

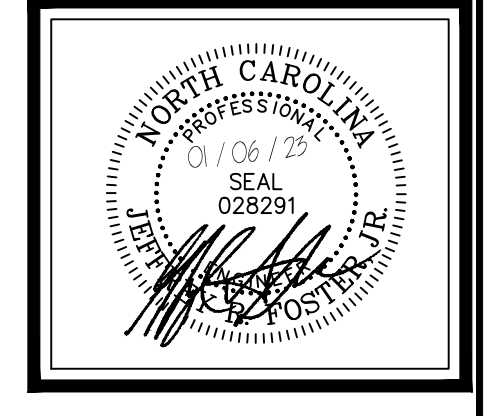
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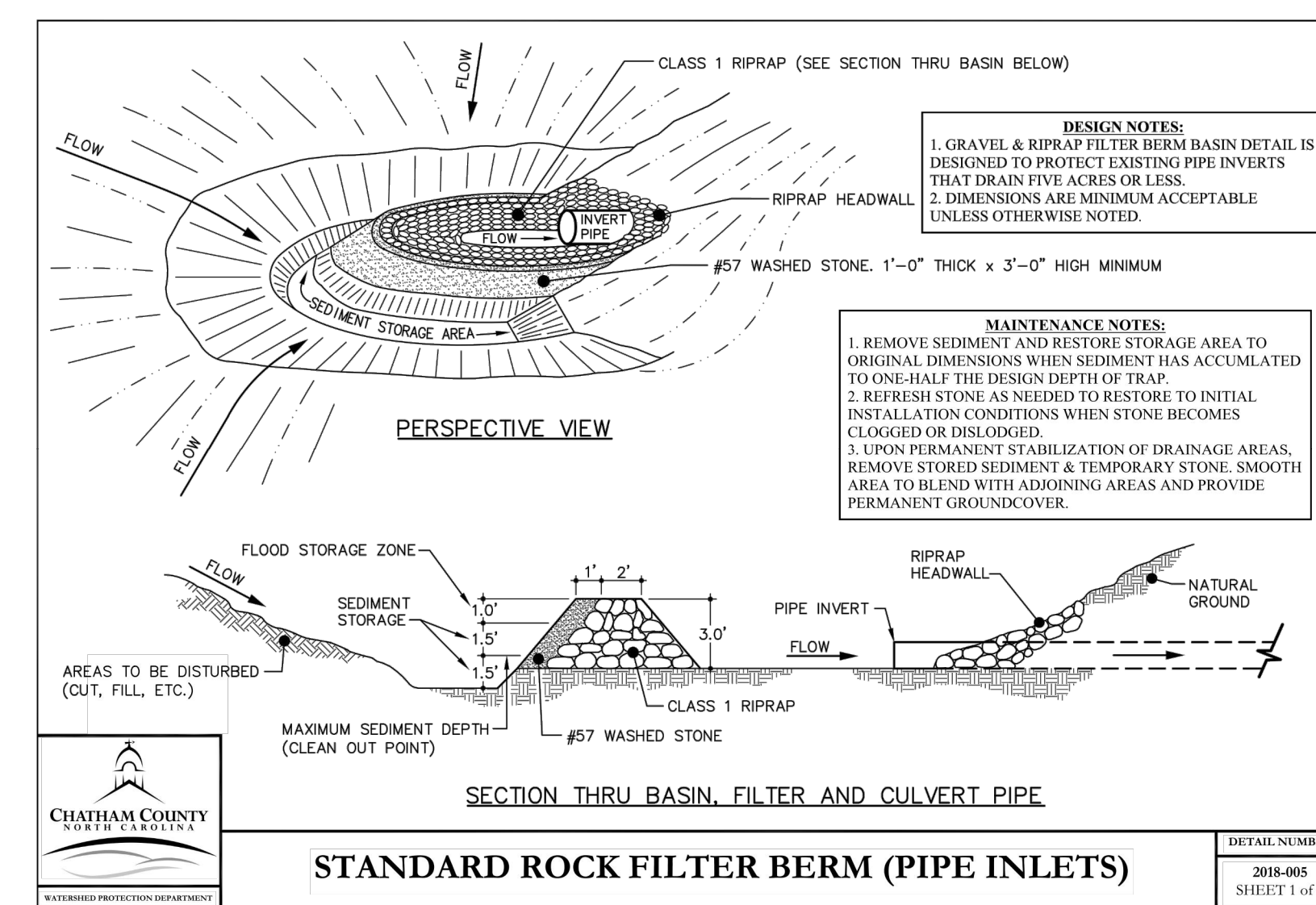
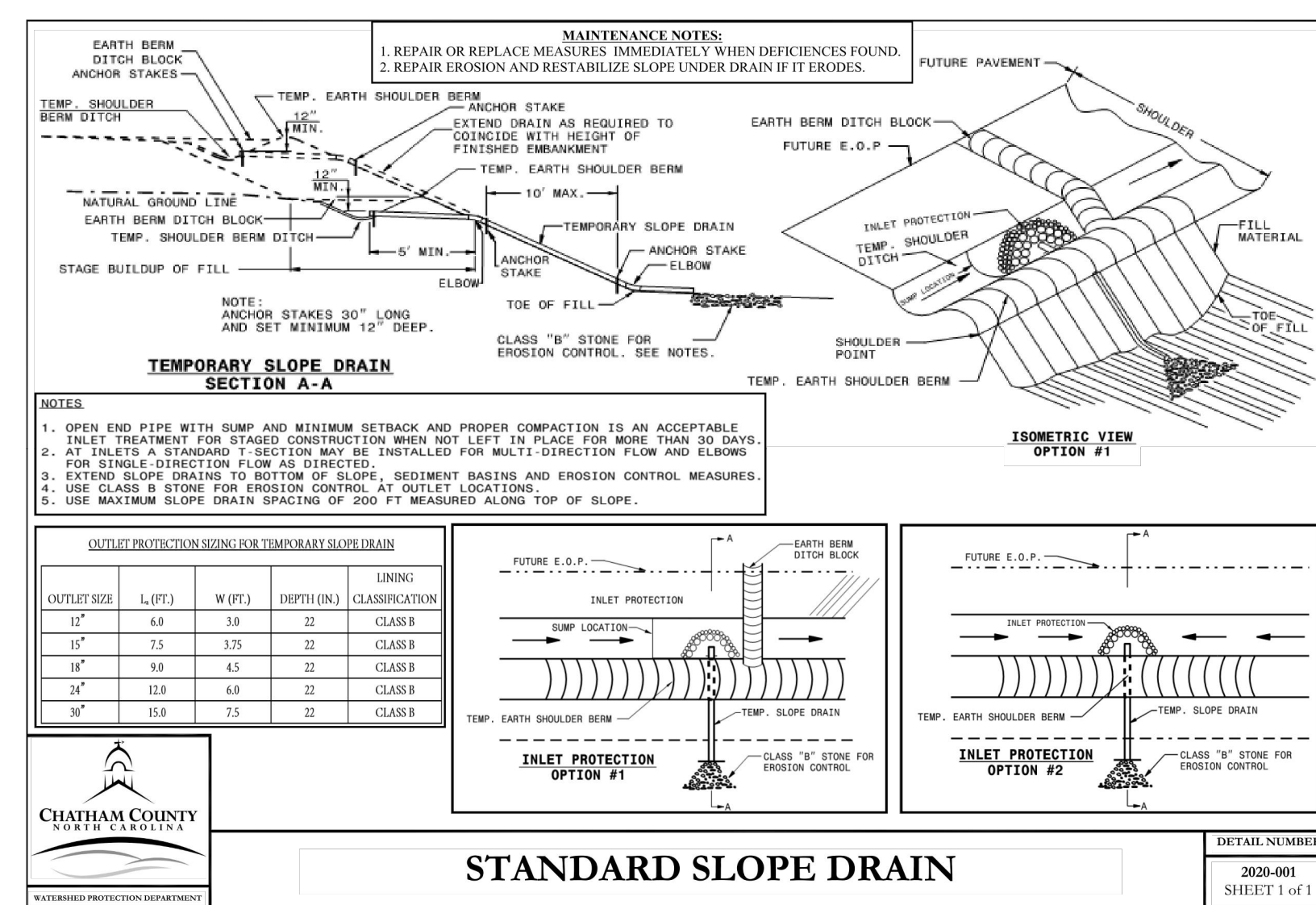
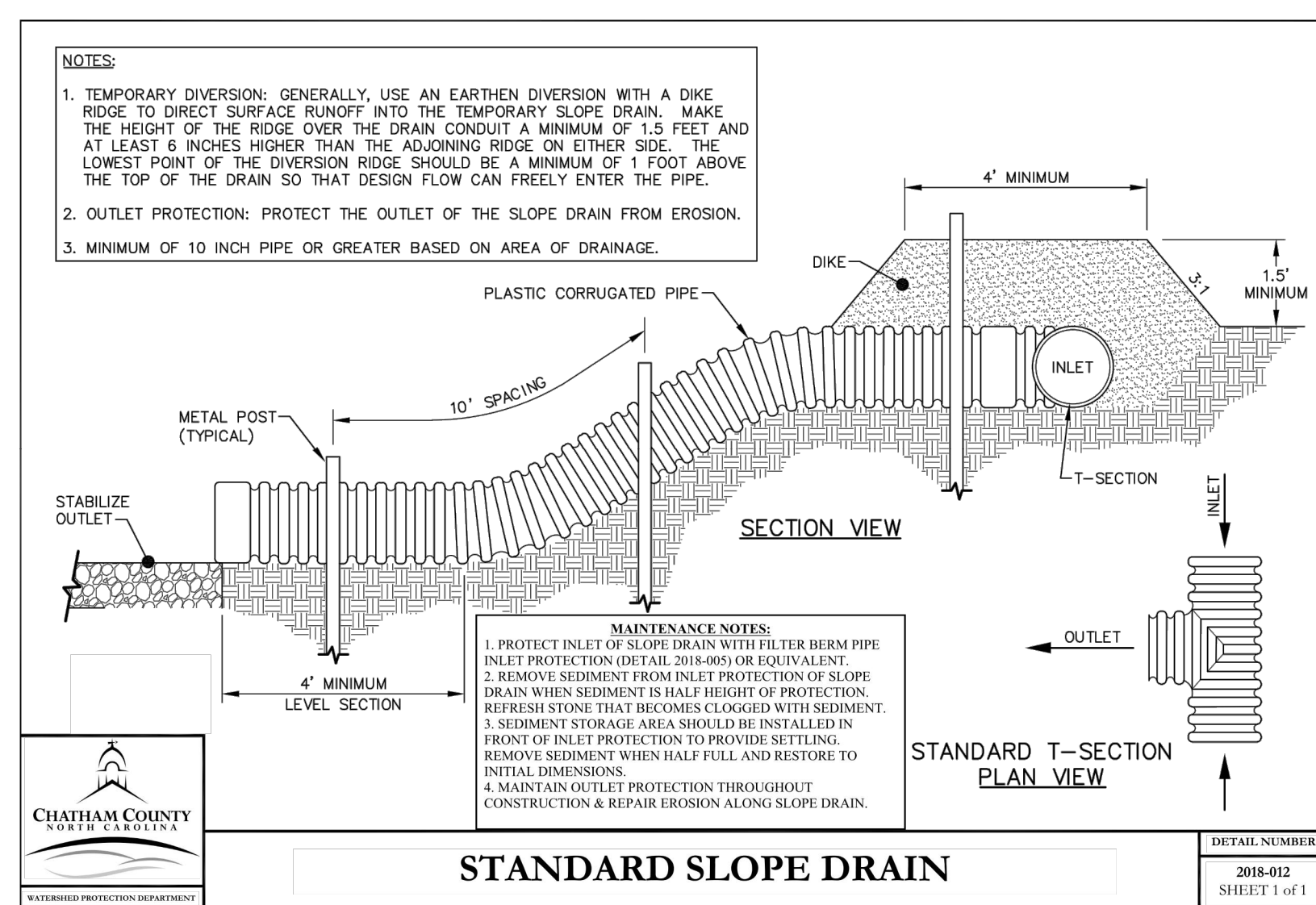
