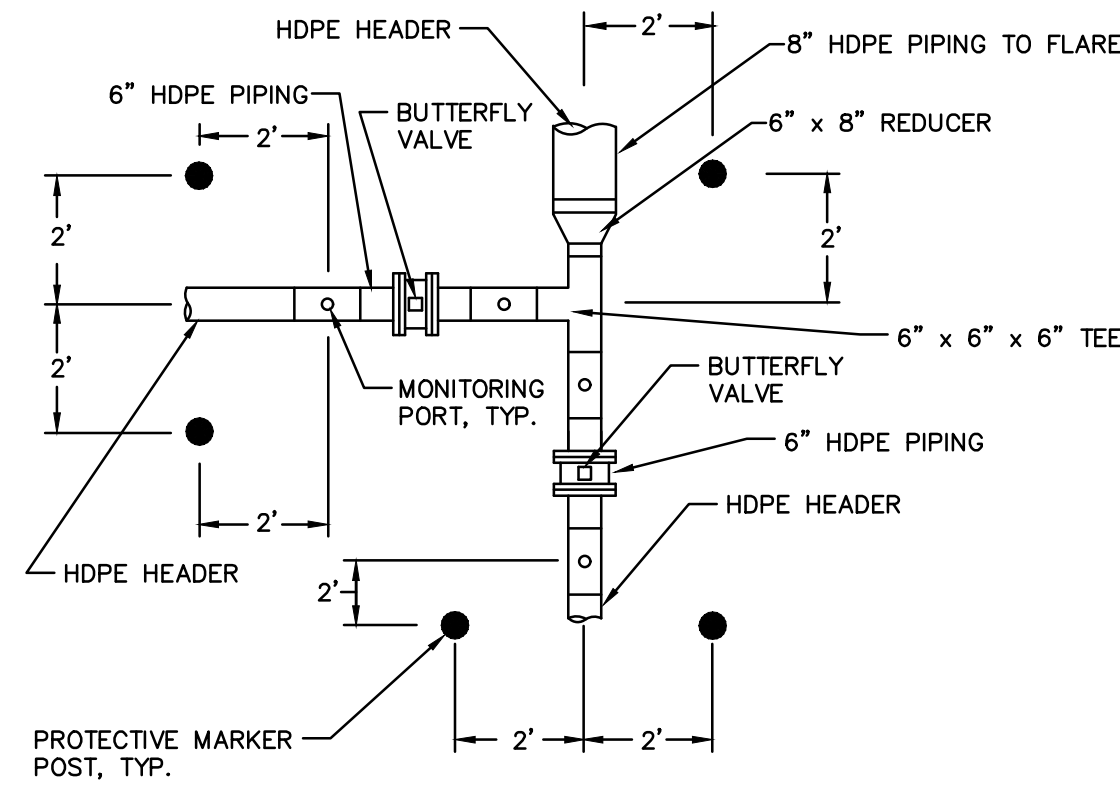
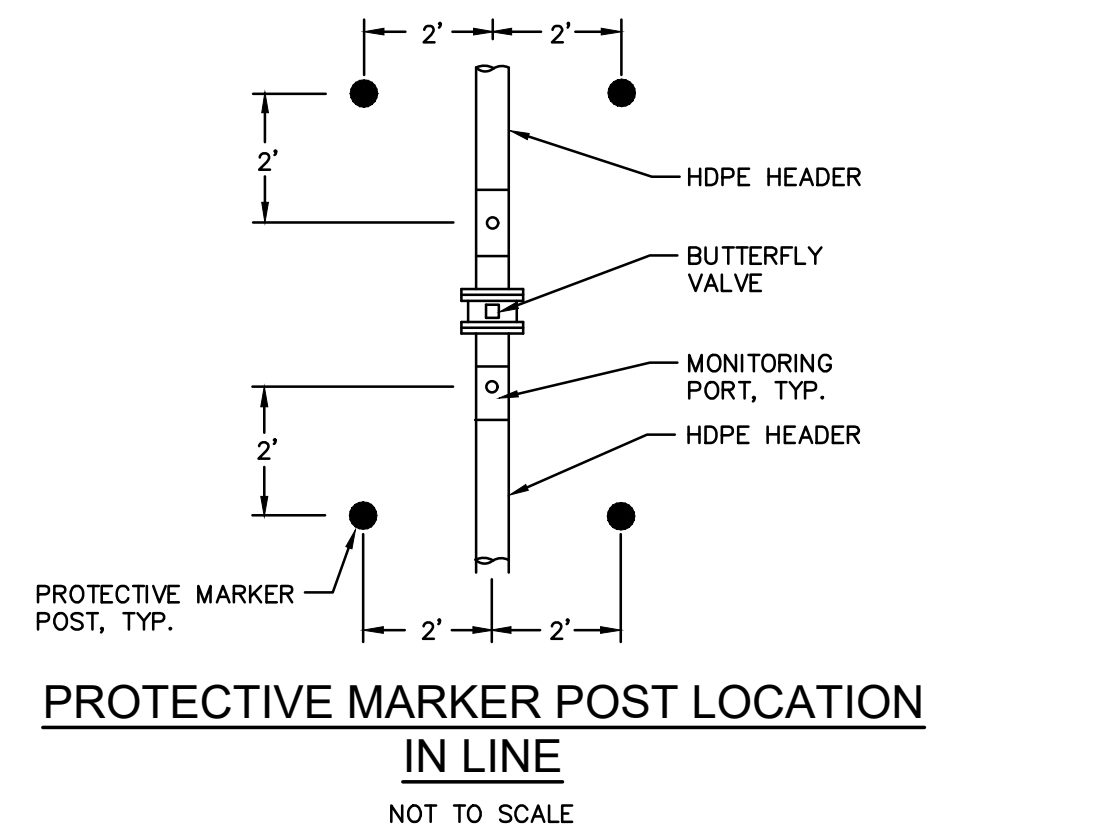


