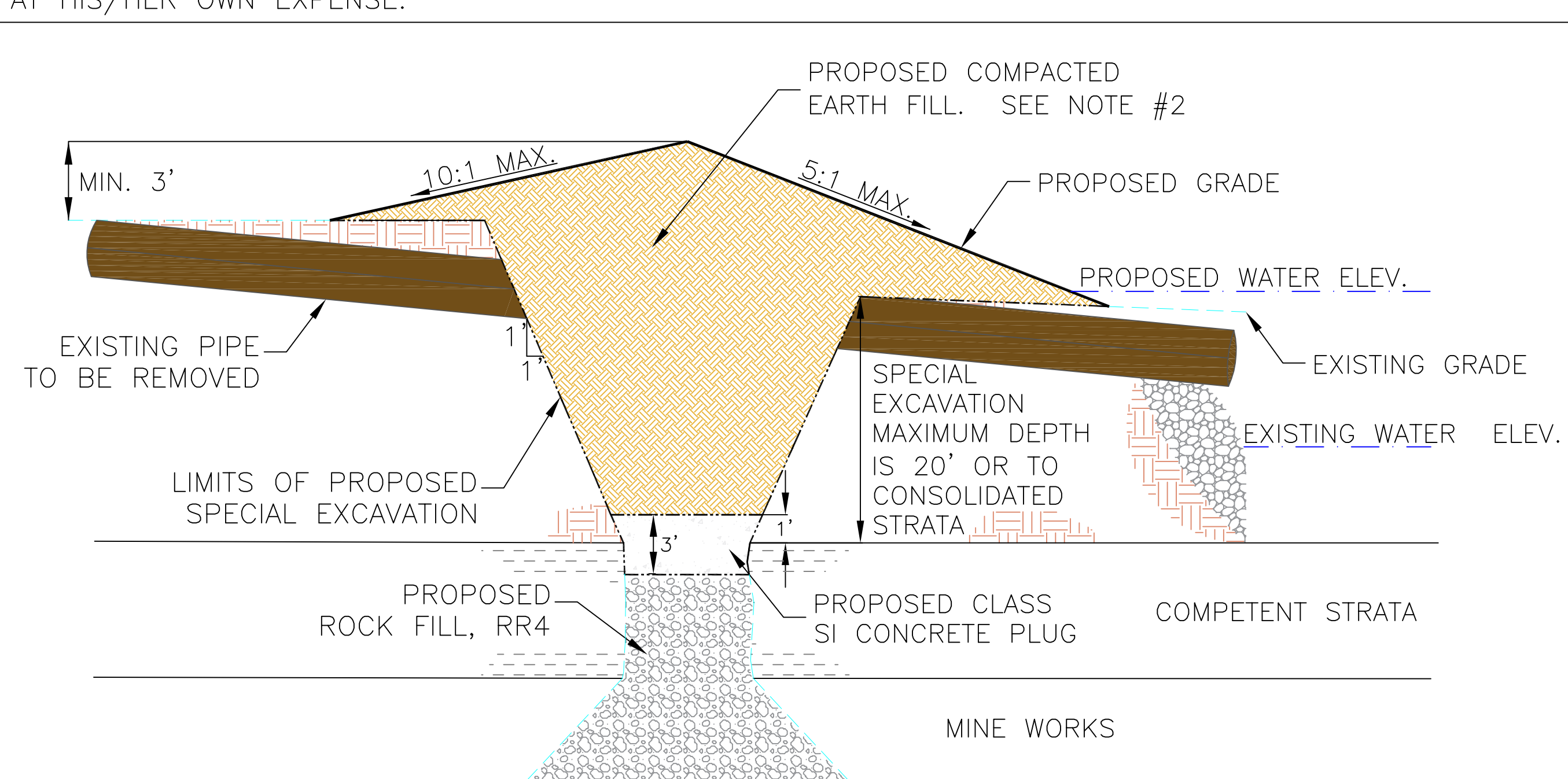


# O'Gara C.C. #5

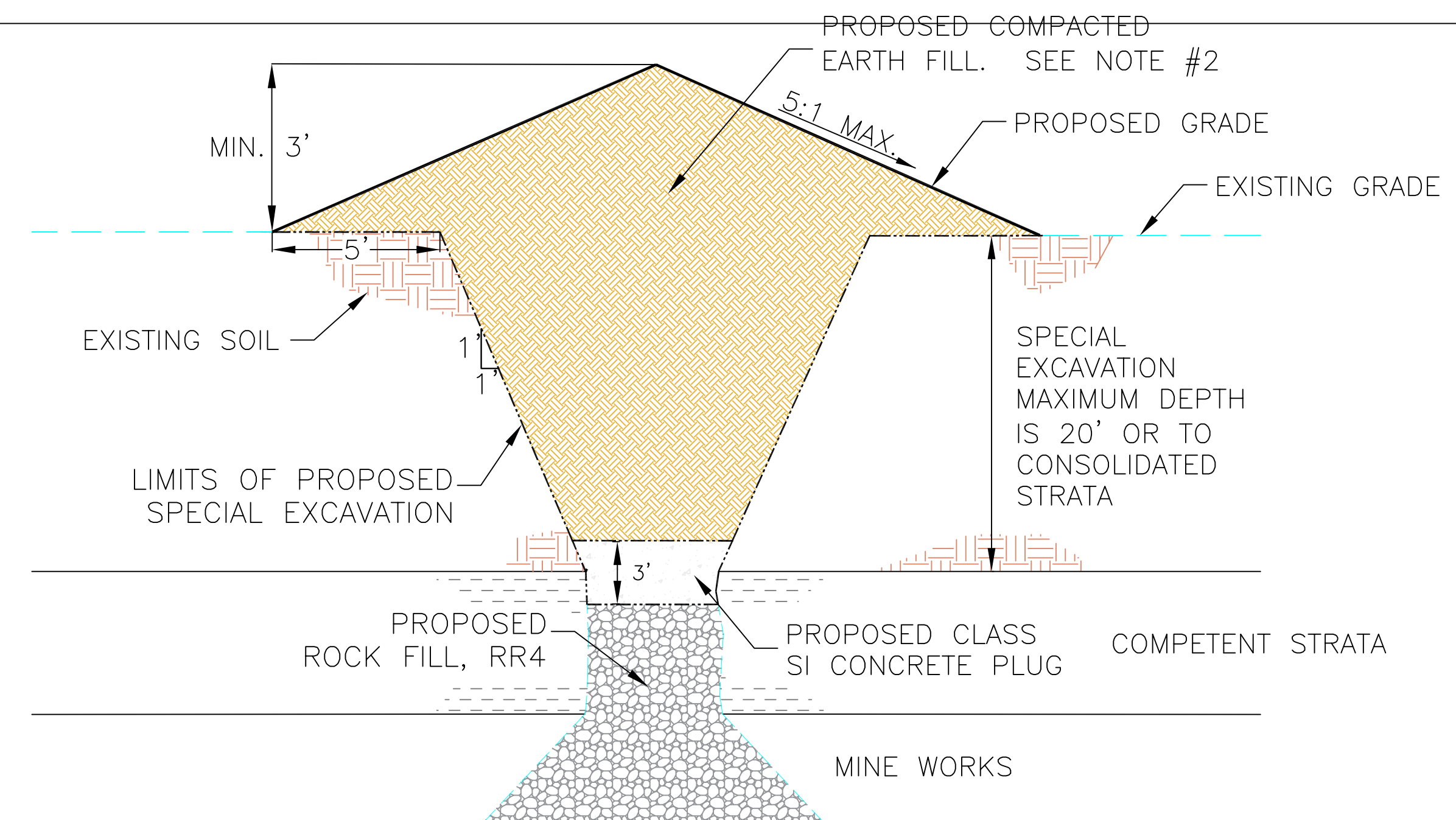


NOTES:

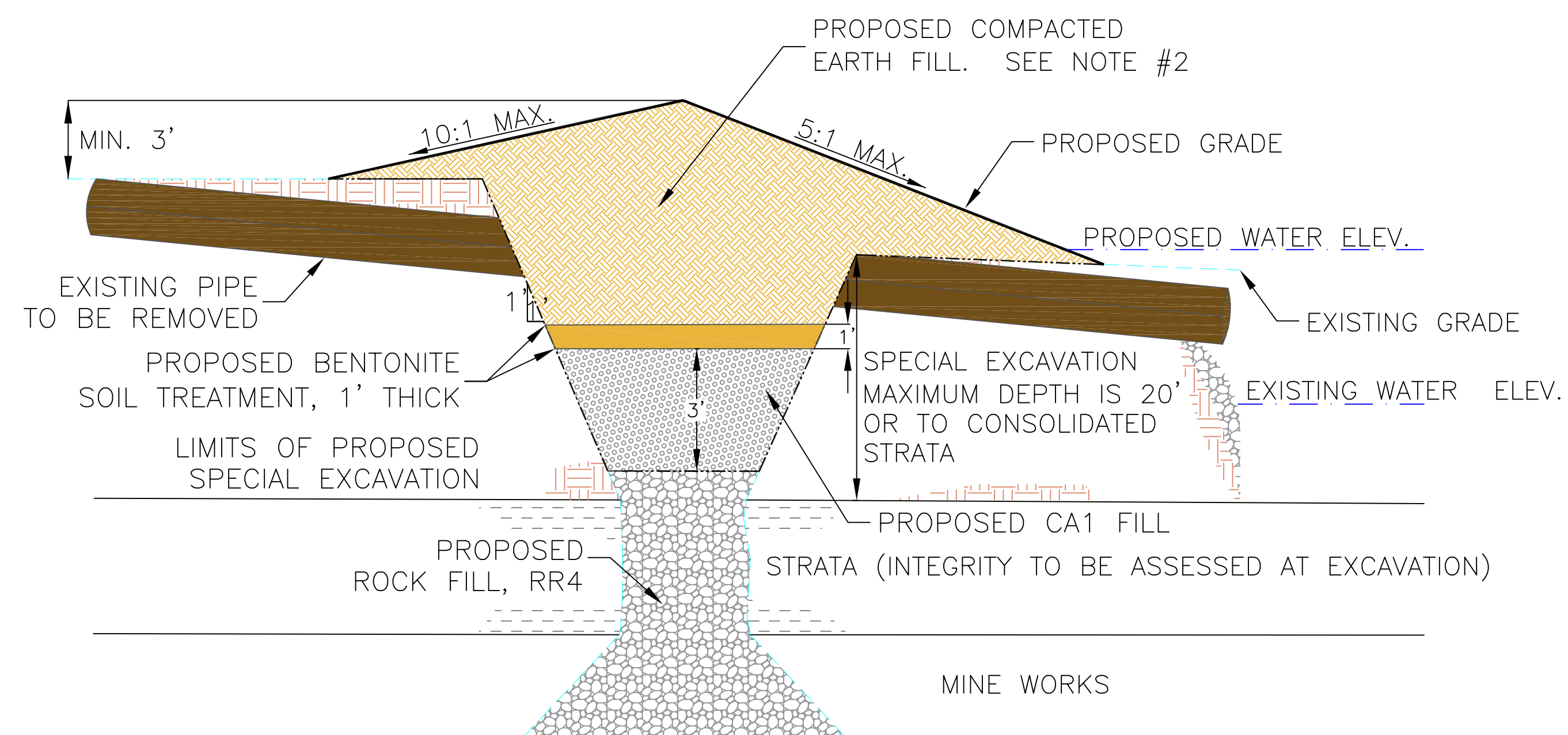
1. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE AREA OF THE SINKHOLES DUE TO THE UNKNOWN STABILITY OF THE AREA AROUND THE SINKHOLES AND THE POSSIBILITY OF MINE GASES. THE ENGINEER WILL VERIFY THE NATURE AND EXTENT OF THE OPEN VOIDS, IF ANY, IN THE STRATA AS SPECIAL EXCAVATION PROGRESSES. THE ENGINEER WILL MAKE THE DETERMINATION DURING CONSTRUCTION BASED UPON THE EXACT CONDITIONS ENCOUNTERED DURING SPECIAL EXCAVATION PROCESS. IF NO CONSOLIDATED MATERIAL IS ENCOUNTERED, NO CONCRETE PLUG WILL BE USED. THE ENGINEER WILL FIELD MEASURE THE VOLUME OF SPECIAL EXCAVATION, CONCRETE PLUG, OR RIPRAP FOR EACH SINKHOLE. THE