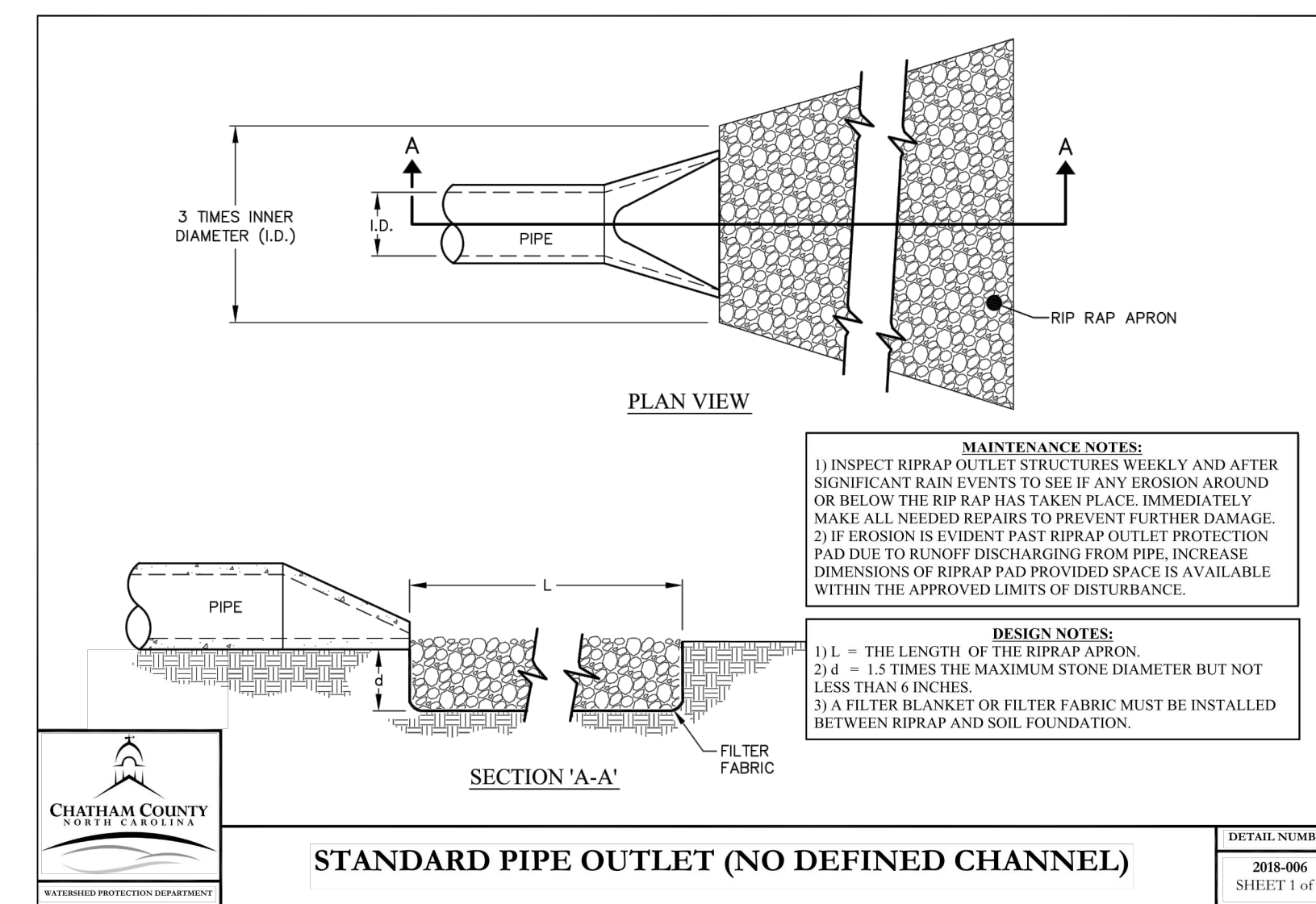
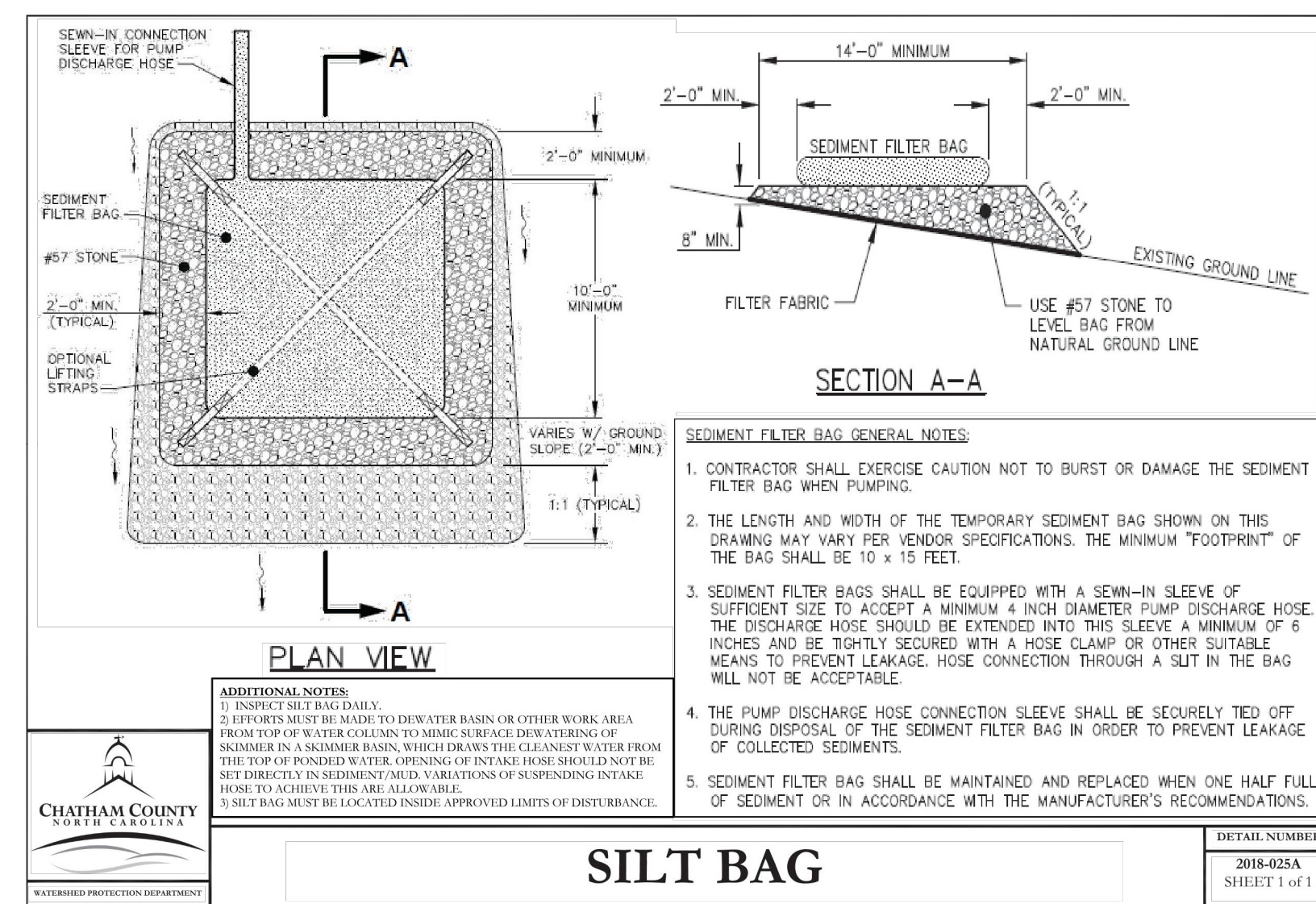
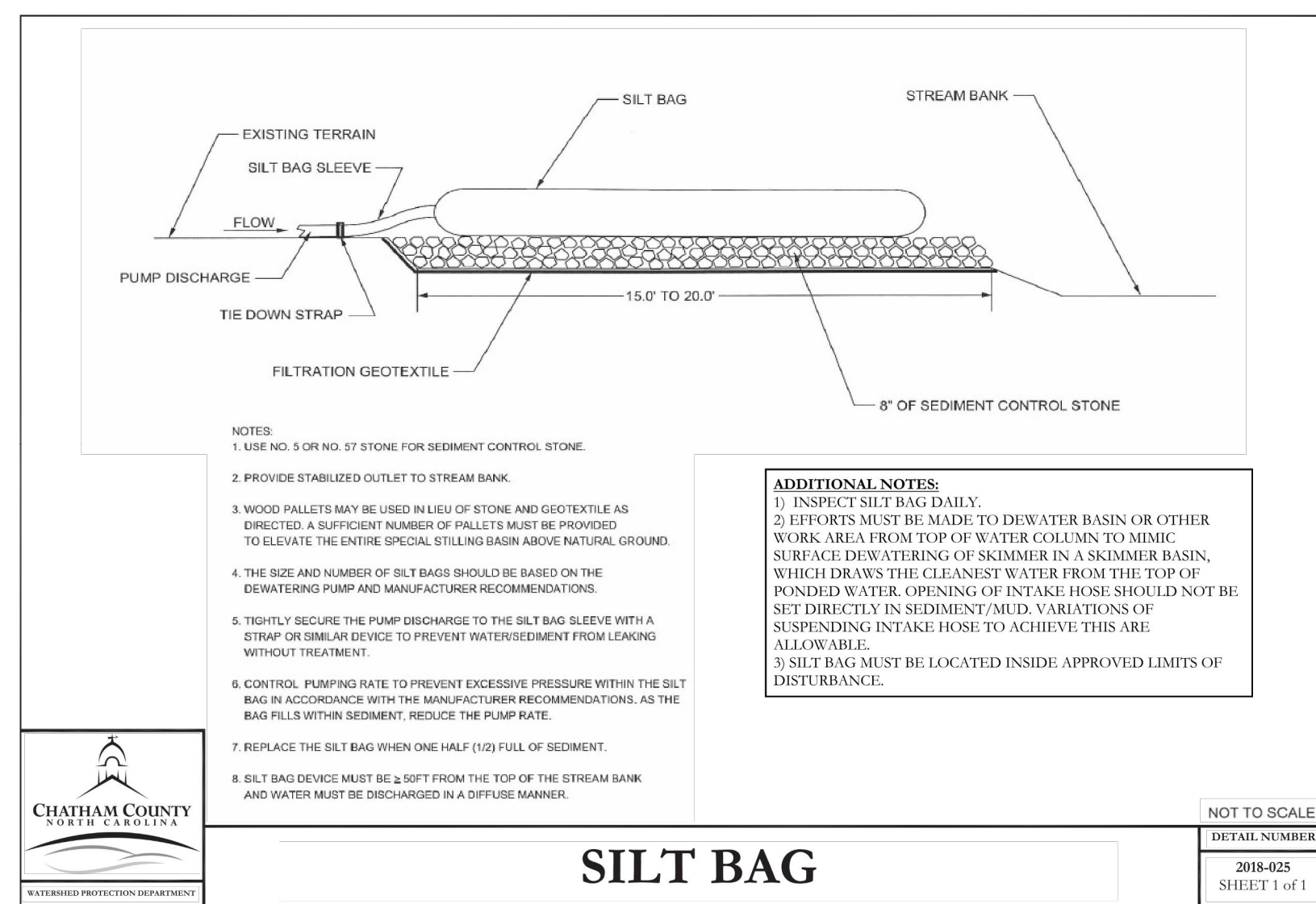
