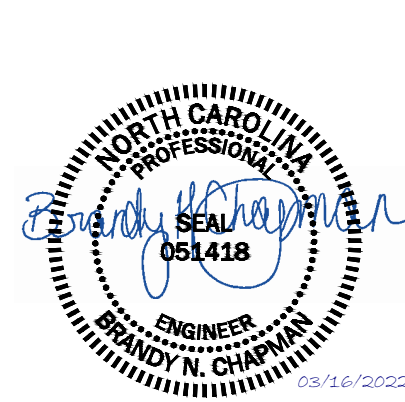


			PROJECT MANAGER DEREK WORLEY	
			DESIGNED BY: BRANDY CHAPMAN	
			DRAWN BY: BRANDY CHAPMAN	
			CHECKED BY: CHRIS TYNES	
			CONTRACT #: W9133L-15-D-0004	
			ANG PROJECT #: FJRP182510	
			HDR PROJECT #: 10226692	
-	MARCH 2022	B-3 DESIGN SUBMITTAL		
ISSUE	DATE	DESCRIPTION		

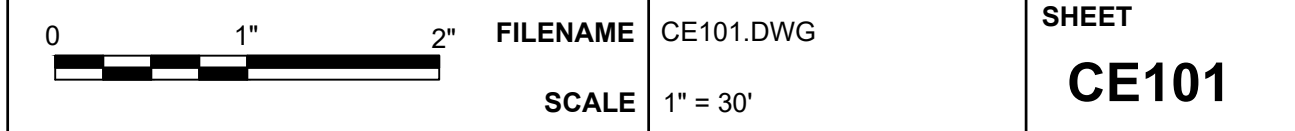


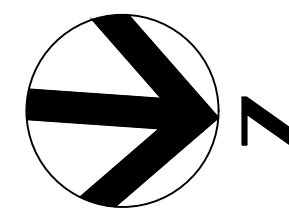
**EXTEND
COMMUNICATIONS DUCT
BANK**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
CHARLOTTE, NC**

CHARLOTTE AIR NATIONAL GUARD BASE

PARTIAL EROSION AND SEDIMENT CONTROL PLAN 1



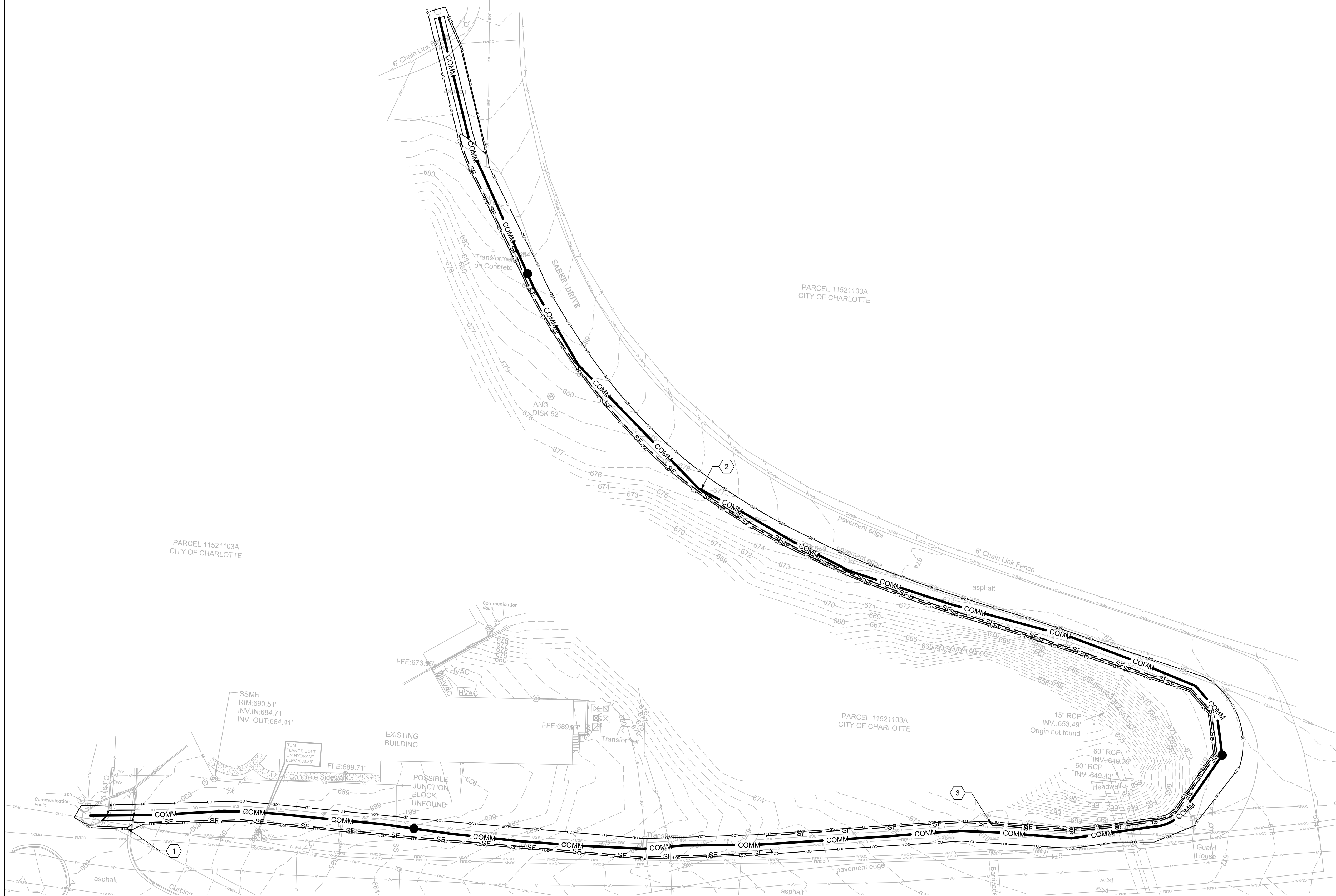


KEY NOTES :

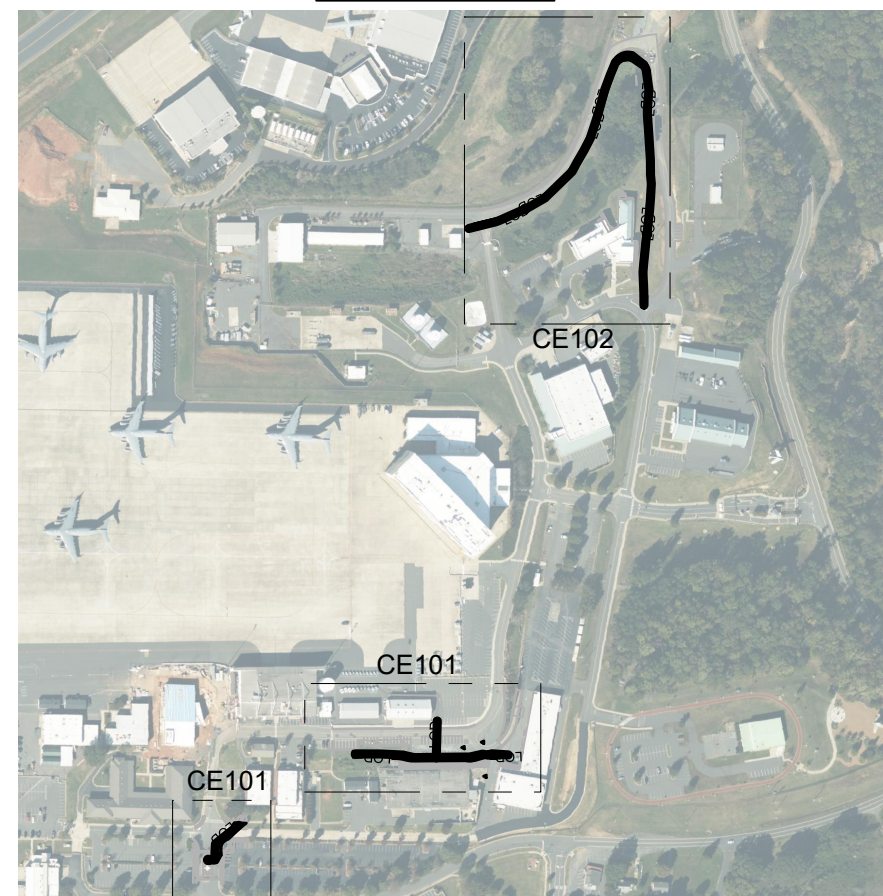
1. WATTLE, SEE SHEET C-042, DETAIL 1
2. BEGINNING OF OF DOUBLE ROW SILT FENCE. SEE SHEET C-042, DETAIL 1.
3. END OF DOUBLE ROW SILT FENCE. SEE SHEET C-042, DETAIL 1.

