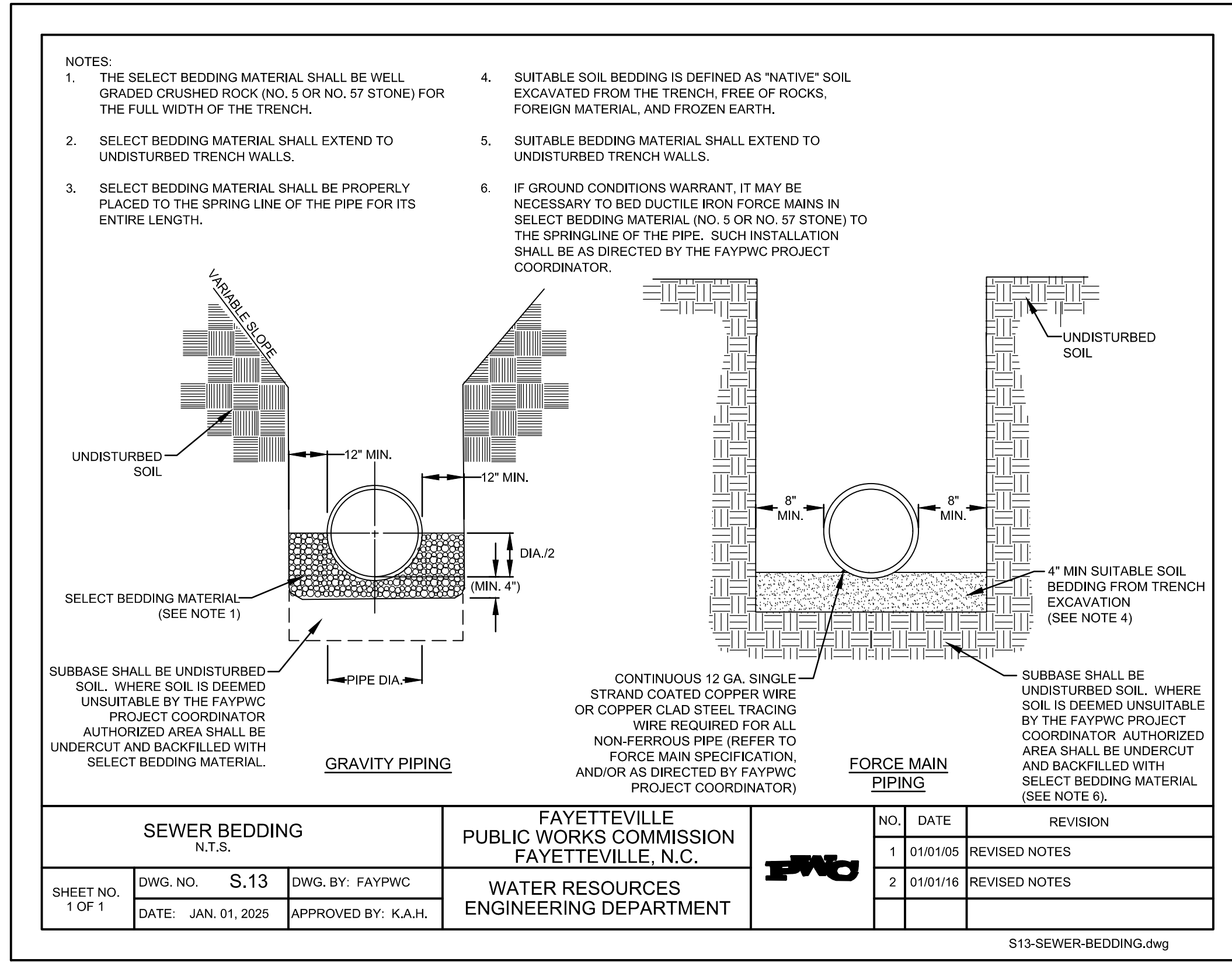


SEWER LATERAL UTILITY CONFLICT SEPARATION REQUIREMENTS			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		
SHEET NO. 1 OF 1	DWG. NO. S.12	DWG. BY: FAYPWC	WATER RESOURCES ENGINEERING DEPARTMENT		
DATE: JAN. 01, 2025	APPROVED BY: K.A.H.				

NO.	DATE	REVISION
1	11/06	ADDED NOTE ON DI LATERALS
2	03/10	ADDED LATERAL AND WM SEPARATION
3	11/23	REVISED/CLARIFIED NOTES

