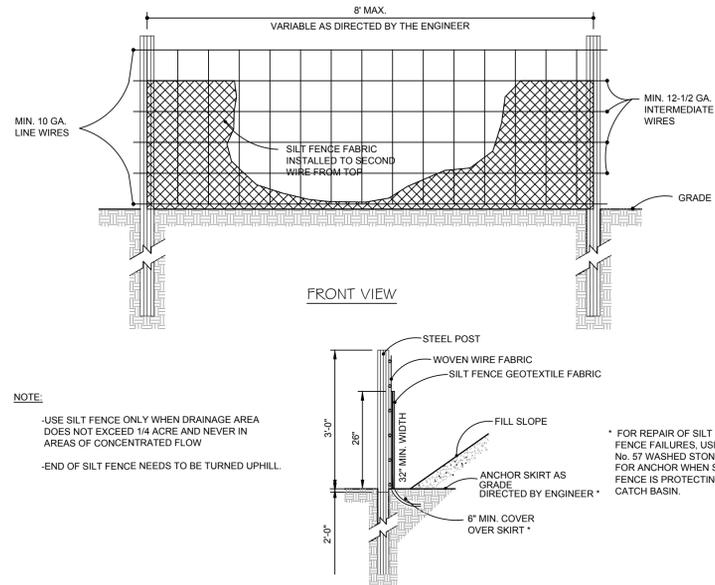


CONSTRUCTION SEQUENCE

- OBTAIN GRADING PERMIT / FINAL APPROVAL FROM CHATHAM COUNTY ENVIRONMENTAL HEALTH.
- CONTACT THE CHATHAM COUNTY EROSION CONTROL SECTION AT 919-545-8343 TO SET UP A PRE-CONSTRUCTION MEETING PRIOR TO ANY LAND DISTURBANCE WORK PERFORMED.
- INSTALL, IN ORDER OF THIS SEQUENCE: DELINEATE THE PROPOSED DISTURBED LIMIT LINE AND INSTALL ALL PROPOSED SILT FENCING THROUGHOUT THE ENTIRE PROJECT AREA ALONG WITH TEMPORARY CONSTRUCTION ENTRANCE.
ONCE THE PREVIOUS MEASURES ARE INSTALLED, CLEAR ONLY AS REQUIRED TO INSTALL PROPOSED 18" STORM DRAINAGE SYSTEM FROM EX. CI# 100 TO DI# 5. THEN INSTALL TEMPORARY INLET PROTECTION.
ALL MEASURES SHALL BE INSTALLED AND INSPECTED FOR COMPLIANCE PRIOR TO COMMENCEMENT OF ANY PROPOSED CLEARING/GRUBBING AND EXCAVATION.
- 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 OF REMAINING 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 INSTALL TEMPORARY INLET PROTECTION FOR THIS SYSTEM. SEED AND MULCH ALL DENUDED AREAS WITHIN 15 WORKING DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION.
- REQUEST FINAL APPROVAL BY ENVIRONMENTAL INSPECTOR. IF THE INSPECTOR IS SATISFIED WITH UPSTREAM PERMANENT GROUND COVER, BEGIN REMOVING TEMPORARY EROSION CONTROL MEASURES.



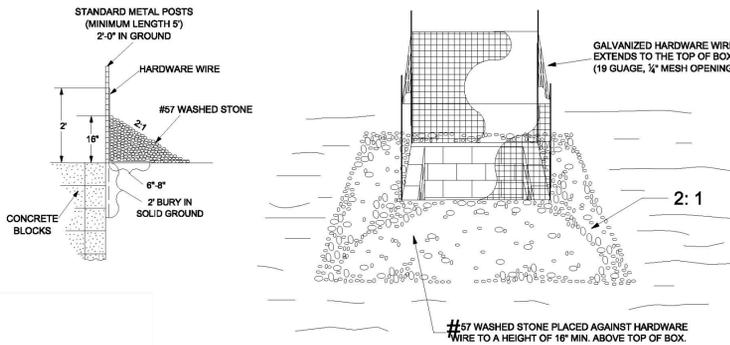
NOTE:

USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW
END OF SILT FENCE NEEDS TO BE TURNED UP HILL.

* FOR REPAIR OF SILT FENCE FAILURES, USE No. 57 WASHED STONE FOR ANCHOR WHEN SILT FENCE IS PROTECTING CATCH BASIN.

