

# Tennessee Wildlife Resources Agency

## Laurel Hill Chert Pit

### Sediment Basin Addition

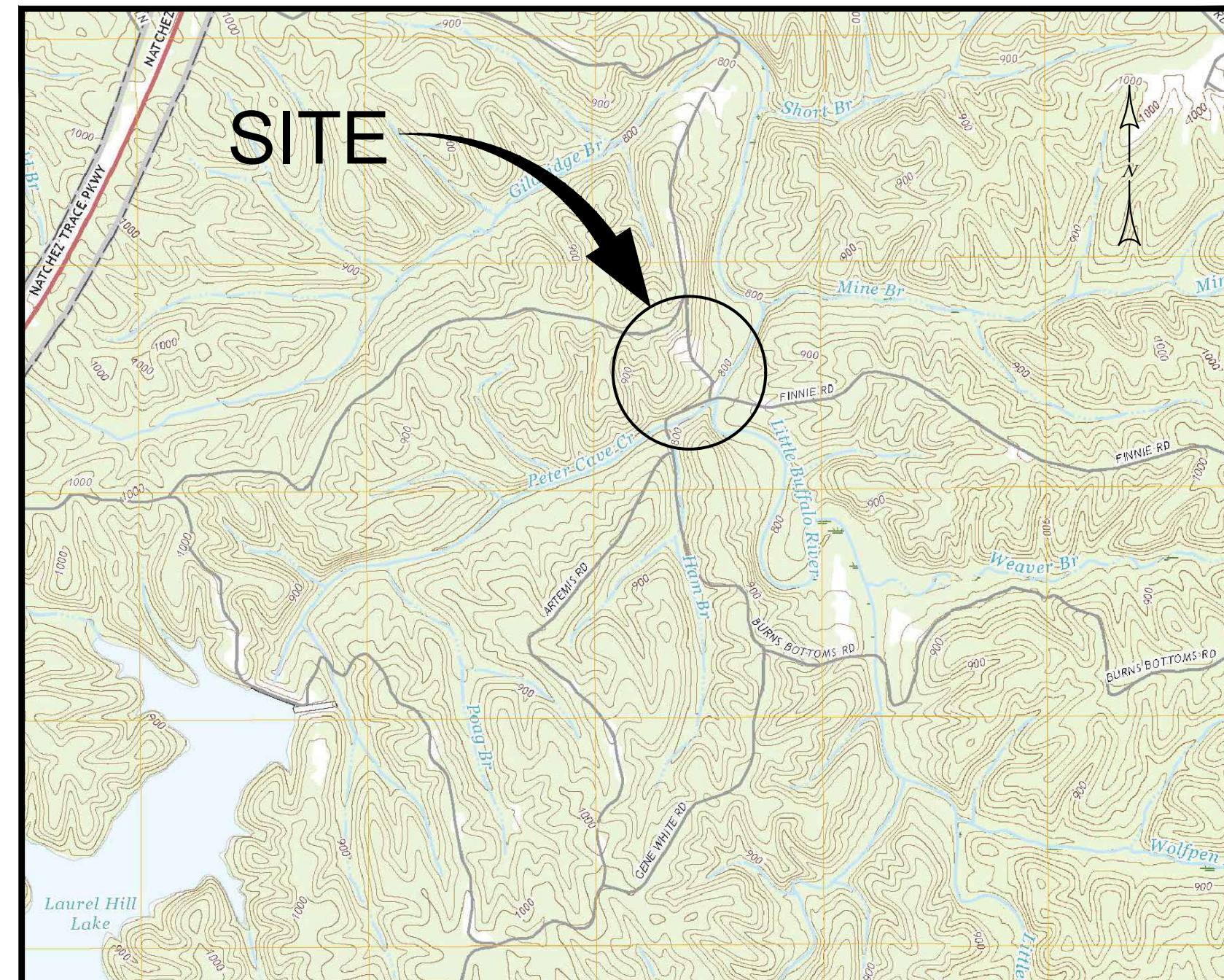
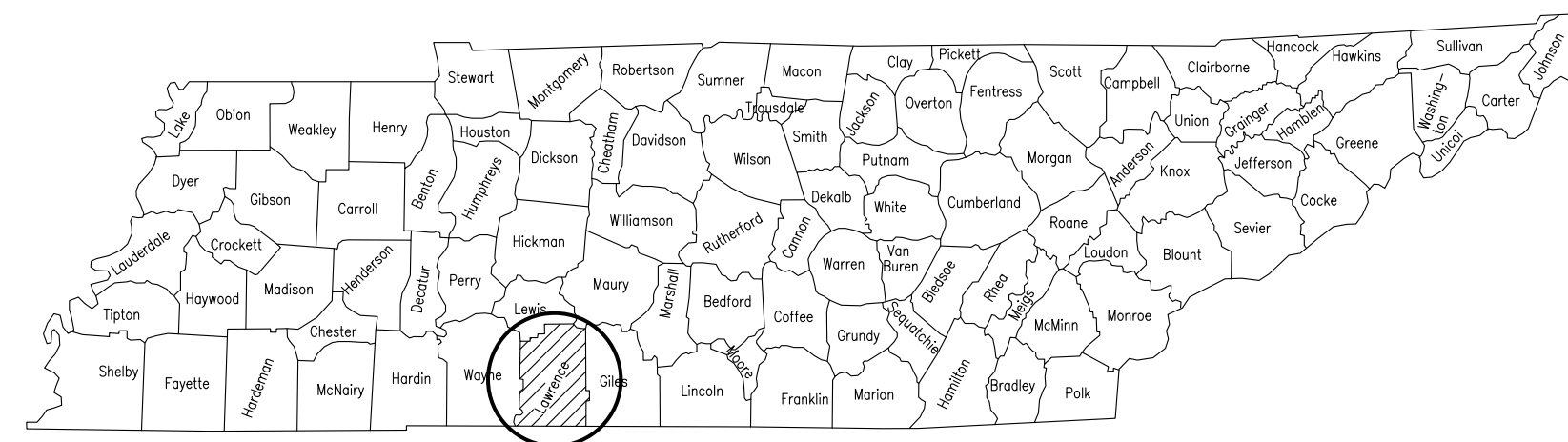
# Lawrenceburg, Lawrence County, Tennessee