SEWER LATERAL UTILITY CONFLICT SEPARATION REQUIREMENTS

DETAIL 1  
NOT TO SCALE D3

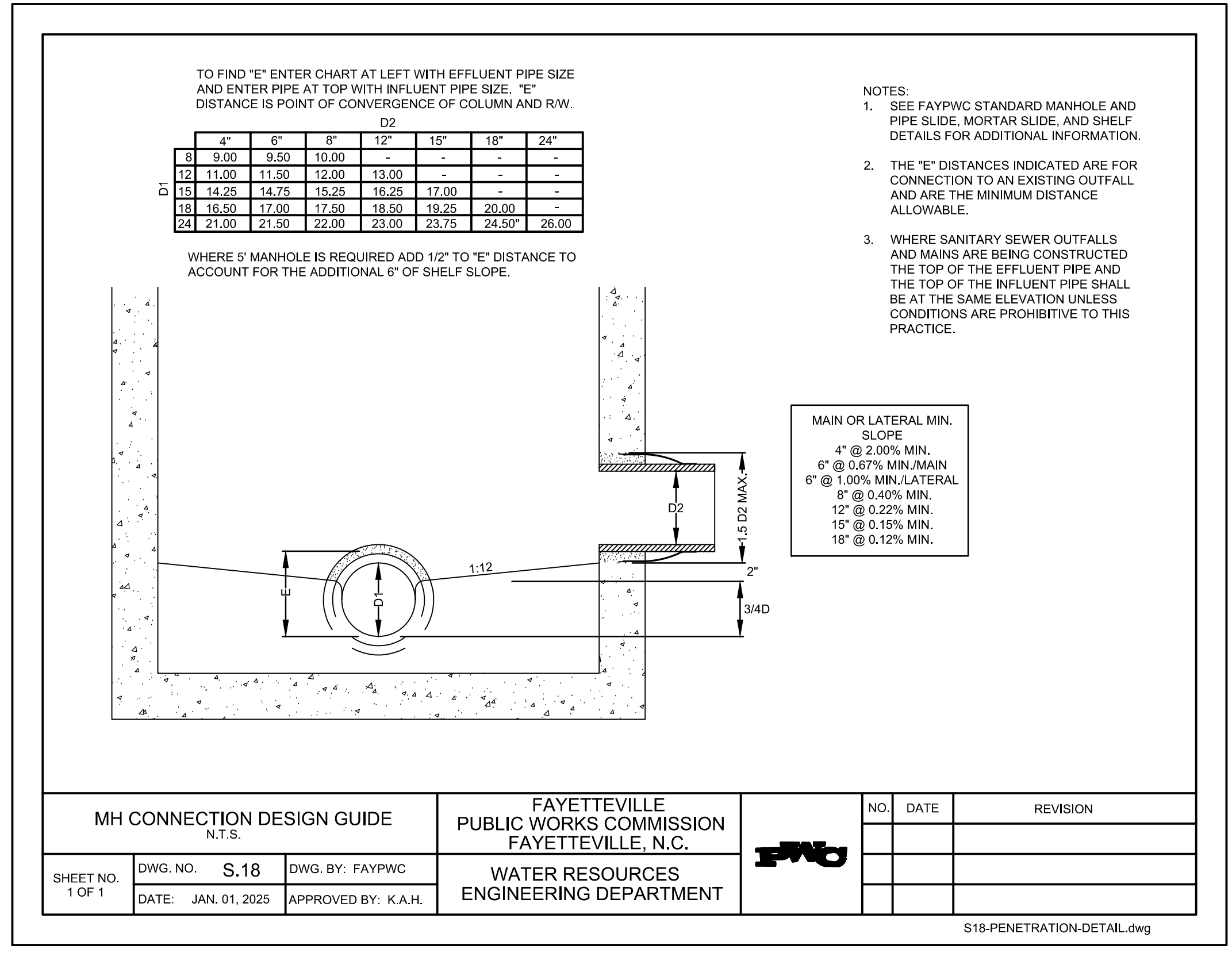


SEWER BEDDING			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		
SHEET NO. 1 OF 1	DWG. NO. S.13	DWG. BY: FAYPWC	WATER RESOURCES ENGINEERING DEPARTMENT		
DATE: JAN. 01, 2025	APPROVED BY: K.A.H.				

NO.	DATE	REVISION
1	01/01/05	REVISED NOTES
2	01/01/16	REVISED NOTES

SEWER BEDDING

DETAIL 2  
NOT TO SCALE D3



MH CONNECTION DESIGN GUIDE			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		
SHEET NO. 1 OF 1	DWG. NO. S.18	DWG. BY: FAYPWC	WATER RESOURCES ENGINEERING DEPARTMENT		
DATE: JAN. 01, 2025	APPROVED BY: K.A.H.				

NO.	DATE	REVISION

MH CONNECTION DESIGN GUIDE

DETAIL 3  
NOT TO SCALE D3

PREPARED FOR:  
**CUMBERLAND COUNTY SOLID WASTE MANAGEMENT DEPARTMENT**  
FAYETTEVILLE, NORTH CAROLINA

PREPARED BY: NC LIC. NO. F-1070 (ENGINEERING)  
SC COA NO. C01488

**SMITH+GARDNER ENGINEERS**  
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577  
1526 Richland St., Columbia SC 29201

SEAL: Stacey A. Smith, Professional Engineer, No. 023002, Exp. 7/2025  
SEAL: Jesse C. Vesce, Professional Engineer, No. 054367, Exp. 10/2025

REV.	DATE	DESCRIPTION
1	9/24	UTILITY UPDATES
2	3/25	RE-BID

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PROJECT TITLE:  
**ASSEMBLY COURT SOLID WASTE CONVENIENCE CENTER**

DRAWING TITLE:  
**UTILITY DETAILS (SHEET 2 OF 4)**

DESIGNED: J.C.L. PROJECT NO: CUMBERLAND 21-8  
DRAWN: J.R.G. SCALE: AS SHOWN  
APPROVED: JCL DATE: AUG. 2022  
FILENAME: CUMBERLAND-D0159  
SHEET NUMBER: 8 DRAWING NUMBER: D3

**FOR BIDDING**  
**NOT FOR CONSTRUCTION**



1. CONTRACTOR SHALL SAW CUT OR MILL ALL PAVEMENTS STRAIGHT AND TRUE PRIOR TO TRENCHING. CONTRACTOR SHALL SAW CUT PATCH AREAS AGAIN IMMEDIATELY PRIOR TO PATCH PAVING. THE FINAL SAW CUT FOR PATCHES SHALL BE STRAIGHT WITH A NEAT SQUARE EDGE AND OF UNIFORM WIDTH PARALLEL WITH THE EDGE OF PAVEMENT/CURB LINE. THE FINAL PRODUCT SHALL BE SUBJECT TO THE OWNERS APPROVAL.

2. CONTRACTOR SHALL SWEEP STREETS AND PROVIDE DUST CONTROL AT ALL TIMES VIA WATER TRUCK, BROOMS, COMPACTORS, ETC. DEBRIS FROM SWEEPING OPERATIONS SHALL NOT BE DIRECTED TOWARD YARDS. CLEAN UP OF DEBRIS, TRASH, EXCESS MATERIALS, ETC. SHALL BE PERFORMED DAILY.

3. ANY TRENCHES OPENED FOR PAVING SHALL BE PAVED BY THE END OF THE SAME DAY. IF WEATHER CONDITIONS CHANGE, EQUIPMENT BREAKS DOWN, OR ANY OTHER OCCURRENCE THAT STOPS THE PAVING OPERATIONS OCCURS, BACKFILL ALL PREPARED AREAS SO THEY ARE PASSABLE BY TRAFFIC.

4. THE CONTRACTOR SHALL PATCH PAVE SERVICE LATERALS ON THE SAME DAY THAT MAIN LINE TRENCHES ARE PAVED. LATERALS SHALL BE PATCHED ON BOTH SIDES OF THE STREET AS PAVING PROGRESSES.

5. THE CONTRACTOR SHALL BE REQUIRED TO IMPLEMENT PROPER TRAFFIC CONTROL PROVISIONS AND ANY DEVICES REQUIRED TO IDENTIFY OBSTRUCTIONS OR HAZARDS WITHIN THE RIGHT-OF-WAY TO INCLUDE REFLECTIVE CONES AT EACH SERVICE LATERAL, REFLECTIVE BARRILES ON RAISED MANHOLES, ETC.

6. AT NO TIME SHALL THE CONTRACTOR LEAVE MAIN AND/OR LATERAL TRENCHES WITH A VERTICAL ELEVATION DROP EXCEEDING ONE INCH (1") FROM EXISTING ASPHALT TO TRENCH SUB GRADE UNATTENDED, UNSECURED, AND/OR OVERNIGHT.