TEMPORARY SILT FENCE
NTS

SECTION VIEW



CATCH BASIN INLET PROTECTION
NTS

Seedbed Preparation:

- Chisel compacted areas and spread topsoil three inches deep over adverse soil conditions, if available.
- Rip the entire area to six inches deep.
- Remove all loose rock, roots, and other obstructions leaving surface reasonable smooth and uniform.
- Apply agricultural lime, fertilizer and superphosphate uniformly and mix with soil (see tables).
- Continue tillage until a well-pulverized, firm reasonably uniform seedbed is prepared four to six inches deep.
- Seed on a freshly prepared seedbed and cover seed lightly with seeding equipment or cutpack after seeding.
- Mulch immediately after seeding and anchor mulch.
- Inspect all seeded areas and make necessary repairs for reseedings within the planting season, if possible. If stand should be over 60% damaged, reestablish following the original lime, fertilizer and seeding rates.
- Consult EFS Environmental Engineers on maintenance treatment and fertilization after permanent cover is established.

Mixture

Agricultural Limestone:	2 tons/acre (3 tons/acre in clay soils)
Fertilizer:	1,000 lbs/acre - 10-10-10
Superphosphate:	500 lbs/acre - 20% analysis
Mulch:	2 tons/acre - small grain straw
Anchor:	Asphalt Emulsion at 300 gals/acre

Seeding Schedule

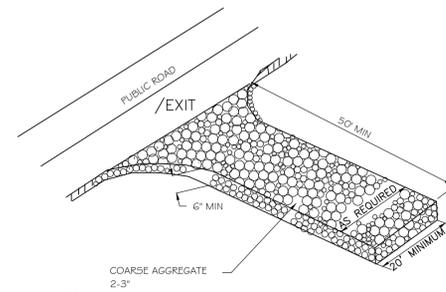
PERMANENT		
Date	Type	Planting Rate
Aug 15 - Nov 1	Tall Fescue	300 lbs/acre
Nov 1 - Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1 - Apr 15	Tall Fescue	300 lbs/acre
Apr 15 - Jun 30	Hulled Common Bermudagrass	25 lbs/acre
Jul 1 - Aug 15	Tall Fescue AND Browntop Millet or Sorghum - Sudan Hybrids ***	125 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum - Sudan Hybrids)

TEMPORARY		
Date	Type	Planting Rate
Mar 1 - Jun 1	Sericea Lespedeza (scarified) and use the following combinations:	50 lbs/acre (Sericea Lespedeza).
Mar 1 - Apr 15	Add Tall Fescue	120 lbs/acre
Mar 1 - Jun 30	Or add Hulled Common Bermudagrass	25 lbs/acre
Jun 1 - Sept 1	Tall Fescue AND Browntop Millet or Sorghum - Sudan Hybrids ***	120 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum - Sudan Hybrids)
Sept 1 - Mar 1	Sericea Lespedeza (unhulled - unscarified) AND Tall Fescue	70 lbs/acre (Sericea Lespedeza); 120 lbs/acre (Tall Fescue)
Nov 1 - Mar 1	And Abruzzi Rye	25 lbs/acre

Consult EFS Environmental Engineer for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those which do well under location conditions; other seeding rate combinations are possible.

*** TEMPORARY: Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow over 12" in height before mowing, otherwise fescue may be shaded out.

SEEDING DETAILS



NOTES:

- GRAVEL PAD TO BE 20x 50' AND 6" THICK MINIMUM
- TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS IS TO BE PROVIDED.
- ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES.
- MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE SILL BE NECESSARY; KEEP SOME HANDY.
- ANY MATERIAL WHICH STILL MAKES IT ONTO THE ROAD MUST BE CLEANED UP IMMEDIATELY.

NOTES: APPLICABLE AT ALL POINTS OF INGRESS & EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE MUST BE PROVIDED.

TEMPORARY CONSTRUCTION ENTRANCE
NTS

DISTURBANCE LIMITATIONS FOR VARIOUS SLOPE CONDITIONS

All land-disturbing activity for which an erosion and sedimentation control plan has not been approved prior to December 2, 2008 that requires a plan or a residential lot disturbance permit must meet the following slope standards.