## December 2023

TWRA Executive Director  
Jason Maxedon

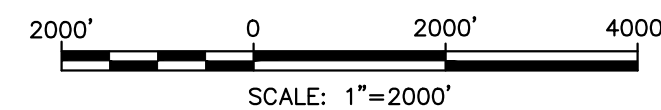
TWRA Chief of Biodiversity  
Josh Campbell

TWRA District 22 Supervisor Captain  
Pam McDonald



**SITE LOCATION MAP**

USGS 7.5 MINUTE TOPOGRAPHIC MAPS:  
DEERFIELD (2019), HENRYVILLE (2019), OVILLA (2019), AND RIVERSIDE (2019)

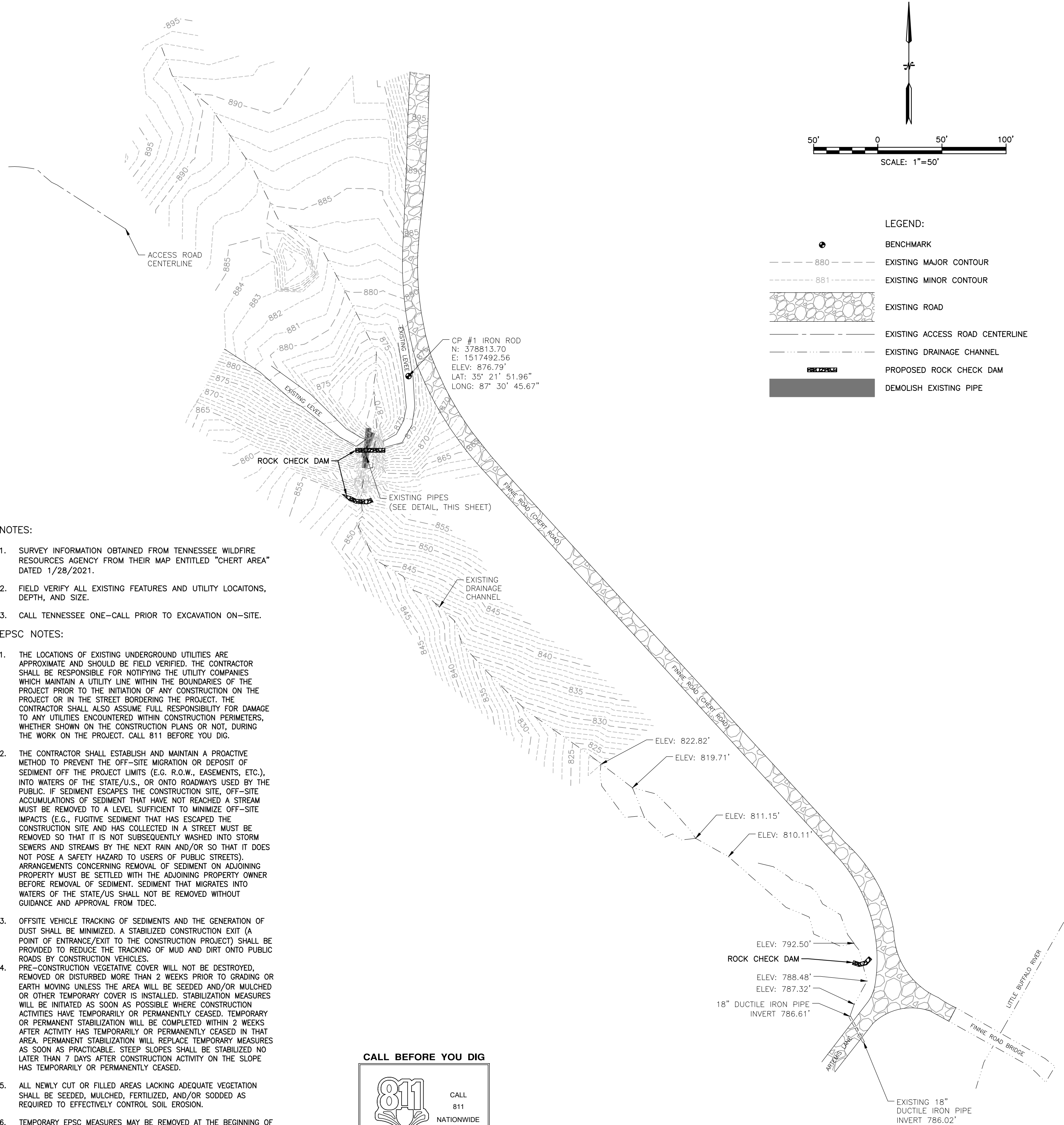


### INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
COVER	
1	EXISTING CONDITIONS AND EROSION AND SEDIMENT CONTROLS AND DETAILS
2	SEDIMENT BASIN PLANS AND NOTES
3	SEDIMENT BASIN PROFILES AND DETAILS