GENERAL NOTES:

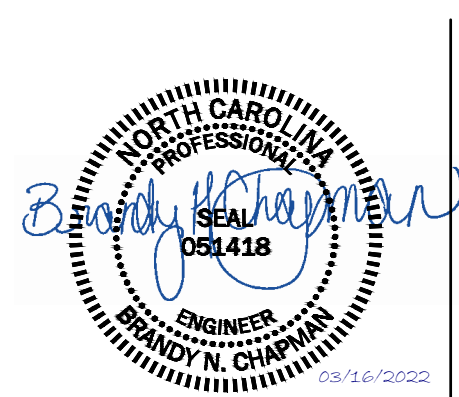
1. PLACE SPOIL ON THE HIGH SIDE OF THE TRENCH.



KEY MAP



-	MARCH 2022	B-3 DESIGN SUBMITTAL
ISSUE	DATE	DESCRIPTION

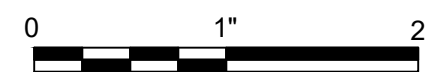


EXTEND COMMUNICATIONS DUCT BANK

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
CHARLOTTE, NC**

CHARLOTTE AIR NATIONAL GUARD BASE

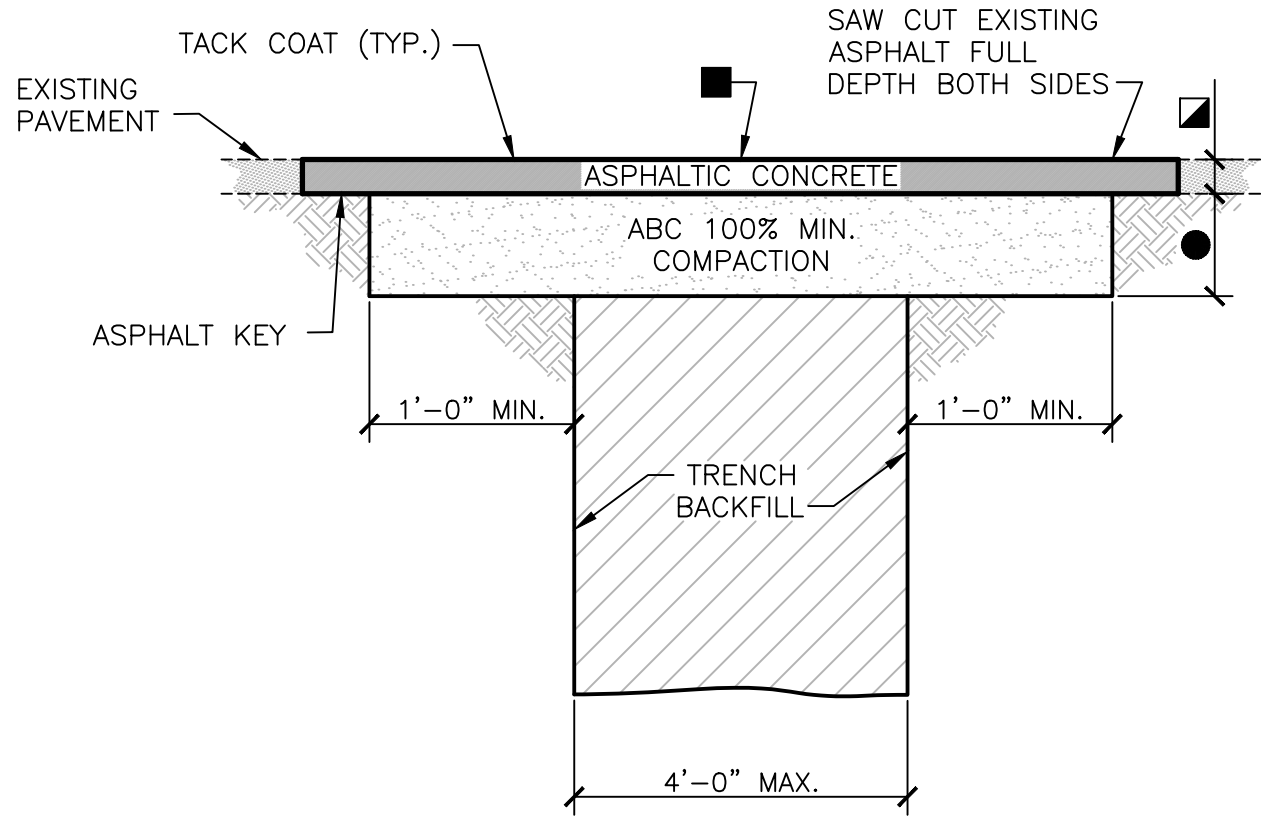
PARTIAL EROSION AND SEDIMENT CONTROL PLAN 2



FILENAME	CE102.DWG
SCALE	1" = 30'

SHEET

CE102



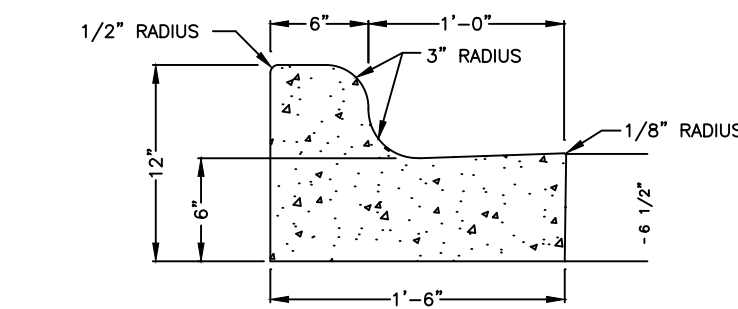
- 2" MINIMUM OR THICKNESS OF EXISTING PAVEMENT WHICHEVER IS GREATER.
- BITUMINOUS SURFACE TREATMENT (CHIPSEAL) REQUIRED ONLY FOR LONGITUDINAL TRENCHES WITH WIDTHS GREATER THAN 6'.
- 8" MINIMUM ABC OR THICKNESS OF EXISTING GRANULAR BASE COURSE MATERIALS (E.G. ABC & SELECT MATERIAL) WHICHEVER IS GREATER.