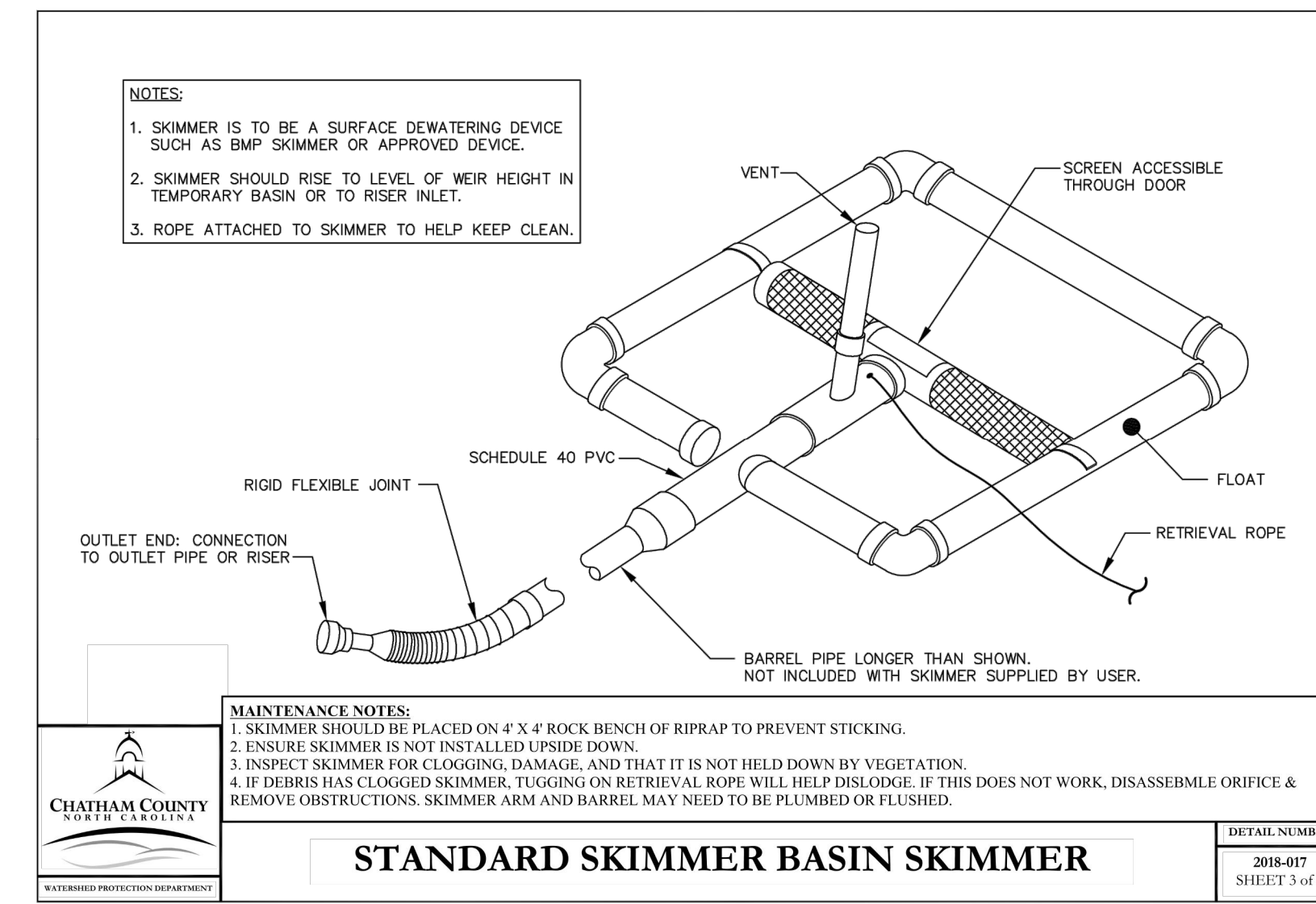
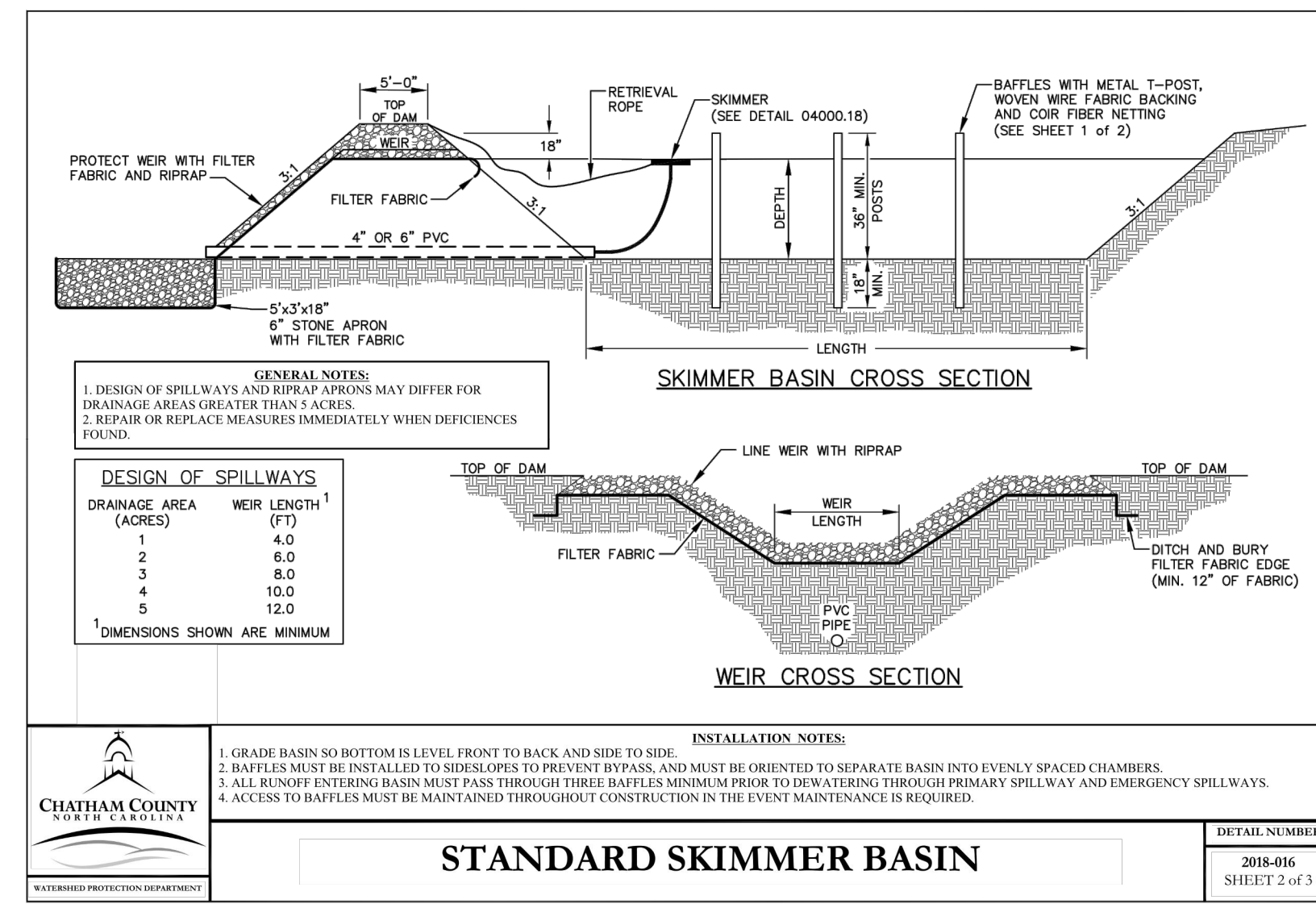
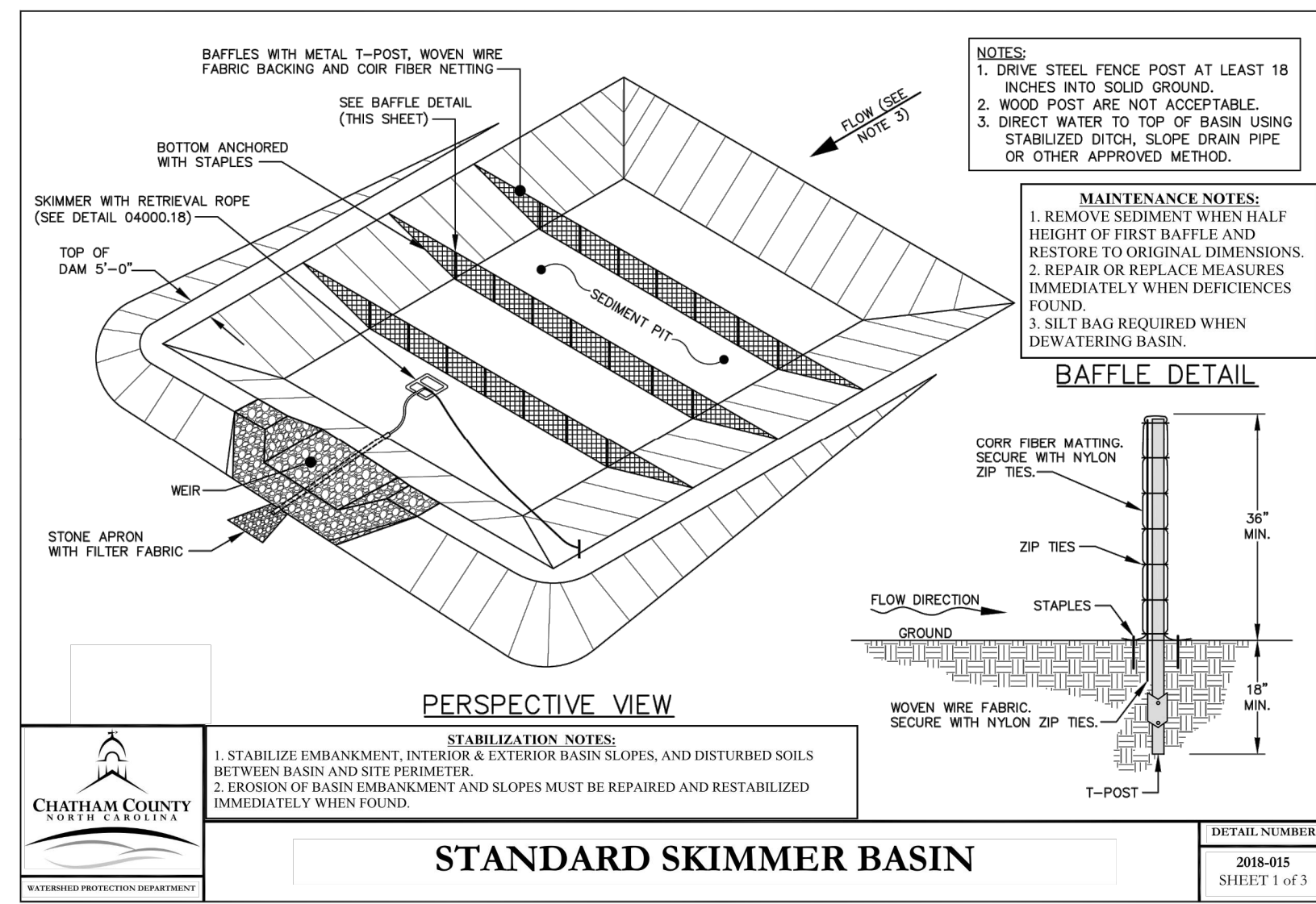
CONSTRUCTION PLANS FOR
 CHAPEL OAKS
 EROSION CONTROL DETAILS
 CHATHAM COUNTY, NORTH CAROLINA