CONTRACTOR SHALL TEMPORARILY FENCE THE EXCAVATION FOR 48 HOURS AFTER COMPLETION OF THE CONCRETE PLUG AND BEFORE PROCEEDING WITH THE REMAINING FILL. DEWATERING SHALL BE INCIDENTAL.
2. PROPOSED COMPACTED EARTH FILL SHALL COME FROM REPLACED SPECIAL EXCAVATION, FURNISHED EXCAVATION, BENTONITE SOIL TREATMENT OR A COMBINATION OF THESE.
3. ACCESS GATES MAY BE REMOVED FOR EASIER ACCESS OF MATERIAL AND EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND/OR REPLACEMENT OF DAMAGED GATES, AND ANY FENCING ASSOCIATED WITH GATES, AT HIS/HER OWN EXPENSE.



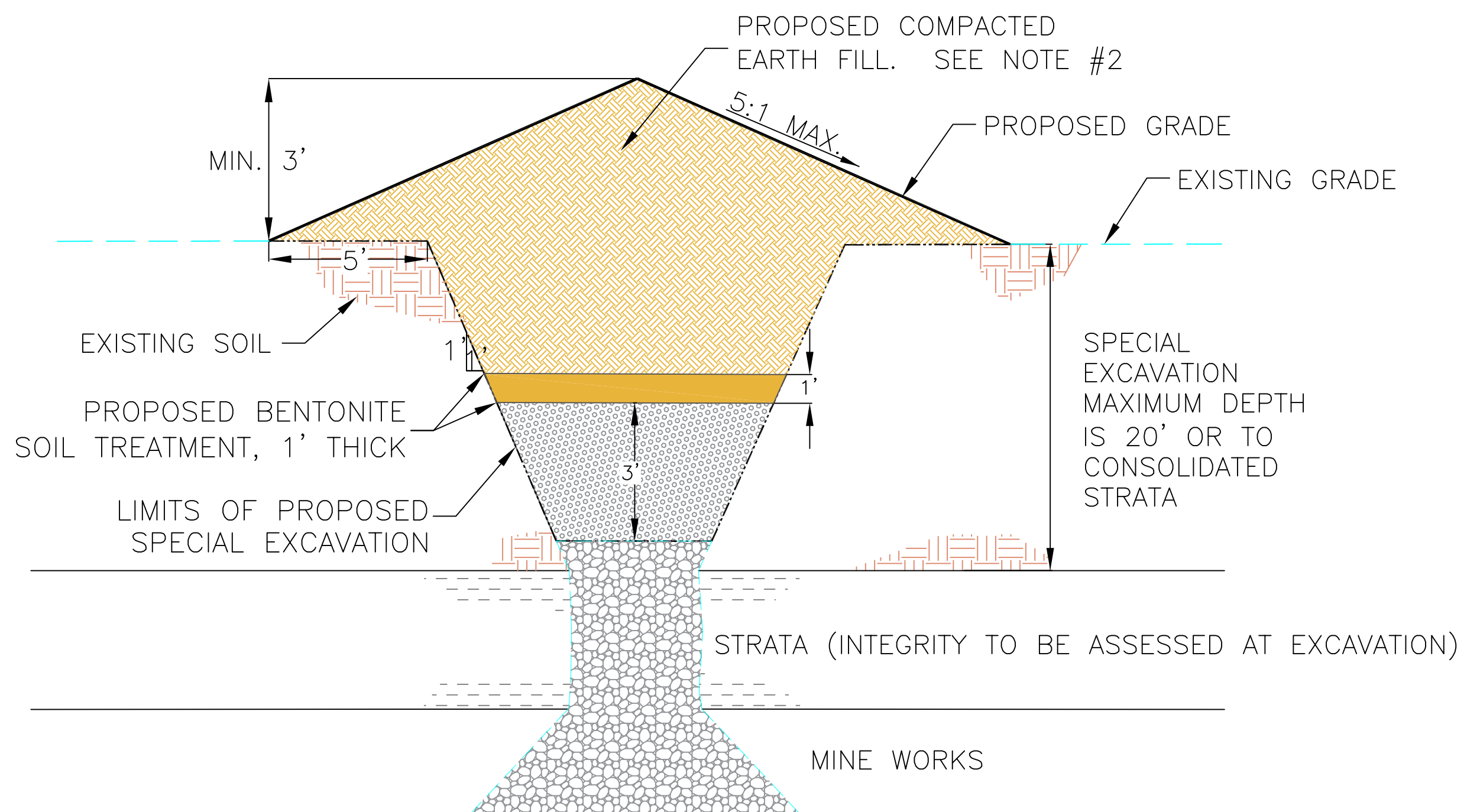
A-1 OPEN VOID SINKHOLE FILLING DETAIL IN BEDROCK  
NOT TO SCALE - TYPICAL PROFILE