GENERAL NOTES

- MATERIAL AND COMPACTION REQUIREMENTS FOR PIPE BEDDING/SHADING SHALL BE IN ACCORDANCE WITH THE NCDOT SPECIFICATION 654 FROM STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- TRENCH BACKFILL SHALL COMMENCE 1 FOOT ABOVE THE TOP OF PIPE.
- BACKFILL COMPACTION REQUIREMENTS SHALL BE PER NCDOT SPECIFICATIONS.
- ABC SHALL BE IN ACCORDANCE WITH THE NCDOT SPECIFICATIONS.
- PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH THE NCDOT SPECIFICATIONS.
- ASPHALTIC TACK MATERIAL SHALL BE IN ACCORDANCE WITH THE NCDOT SPECIFICATIONS.
- ASPHALTIC CONCRETE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NCDOT SPECIFICATIONS.
- BITUMINOUS SURFACE TREATMENT (CHIP SEAL) SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NCDOT SPECIFICATIONS.
- LOAD TRANSFER DOWELS FOR JOINTS TRANSVERSE TO THE ROADWAY CENTERLINE SHALL BE SMOOTH STEEL DOWELS IN ACCORDANCE WITH THE REQUIREMENTS OF NCDOT SPECIFICATIONS SECTION 1070-6. DOWELS SHALL BE SIZED AND SPACED AS FOLLOWS:

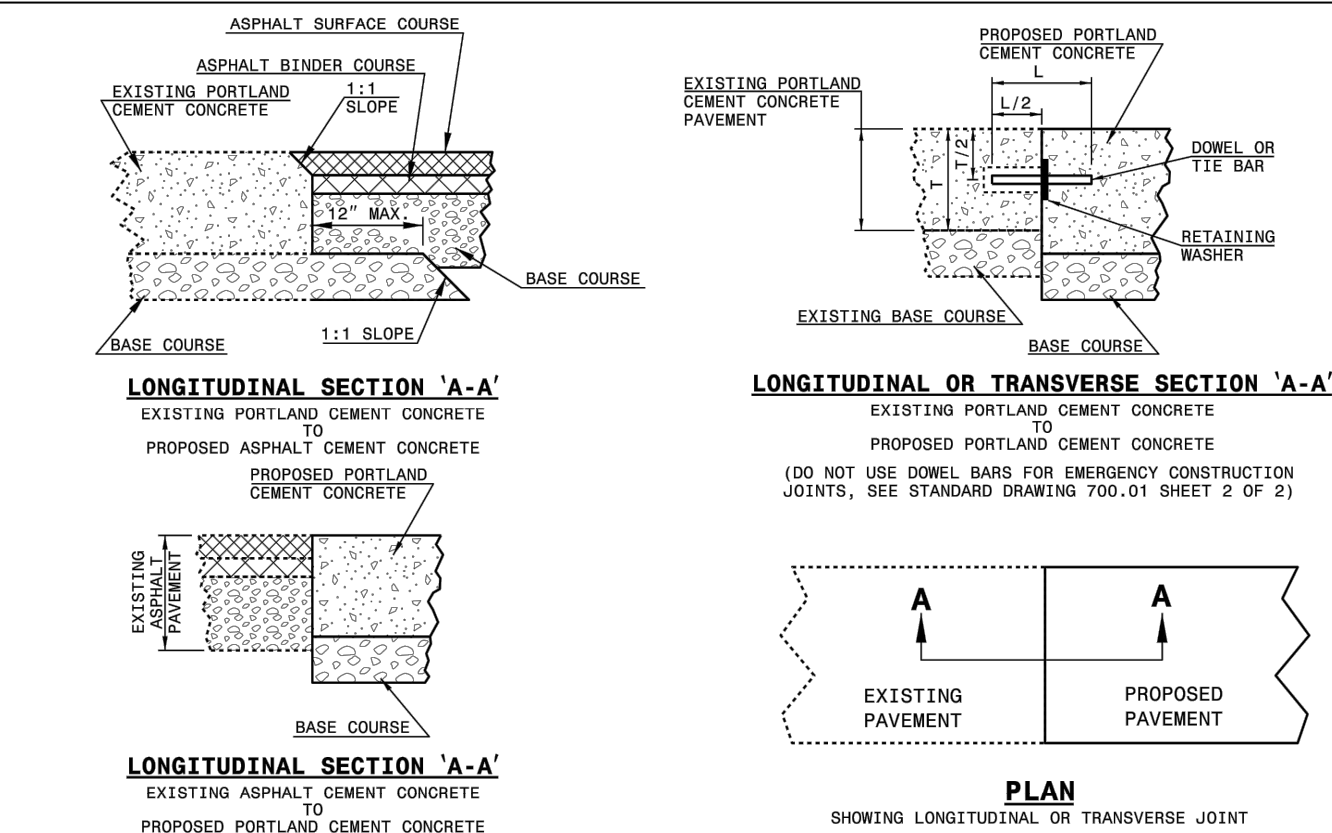
PCCP THICKNESS	DOWEL SIZE	DOWEL LENGTH	DOWEL SPACING
6"	#5	12"	18"
7"	#6	15"	15"
8"	#8	15"	12"
10"	#10	15"	12"

- DEFORMED TIE BARS SHALL BE USED IN TRENCH PATCHES LONGITUDINAL TO THE ROADWAY CENTERLINE WHEN THE TRENCH LENGTH IS GREATER THAN 50 FEET. TIE BARS SHALL BE 24 INCHES LONG. DEFORMED #4 [No. 13] BARS FOR PCCP LESS THAN 8 INCHES THICK AND #5 [No. 16] BARS IF 8 INCHES THICK OR MORE. TIE BARS SHALL BE PLACED 30 INCHES CENTER-TO-CENTER.
- HOLES SHALL BE DRILLED 1 FOOT INTO THE EXISTING SLAB FOR TIE BARS AND 7 INCHES FOR DOWELS. HOLES SHALL BE OF A DIAMETER SUFFICIENT TO ACCOMMODATE THE TIE BAR ANCHORAGE OR DOWEL CAP. TIE BARS SHALL BE ANCHORED WITH AN APPROVED HIGH VISCOSITY EPOXY.
- IF THE CONCRETE SLAB REMAINING NEXT TO A LONGITUDINAL OR TRANSVERSE JOINT IS LESS THAN 6 FEET AT ITS NARROWEST WIDTH, REMOVE AND REPLACE THE EXISTING CONCRETE TO THE JOINT.