Date:	JANUARY 19, 2022
Scale:	N/A
Drawn:	BCS
Checked:	JRF
Project No.:	215-018
Computer Dwg. Name:	215-018_r391_erosion control details

Sheet No:
C351
 Of 33



FINAL DESIGN



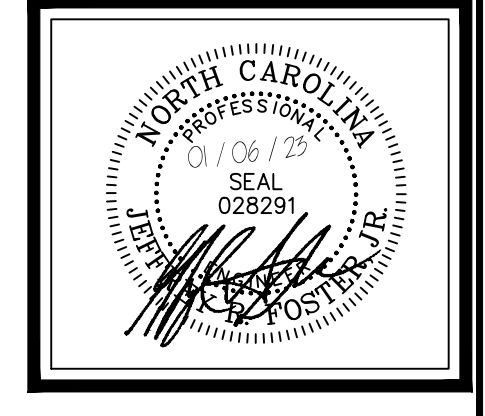
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CONSTRUCTION PLANS FOR
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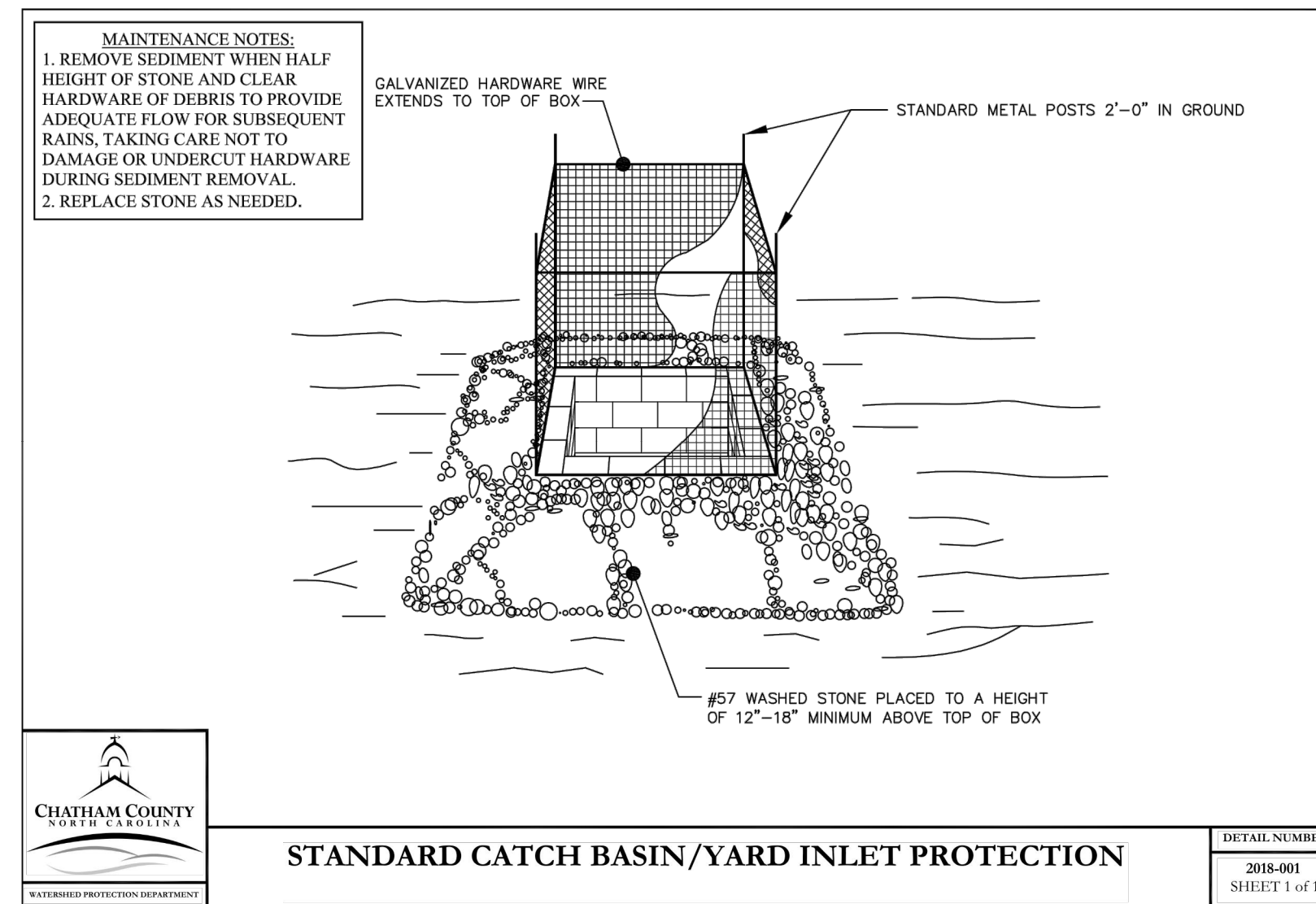
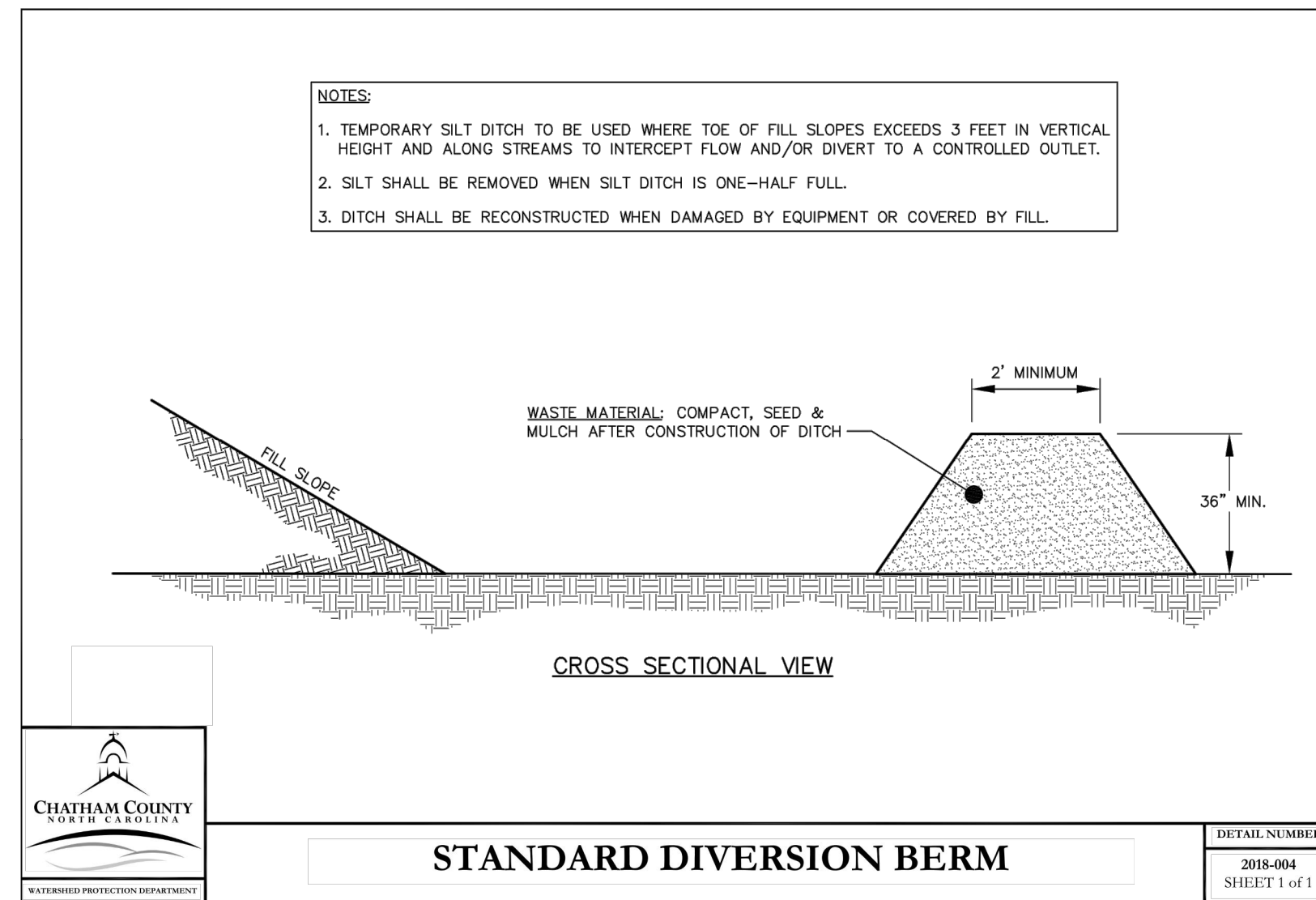
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FINAL DESIGN



Species	Rate (lb/acre)	Dates
Rye (grain)	120	January 1 - May 1
Annual lespedeza (Kobe)	50	
German millet	40	May 1 - August 15
Rye (grain)	120	August 15 - December 31

Soil Amendments
Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A dist with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

TEMPORARY SEEDING/MULCHING SPECIFICATIONS

DETAIL NUMBER: 2018-020
SHEET 1 of 1

ALL DISTURBED AREAS	
March 1 - August 31	September 10 - February 28
50# Tall Fescue	50# Tall Fescue
10# Centipede	10# Centipede
25# Bermudagrass (hulled)	35# Bermudagrass (unhulled)
500# Fertilizer	500# Fertilizer
4000# Limestone	4000# Limestone

WASTE AND BORROW AREAS	
March 1 - August 31	September 10 - February 28
75# Tall Fescue	75# Tall Fescue
25# Bermudagrass (hulled)	25# Bermudagrass (unhulled)
500# Fertilizer	500# Fertilizer
4000# Limestone	4000# Limestone