- Steep slopes
 - No land-disturbing activity in excess of 5,000 square feet shall occur on any steep slope, except to the extent it is necessary and otherwise permitted by state law to be used for septic system needs, or for roadway crossings or utilities, where no practicable alternative exists; provided, however, that this limitation shall not apply to subdivision lots which have sketch, preliminary or final approval prior to December 2, 2008.
 - All land-disturbing activity that will be permitted within areas of steep slopes as defined by this chapter and identified on the county GIS map must include the following standards on the erosion and sedimentation control plan and all site work must conform to these standards.
 - Erosion and sedimentation control devices. The person conducting the land-disturbing activity shall provide erosion and sedimentation control devices and practices that are sufficient to retain the sediment generated by the land-disturbing activity within the limits of disturbance during construction. All devices and practices must be designed in accordance with this chapter.
 - Ground cover. The person conducting the land-disturbing activity shall provide temporary or permanent ground cover sufficient to restrain erosion within seven calendar days following completion of any phase of grading or any period of inactivity. The provisions for ground cover must be provided regardless of weather conditions, weekends, holidays, equipment malfunction and/or any extenuating circumstance.
 - Phasing. Land-disturbing activities must be phased so that no more than one acre of land will be disturbed on steep slopes at any time.
 - Scale and contours. The scale of the erosion and sedimentation control plan must not exceed one inch equals 30 feet and must produce a legible document. Existing and proposed grades shall be depicted at contour intervals of two feet.
 - Inspections. All land-disturbing activity conducted on steep slopes must be visually inspected by the financially-responsible person as specified in § 164.12(i). Copies of the inspections must be provided to the county erosion and sedimentation control staff. Any erosion observed during these inspections must be immediately repaired and stabilized with temporary or permanent stabilization.
- Moderate slopes. All land-disturbing activity that will be conducted within areas of moderate slopes as defined by this chapter and identified on the county GIS map must include the following standards on the erosion and sedimentation control plan, and all site work must conform to these standards.
 - Erosion and sedimentation control devices. The person conducting the land-disturbing activity shall provide erosion and sedimentation control devices and practices that are sufficient to retain the sediment generated by the land-disturbing activity within the limits of disturbance during construction. All devices and practices must be designed in accordance with this chapter.
 - Ground cover. The person conducting the land-disturbing activity shall provide temporary or permanent ground cover sufficient to restrain erosion within ten calendar days following completion of any phase of grading or any period of inactivity. The provisions for ground cover must be provided regardless of weather conditions, weekends, holidays, equipment malfunction and/or any extenuating circumstance.
 - Phasing. Land-disturbing activities must be phased so that no more than ten acres of land will be disturbed on moderate slopes at any time.
 - Scale and contours. The scale of the erosion and sedimentation control plan must not exceed one inch equals 50 feet and must produce a legible document. Existing and proposed grades shall be depicted at contour intervals of two feet.
 - Inspections. All land-disturbing activity conducted on moderate slopes must be visually inspected by the financially-responsible person as specified in § 164.12(i). Copies of the inspections must be provided to the county erosion and sedimentation control staff. Any erosion observed during these inspections must be immediately repaired and stabilized with temporary or permanent stabilization.
- Gradual slopes. All land-disturbing activity that will be conducted within areas of gradual slopes as defined by this chapter and identified on the county GIS map must include the following standards on the erosion and sedimentation control plan, and all site work must conform to these standards.
 - Erosion and sedimentation control devices. The person conducting the land-disturbing activity shall provide erosion and sedimentation control devices and practices that are sufficient to retain the sediment generated by the land-disturbing activity within the limits of disturbance during construction. All devices and practices must be designed in accordance with this chapter.
 - Ground cover. The person conducting the land-disturbing activity shall provide temporary or permanent ground cover sufficient to restrain erosion within 15 calendar days following completion of any phase of grading or any period of inactivity. The provisions for ground cover must be provided regardless of weather conditions, weekends, holidays, equipment malfunction and/or any extenuating circumstance.
 - Phasing. Land-disturbing activities must be phased so that no more than 15 acres of land will be disturbed on gradual slopes at any time.
 - Scale and contours. The scale of the erosion and sedimentation control plan must not exceed one inch equals 50 feet and must produce a legible document. Existing and proposed grades shall be depicted at contour intervals of two feet.
 - Inspections. All land-disturbing activity conducted on gradual slopes must be visually inspected by the financially-responsible person as specified in § 164.12(i). Copies of the inspections must be provided to the county erosion and sedimentation control staff. Any erosion observed during these inspections must be immediately repaired and stabilized with temporary or permanent stabilization.

- Steep slope variance. (a) A property owner may apply to the Board of Commissioners for a variance from the requirements of division (B)(1) above. (b) In order for the Board of Commissioners to grant the variance the applicant has the burden of proving the following:
 - Significantly increased velocity of flow, deposit of sediment or erosion;
 - Significant threats to water quality;
 - The removal of significant wildlife or plant habitat; or
 - A public nuisance.
- The provisions of this section's steep slope requirements leave the owner no legally reasonable use of the property; and
- A failure to grant the variance would result in hardship.



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SITE DEVELOPMENT PLANS FOR LOT 9 US 64 EAST BUSINESS PARK EROSION CONTROL DETAILS CHATHAM COUNTY, NC

Date:	APRIL, 2016
Scale:	-
Drawn:	CPM
Checked:	MPA
Project No.:	127-198
Computer Dwg. Name:	127-198_Sht-08-Erosion-Control-Details

Sheet No. **8** Of **1**