PAVEMENT REPAIR NOTES		FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		NO. DATE REVISION		
SHEET NO. 1 OF 1	DWG. NO. M.1 DATE: JAN. 01, 2025	DWG. BY: FAYPWC APPROVED BY: K.A.H.	FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C. WATER RESOURCES ENGINEERING DEPARTMENT	1	07/10	REVISED, DELETED NOTES
FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C. WATER RESOURCES ENGINEERING DEPARTMENT				NO. DATE REVISION		

M1-PAVEMENT-REPAIR-NOTES.dwg

PAVEMENT REPAIR NOTES  
DETAIL 1  
NOT TO SCALE D5

NOTES:

- CONTRACTOR SHALL PATCH PAVEMENT TO THE SAME PAVEMENT PROFILE AS EXISTED PRIOR TO REMOVING PAVEMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THIS DETAIL.
- WHERE PATCH OF ASPHALT CURBING OCCURS CONTRACTOR SHALL MATCH EXISTING CURB GRADES WITHIN 0.02 FEET. PATCHES THAT ARE ABOVE THE CURB GRADE LINE WILL NOT BE ACCEPTABLE AND SHALL BE REMOVED AND REPLACED. CURB PATCH SHALL BE THE SAME SHAPE/TEMPLATE AS THE EXISTING CURB.
- CONTRACTOR SHALL BE REQUIRED TO PROVIDE TRAFFIC CONTROL AND DEVICES AS REQUIRED BY THE M.U.T.C.D. OR NO SUPPLEMENT. WORK CANNOT PROCEED UNTIL THE MEASURES ARE IN PLACE. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT NEW PAVEMENT FROM TRAFFIC AND OTHER SOURCES OF DAMAGE UNTIL ASPHALT HAS SUFFICIENTLY COOLED TO PREVENT DAMAGE.
- CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT STRAIGHT AND TRUE IMMEDIATELY PRIOR TO PAVING. THE FINAL PRODUCT SHALL BE SUBJECT TO THE OWNERS APPROVAL.
- PATCH PAVING ON NCDOT MAINTAINED ROADS SHALL BE IN ACCORDANCE WITH THE APPROVED NCDOT ENCROACHMENT. REFER TO FAYPWC STANDARD DETAIL M.19 FOR NCDOT PATCH PAVING REQUIREMENTS.
- PROVIDE A MINIMUM OF 2" PAVEMENT (99.5), IF THE EXISTING PAVEMENT IS 2" OR LESS. MATCH EXISTING PAVEMENT THICKNESS IF OVER 2".
- FOR PATCHES UP TO 4" THICK, PLACE 99.5 IN 2 LIFTS.
- FOR PATCHES OVER 4" THICK, PLACE BINDER (I-19.0) TO 2" BELOW SURFACE. INSTALL BINDER IN 2" (MAX.) LIFTS. THE FINAL 2" SHALL BE SURFACE (99.5).
- ALL PATCHES SHALL HAVE A MINIMUM OF 8" ABC UNDER ALL PAVEMENT, INCLUDING CURB AS REQUIRED.

PERMANENT PAVEMENT PATCH		FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		NO. DATE REVISION		
SHEET NO. 1 OF 1	DWG. NO. M.2 DATE: JAN. 01, 2025	DWG. BY: FAYPWC APPROVED BY: K.A.H.	FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C. WATER RESOURCES ENGINEERING DEPARTMENT	1	01/07	CHANGED ASPHALT MIX
FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C. WATER RESOURCES ENGINEERING DEPARTMENT				NO. DATE REVISION		

M2-PER-PATCH.dwg

PERMANENT PAVEMENT PATCH  
DETAIL 2  
NOT TO SCALE D5

NOTES:

- ALL MATERIALS SHALL BE APPROVED BY FAYPWC. SEE DRAWING W.4 SHEET 2 OF 2 FOR METER BOX LID DETAIL.
- METER BOX SHALL NOT BE LOCATED WHERE H-20 LOADINGS CAN IMPACT BOX OR COVER.
- FOR 1" WATER LATERAL INSTALLATION SEE FAYPWC DETAIL W.2
- DIMENSIONS ± 1/16 U.N.O.

1-INCH METER BOX DETAILS		FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		NO. DATE REVISION		
SHEET NO. 1 OF 2	DWG. NO. W.4 DATE: JAN. 01, 2025	DWG. BY: FAYPWC APPROVED BY: K.A.H.	FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C. WATER RESOURCES ENGINEERING DEPARTMENT	1	03/10	CHANGED BOX DIMENSIONS
FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C. WATER RESOURCES ENGINEERING DEPARTMENT				NO. DATE REVISION		

W4-1IN-METERBOX.dwg

1IN METER BOX  
DETAIL 3  
NOT TO SCALE D5

1-INCH METER BOX LID		FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		NO. DATE REVISION		
SHEET NO. 2 OF 2	DWG. NO. W.4 DATE: JAN. 01, 2025	DWG. BY: FAYPWC APPROVED BY: K.A.H.	FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C. WATER RESOURCES ENGINEERING DEPARTMENT	1	07/07	REVISED LID
FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C. WATER RESOURCES ENGINEERING DEPARTMENT				NO. DATE REVISION		

W4-1IN-METERBOX.dwg

PREPARED FOR:  
**CUMBERLAND COUNTY  
SOLID WASTE  
MANAGEMENT DEPARTMENT  
FAYETTEVILLE,  
NORTH CAROLINA**

PREPARED BY:  
NC LIC. NO. F-1370 (ENGINEERING)  
SC COA NO. C01488  
**SMITH+  
GARDNER  
ENGINEERS**  
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577  
1526 Richland St., Columbia SC 29201

SEAL  
Signed by:  
Stacy A. Smyth  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 023002  
ENGINEER STACEY A. SMYTH /2025

SEAL  
Signed by:  
Jesse C. Vesce  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 054367  
ENGINEER JESSE C. VESCE C. LI /2025

REV.	DATE	DESCRIPTION
1	9/24	UTILITY UPDATES
2	3/25	RE-BID

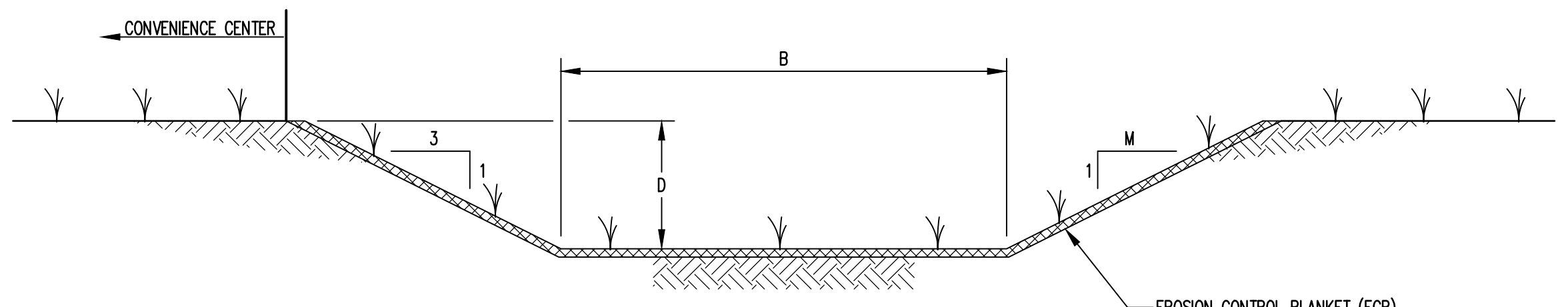
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PROJECT TITLE:  
**ASSEMBLY COURT  
SOLID WASTE  
CONVENIENCE CENTER**