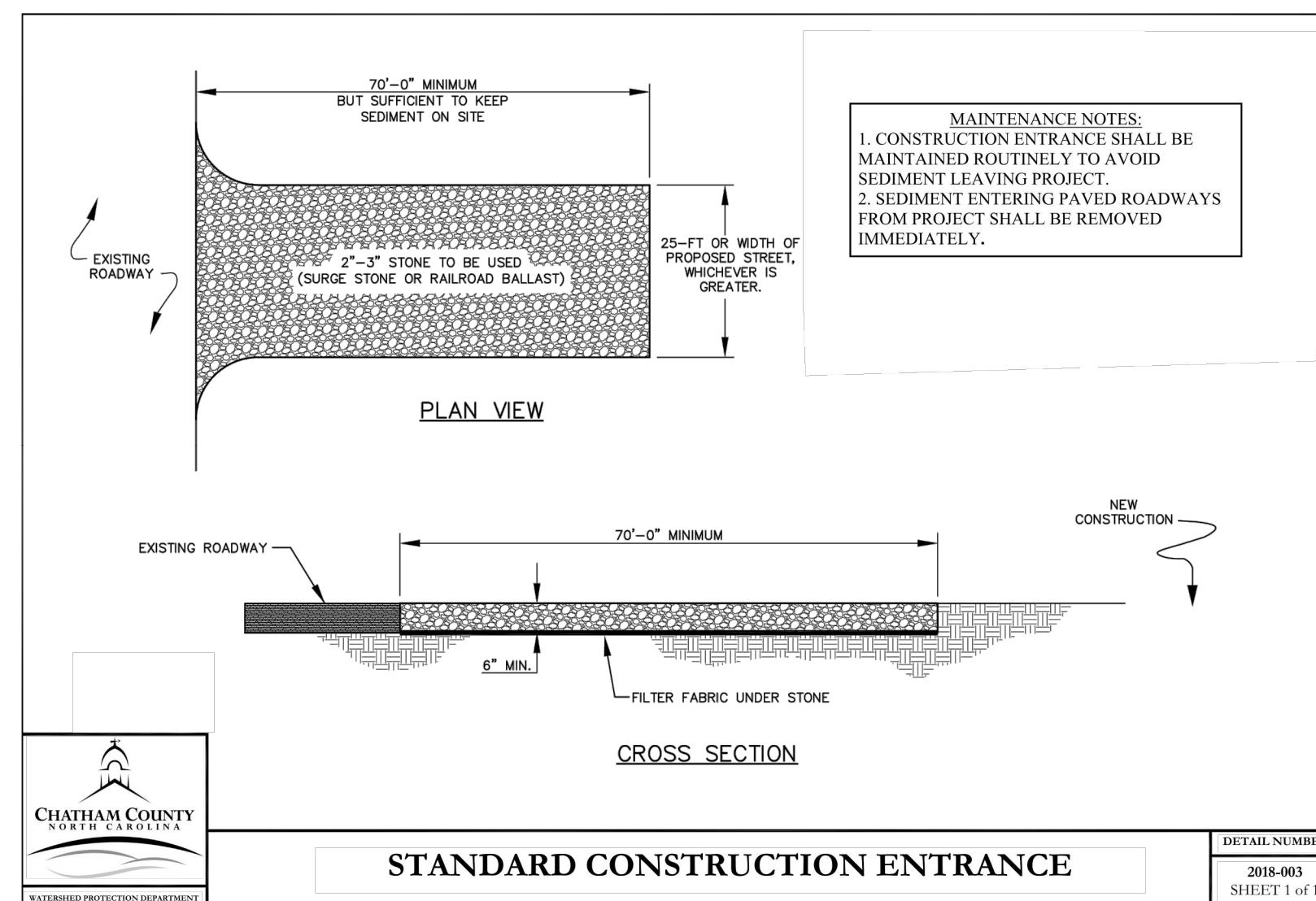
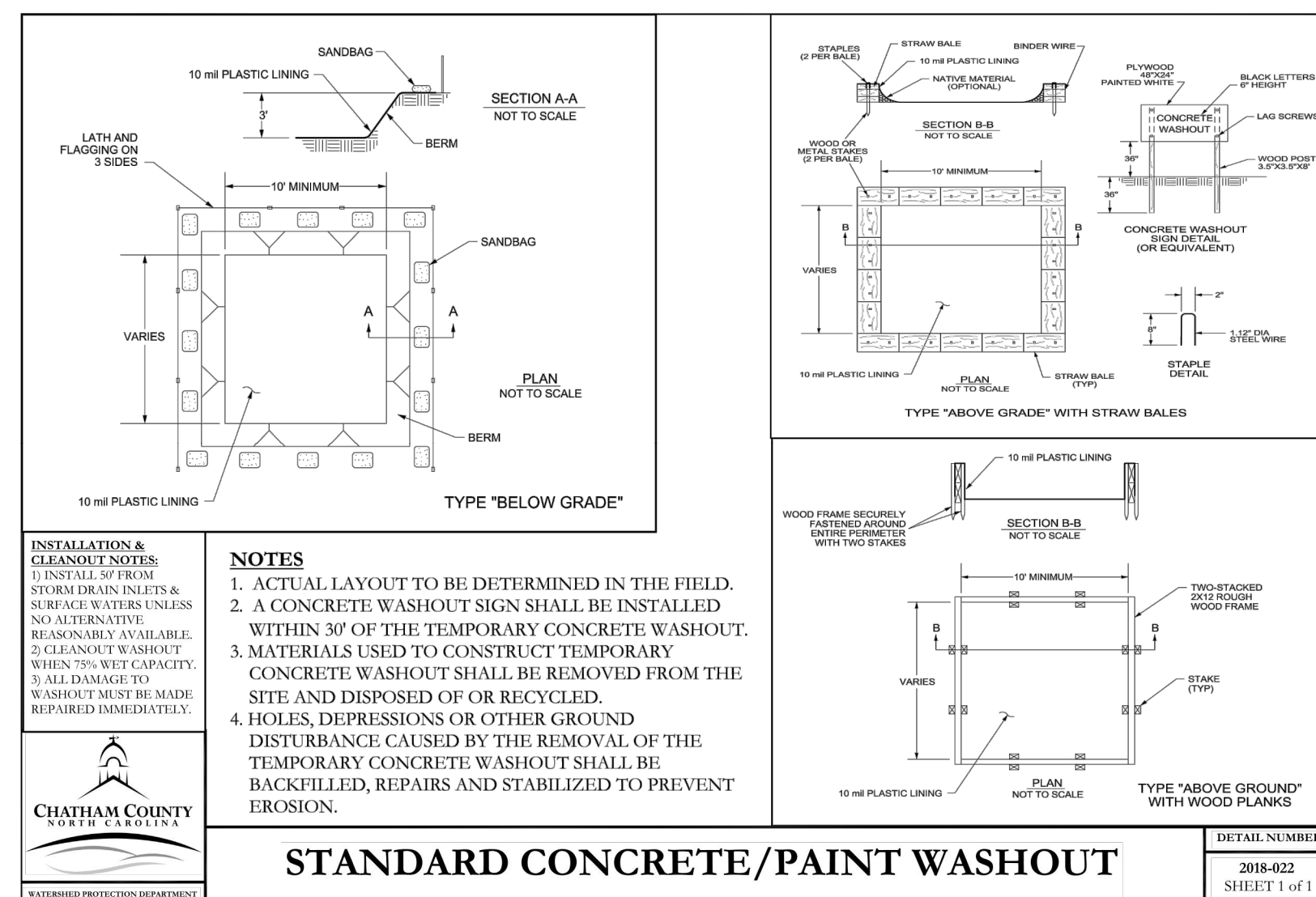
NOTE: 50# of Bahiagrass may be substituted for either Centipede or Bermudagrass only upon request.

On cut and fill slopes 2:1 or steeper Centipede shall be applied at the rate of 5 lb/acre and add 20# of Sericea Lespedeza from January 1 - December 31.