A-2 OPEN VOID SINKHOLE FILLING DETAIL IN BEDROCK  
NOT TO SCALE - TYPICAL SECTION



A-3 OPEN VOID SINKHOLE FILLING DETAIL IN UNCONSOLIDATED MATERIAL  
NOT TO SCALE - TYPICAL PROFILE



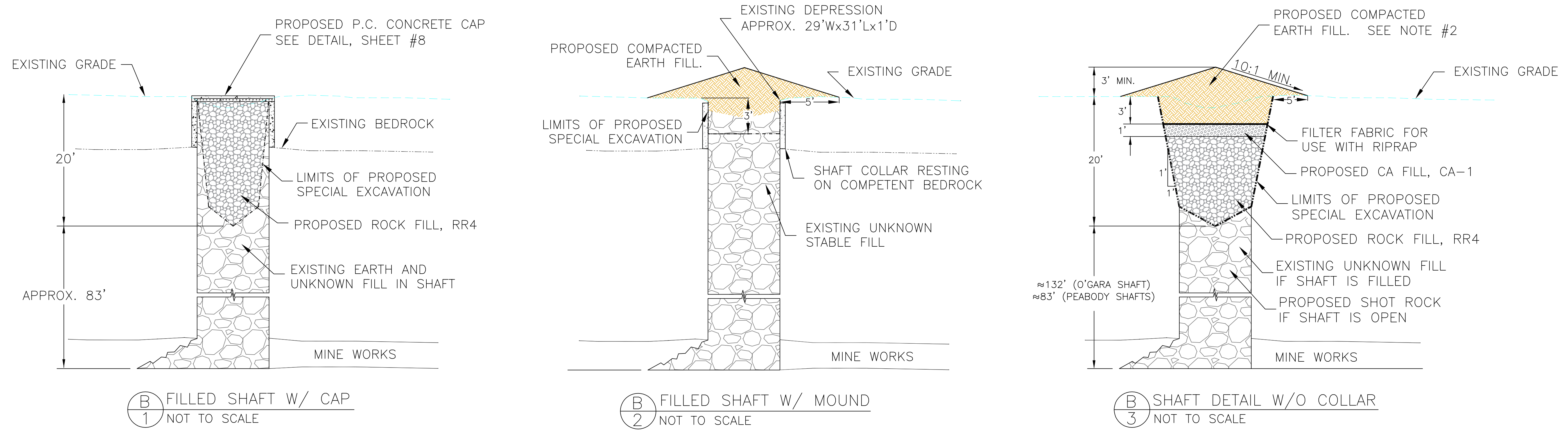
A-4 OPEN VOID SINKHOLE FILLING DETAIL IN UNCONSOLIDATED MATERIAL  
NOT TO SCALE - TYPICAL SECTION