DOWEL NEW CURB AND GUTTER TO THE EXISTING CURB AND GUTTER AS SHOWN IN NCDOT 700.05

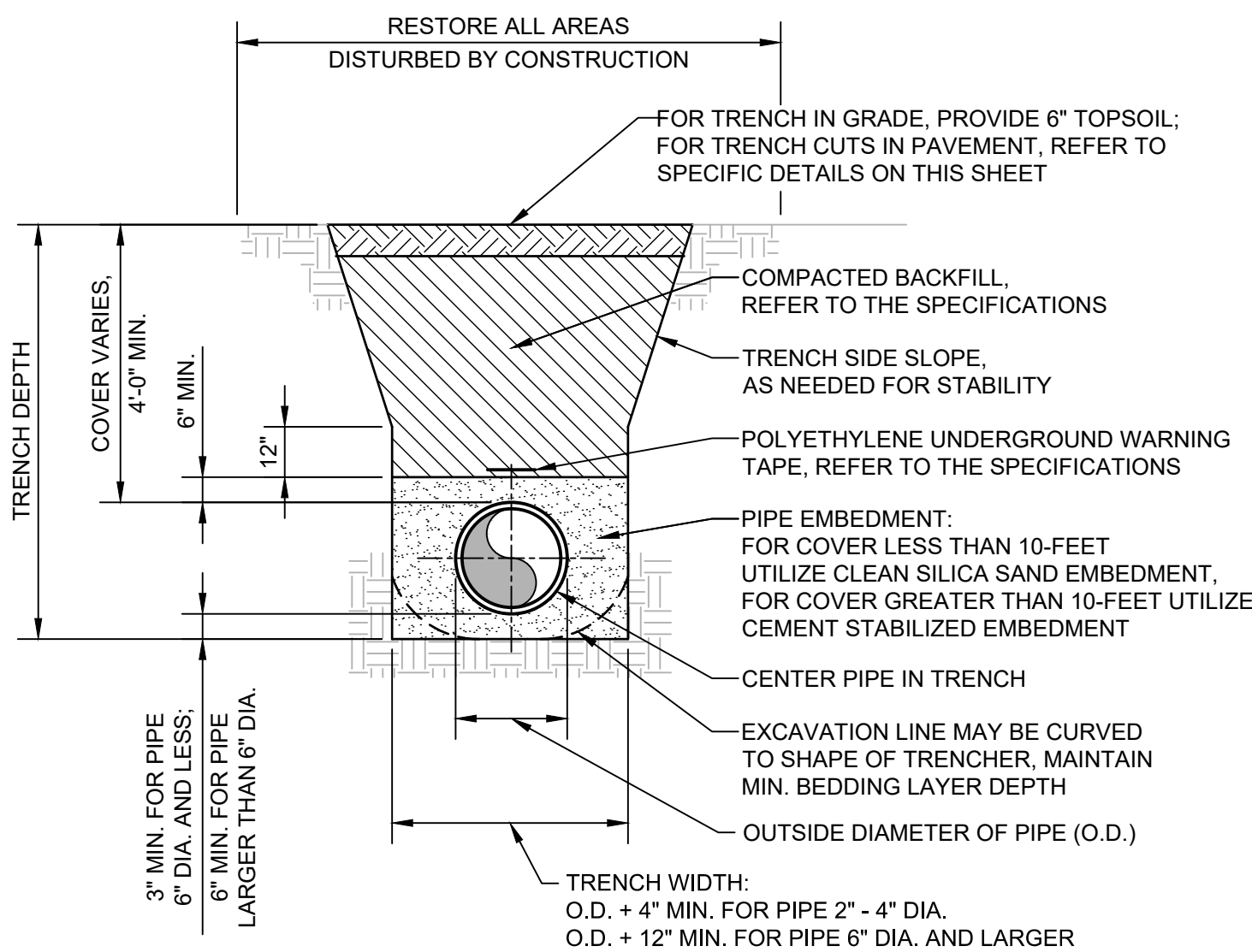
1'-6" CONCRETE CURB AND GUTTER
NOT TO SCALE



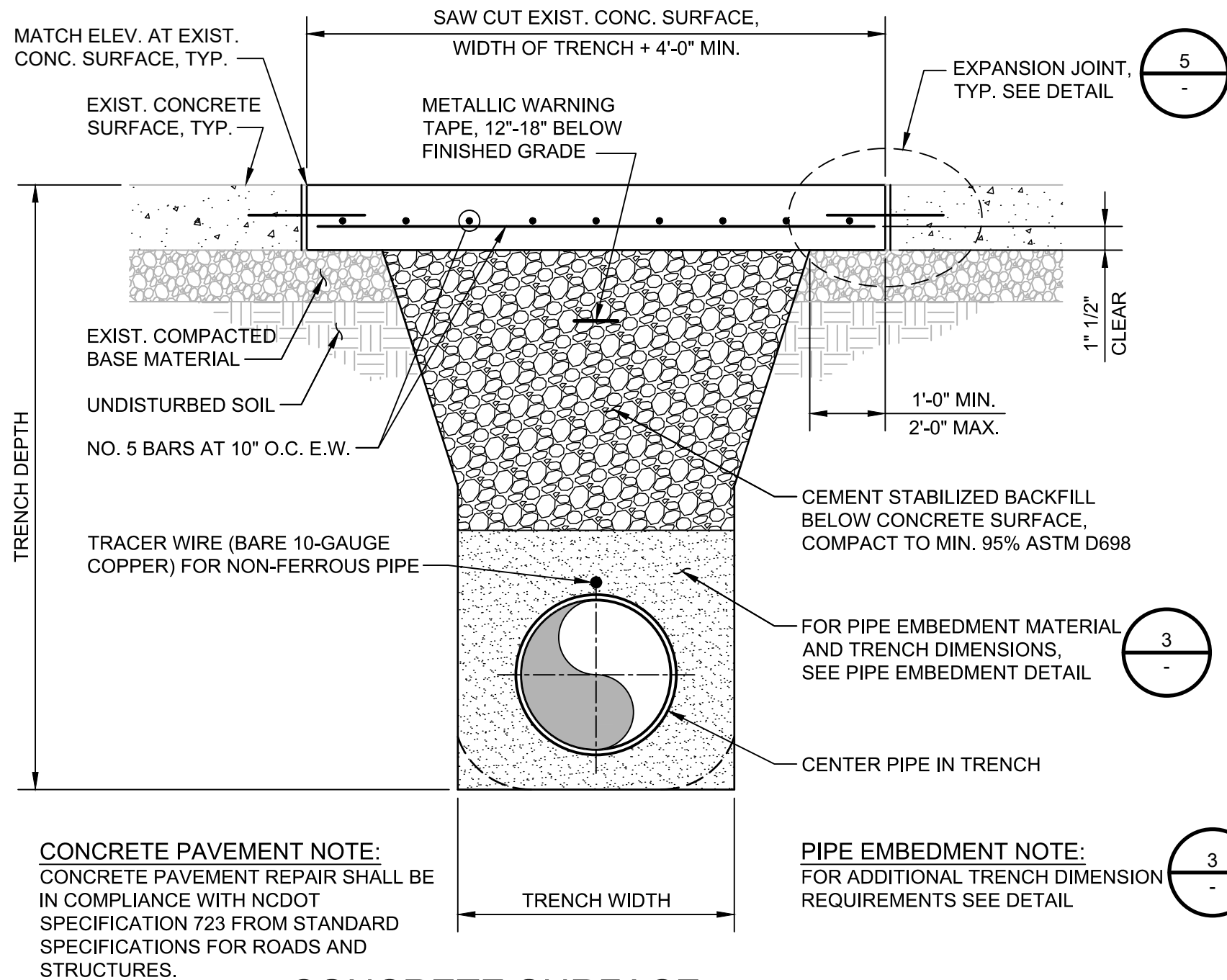
GENERAL NOTES:
-JOIN PAVEMENTS AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER.
-PLACE TIE BARS (DEFORMED STEEL BARS) ALONG THE LONGITUDINAL JOINTS AT 30" ON CENTER. PLACE DOWEL BARS (SMOOTH STEEL BARS) ALONG THE TRANSVERSE JOINTS AT 12" ON CENTER. THE PLACEMENT AND/OR SPACING OF TIE OR DOWEL BARS MAY BE MODIFIED BY THE PLANS OR THE ENGINEER. MEASURE THE HOLES, TO ACCEPT THESE BARS, THE O.D. OF THE BAR PLUS 1/8" IN DIAMETER AND 1/2 THE LENGTH OF THE BAR PLUS 1" UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER OF THE ADHESIVE. USE RETAINING WASHERS (NYLON, PLASTIC OR COMPOSITE) ON ALL BARS TO HOLD THE ADHESIVE MATERIAL IN PLACE. THE RETAINING WASHERS SHALL BE: 1-D-BAR O.D., O.D.-HOLE 1-D. + 1/16" MIN., THICKNESS=1/8" MIN. SEE STANDARD DRAWING 700.01 FOR BAR SIZES AND OTHER JOINT RELATED INFORMATION. PROVIDE ADHESIVE BONDING MATERIAL SPECIFIED BY SECTION 1081 OF THE STANDARD SPECIFICATIONS FOR TYPE 3 OR SA ADHESIVES.
-SEE TYPICAL SECTIONS FOR PAVEMENT COMPOSITION, SUMMARY OF QUANTITIES AND FOR OTHER SPECIFIC INFORMATION.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RAILROADS
ROADWAY STANDARD DRAWING FOR
TYPING PROPOSED PAVEMENT
TO EXISTING PAVEMENT
SHEET 1 OF 1
700.05