DRAWING TITLE:  
**UTILITY DETAILS  
(SHEET 4 OF 4)**

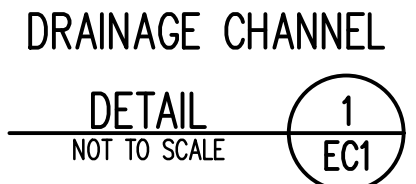
DESIGNED: J.C.L.	PROJECT NO: CUMBERLAND 21-8
DRAWN: J.R.G.	SCALE: AS SHOWN
APPROVED: JAL	DATE: AUG. 2022
FILENAME: CUMBERLAND-D0159	DRAWING NUMBER: 10
SHEET NUMBER: 10	DRAWING NUMBER: 05

**FOR BIDDING  
NOT FOR CONSTRUCTION**



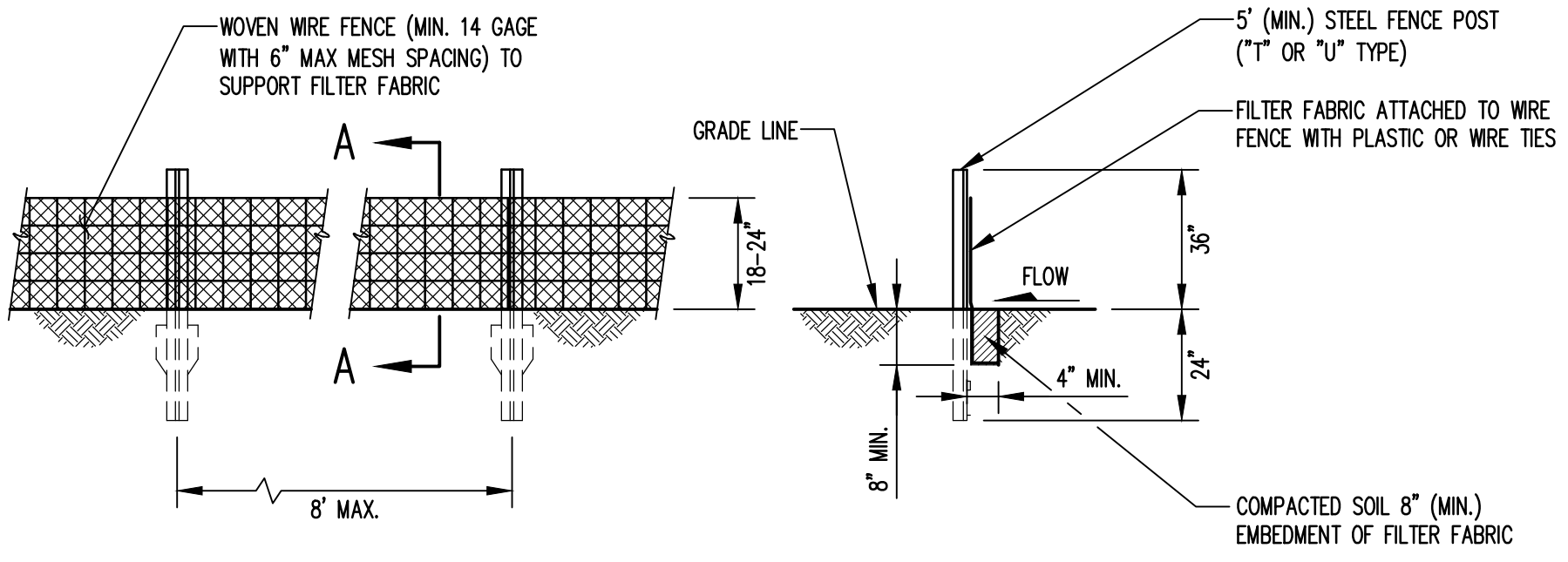
DRAINAGE CHANNEL SCHEDULE				
DRAINAGE CHANNEL NO.	B	M	D	LINING
DC-1 & DC-2	10	2	1.5	GRASS
DC-3	3	2	1	GRASS