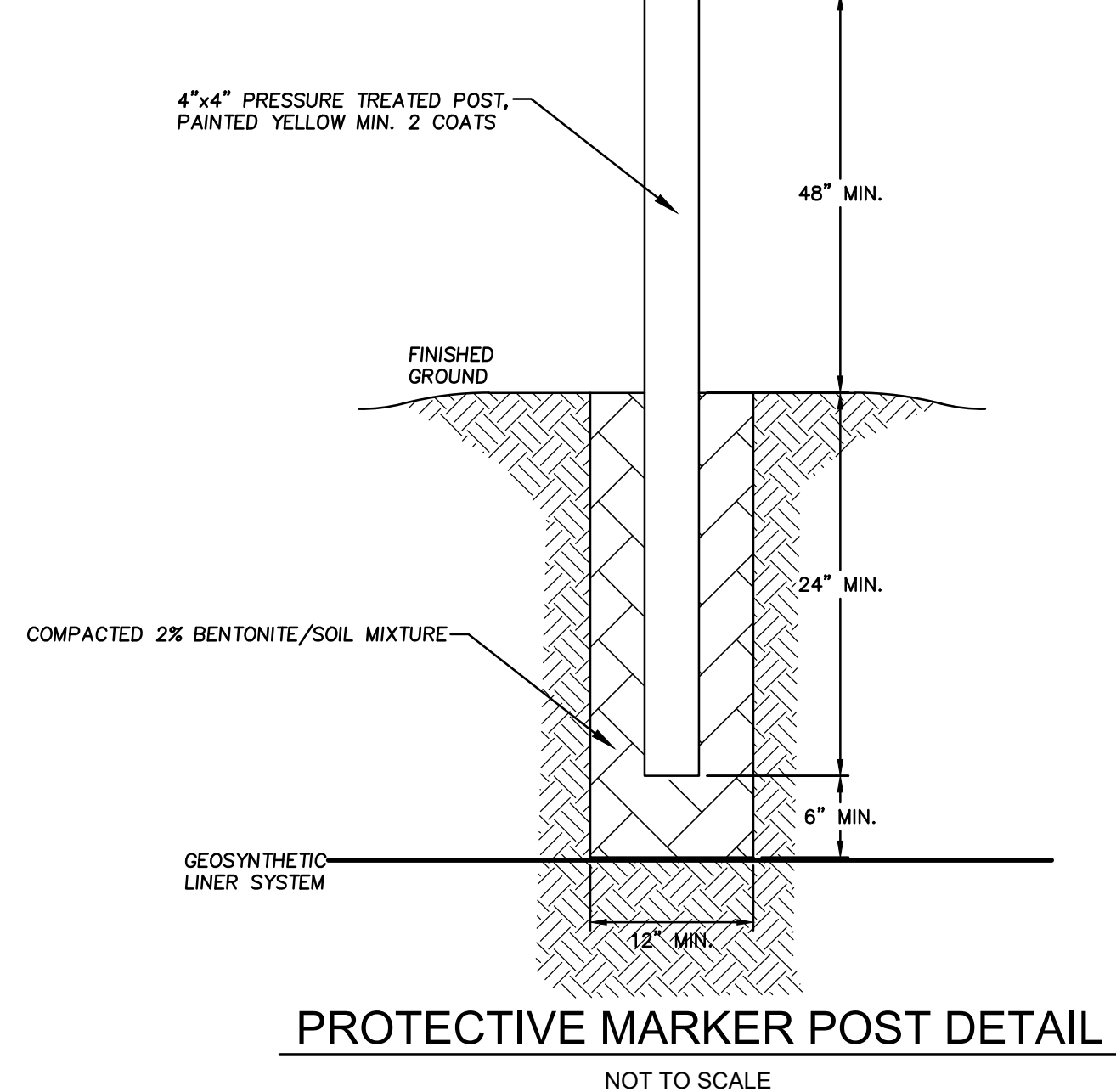
BUTTERFLY VALVE WITH 2-PIECE STEM EXTENSION AND MONITORING PORTS
NOT TO SCALE



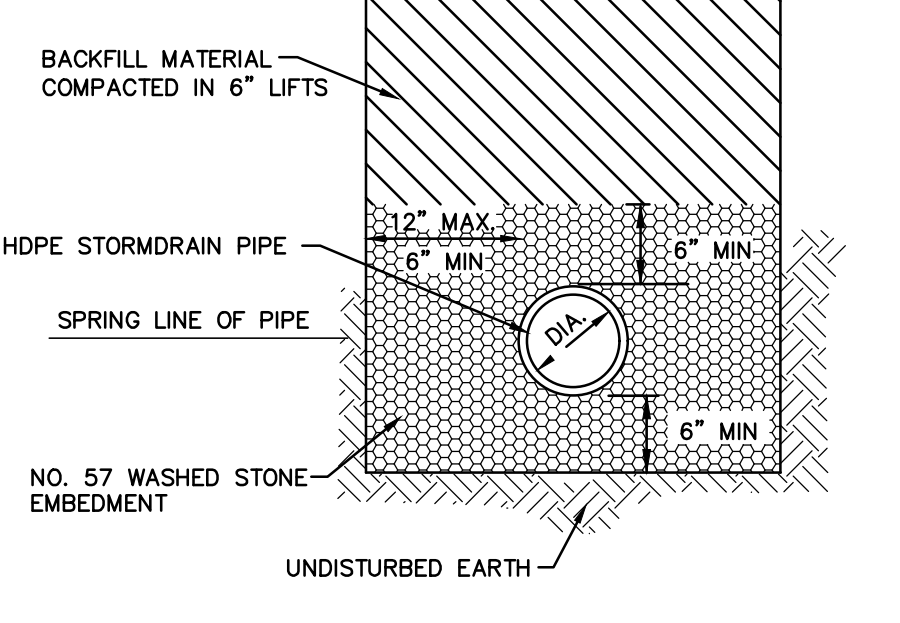
PROTECTIVE MARKER POST LOCATION AT TYPICAL TEES