SINKHOLE FILLING QUANTITIES

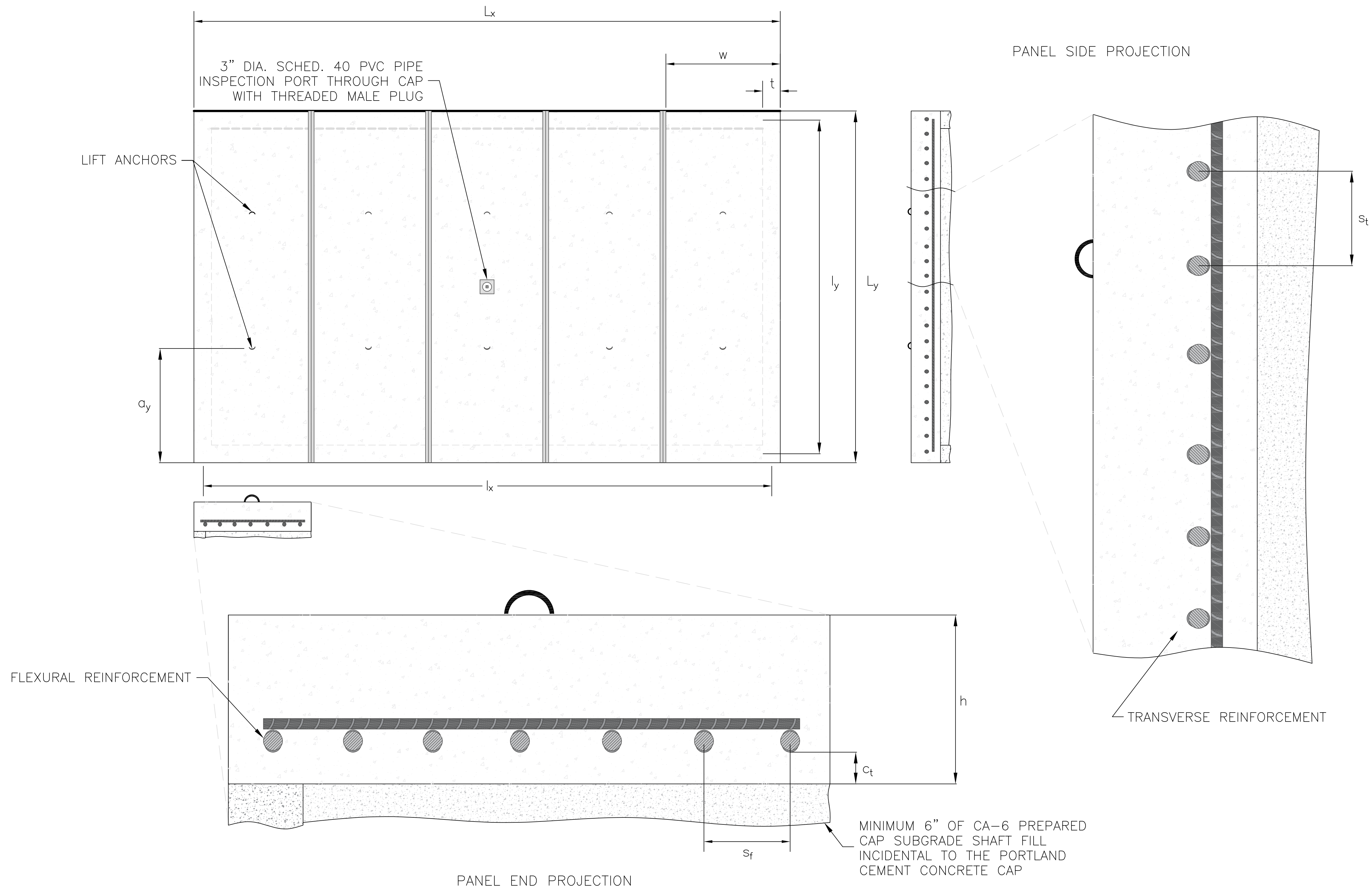
SINKHOLE NAME	ROCK FILL RR4 (TON)	CA-1 FILL (TON)	FURNISHED EXCAVATION (CU. YD.)	BENTONITE-AGGREGATE COMPOSITE BACKFILL (POUND)	SPECIAL EXCAVATION (CU. YD.)	CLASS SI CONCRETE (CU. YD.)
VAN METER #1, CONCRETE PLUG	72.0		1033		852	7
VAN METER #1, AGGREGATE FILL	92.0	9.0	778	1325	627	
VAN METER #2			26			
VAN METER #3			10			

NOTES:

1. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE AREA OF THE SHAFTS DUE TO THE UNKNOWN CONDITION OF THE SHAFTS AND THE UNKNOWN STABILITY OF THE AREA AROUND THE SHAFTS. THE ENGINEER RESERVES THE RIGHT TO INCREASE OR DECREASE THE VOLUME OF SPECIAL EXCAVATION AND BACKFILL MATERIALS REQUIRED. THE ENGINEER WILL MAKE THE DETERMINATION DURING CONSTRUCTION, BASED ON THE EXACT CONDITIONS ENCOUNTERED DURING THE SPECIAL EXCAVATION PROCESS, BACKFILL PER DETAIL B-1, SHALL BE USED WHEN THE EXISTING SHAFT WALLS ARE DETERMINED TO BE IN STABLE CONDITION. BACKFILL PER DETAIL B-2, SHALL BE USED WHEN SHAFT WALLS ARE DETERMINED TO BE UNSTABLE. AFTER INSTALLATION OF THE RIPRAP, THE CONTRACTOR SHALL TEMPORARILY FENCE THE EXCAVATION AND WAIT FOR 7 DAYS, PRIOR TO COMPLETION OF THE REMAINING FILL.