**GRASS LINED CHANNELS**



**GENERAL EROSION AND SEDIMENTATION CONTROL NOTES**

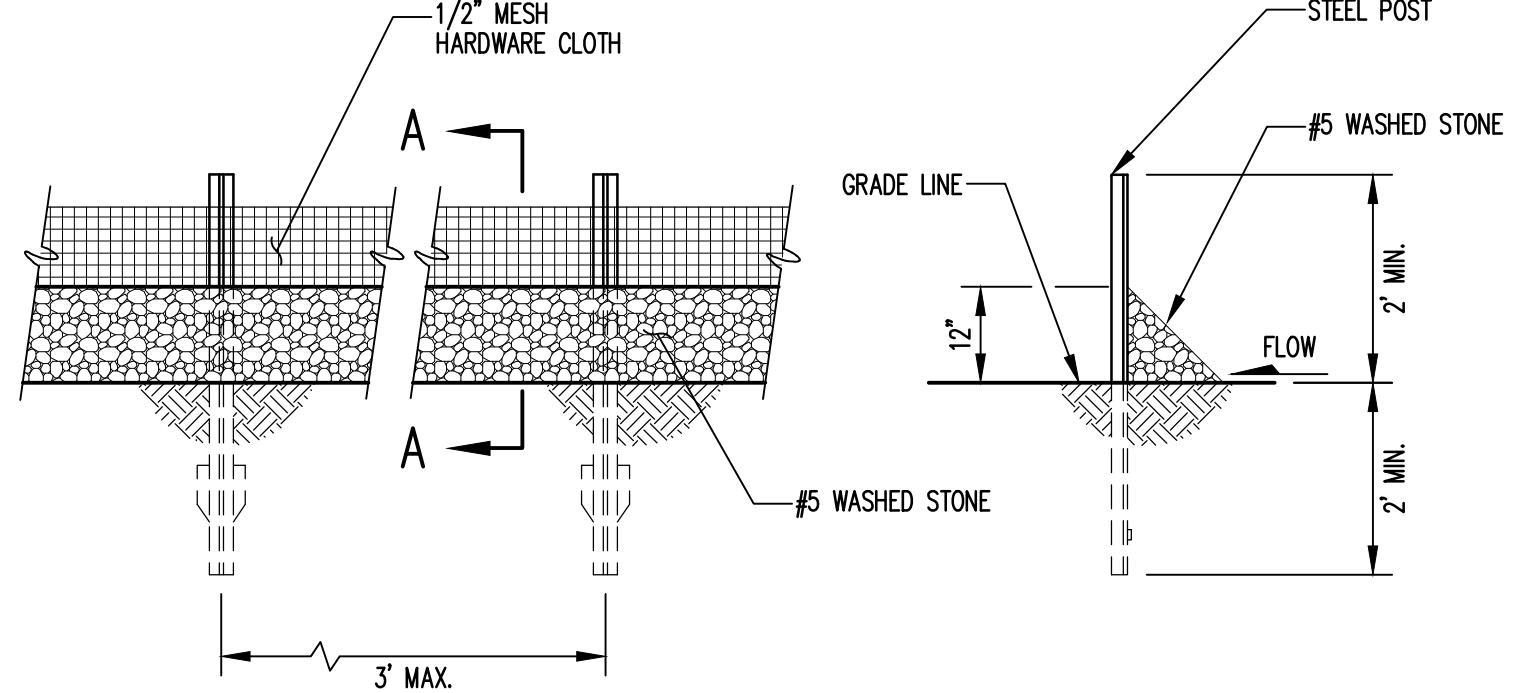
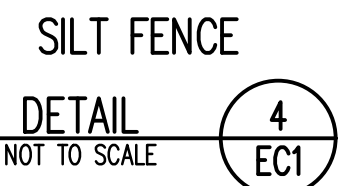
- ALL EROSION AND SEDIMENTATION CONTROL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL AS WELL AS APPLICABLE REGULATIONS.
- AN EROSION AND SEDIMENT CONTROL (E&S) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES OCCUR.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ESTABLISHED PRIOR TO, OR AS SOON AS PRACTICAL THEREAFTER, ANY LAND CLEARING OR CONSTRUCTION ACTIVITIES MAY BEGIN. THE CONTRACTOR SHALL FOLLOW THE FOLLOWING SCHEDULE:
  - FLAG THE CLEARING LIMITS AND IDENTIFY ANY TREE PROTECTION AREAS WITH THE OWNER.
  - INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT (WHERE NECESSARY).
  - CLEAR THE VEGETATED PORTION OF THE SITE AND INSTALL SILT AND STONE FILTER FENCING (WHERE REQUIRED) PRIOR TO STRIPPING/GRUBBING.
  - ONLY STRIP/GRUB AREAS REQUIRED FOR INSTALLATION OF STRUCTURES, BERMS AND DRAINAGE CHANNELS. OTHER AREAS WILL BE STRIPPED/GRUBBED ONCE SEDIMENT BASINS ARE COMPLETED.
  - COMPLETE INSTALLATION OF SEDIMENT BASINS.
  - PERFORM EARTHWORK AS REQUIRED FOR CONSTRUCTION. INSTALL DRAINAGE AND EROSION AND SEDIMENTATION CONTROL MEASURES AS AREAS ARE BROUGHT TO GRADE.
  - PERFORM FINE GRADING AND ESTABLISH PERMANENT VEGETATION ON COMPLETED AREAS.
  - AFTER STABILIZATION, REMOVE SILT FENCING AND OTHER TEMPORARY MEASURES AS DIRECTED BY THE OWNER AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED ACCORDING TO THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF GREATER THAN 1 INCH. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED AS SPECIFIED IN THE CONSTRUCTION DETAILS ON THIS PLAN. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - THE REMOVAL AND SATISFACTORY DISPOSAL OF TRAPPED OR DEPOSITED SEDIMENTS FROM BASINS, TRAPS, BARRIERS, FILTERS, AND/OR DRAINAGE FEATURES/DEVICES.
  - REPLACEMENT OF FILTER FABRICS USED FOR SILT FENCES UPON LOSS OF EFFICIENCY; AND
  - REPLACEMENT OF ANY OTHER COMPONENTS WHICH ARE DAMAGED OR CANNOT SERVE THE INTENDED USE.
- SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF THE SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:
  - ALL PERIMETER DICES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3H:1V) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
  - ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
  - BASINS, TRAPS, CHANNELS, AND DIVERSIONS SHALL BE LINED WITH ANCHORED ROLLED EROSION PRODUCTS OR RIP RAP AND/OR VEGETATED UPON CONSTRUCTION.
  - PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE ESTABLISHED WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
- A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN, THE CERTIFICATE OF APPROVAL, AND LETTER OF APPROVAL ARE TO BE KEPT ON SITE (BY OWNER).
- THE NPDES PERMIT (WITH A MINIMUM OF 30 DAYS OF SELF-INSPECTION REPORTS) ARE TO BE KEPT ON SITE AND A RAIN GAUGE IS TO BE INSTALLED AND MAINTAINED FOR RECORD KEEPING UNTIL THE PROJECT IS CLOSED OUT BY THE LAND QUALITY SECTION REGIONAL OFFICE.
- UPON PROJECT COMPLETION, THE PERMITTEE SHALL CONTACT DEMR TO CLOSE OUT THE EROSION AND SEDIMENTATION CONTROL PLAN.



**ELEVATION**

**SECTION A-A**

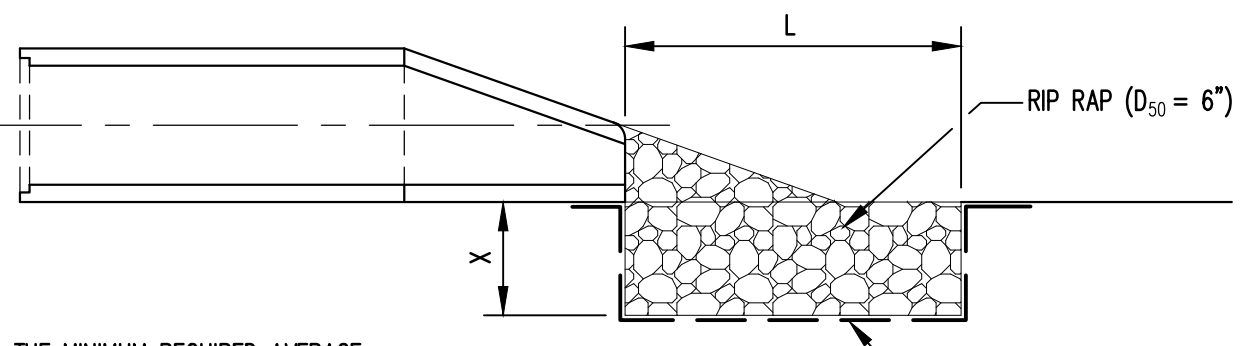
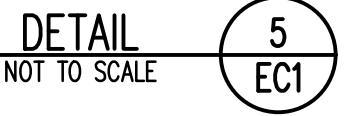
- NOTE:**
- PLACE 10' MIN. LENGTH OF STONE FILTER FENCE AT LOW POINTS ALONG SILT FENCE AND WHERE DIRECTED BY THE ENGINEER TO RELEASE WATER. SEE DETAIL 5 (EC1).