NOT TO SCALE



PROTECTIVE MARKER POST LOCATION IN LINE
NOT TO SCALE



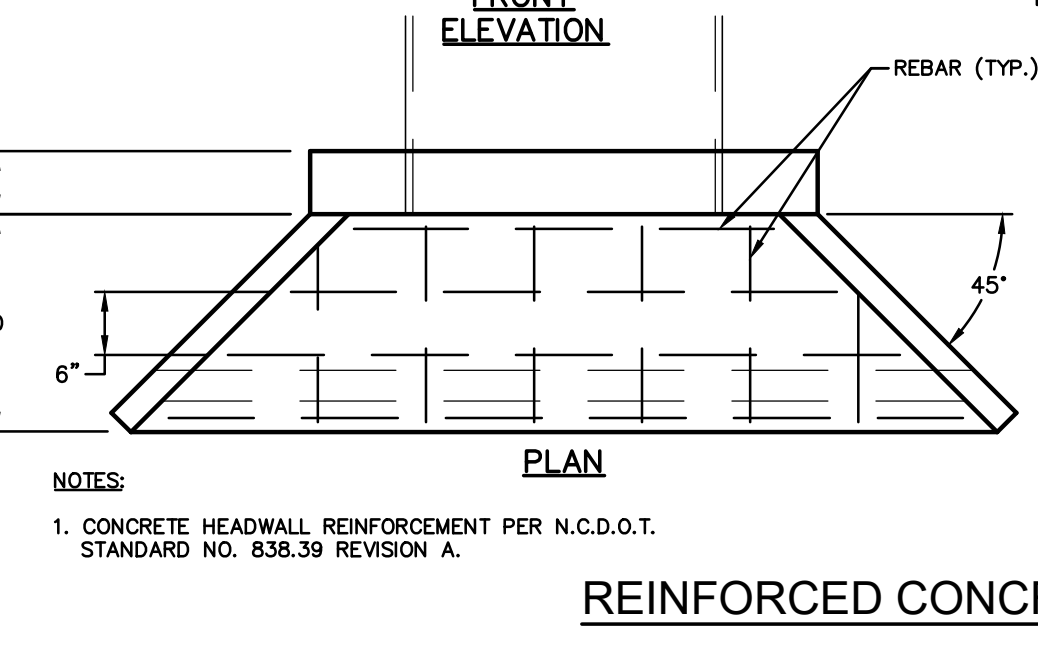
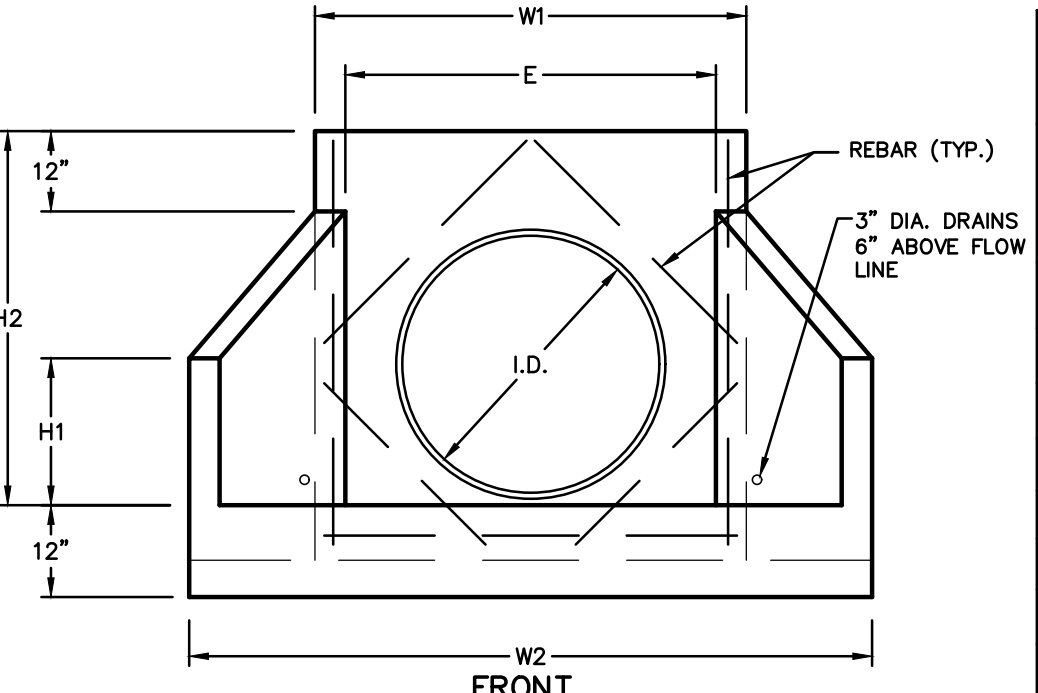
PROTECTIVE MARKER POST DETAIL
NOT TO SCALE