PROJECT NO. 707-175  
SET NO. \_\_\_\_

SUBMITTALS AND REVISIONS			
DATE	BY	NO.	DESCRIPTION



LEGEND:
● BENCHMARK
--- 880 --- EXISTING MAJOR CONTOUR
--- 881 --- EXISTING MINOR CONTOUR
[Pattern] EXISTING ROAD
--- --- EXISTING ACCESS ROAD CENTERLINE
--- --- EXISTING DRAINAGE CHANNEL
[Pattern] PROPOSED ROCK CHECK DAM
[Pattern] DEMOLISH EXISTING PIPE

NOTES:

- 1. SURVEY INFORMATION OBTAINED FROM TENNESSEE WILDFIRE RESOURCES AGENCY FROM THEIR MAP ENTITLED "CHERT AREA" DATED 1/28/2021.
2. FIELD VERIFY ALL EXISTING FEATURES AND UTILITY LOCATIONS, DEPTH, AND SIZE.
3. CALL TENNESSEE ONE-CALL PRIOR TO EXCAVATION ON-SITE.

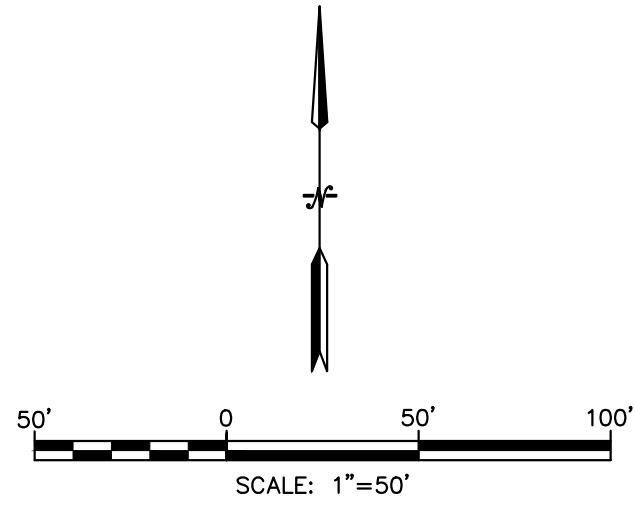
EPSC NOTES:

- 1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREET BORDERING THE PROJECT.
2. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.) INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE PUBLIC.
3. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
4. PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 2 WEEKS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.
5. ALL NEWLY CUT OR FILLED AREAS LACKING ADEQUATE VEGETATION SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
6. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE A PRECIPITATION EVENT.
7. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS ESTABLISHED 70% PERMANENT VEGETATION COVERAGE OR EQUIVALENT MEASURES SUCH AS RIP RAP OR GEOTEXTILES IN AREAS NOT COVERED WITH IMPERVIOUS AREA.

CALL BEFORE YOU DIG



IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE. THEREFORE CERTIFICATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHHELD.



ENHANCED ROCK CHECK DAM ESTIMATED QUANTITIES TABLE, DETAILS FOR TRAPEZOIDAL DITCH, V-DITCH, CHANNELS, and GENERAL NOTES. Includes a table with columns for Material, Proposed, and Estimated quantities for various sections.