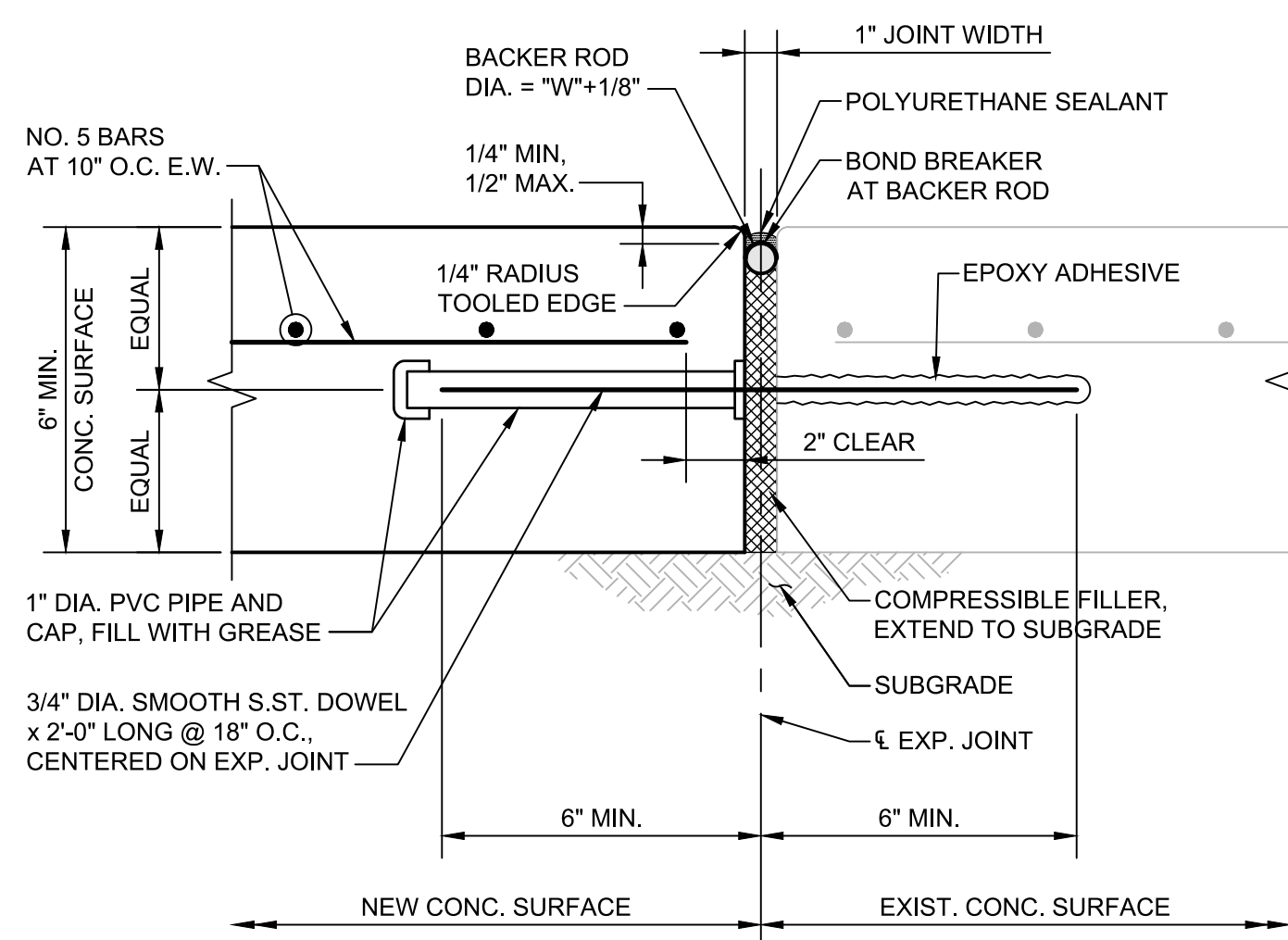
TYPE 1 UTILITY TRENCH PATCH
NOT TO SCALE



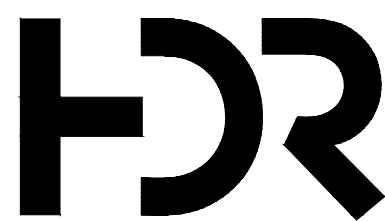
TYPICAL PIPE EMBEDMENT DETAIL
NOT TO SCALE



CONCRETE SURFACE
TRENCH AND REPAIR DETAIL
NOT TO SCALE



CONCRETE
EXPANSION JOINT (EJ) DETAIL
NOT TO SCALE



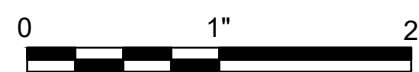
ISSUE	DATE	DESCRIPTION
-	MARCH 2022	B-3 DESIGN SUBMITTAL

PROJECT MANAGER	DEREK WORLEY