STANDARD EXCAVATION
NOT TO SCALE

NOTES:
1. CONSTRUCTION OF TRENCHES SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY AND HEALTH REGULATIONS WHICH HAVE JURISDICTION AT THE PROJECT SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE APPLICABLE REGULATIONS AND FOLLOW THEM ACCORDINGLY.
2. PAYMENT FOR ROCK EXCAVATION AND SELECT BACKFILL IN TRENCH SHALL BE FOR ACTUAL QUANTITIES AND SHALL NOT EXCEED THE WIDTH OF TRENCH SHOWN ON THIS DETAIL.

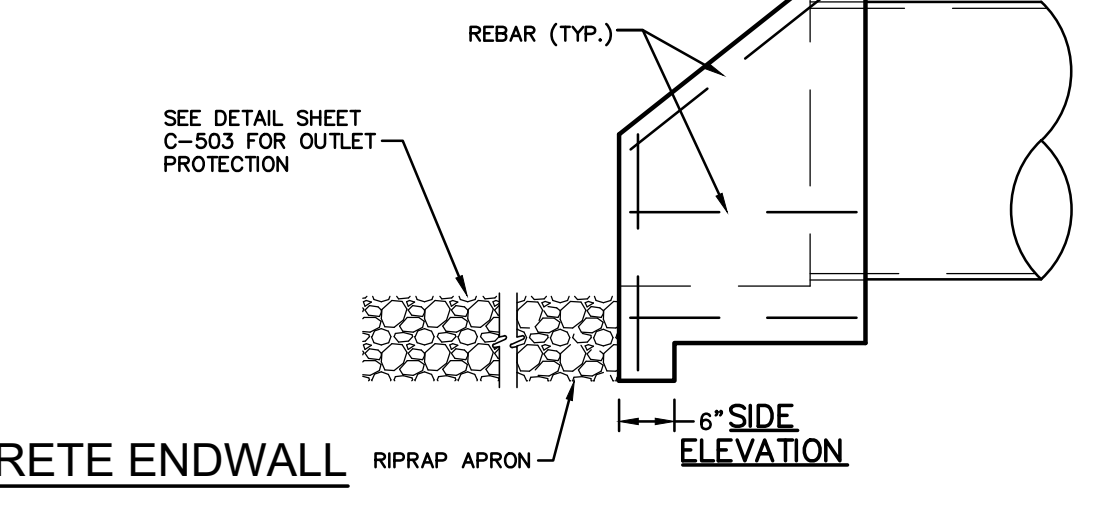
TYPICAL TRENCHING DETAIL HDPE PIPE WITH WASHED STONE EMBEDMENT
NOT TO SCALE



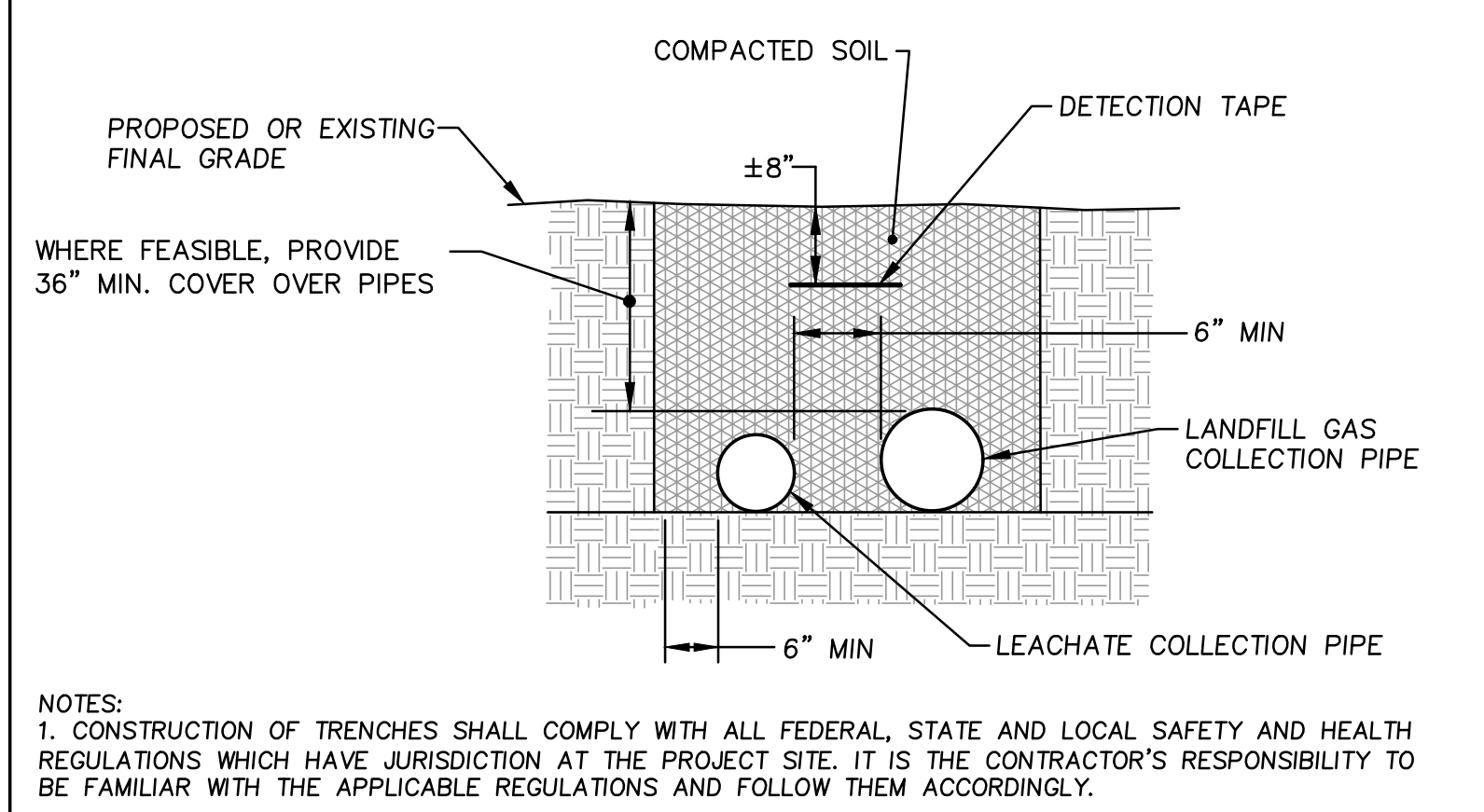
REINFORCED CONCRETE ENDWALL
NOT TO SCALE

HEADWALL DIMENSIONS (HDPE PIPE)							