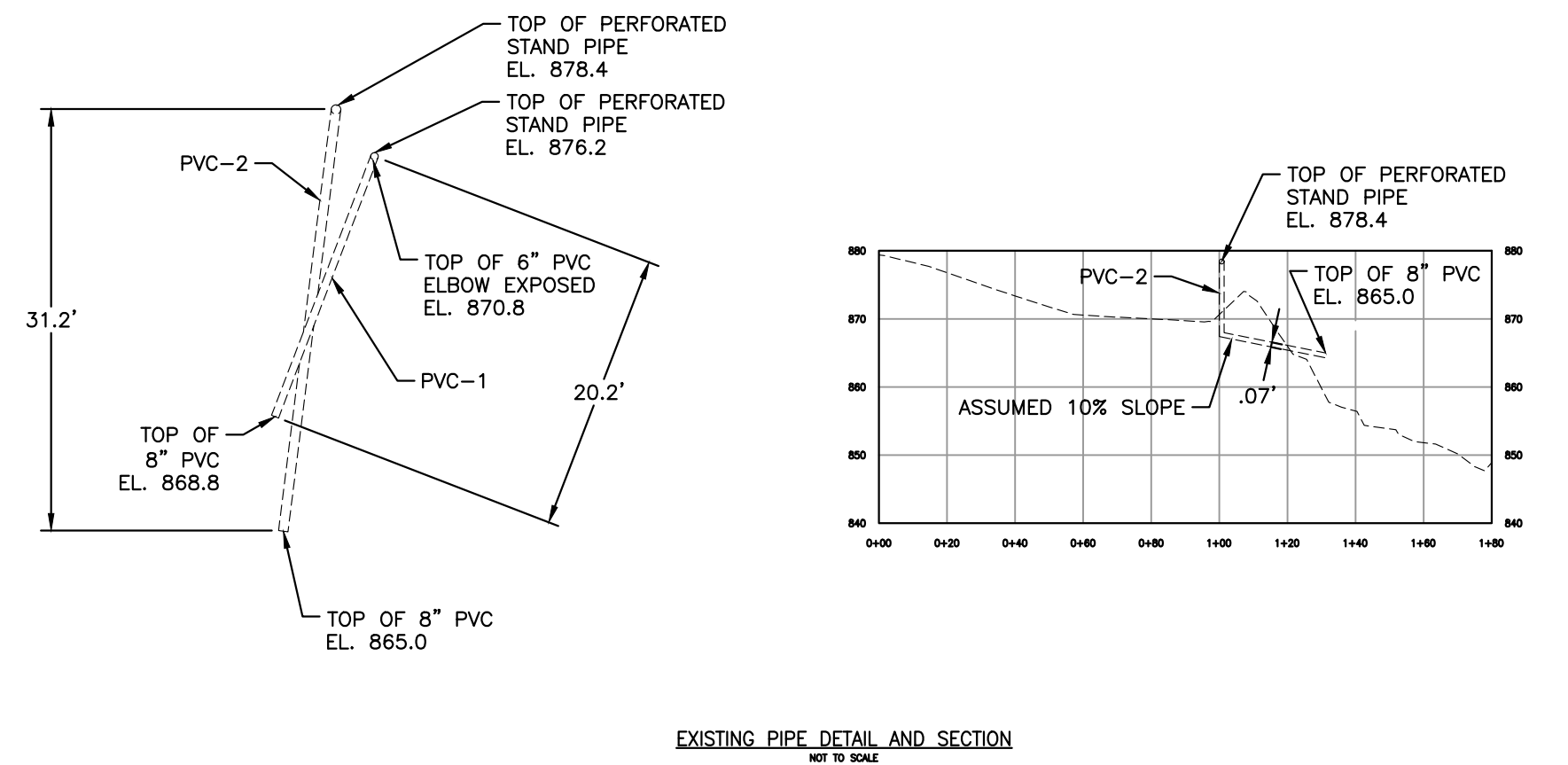
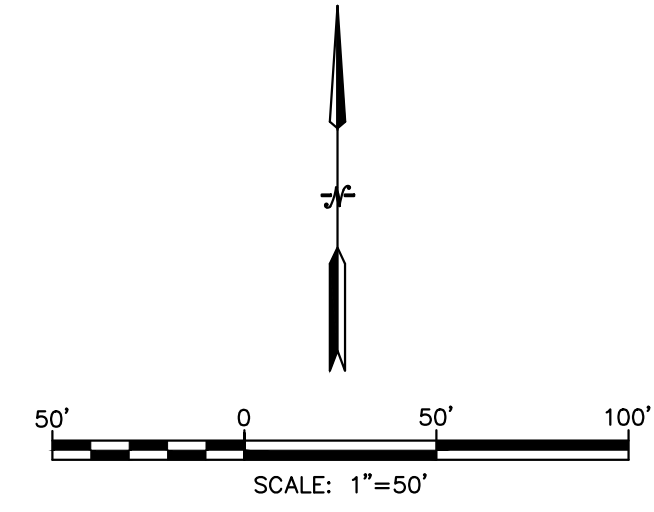