DESIGNED BY:	BRANDY CHAPMAN
DRAWN BY:	BRANDY CHAPMAN
CHECKED BY:	CHRIS TYNES
CONTRACT #:	W9133L-15-D-0004
ANG PROJECT #:	FJRP182510
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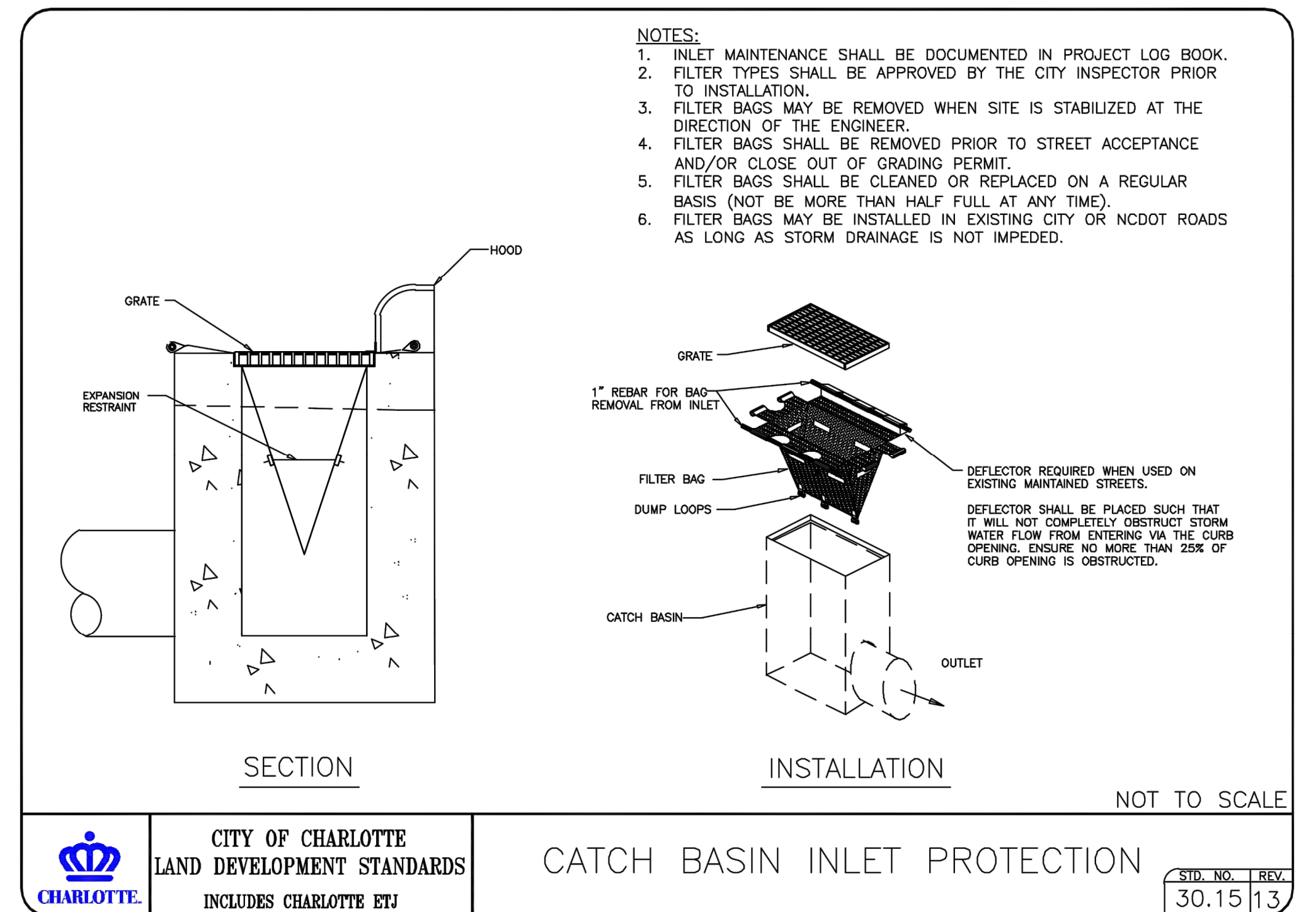
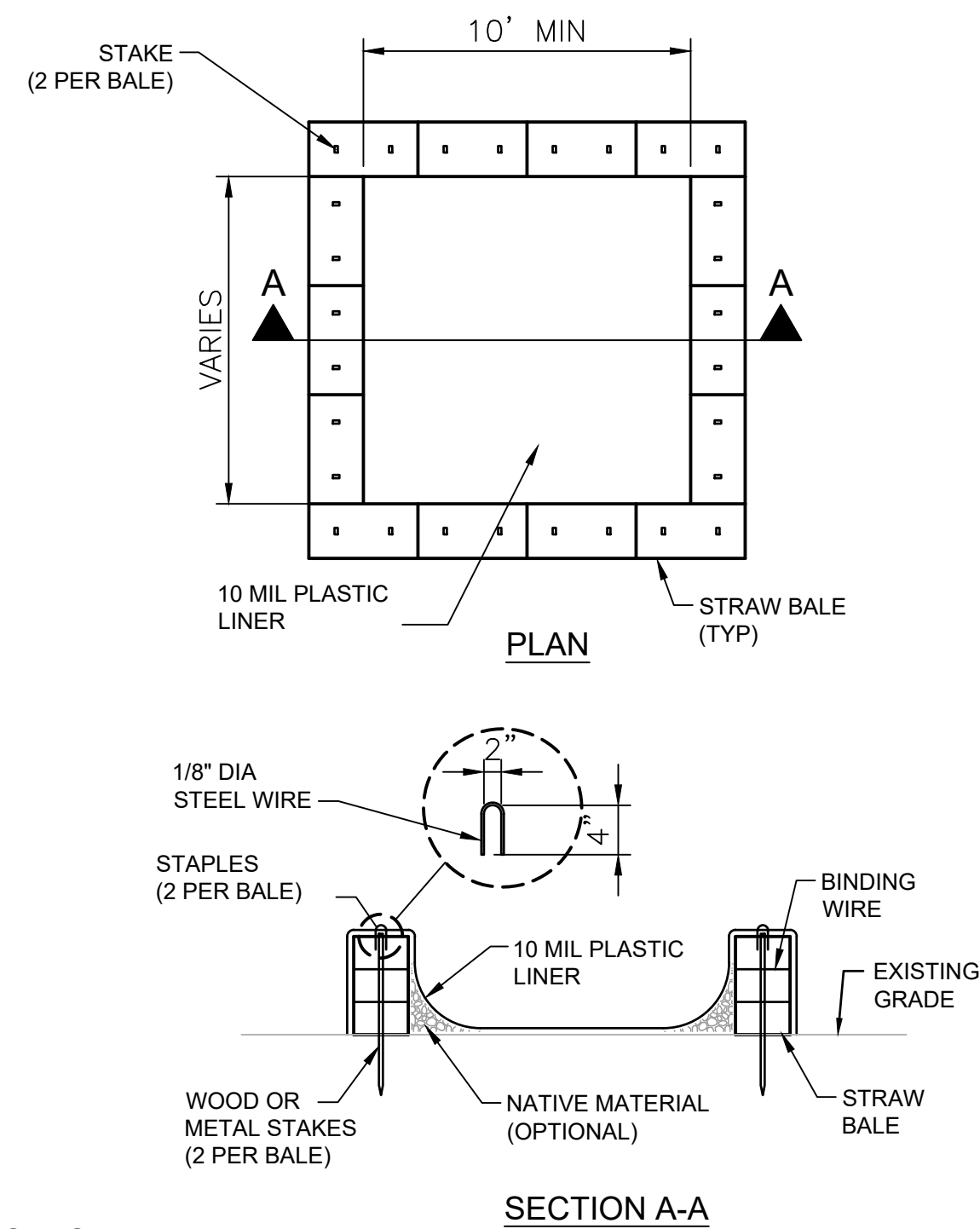
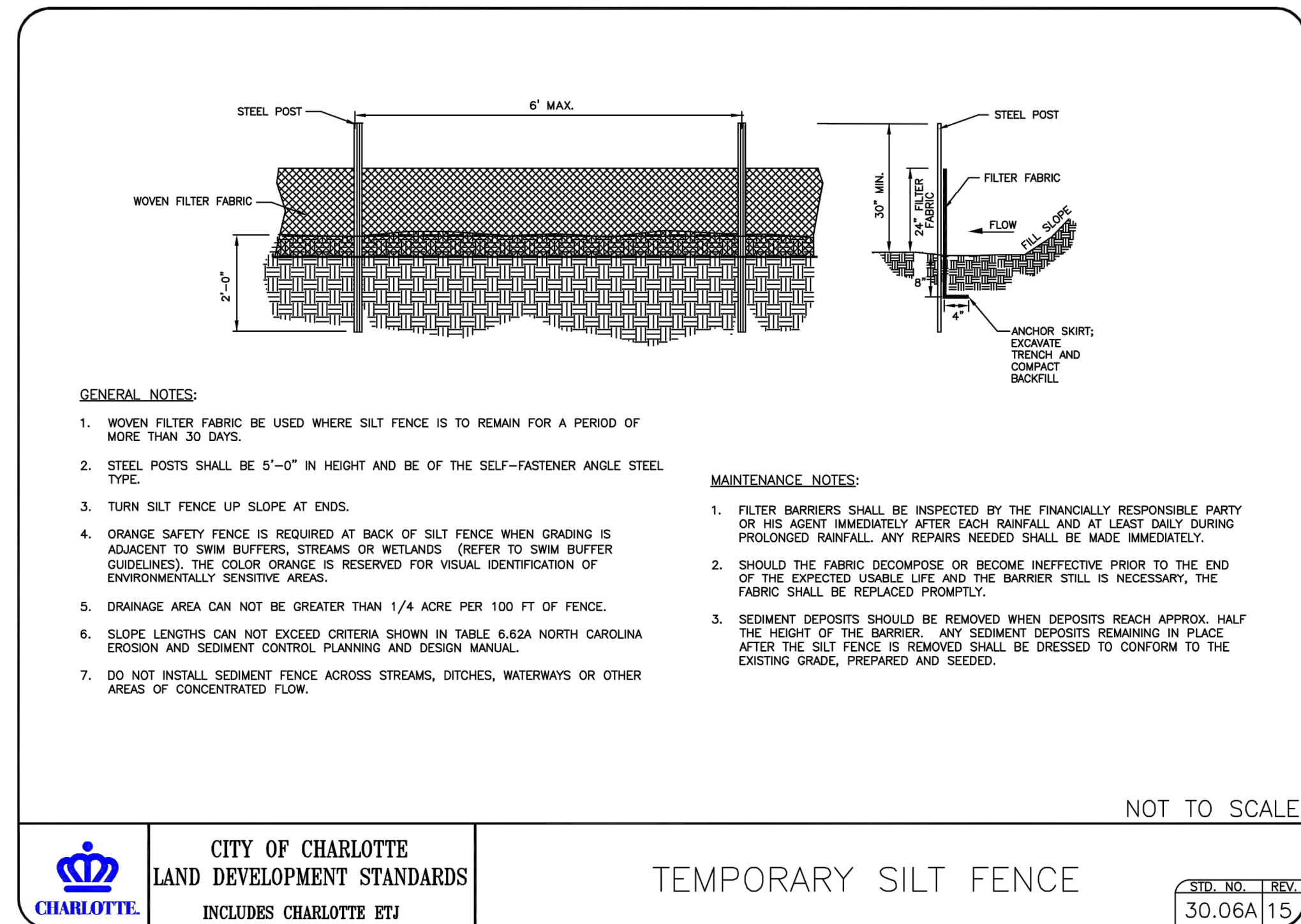
EXTEND
COMMUNICATIONS DUCT
BANK
NC AIR NATIONAL GUARD
145TH AIRLIFT WING
CHARLOTTE, NC