**ELEVATION**

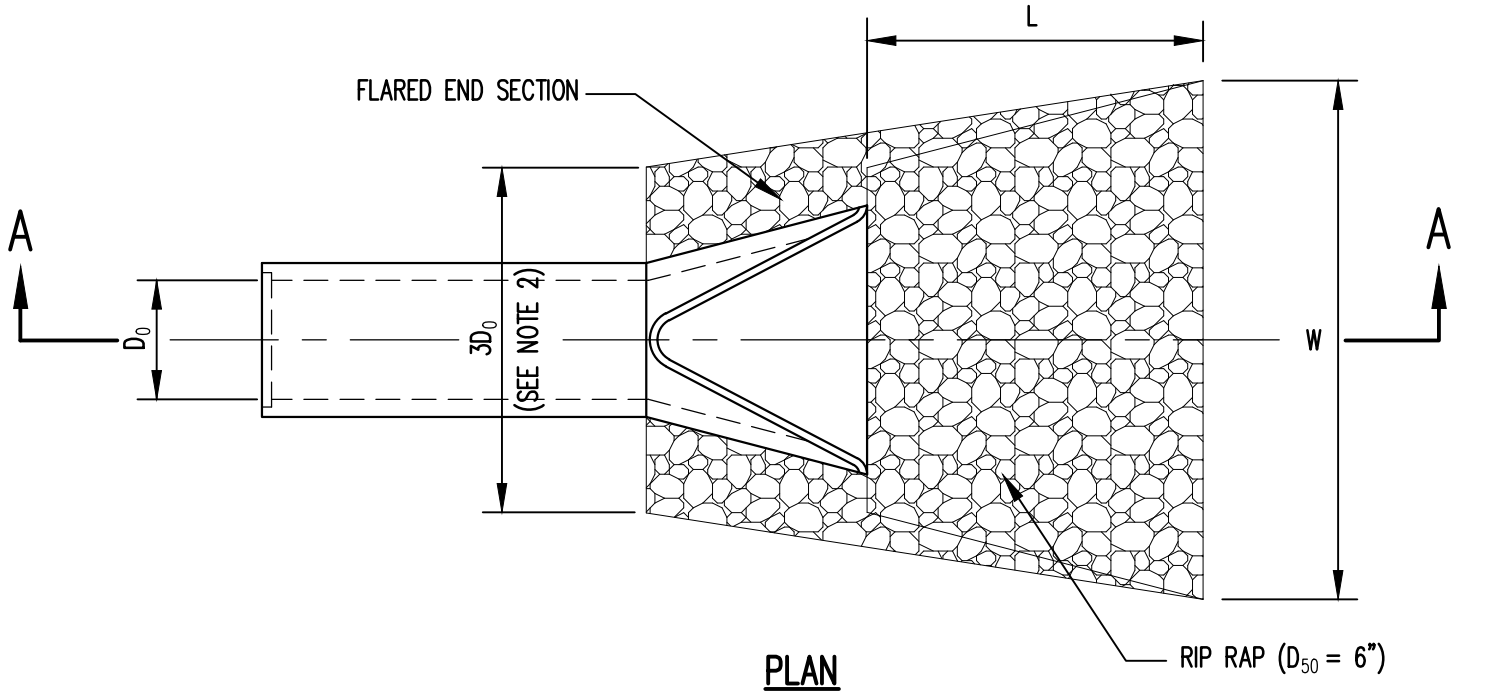
**SECTION A-A**

**STONE FILTER FENCE**



**NOTE:**  
1. D<sub>50</sub> REFERS TO THE MINIMUM REQUIRED AVERAGE STONE SIZE.

**SECTION A-A**



**PLAN**

**RIP RAP OUTLET PROTECTION**



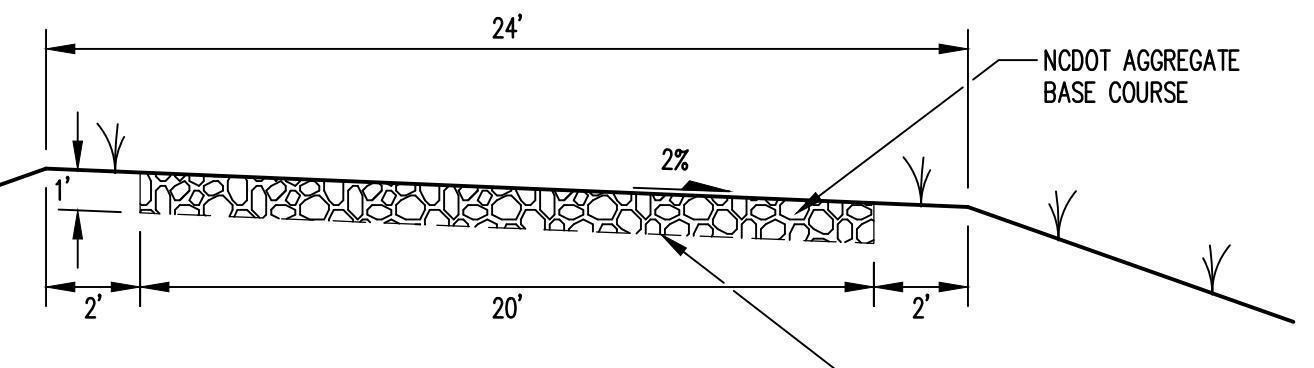
RIP RAP OUTLET PROTECTION SCHEDULE					
PIPE	D <sub>0</sub> (FT)	L (FT)	W (FT)	D <sub>50</sub> (FT)	X (FT)
C-1	1	6	7	0.5	2.0

**GENERAL NOTES**

- THE SITE IS REQUIRED TO OBTAIN A NPDES CONSTRUCTION STORMWATER CERTIFICATE OF COVERAGE (COC) PRIOR TO INITIATING THE PROJECT.
- THE SITE IS REQUIRED TO FILE A NOTICE OF TERMINATION FOR THE COC AFTER THE PROJECT IS FINISHED.

