

Jul 16, 2014 - 1:15pm V:\Land\Projects\2013\0063\Orig\AsBuilt - E&S - Waterline.dwg

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION:
THIS PROJECT CONSISTS OF CONSTRUCTION OF WATER LINE ALONG REDBUD LANE ROUTE 951, IN FRANKLIN COUNTY. THE PROJECT INCLUDES ASSOCIATED EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO CONSTRUCT WATERLINE, APPROXIMATELY 0.28 ACRES WILL BE DISTURBED AS PART OF THE CONSTRUCTION. A VSMP PERMIT WILL BE REQUIRED FOR THIS PORTION OF THE PROJECT.

EXISTING SITE CONDITIONS:
THE EXISTING SITE CONSISTS OF ROADSIDE DITCH, POWER POLE AND CULVERTS.

ADJACENT PROPERTIES:
THE SURROUNDING PROPERTY IS ZONED RESIDENTIAL. ALL MEASURES SHALL BE TAKEN TO ENSURE THAT THE SITE IS STABILIZED AND NO ADDITIONAL SEDIMENT IS DEPOSITED INTO THE DRAINAGE CHANNEL.

OFFSITE AREAS:
ALL GRADING SHALL OCCUR ON-SITE. ANY ADDITIONAL DIRT BORROWED OR WASTED FROM THE SITE WILL BE EITHER STOCKPILED OR REMOVED FROM A LOCATION CHOSEN BY THE CONTRACTOR AT A LATER DATE.

CRITICAL AREAS:
THERE ARE NO CRITICAL AREAS FOR THIS PROJECT.

SOILS:
SOILS IN THE PROJECT AREA CONSISTS OF CLIFFORD FINE SANDY LOAM. SOIL CHARACTERISTICS, K FACTOR = 0.28, SYMBOL = 7C, AASHTO RATING = A-4, HYDROLOGIC SOIL GROUP B.

EROSION AND SEDIMENT CONTROL MEASURES:
UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATION OF THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. THE MINIMUM STANDARDS OF THE HANDBOOK SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY VARIANCE.

SECTION 3.05-- SILT FENCE
MAINTENANCE
1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING.
3. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

SECTION 3.31-- TEMPORARY SEEDING
ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER BY PLANTING SEED ON ROUGH-GRADED AREAS THAT WILL BE BROUGHT TO FINAL GRADE BETWEEN 6 MONTHS AND A YEAR.

SECTION 3.32-- PERMANENT SEEDING
MAINTENANCE
1. EVEN WITH CAREFUL, WELL-PLANNED SEEDING OPERATIONS, FAILURES CAN OCCUR. WHEN IT IS CLEAR THAT PLANTS HAVE NOT GERMINATED ON AN AREA OR HAVE DIED THESE AREAS MUST BE RESEEDD IMMEDIATELY TO PREVENT EROSION DAMAGE. HOWEVER, IT IS EXTREMELY IMPORTANT TO DETERMINE FOR WHAT REASON GERMINATION DID NOT TAKE PLACE AND MAKE ANY CORRECTIVE ACTION NECESSARY PRIOR TO RESEEDING THE AREA. HEALTHY VEGETATION IS THE MOST EFFECTIVE EROSION CONTROL AVAILABLE.

SECTION 3.35-- MULCHING
MAINTENANCE
1. ALL MULCHES AND SOIL COVERINGS SHOULD BE INSPECTED PERIODICALLY (PARTICULARLY AFTER RAINSTORMS) TO CHECK FOR EROSION. WHERE EROSION IS OBSERVED IN MULCHED AREAS, ADDITIONAL MULCH SHOULD BE APPLIED. NETS AND MATS SHOULD BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, RE-INSTALL NETTING OR MATTING AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. INSPECTIONS SHOULD TAKE PLACE UP UNTIL GRASSES ARE FIRMLY ESTABLISHED. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE; REPAIR AS NEEDED.

VEGETATIVE PRACTICES:

TEMPORARY SEEDING / PERMANENT STABILIZATION:
SEEDING MEASURES SHALL BE TAKEN ON DISTURBED SOIL AT CUT / FILL SLOPES, DITCH LINES, OR AREAS OUTSIDE OF ON-GOING CONSTRUCTION PRACTICES WITHIN SEVEN (7) DAYS OF COMPLETED GRADING. ALL AREAS DISTURBED BY CONSTRUCTION WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINAL GRADING.