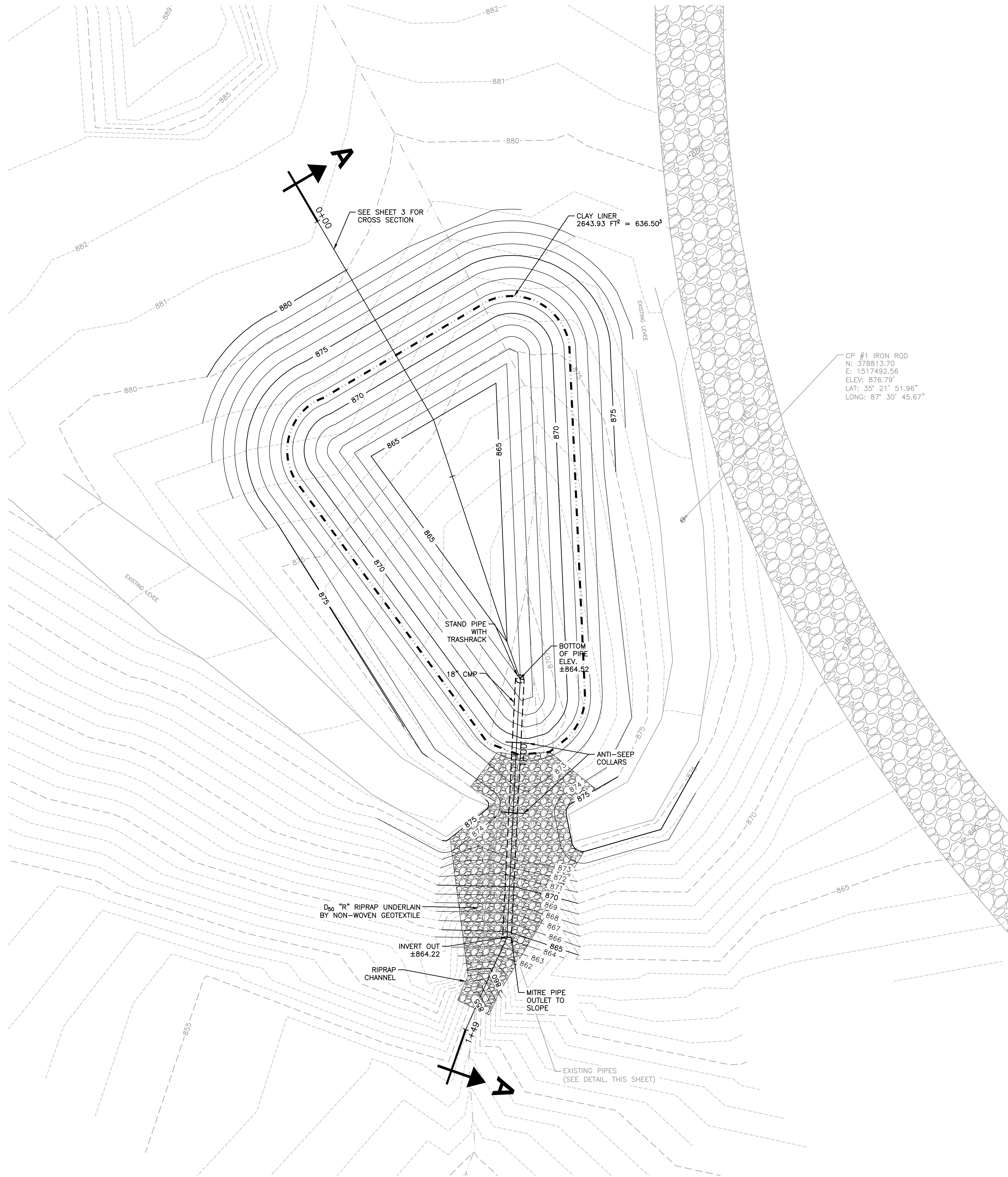