CHARLOTTE AIR NATIONAL GUARD BASE
CIVIL
SITE DETAILS



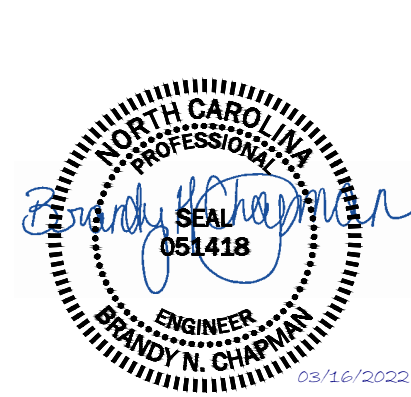
FILENAME | C-030.DWG
SCALE | AS NOTED

SHEET
C-030

[illegible]

-	MARCH 2022	B-3 DESIGN SUBMITTAL
ISSUE	DATE	DESCRIPTION

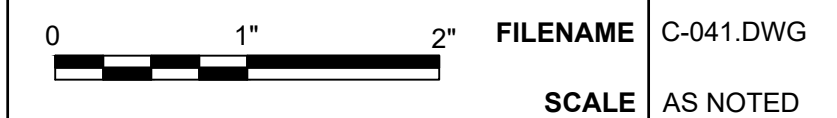
PROJECT MANAGER	DEREK WORLEY
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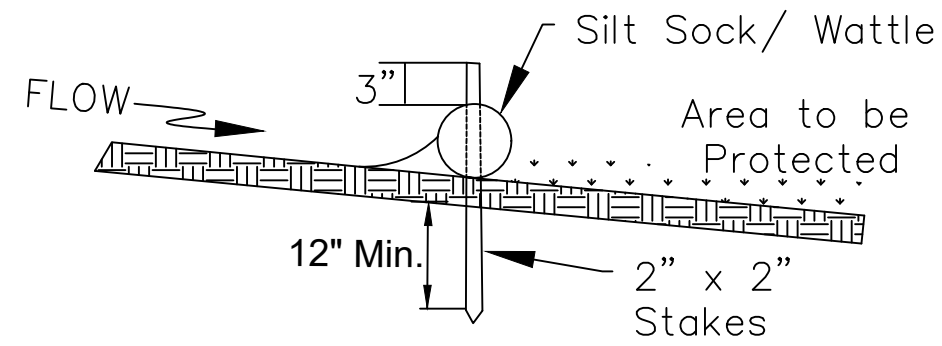
**EXTEND
COMMUNICATIONS DUCT
BANK**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
CHARLOTTE, NC**