SHAFT FILLING QUANTITIES							
SHAFT NAME	DETAIL NAME	SHOT ROCK (TON)	ROCK FILL RR4 (TON)	CA-1 FILL (TON)	FURNISHED EXCAVATION (CU. YD.)	FILTER FABRIC (SQ. YD.)	SPECIAL EXCAVATION (CU. YD.)
O'GARA, OPEN SHAFT, W/O COLLAR	B-3	904.0	713.0	96.0	446	215	867
O'GARA, FILLED SHAFT, W/O COLLAR	B-3		713.0	96.0	446	215	867
PEABODY EAST, FILLED SHAFT, W/ MOUND	B-2				122		100
PEABODY EAST, FILLED SHAFT, W/ CAP	B-1		141.0				109
PEABODY EAST, FILLED SHAFT, W/O COLLAR	B-3		112.0	8.0	44	17	108
PEABODY WEST, FILLED SHAFT, W/ CAP	B-1		141.0				109
PEABODY WEST, FILLED SHAFT, W/O COLLAR	B-3		112.0	8.0	44	17	108



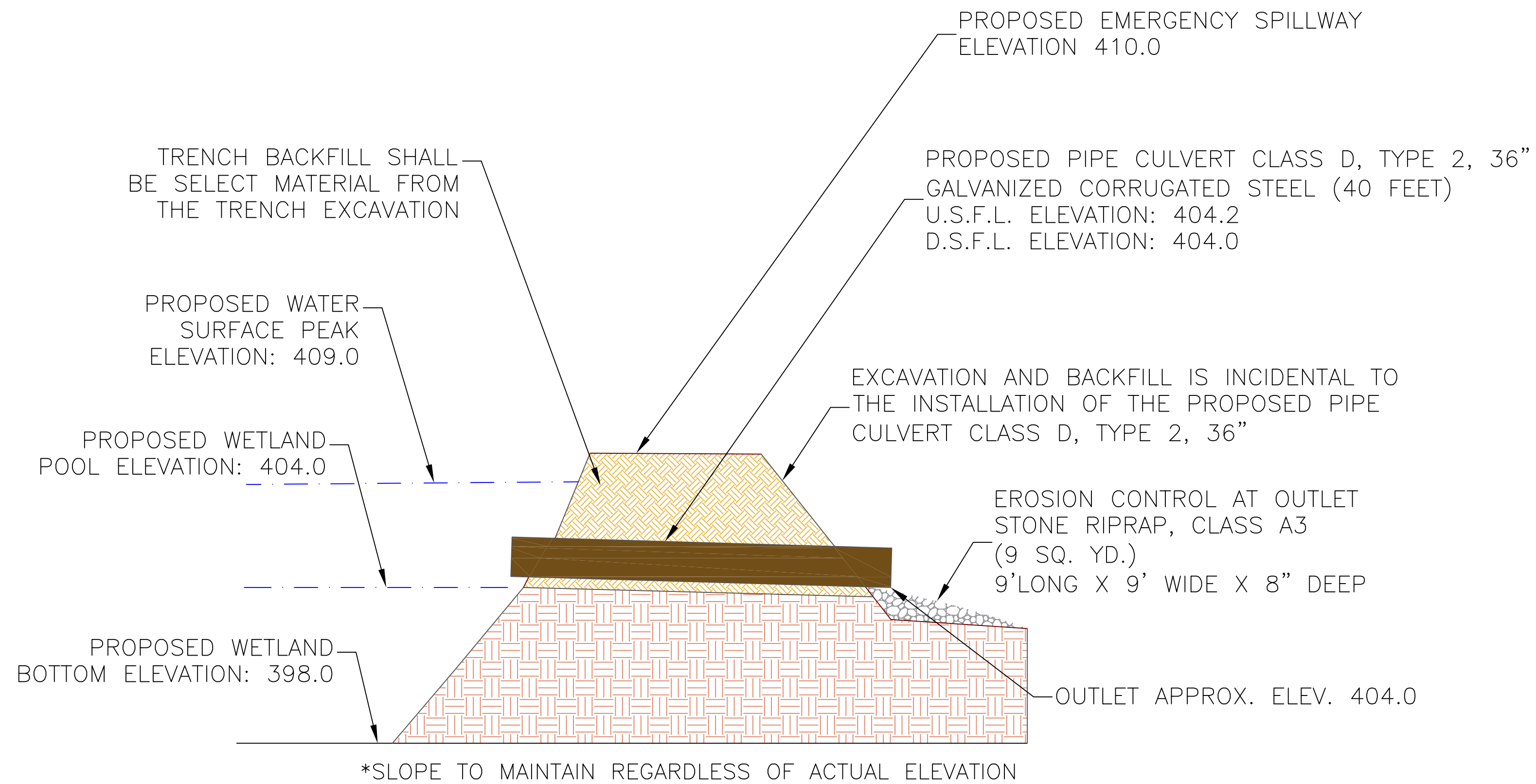
**C**  
1 CONCRETE CAP  
NOT TO SCALE

CONCRETE CAP SPECS.													
SHAFT	L <sub>x</sub> (FOOT)	L <sub>y</sub> (FOOT)	l <sub>x</sub> (FOOT)	l <sub>y</sub> (FOOT)	t (FOOT)	w (FOOT)	h (INCH)	S <sub>f</sub> (INCH)	S <sub>t</sub> (INCH)	C <sub>t</sub> (INCH)	a <sub>y</sub> (FOOT)	FLEX.	TRANS.
PEABODY C.C. #42	17.5	11.5	16.5	10.5	1.0	3.5	6.5	4	4	1.5	2	#4 Gr. 60	#4 Gr. 60