Table with columns for DATE, BY, AND DESCRIPTION.

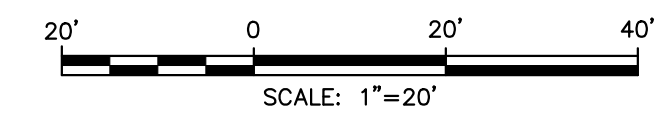


LEGEND:

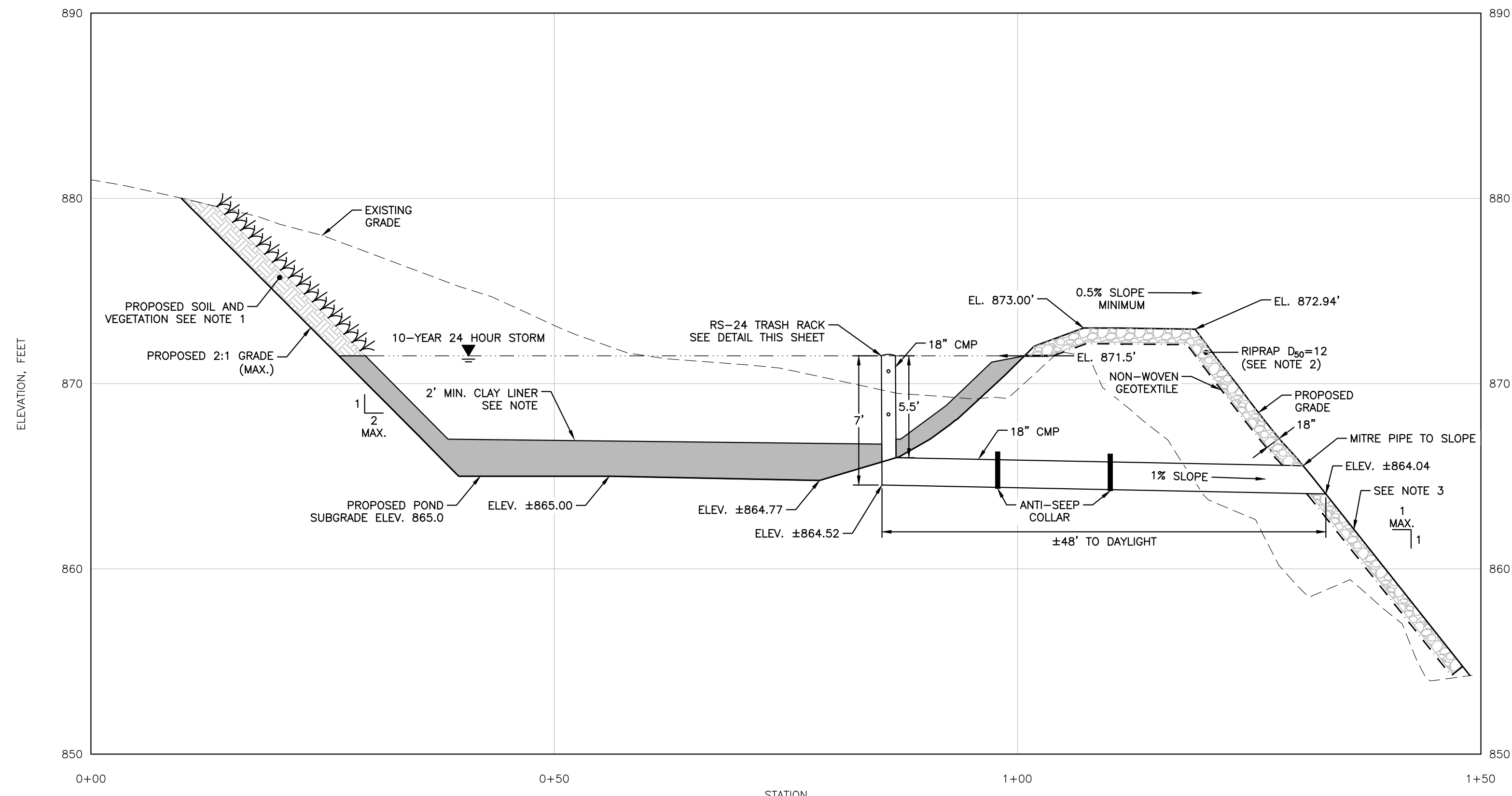
•	BENCHMARK
- - - - 880 - - - -	EXISTING MAJOR CONTOUR
- - - - 881 - - - -	EXISTING MINOR CONTOUR
[Pattern]	EXISTING ROAD
- - - - - - - -	EXISTING DRAINAGE CHANNEL
— 870 —	PROPOSED MAJOR CONTOUR
— 873 —	PROPOSED MINOR CONTOUR
[Pattern]	PROPOSED RIPRAP CHANNEL
- - - - - - - -	PROPOSED 18" CMP WITH TRASHRACK
- - - - - - - -	CLAY LINER