NOTE: USE NEXT LARGEST SIZE FOR CONCRETE PIPE.							
INSIDE DIAMETER OF PIPE	W1	W2	H1	H2	D	E	WEIGHT
12"-15"-18"	3'-2"	4'-10"	1'-3"	3'-2"	1'-3"	1'-9"	1,550
21"-24"	3'-8"	6'-1"	1'-9"	3'-8"	1'-6"	2'-3"	2,100
30"	4'-2"	7'-2"	2'-0"	4'-2"	1'-10"	2'-9"	2,850
36"	4'-8"	8'-4"	2'-4"	4'-8"	2'-2"	3'-3"	3,700
42"-48"	5'-8"	10'-10"	3'-3"	5'-8"	2'-11"	4'-3"	5,600
54"-60"	6'-10"	11'-9"	3'-6"	6'-8"	3'-4"	5'-2"	7,500
66"-72"	8'-1"	12'-0"	3'-8"	7'-7"	3'-4"	6'-2"	8,500
84"-96"	9'-4"	12'-8"	4'-0"	9'-6"	3'-4"	7'-6"	10,000

NOTE:
1. 4000 PSI CONCRETE STANDARD.
2. HW's 4-6 NOT USED.



RIPPRAP APRON
NOT TO SCALE

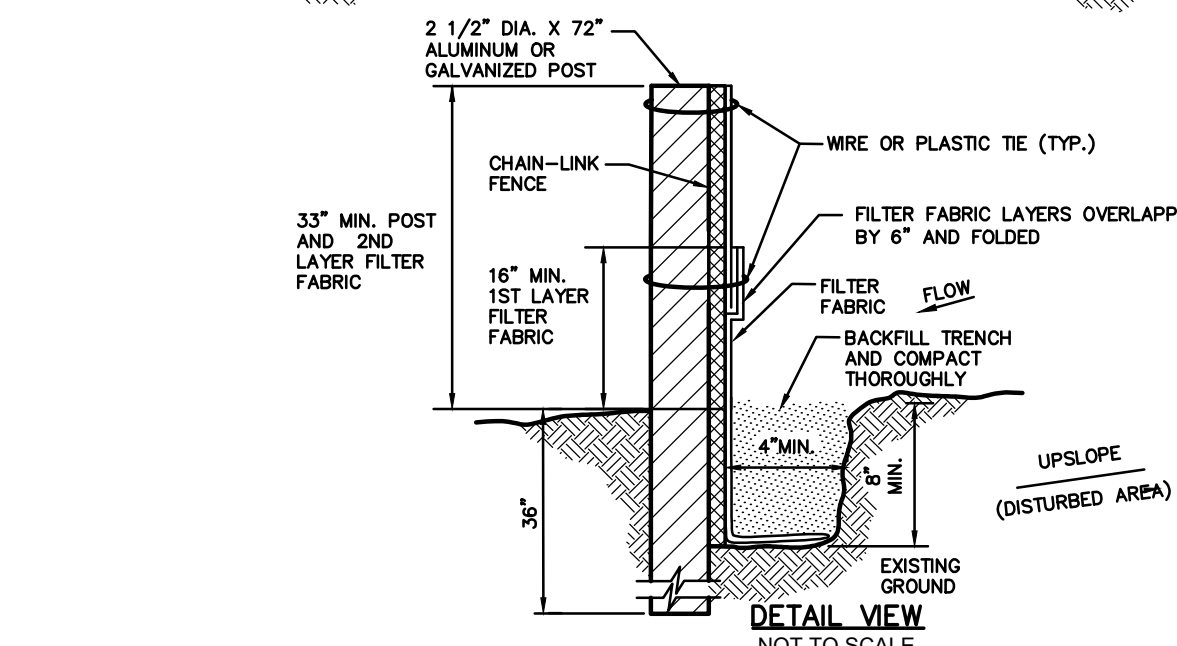
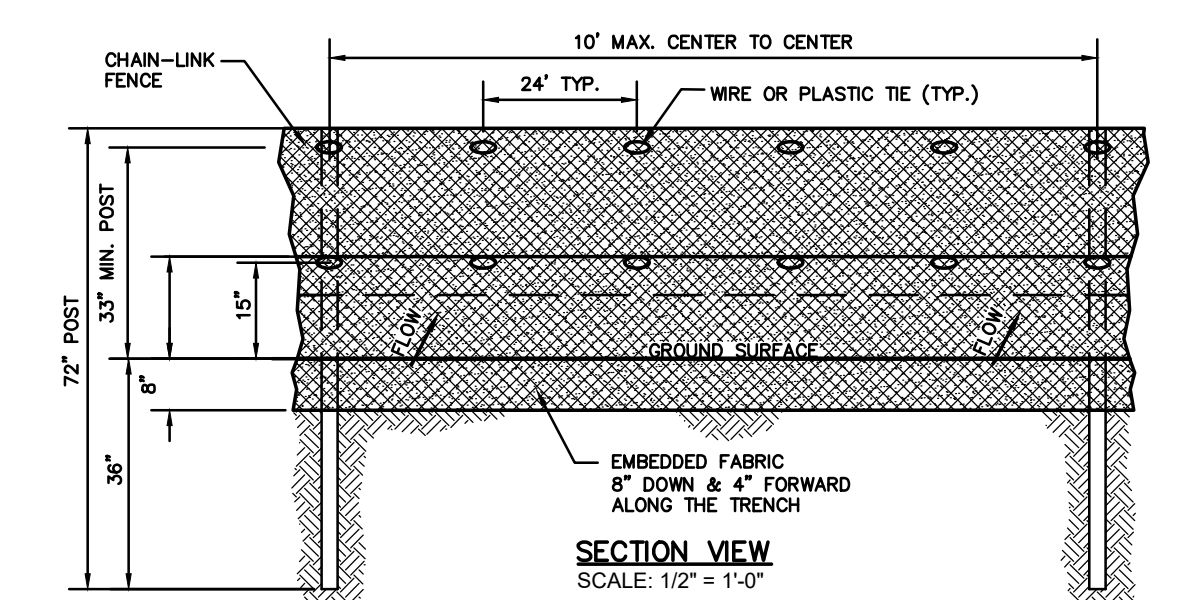