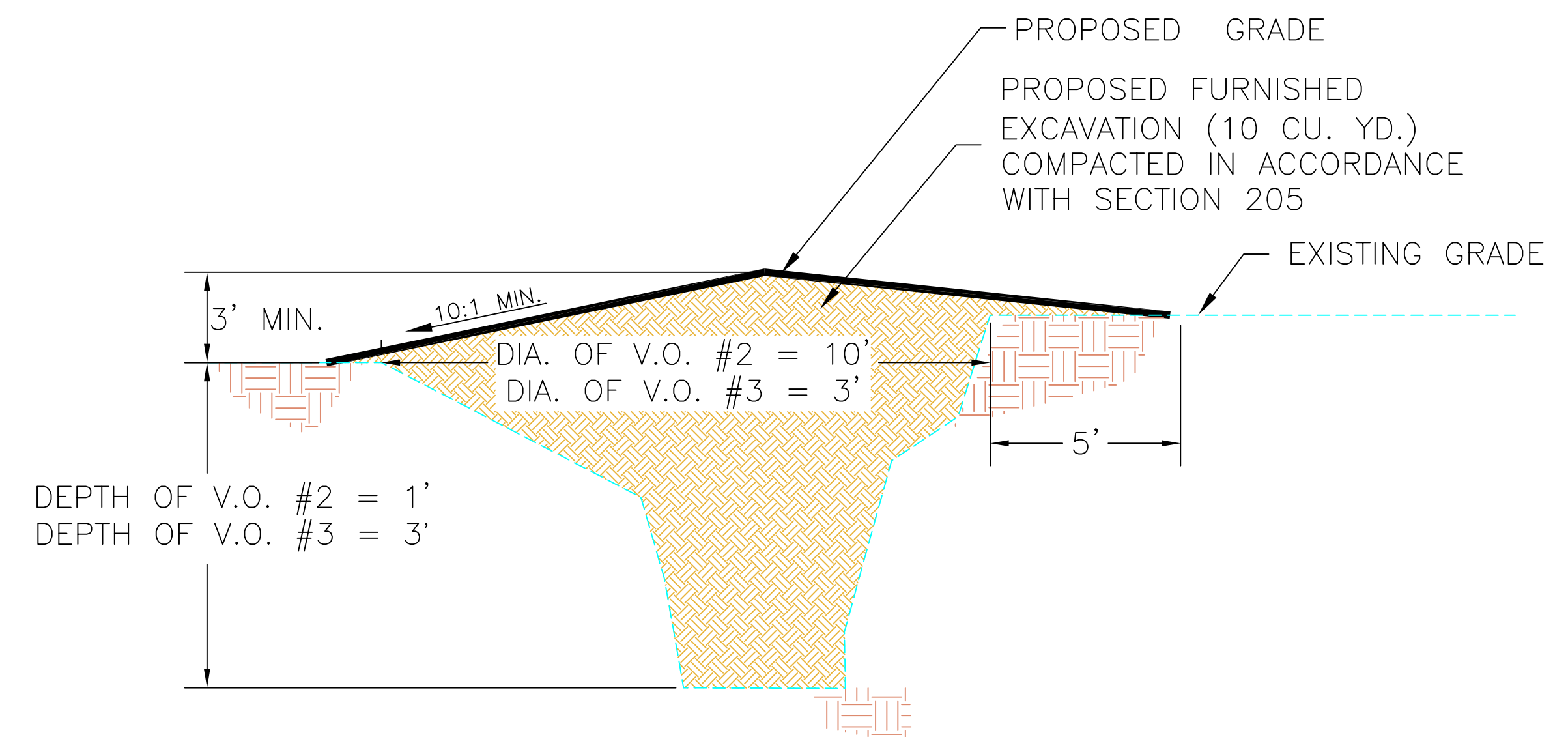
NOTES:

DIMENSIONS OF SHAFT AND INTEGRITY OF THE SHAFT COLLAR ARE ASSUMED FROM AVAILABLE INFORMATION AND MAY CHANGE AT THE TIME OF EXCAVATION RESULTING IN CHANGES TO THE PROPOSED DIMENSIONS PRESENTED HERE.