CULVERT SCHEDULE						
NO.	SIZE	LENGTH (FT)	INV. IN (FEET)	INV. OUT (FEET)	SLOPE (%)	REMARKS
C-1	12" RCP (CLASS III)	45	97.3	97.0	5.6	

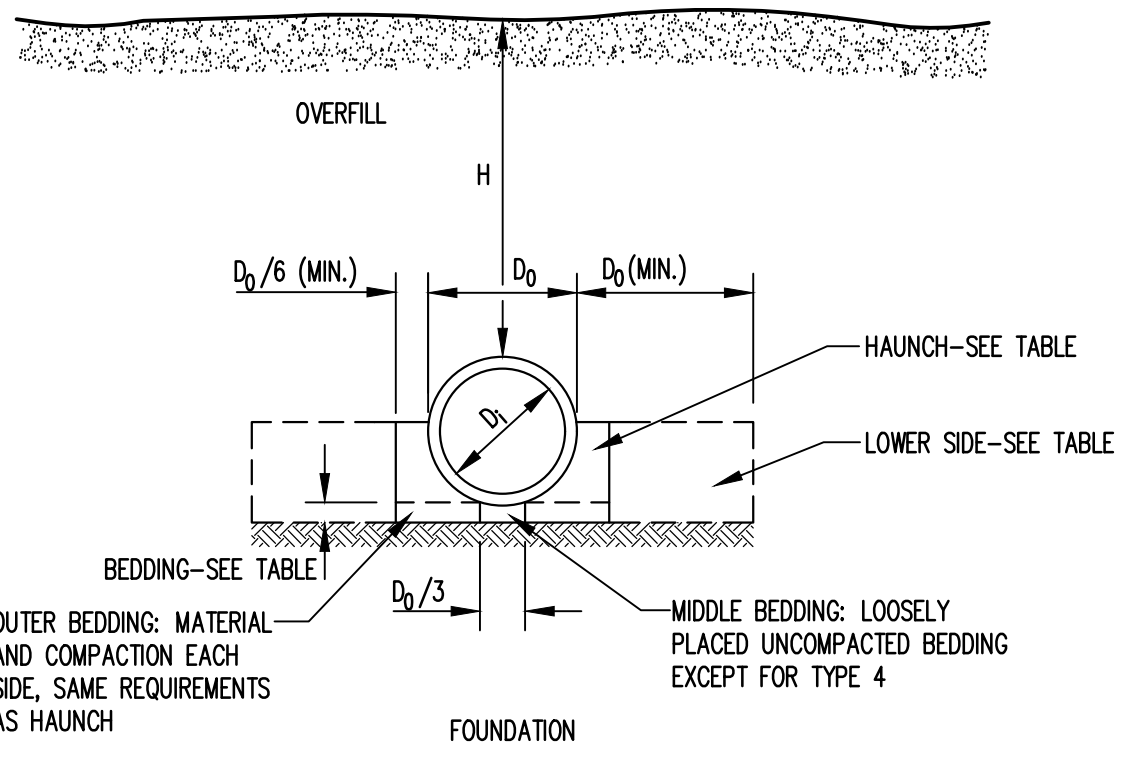
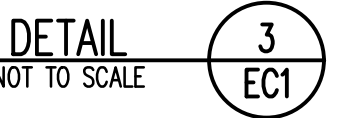
STANDARD EMBANKMENT INSTALLATION SOILS AND MINIMUM COMPACTION REQUIREMENTS			
INSTALLATION TYPE	BEDDING THICKNESS	HAUNCH AND OUTER BEDDING	LOWER SIDE
TYPE 1	D <sub>0</sub> /24"(600mm) MINIMUM, NOT LESS THAN 3"(75mm). IF ROCK FOUNDATION, USE D <sub>0</sub> /12"(300mm) MINIMUM, NOT LESS THAN 6"(150mm).	95% SW, SP, GW, GP	90% SW, SP, GW, GP; 95% ML, SM, GM OR GC, SC WITH <20% PASSING NO.200 SIEVE; OR 100% CL, MH, SC, GC, CH.
TYPE 2	D <sub>0</sub> /24"(600mm) MINIMUM, NOT LESS THAN 3"(75mm). IF ROCK FOUNDATION, USE D <sub>0</sub> /12"(300mm) MINIMUM, NOT LESS THAN 6"(150mm).	90% SW, SP, GW, GP; OR 95% ML, SM, GM OR GC, SC WITH <20% PASSING NO.200 SIEVE	85% SW, SP, GW, GP; 90% ML, SM, GM OR GC, SC WITH <20% PASSING NO.200 SIEVE; OR 95% CL, MH, SC, GC, CH.
TYPE 3	D <sub>0</sub> /24"(600mm) MINIMUM, NOT LESS THAN 3"(75mm). IF ROCK FOUNDATION, USE D <sub>0</sub> /12"(300mm) MINIMUM, NOT LESS THAN 6"(150mm).	85% SW, SP, GW, GP; 90% ML, SM, GM OR GC, SC WITH <20% PASSING NO.200 SIEVE; OR 95% CL, MH, SC, GC, CH	85% SW, SP, GW, GP; 90% ML, SM, GM OR GC, SC WITH <20% PASSING NO.200 SIEVE; OR 95% CL, MH, SC, GC, CH.
TYPE 4	NO BEDDING REQUIRED, EXCEPT IF ROCK FOUNDATION, USE D <sub>0</sub> /12"(300mm) MINIMUM, NOT LESS THAN 6"(150mm).	NO COMPACTION REQUIRED, EXCEPT IF CL, MH, SC, GC, CH USE 85%	NO COMPACTION REQUIRED, EXCEPT IF CL, MH, SC, GC, CH USE 85%



**NOTES:**

- AGGREGATE BASE COURSE SHALL MEET THE GRADING REQUIREMENTS IN NCDOT SECTION 520 AND BE OBTAINED FROM AN APPROVED NCDOT SOURCE.
- AGGREGATE SHALL BE PLACED AND COMPACTED IN 8-INCH THICK (N-PLACE) LIFTS TO 100 PERCENT ITS STANDARD PROCTOR MAXIMUM DRY DENSITY.
- GEOTEXTILE SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 180 LBS, MINIMUM PUNCTURE RESISTANCE OF 75 LBS, TRAPEZOIDAL TEAR OF 75 LBS, AND AOS OF LESS THAN 0.6 MM.