LANDFILL GAS COLLECTION PIPE / LEACHATE COLLECTION PIPE TRENCH DETAIL OUTSIDE OF LINER LIMITS
NOT TO SCALE

NOTES:
1. CONSTRUCTION OF TRENCHES SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY AND HEALTH REGULATIONS WHICH HAVE JURISDICTION AT THE PROJECT SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE APPLICABLE REGULATIONS AND FOLLOW THEM ACCORDINGLY.

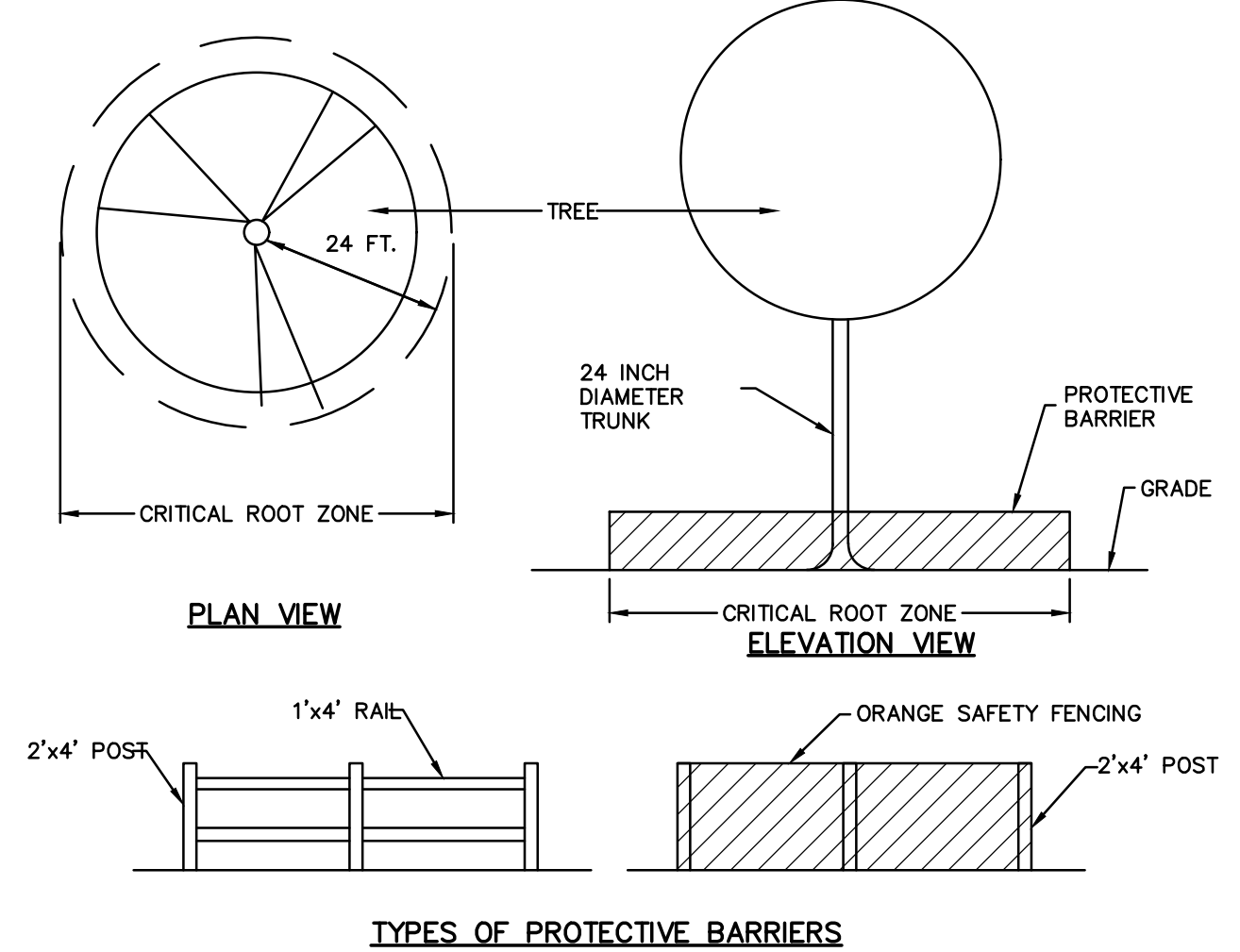
RIPRAP APRON SIZING CHART					
OUTLET No.	PIPE DIAMETER (Do)	3 x Do	APRON LENGTH (La)	APRON WIDTH (W=Do+La)	DEPTH (d)
RR1	30"	6'	14'	16.5'	6"
RR1A (TEMP)	6"	1.5'	14'	14.5'	6"
RR2	30"	7.5'	26'	28.5'	12"
RR3	36"	6'	20'	23'	6"
RR4	18"	4.5'	9'	10.5'	6"
RR4A	15"	3.75'	8'	9.25'	6"
RR4B	30"	7.5'	10'	10'	9"
RR5	30"	7.5'	16'	18.5'	6"
RR6	36"	9'	20'	23'	6"
RR7	24"	6'	13'	15'	6"
RR8 (TEMP)	6"	1.5'	14'	14.5'	6"
RR9 (TEMP)	6"	1.5'	14'	14.5'	6"

NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
4. MIRAFI 140N FILTER FABRIC (OR APPROVED EQUAL) SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.
5. REFERENCE NCDQG LAND QUALITY SECTION DESIGN MANUAL: 8.06.3.

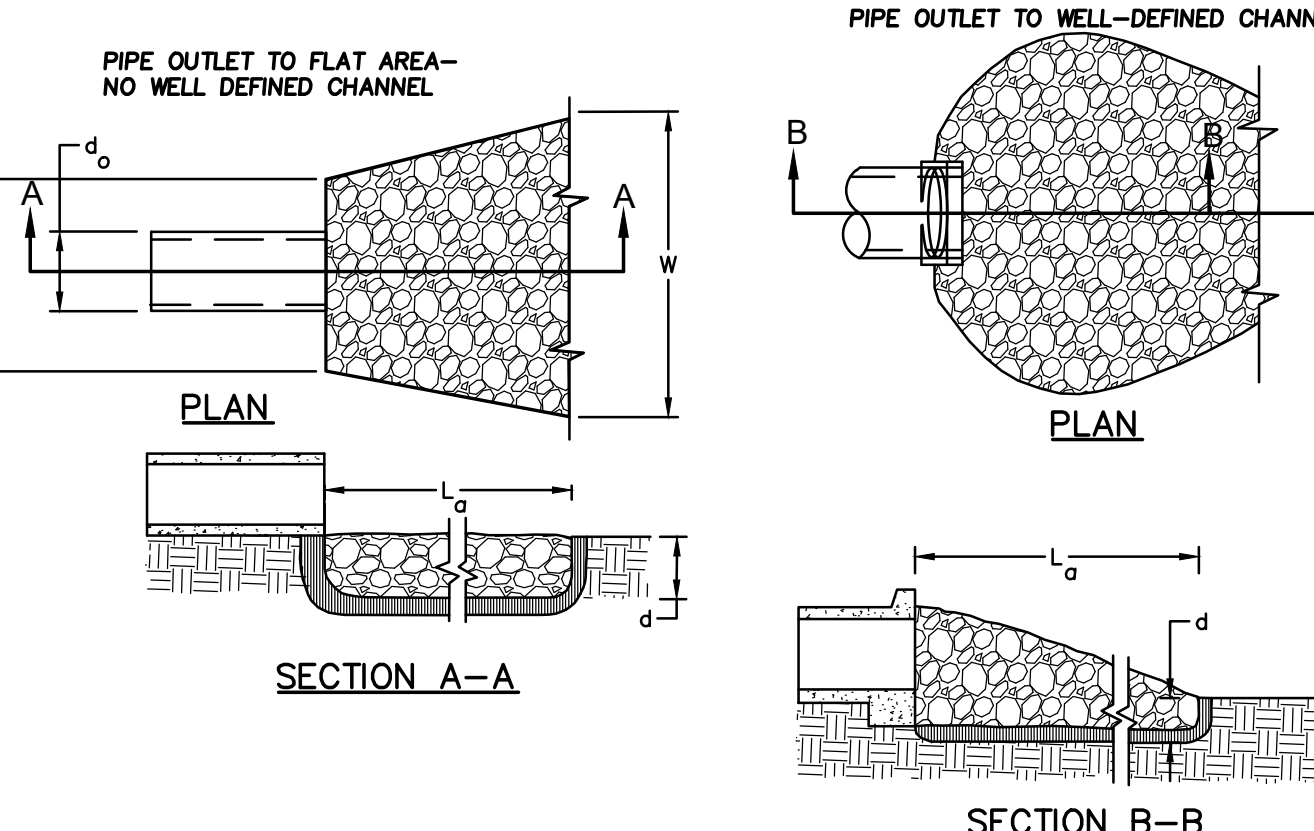


CONSTRUCTION SPECIFICATIONS:
1. CHAIN-LINK FENCE SHALL BE 42 INCHES IN HEIGHT AND USE 42 INCH FABRIC AND 6 FOOT LENGTH POSTS.
2. POLES DO NOT NEED TO BE SET IN CONCRETE.
3. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES.
4. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" HORIZONTALLY AT THE TOP AND MIDDLE (VERTICAL) SECTIONS.
5. FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND.
6. WHEN TWO HORIZONTAL SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
7. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE AS NECESSARY.
8. FABRIC SHALL BE REPLACED PROMPTLY IF FOUND TO BE IN DISREPAIR.
9. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT AND WHEN DEPOSITS REACH APPROXIMATELY 1/3 HEIGHT OF BARRIER.

SILT FENCE - SUPER