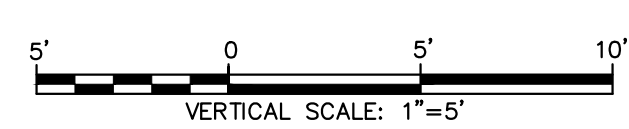
AERIAL VIEW OF SEDIMENT BASIN LOCATION



DATE	BY	DESCRIPTION

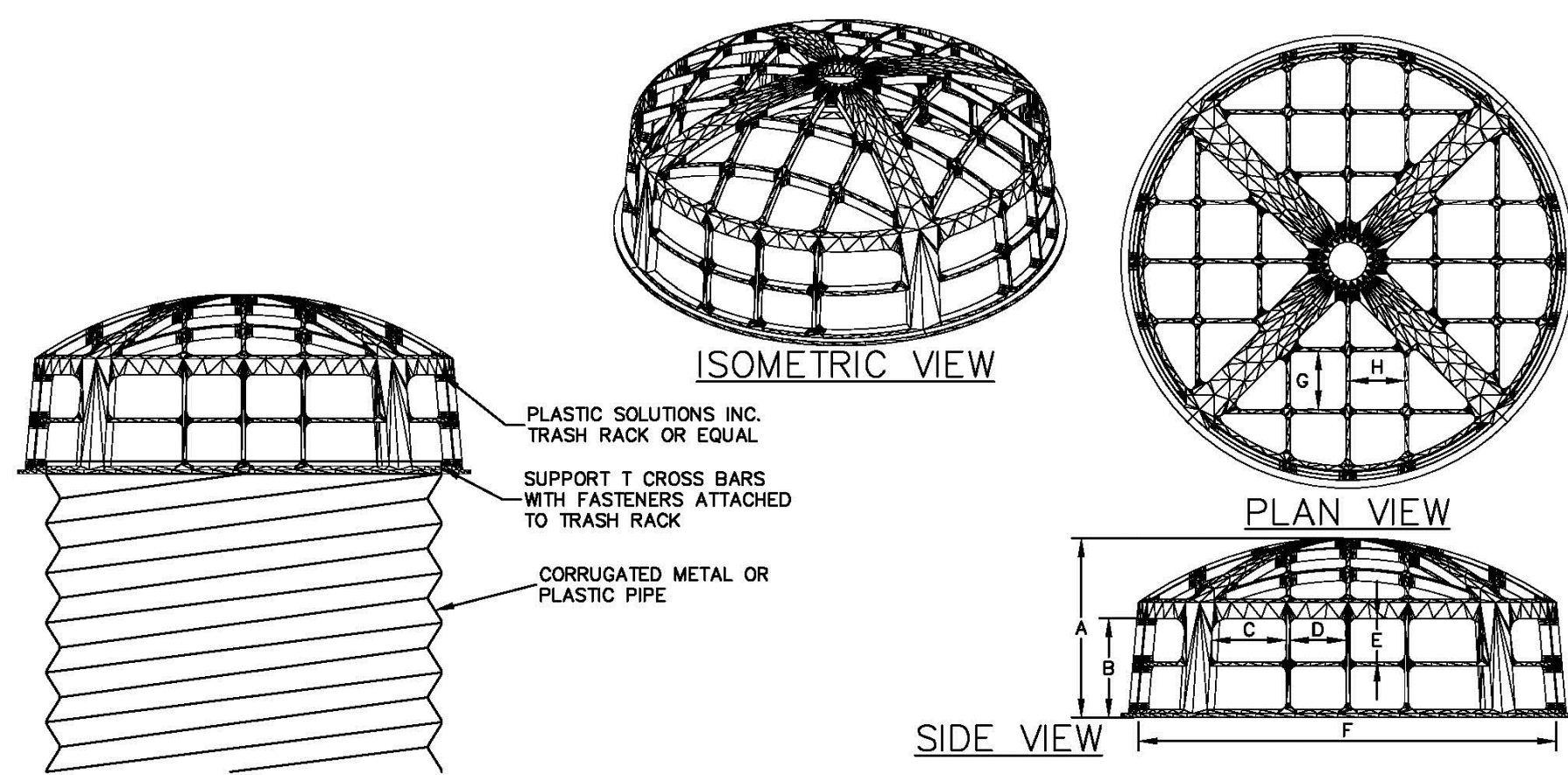


PROFILE A-A OF SEDIMENT BASIN AND SPILLWAY



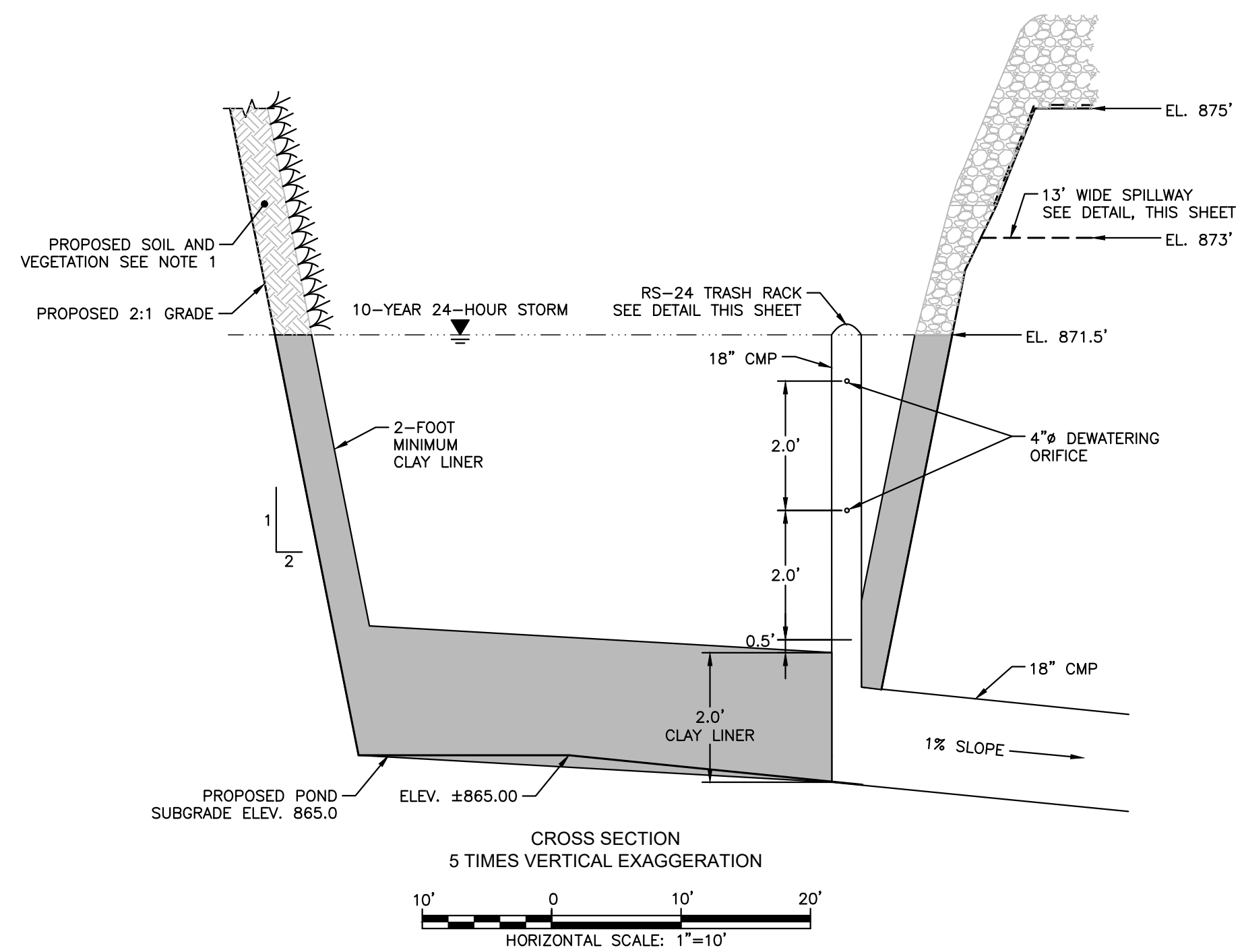
NOTES:

1. STABILIZE ALL DISTURBED AREAS WITH SEED AND STRAW. EROSION CONTROL BLANKET SHALL BE APPLIED TO SLOPES STEEPER THAN 3H:1V.
2. RIPRAP PLACEMENT THICKNESS SHALL BE 1.5 X  $D_{90}$ =12. ALL RIPRAP TO BE UNDERLAIN BY NON-WOVEN GEOTEXTILE.
3. MAXIMUM SLOPE: 1 HORIZONTAL TO 1 VERTICAL.