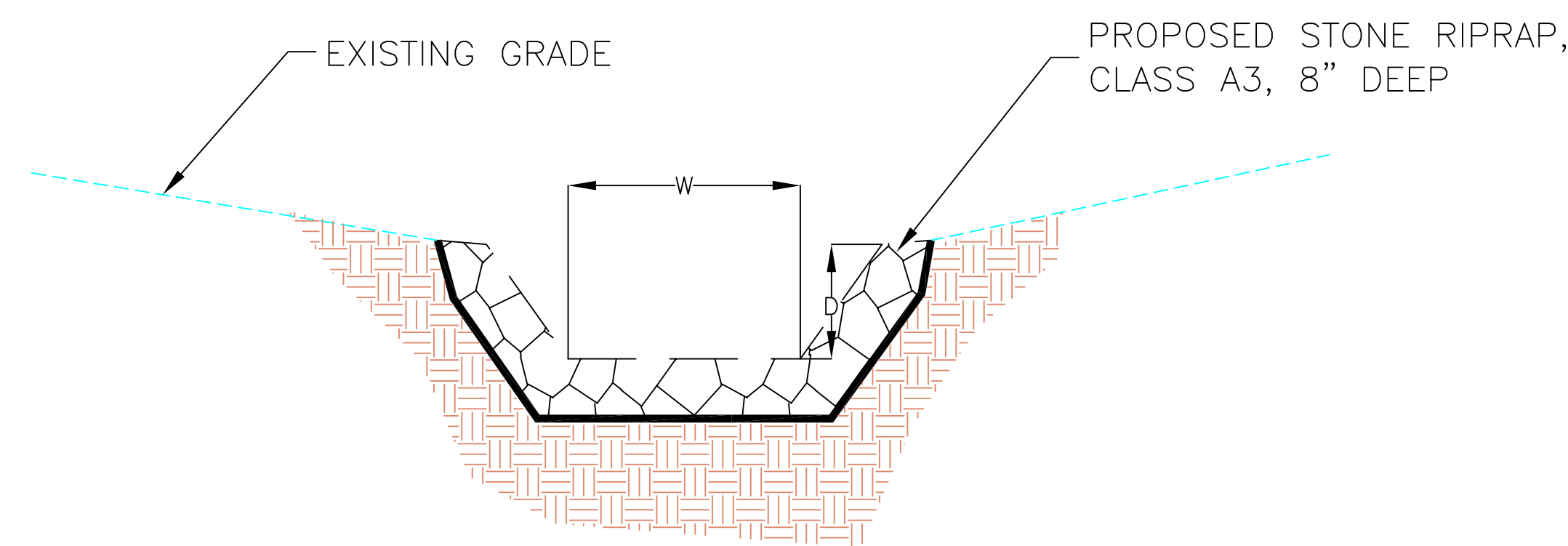


**D**  
1 WETLAND OUTLET PROFILE  
NOT TO SCALE



\*VERTICAL OPENING (V.O.) #3, AS SHOWN ON SHEET #3, IS SHALLOW AND LIES ALONG A SHALLOW WATERWAY. FILLING SHOULD ONLY BE DONE WHEN SOIL MOISTURE IS SATISFACTORY FOR OPTIMUM COMPACTION OF THE FILL. THE FILL HEIGHT ABOVE GRADE SHOULD BE AS DIRECTED BY THE ENGINEER TO FACILITATE DRAINAGE.

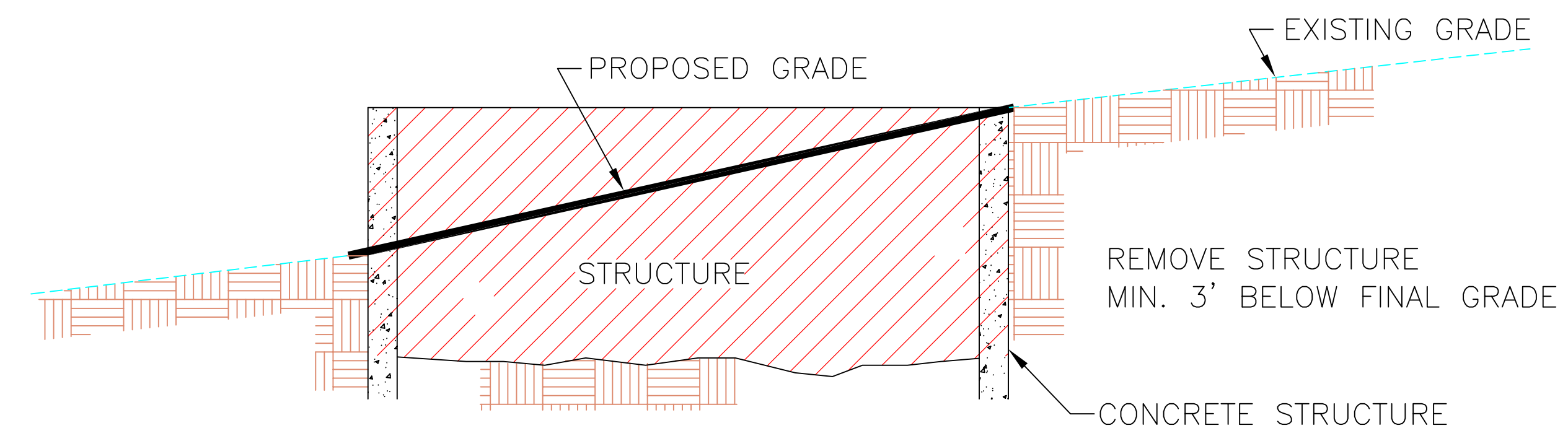
**D**  
2 SINKHOLE REMEDIATION W/O EXCAVATION  
NOT TO SCALE



\* PROPOSED CHANNEL WILL MERGE WITH EXISTING UPSTREAM CHANNEL AND SERVE AS A POND INLET DOWNSTREAM.

CHANNEL QUANTITIES						
INLET CHANNEL	LINING	WIDTH (W)	DEPTH (D)	SS	CHANNEL EXCVATION	STONE RIPRAP CLASS A3
VAN METER BROTHERS	A3	8 ft	1 ft	4:1	28 CU. YD.	122 SQ. YD.

**D**  
3 TYPICAL DITCH CROSS SECTIONS  
NOT TO SCALE



**D**  
4 STRUCTURE REMOVAL DETAIL  
TYPICAL SECTION, NOT TO SCALE