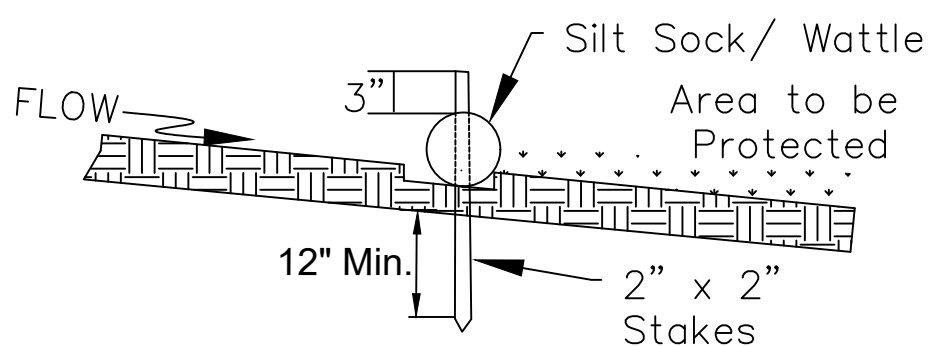
CHARLOTTE AIR NATIONAL GUARD BASE
CIVIL
EROSION CONTROL DETAILS 1



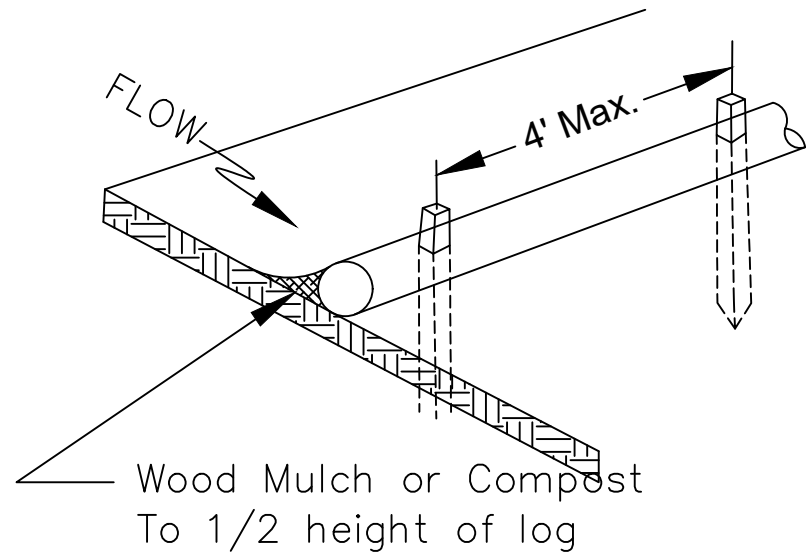
C-041



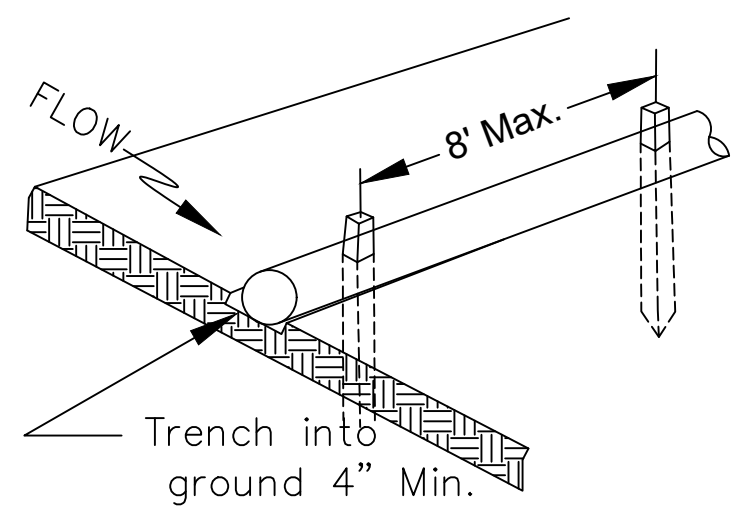
SECTION



SECTION



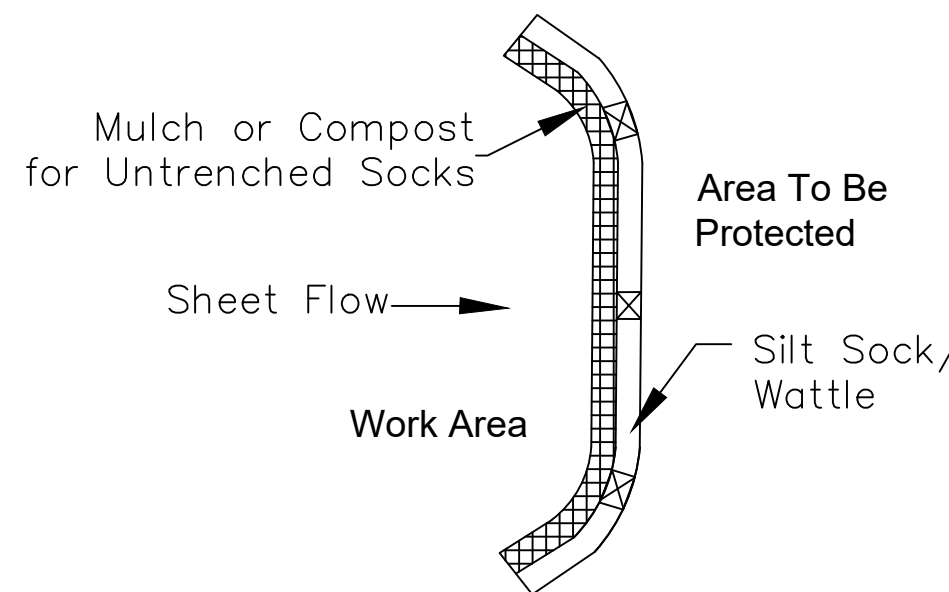
UNTRENCHED INSTALLATION



ENTRENCHED INSTALLATION*

*THIS APPLICATION MAY NOT BE USED WITH COMPOST SOCKS SMALLER THAN 12".

ISOMETRIC VIEW



COMPOST SOCK INITIAL FLOW RATES					
Compost Sock Design Diameter	8 Inch (200 mm)	12 Inch (300 mm)	18 Inch (450 mm)	24 Inch (600 mm)	32 Inch (750 mm)
Maximum Slope Length (<2%)	600 Feet (183 m)	750 Feet (229 m)	1,000 Feet (305 m)	1,300 Feet (396 m)	1,650 Feet (500 m)
Hydraulic Flow Through Rate	7.5 gpm/ft (94 l/m/m)	11.3 gpm/ft (141 l/m/m)	15.0 gpm/ft (188 l/m/m)	22.5 gpm/ft (281 l/m/m)	30.0 gpm/ft (374 l/m/m)

NOTE:

- Other materials providing equivalent protection against erosive velocities may be substituted for use in silt socks or wattles.
- Fill silt sock/wattle netting uniformly with compost to the desired length such that logs do not deform.
- Silt sock/Wattle(s) should be installed parallel to and a minimum of 10 feet beyond the toe of a graded slope. Silt Sock/Wattle(s) located below flat areas should be located at the edge of the land disturbance. The ends of the silt sock/wattle(s) should be turned slightly upslope to prevent runoff from going around the end of the silt sock/wattle(s).
- Oak or other durable hardwood stakes with a 2 inch x 2 inch cross section should be driven vertically plumb, through the center of the silt sock/wattle. Stakes should be placed at a maximum interval of 4 feet or a maximum interval of 8 feet if the silt sock/wattle is placed in a 4 inch trench.
- In the event staking is not possible (ie. when socks/wattles are used on pavement) heavy concrete blocks shall be used behind the silt sock/wattle to hold it in place during runoff events.

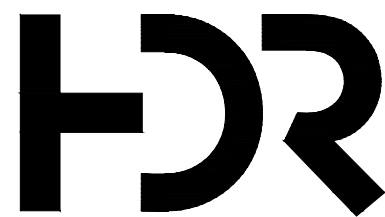
MAINTENANCE:

- Inspect silt sock/wattle at least weekly and after each 1 inch or greater rainfall. Remove accumulated sediment and any debris as needed to allow for adequate flow.
- Silt sock/Wattle must be replaced if clogged or torn.
- If ponding becomes excessive, the silt sock/wattle may need to be replaced with a larger diameter or a different measure. Reinstall if damaged or dislodged.
- Silt socks/wattles shall be inspected until land disturbance is complete and the area above the measure has been permanently stabilized.



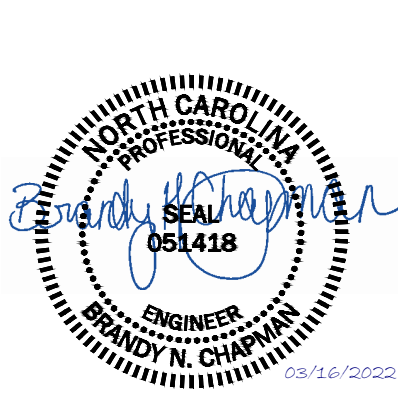
SILT SOCK/WATTLE

NOT TO SCALE



PROJECT MANAGER DEREK WORLEY		
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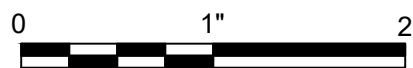


EXTEND
COMMUNICATIONS DUCT
BANK

NC AIR NATIONAL GUARD
145TH AIRLIFT WING
CHARLOTTE, NC

CHARLOTTE AIR NATIONAL GUARD BASE

CIVIL
EROSION CONTROL DETAILS 2



FILENAME | C-042.DWG
SCALE | AS NOTED

SHEET
C-042