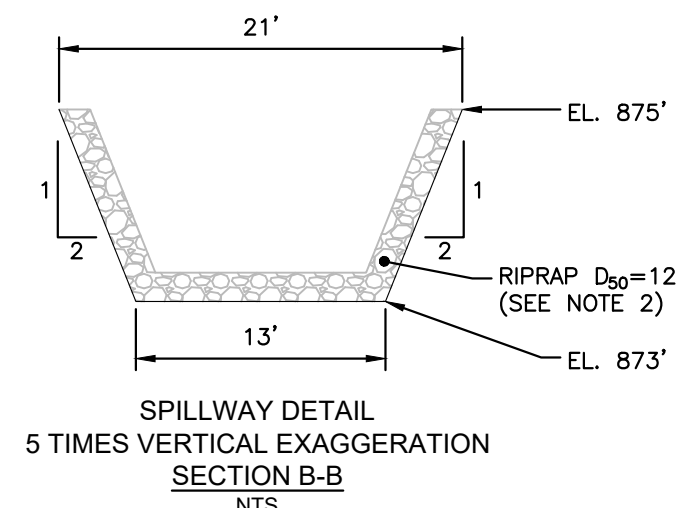


ROUND SERIES TRASH RACKS										
PART NO.	RISER		A	B	C	D	E	F	G	H
	CONCRETE INSIDE DIA.	CMP OR HDPE NOMINAL DIA.								
RS-24	24"	12"-18"	17 1/3"	13 1/3"	7 3/4"	6 1/4"	6 1/4"	27 1/2"	6 1/4"	7 1/2"
RS-36	36"	21"-30"	21 1/8"	13 1/2"	8 1/4"	6 1/4"	6 1/4"	40 1/2"	6 1/4"	7 1/2"
RS-48	48"	33"-42"	27 3/4"	17 3/4"	7"	8 1/2"	6 3/4"	54 1/4"	8 1/2"	8"
RS-60	60"	48"-54"	27 3/4"	17 3/4"	11 1/2"	8 1/2"	6 3/4"	67 1/2"	8 1/2"	9"

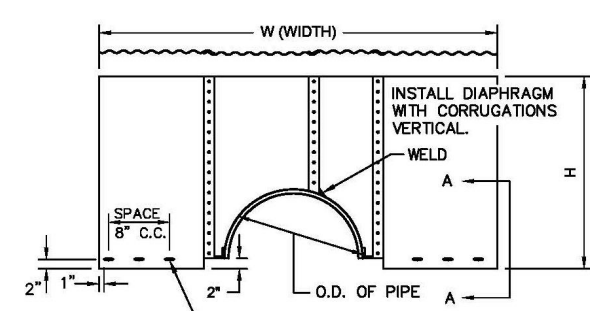
TRASH RACK DETAIL



CROSS SECTION  
5 TIMES VERTICAL EXAGGERATION  
HORIZONTAL SCALE: 1"=10'



SPILLWAY DETAIL  
5 TIMES VERTICAL EXAGGERATION  
SECTION B-B  
NTS



NOTE: ONE HALF DIAPHRAGM SHOWN, OTHER HALF SAME EXCEPT SLOTS ARE VERTICAL.

NOTES:

1. UNASSEMBLED DIAPHRAGMS SHALL BE MARKED BY PAINTING OR TAGGING WHEN NECESSARY TO IDENTIFY MATCHING PAIRS TO SECURE A PROPER INSTALLATION.
2. THE LAP BETWEEN THE TWO HALF SECTIONS AND BETWEEN THE PIPE AND COUPLING BAND SHALL BE CAULKED WITH BITUMINOUS MASTIC AT TIME OF INSTALLATION. NEOPRENE GASKET 3/8" X 7" MINIMUM WIDTH MAY BE USED IN LIEU OF MASTIC.
3. ALL WELDS AND ALL HEAT AFFECTED AREAS ON ZINC COATED METAL SHALL BE THOROUGHLY CLEANED AND TREATED IN ACCORDANCE WITH SPECIFICATIONS (STEEL ONLY).
4. EACH DIAPHRAGM SHALL BE FURNISHED WITH FOUR RODS AND NUTS AND FOUR STANDARD TANK LUGS OR 1" LUGS FOR SECURING DIAPHRAGMS TO PIPE.
5. RODS FOR COLLAR COUPLING BANDS AND DIAPHRAGMS FOR 6" THRU 12" DIA. PIPE SHALL BE 3/8" DIA. AND FOR PIPE LARGER THAN 12" DIA. THE RODS SHALL BE 1/2" DIA.
6. THE METAL AND COATING CHOICE OF THE DIAPHRAGM WILL BE THE SAME AS THE OUTLET PIPE (SHEET 1 OF 3).

SIZES FOR STANDARD 20' SPACING

OUTLET DIA. (IN)	GAGE	NOMINAL DIAPHRAGM SIZE (IN)	FABRICATION DIMENSIONS INCHES	
			W (WIDTH)	H (HEIGHT)
8	16	58 X 58	58 1/2	30 1/2
10	16	58 X 58	58 1/2	30 1/2
12	16	60 X 60	64	32 1/2
15	16	63 X 63	68	34
18	16	66 X 66	69 1/4	35 1/2
21	18	69 X 69	72	37
24	14	72 X 72	72	38 1/2
30	14	78 X 78	82 1/2	41 1/2
36	12	84 X 84	88	44 1/2
42	12	90 X 90	93 1/4	47 1/2
48	12	96 X 96	96	50 1/2
54	12	102 X 102	106 1/2	53 1/2

ANTI SEEP COLLAR DETAIL

SEDIMENT BASIN  
PROFILES AND DETAILS

TENNESSEE WILDLIFE RESOURCES AGENCY  
LAUREL HILL CHERT PIT  
SEDIMENT BASIN ADDITION  
LAUREL HILL WILDLIFE MANAGEMENT AREA  
LAWRENCE COUNTY, TENNESSEE

SUBMITTALS AND REVISIONS

DATE	BY	DESCRIPTION