NOT TO SCALE

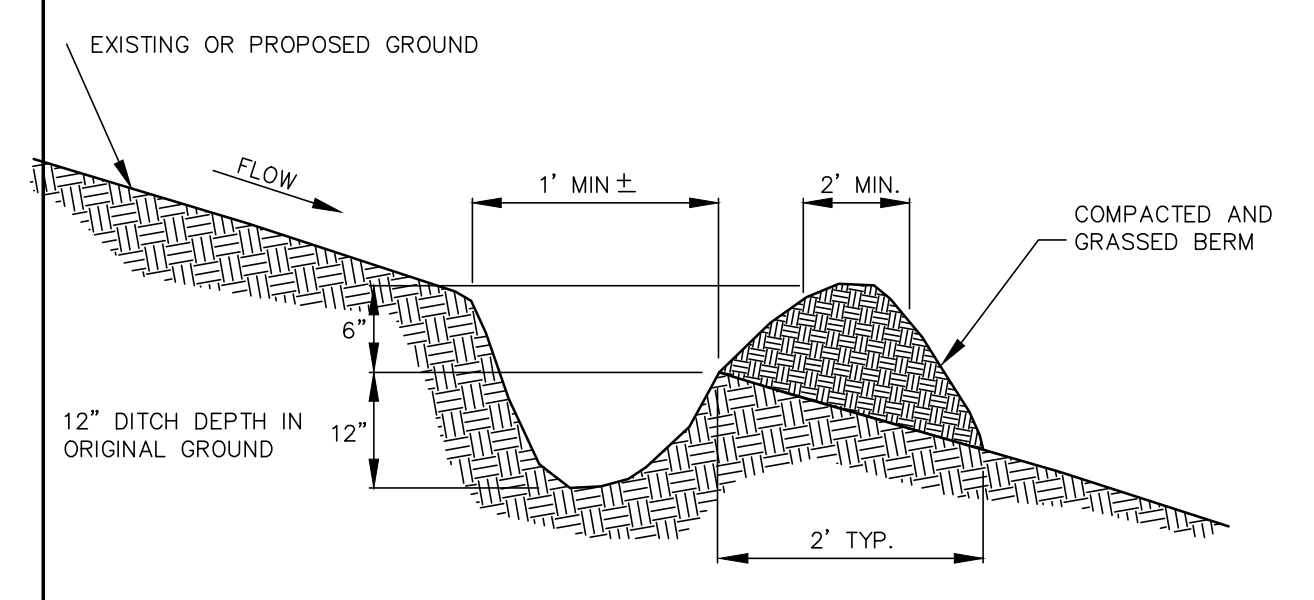


TYPES OF PROTECTIVE BARRIERS
TREE PROTECTION DETAIL



OUTLET PROTECTION
NOT TO SCALE

NOTES:
1. SEE PLANS FOR LOCATION OF DIVERSION DITCHES THAT INCLUDE ROCK CHECK DAMS.



TEMPORARY/PERMANENT DIVERSION DITCH
NOT TO SCALE

BID DOCUMENTS

SIGNED AND DATED:

NO.	DATE	BY	DESCRIPTION

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED IN ACCORDANCE WITH THE STANDARD CERTIFICATION REQUIREMENTS FOUND IN NC ADMINISTRATIVE CODE (21-56 (HOS)). THIS DIGITAL SIGNATURE HAS BEEN FOUND BY THE NC BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS TO MEET THESE STANDARDS. PLEASE CONTACT THE SIGNER IF YOU NEED ASSISTANCE IN VALIDATING THE SIGNATURE.

FRANCIS FARM LANDFILL RESTRICTIVE COVER IMPLEMENTATION
HAYWOOD COUNTY
HAYWOOD COUNTY, NORTH CAROLINA

GRAPHIC SCALE DIVISION VALUE = 40 FEET

OFFICE MANAGER	DESIGNER
MDC	DAP
PROJECT MANAGER	REVIEWER
JRB	JRB

MISCELLANEOUS DETAILS		
DATE	PROJECT #	FUNDING #
DECEMBER 2019	14.00708	N/A

SHEET
C-505