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

PERMANENT SEEDING/MULCHING SPECIFICATIONS

DETAIL NUMBER: 2018-021
SHEET 1 of 1



CONSTRUCTION SEQUENCE

- OBTAIN GRADING PERMIT / FINAL APPROVAL FROM CHATHAM COUNTY WATERSHED PROTECTION.
 - CONTACT THE CHATHAM COUNTY WATERSHED PROTECTION DEPARTMENT TO SET UP A PRE-CONSTRUCTION MEETING PRIOR TO ANY LAND DISTURBANCE WORK PERFORMED.
 - THERE ARE TWO STAGES INDICATED IN ONE PHASE OF DISTURBANCE AND EACH STAGE OF THIS PHASE MUST BE STABILIZED AND APPROVED BY CHATHAM COUNTY WATERSHED PROTECTION PRIOR TO BEGINNING WORK ON THE NEXT STAGE.
 - INSTALL IN ORDER OF THIS SEQUENCE: DELINEATE THE PROPOSED TREELINE/DISTURBED LIMIT LINE AND INSTALL THE TEMPORARY CONSTRUCTION ENTRANCES ALONG WITH ALL PROPOSED SILT FENCING WITH REINFORCED OUTLETS THROUGHOUT THE ENTIRE PROJECT AREA. ONCE SILT FENCE AND SUPER SILT FENCE REINFORCED OUTLETS ARE IN PLACE, EXISTING STRUCTURES MAY BE REMOVED.
 - FOR STAGE 1, CONTRACTOR SHALL FIRST INSTALL THE CLEAN WATER SWALES AND CLEAN WATER PIPES/STRUCTURE SYSTEMS AS INDICATED ON THE PLANS. CONTRACTOR SHALL INSTALL ONLY WHEN FORECAST REFLECTS 3-4 DAY OF DRY WEATHER. CONSTRUCT SWALE STARTING FROM DOWNSTREAM END AND STABILIZE WORK WITH RIP RAP AT THE END OF EACH DAY. ONCE CLEAN WATER SWALES ARE INSTALLED AND STABILIZED, CONTRACTOR TO INSTALL THE HORSESHOE INLET PROTECTION ON PIPE SYSTEMS INSTALLED AS PART OF THE CLEAN WATER BYPASS, WHERE INDICATED.
 - BEGIN INSTALLATION OF TEMPORARY SKIMMER BASINS. CLEAR ONLY AS NECESSARY TO ACCESS THESE AREAS AND TO CONSTRUCT THESE DEVICES. SOME PIPES AND INLETS ARE INDICATED IN STG. 1 FOR INSTALLATION TO BETTER FACILITATE ROAD CONSTRUCTION WHILE CAPTURING AND MOVING SEDIMENT LADEN WATER TO BASINS. ONCE THE PREVIOUS MEASURES ARE INSTALLED, CLEAR ONLY AS REQUIRED TO INSTALL TEMPORARY DIVERSION BERMS/ DITCHES TO THE SKIMMER BASINS AND OTHER TEMPORARY MEASURES AS SHOWN ON THE APPROVED PLAN. THE CONTRACTOR SHALL STABILIZE ALL DISTURBED AREAS AND SKIMMER BASINS IMMEDIATELY UPON THEIR CONSTRUCTION. CONTRACTOR TO INSTALL DITCH/ SWALE LINER REQUIREMENTS AT THE TIME OF DITCH/ SWALE INSTALLATION.
 - UPON COMPLETION OF TSB-A27A, BEGIN CONSTRUCTION OF BERM FOR TSB-A27B. TRANSITION FROM TSB-A27A TO TSB-A27B PRIOR TO INSTALLING STRUCTURE SYSTEM "D". THIS TRANSITION IS TO BE COORDINATED WITH THE COWPD FIELD INSPECTION.
 - ALL MEASURES AND DISTURBED AREAS SHALL BE INSTALLED AND INSPECTED FOR COMPLIANCE PRIOR TO COMMENCEMENT OF ANY PROPOSED CLEARING/GRUBBING AND EXCAVATION IN THE RIGHT-OF-WAY OR REMAINDER OF THE SITE.
 - CALL FOR AN INSPECTION FOR COMPLIANCE PRIOR TO ANY ADDITIONAL CLEARING. OBTAIN CERTIFICATE OF COMPLIANCE THROUGH ON-SITE INSPECTION BY ENVIRONMENTAL INSPECTOR.
 - ONCE CERTIFICATE OF COMPLIANCE IS OBTAINED, BEGIN CLEARING AND GRUBBING WHERE INDICATED. DEMOLITION OF EXISTING STRUCTURES MAY BEGIN.
 - ONCE COMPLETE, ALONG WITH CLEARING AND GRUBBING OF DISTURBED AREAS AS SHOWN ON APPROVED PLAN, BEGIN EXCAVATION OF ROADWAYS AND INSTALLATION OF SUBSURFACE DRAINAGE AND UTILITIES. INSTALL ADDITIONAL INLET PROTECTION DEVICES AS REQUIRED AND/OR SHOWN. ONCE SUBSURFACE DRAINAGE IS INSTALLED AND OPERATIONAL AND APPROVAL HAS BEEN OBTAINED FROM CHATHAM COUNTY, TEMPORARY SKIMMER BASINS TSB-B11 AND TSB-B21 CAN BE DECOMMISSIONED, THE AREA GRADED, AND THE SLOPES STABILIZED. SEED AND MULCH ALL DENUDEED AREAS WITHIN 14 WORKING DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION. ADJUST / MAINTAIN POSITIVE GRADE ON ALL TEMPORARY DITCHES/SWALES TO APPROPRIATE TREATMENT DEVICES AS REQUIRED.
 - REQUEST FINAL APPROVAL BY CHATHAM COUNTY INSPECTOR. IF THE INSPECTOR IS SATISFIED WITH UPSTREAM PERMANENT GROUND COVER, DECOMMISSIONING OF THE TEMPORARY SKIMMER BASINS MAY BEGIN. FOR SKIMMER BASINS TO BE CONVERTED TO SCM'S, THAT WORK MAY BEGIN ONCE THE BASINS HAVE BEEN DEWATERED VIA SILT BAGS. EXCESS MATERIAL FROM POND EXCAVATION IS TO BE PLACED IN THE EXISTING STOCKPILE LOCATIONS. ONCE EXCAVATION IS COMPLETE, THE STOCKPILES ARE TO BE SEEDED WITH SLOPE PROTECTION ADDED. THESE STOCKPILES WILL BE AVAILABLE FOR USE BY THE SITE CONTRACTOR FOR INDIVIDUAL LOT GRADING AS REQUIRED. NO MATERIAL IS EXPECTED TO REMAIN ONCE THE PROJECT HAS BEEN COMPLETED.
 - TEMPORARY BASINS TO BE DEWATERED WITH SILT BAGS. CONTACT CHATHAM COUNTY INSPECTOR FOR AN INSPECTION PRIOR TO REMOVING TEMPORARY EROSION CONTROL DEVICES. ONCE THE SITE IS PERMANENTLY STABILIZED, BEGIN REMOVING TEMPORARY EROSION CONTROL MEASURES SUCH AS WATTLES, TEMPORARY DITCHES, SILT FENCE, SILT FENCE OUTLETS, AND OTHER TEMPORARY MEASURES. ONCE THE NEED FOR THE SKIMMER BASINS IS COMPLETE AND READY FOR CONVERSION TO WET POND SCMs, DOWNSLOPE TEMPORARY MEASURES SHALL REMAIN IN PLACE UNTIL SUCH TIME THAT THE CONVERSION IS COMPLETE AND THE SCM STABILIZED. REMOVAL OF TEMPORARY MEASURES TO BE COORDINATED WITH THE ENVIRONMENTAL INSPECTOR.
 - AFTER SITE STABILIZATION HAS OCCURRED, REQUEST A FINAL INSPECTION BY ENVIRONMENTAL INSPECTOR TO CLOSE OUT LAND-DISTURBING PERMIT.
- *CONTRACTOR TO REESTABLISH TEMPORARY DIVERSION SWALES AT THE END OF EACH DAY TO ENSURE DRAINAGE TO THE APPROPRIATE STRUCTURE.

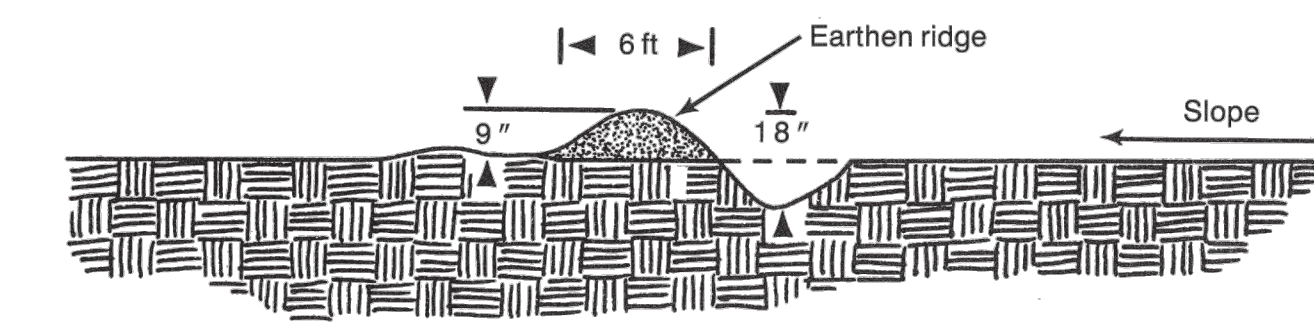


Figure 6.23b Section view of a water bar.

Maintenance Periodically inspect right-of-way diversions for wear and after every heavy rainfall for erosion damage. Immediately remove sediment from the flow area, and repair the dike. Check outlet areas, and make timely repairs as needed. When permanent road drainage is established and the area above the temporary right-of-way diversions is permanently stabilized, remove the dike, and fill the channel to blend with the natural ground, and appropriately stabilize the disturbed area.

TEMPORARY WATER BAR



FINAL DESIGN

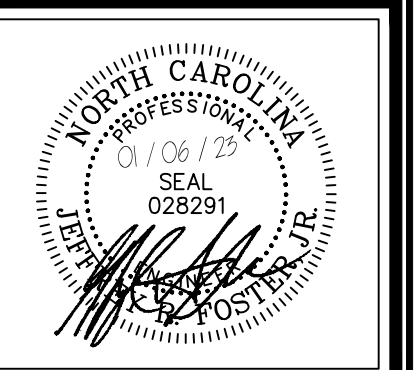
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