**ALL-WEATHER ACCESS ROAD**



**CONCRETE PIPE INSTALLATION**



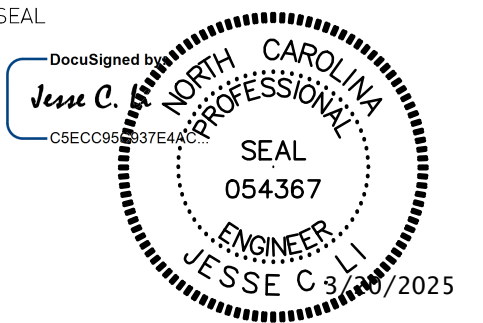
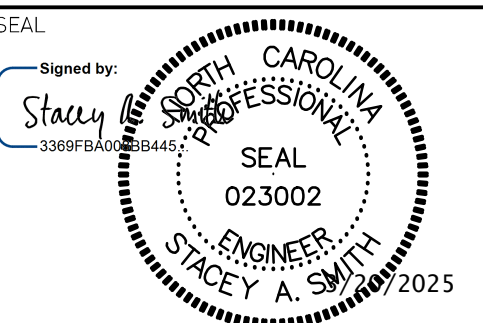
**NOTES:**

- COMPACTION AND SOIL SYMBOLS (95% SW) REFER TO SW SOIL MATERIAL (USCS CLASSIFICATION) WITH A MINIMUM STANDARD PROCTOR COMPACTION (ASTM D 698) OF 95%.
- SOIL IN THE OUTER BEDDING, HAUNCH, AND LOWER SIDE ZONES, EXCEPT WITHIN D<sub>0</sub>/3 FROM THE PIPE SPRINGLINE, SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS THE MAJORITY OF THE SOIL IN THE OVERFILL ZONE.
- SUBTRENCHES:
  - A SUBTRENCH IS DEFINED AS A TRENCH WITH ITS TOP BELOW FINISHED GRADE BY MORE THAN 0.1H OR, FOR ROADWAYS, ITS TOP IS AT AN ELEVATION LOWER THAN 1'(0.3m) BELOW THE BOTTOM OF THE PAVEMENT BASE MATERIAL.
  - THE MINIMUM WIDTH OF A SUBTRENCH SHALL BE 1.33 D<sub>0</sub> OR WIDER IF REQUIRED FOR ADEQUATE SPACE TO ATTAIN THE SPECIFIED COMPACTION IN THE HAUNCH AND BEDDING ZONES.
  - FOR SUBTRENCHES WITH WALLS OF NATURAL SOIL, ANY PORTION OF THE LOWER SIDE ZONE IN THE SUBTRENCH WALL SHALL BE AT LEAST AS FIRM AS AN EQUIVALENT SOIL PLACED TO THE COMPACTION REQUIREMENTS SPECIFIED FOR THE LOWER SIDE ZONE AND AS FIRM AS THE MAJORITY IF THE SOIL IN THE OVERFILL ZONE, OR SHALL BE REMOVED AND REPLACED WITH SOIL COMPACTED TO THE SPECIFIED LEVEL.

**FOR BIDDING**  
**NOT FOR CONSTRUCTION**

PREPARED FOR:  
**CUMBERLAND COUNTY**  
**SOLID WASTE**  
**MANAGEMENT DEPARTMENT**  
**FAYETTEVILLE,**  
**NORTH CAROLINA**

PREPARED BY:  
NC LIC. NO. F-1070 (ENGINEERING)  
SC COA NO. C01488  
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**ENGINEERS**  
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REV.	DATE	DESCRIPTION
2	3/25	RE-BID

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PROJECT TITLE:  
**ASSEMBLY COURT**  
**SOLID WASTE**  
**CONVENIENCE CENTER**

DRAWING TITLE:  
**EROSION & SEDIMENTATION**  
**CONTROL DETAILS**  
**(SHEET 1 OF 2)**

DESIGNED	J.C.L.	PROJECT NO.	CUMBERLAND 21-8
DRAWN	J.R.G.	SCALE	AS SHOWN
APPROVED	jcl	DATE	AUG. 2022
FILENAME	CUMBERLAND-D0159		
SHEET NUMBER	11	DRAWING NUMBER	EC1





PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Table with 3 columns: Inspect, Frequency (during normal business hours), and Inspection records must include. Rows include: (1) Rain gauge maintained in good working order; (2) E&SC Measures; (3) Stormwater discharge outfalls (SDOs); (4) Perimeter of site; (5) Streams or wetlands onsite or offsite (where accessible); (6) Ground stabilization measures.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART II, SECTION G, ITEM (4)  
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Table with 2 columns: Item to Document and Documentation Requirements. Rows include: (a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan; (b) A phase of grading has been completed; (c) Ground cover is located and installed in accordance with the approved E&SC plan; (d) The maintenance and repair requirements for all E&SC measures have been performed; (e) Corrective actions have been taken to E&SC measures.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

- (a) Visible sediment deposition in a stream or wetland.
(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).
(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
(d) Anticipated bypasses and unanticipated bypasses.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Table with 2 columns: Occurrence and Reporting Timeframes (After Discovery) and Other Requirements. Rows include: (a) Visible sediment deposition in a stream or wetland; (b) Oil spills and release of hazardous substances per Item 1(b)-(c) above; (c) Anticipated bypasses [40 CFR 122.41(m)(3)]; (d) Unanticipated bypasses [40 CFR 122.41(m)(3)]; (e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)].



CUMBERLAND COUNTY  
SOLID WASTE  
MANAGEMENT DEPARTMENT  
FAYETTEVILLE,  
NORTH CAROLINA

PREPARED FOR: NC LIC. NO. F-1070 (ENGINEERING)  
SC COA NO. C01488

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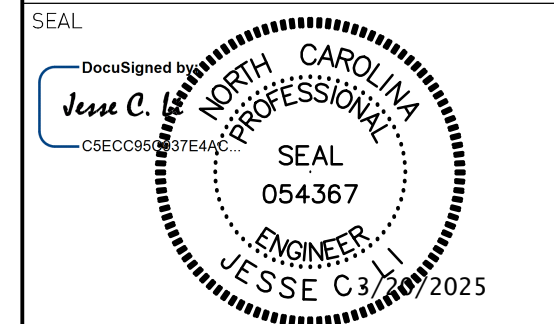
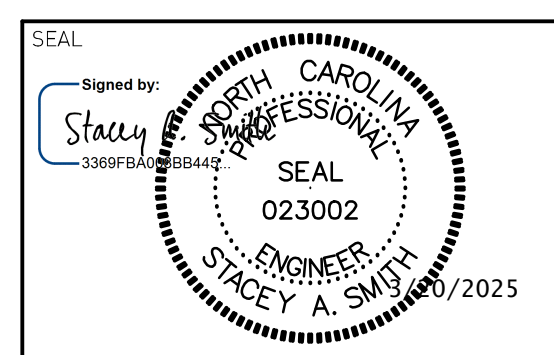


Table with 3 columns: REV., DATE, DESCRIPTION. Row 1: 2, 3/25, RE-BID.

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PROJECT TITLE:  
ASSEMBLY COURT  
SOLID WASTE  
CONVENIENCE CENTER

DRAWING TITLE:  
SELF-INSPECTION,  
RECORDKEEPING,  
AND REPORTING (NCDEQ)

Table with 2 columns: DESIGNED, DRAWN, APPROVED, FILENAME, SHEET NUMBER, PROJECT TITLE, SCALE, DATE, DRAWING NUMBER. Values include: J.C.L., J.B.G., JCL, CUMBERLAND-00159, 14, NCG02, CUMBERLAND 21-8, AS SHOWN, AUG. 2022.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19