SITE MAINTENANCE:

- SILT FENCE BARRIERS SHALL BE CHECKED WEEKLY AND ESPECIALLY AFTER EACH RAINFALL EVENT, TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. IF ANY BARRIER IS DAMAGED DUE TO CONSTRUCTION ACTIVITIES, NATURAL CAUSES, OR ANY OTHER REASON, THE BARRIER SHALL BE REPAIRED OR REPLACED IMMEDIATELY. IF TRASH OR SEDIMENTATION REACHES ONE-HALF THE HEIGHT OF THE BARRIER, THE BARRIER SHALL BE CLEANED, AND RESTORED TO PROPER FUNCTIONING CONDITION.
- ALL OTHER STRUCTURAL MEASURES ARE TO BE CHECKED WEEKLY AND ESPECIALLY AFTER EACH RAINFALL EVENT TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. ANY DAMAGED OR CLOGGED MEASURE SHALL BE CLEANED OUT OR REPAIRED IMMEDIATELY.
- ALL SEDIMENT REMOVED FROM THE CONTROL DEVICES SHALL BE RE--SPREAD ON THE SITE ABOVE THE CONTROL DEVICES.
- VEGETATION SHALL BE CHECKED WEEKLY TO INSURE PROPER AND ADEQUATE COVERAGE. BARE OR WASHED AREAS SHALL BE SCARIFIED AND RESEEDD UNTIL PERMANENT STABILIZATION HAS BEEN ACHIEVED.
- ONCE SITE HAS ESTABLISHED AND SEDIMENT HAS CEASED TO BE CONVEYED ON THE SITE, ALL SILT FENCE BARRIERS AND INLET PROTECTION SHALL BE REMOVED FROM THE SITE.
- OTHER CONTROLS.
 - NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, GARBAGE AND DEBRIS SHALL BE DISCHARGED TO SURFACE WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A CWA SECTION 404 PERMIT.
 - WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, MINIMIZATION OF TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ON THE PAVEMENT WILL BE PREVENTED BY PROPER USE AND MAINTENANCE OF THE CONSTRUCTION ENTRANCES AND CLEANING THE ROAD AT THE END OF EACH DAY.
 - STORAGE OF ONSITE MATERIALS WILL BE DONE TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER AND SPILL PREVENTION AND RESPONSE.
 - DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM.

INSPECTIONS AND REPORTING:

FACILITY PERSONNEL WHO ARE FAMILIAR WITH THE CONSTRUCTION ACTIVITY, THE BMPs AND THE STORMWATER POLLUTION PREVENTION PLAN WILL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AND AREAS USED FOR STORAGE MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROLS AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. THESE INSPECTIONS SHALL BE CONDUCTED EVERY 14 DAYS OR WITHIN 48 HOURS OF THE END OF A STORM EVENT THAT IS 0.5 INCHES OR GREATER.

EROSION AND SEDIMENT CONTROL DEVICES:

PERIMETER EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITY. AS CONSTRUCTION PROCEEDS, ALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS SOON AS POSSIBLE. EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLAN ARE A MINIMUM AND THE PROJECT CONDITION MAY DICTATE ADDITIONAL CONTROL. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PER THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

EROSION AND SEDIMENT CONTROL MAINTENANCE:

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES FOR THE DURATION OF THE PROJECT. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CHECKED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL TO INSURE THAT ALL DEVICES ARE IN PLACE AND FUNCTIONING AS REQUIRED. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED PER THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. IN GENERAL, IF THE SILT BUILT UP BEHIND A BARRIER BECOMES AS DEEP AS 9 INCHES, THE SILT IS TO BE REMOVED AND THE BARRIER REPAIRED OR REPLACED. AFTER COMPLETION OF THE PROJECT, AND PERMANENT SEEDING HAS BEEN ESTABLISHED, EROSION CONTROL DEVICES AND ANY SILT BUILT UP SHALL BE REMOVED. DISTURBED AREAS DUE TO THIS CLEANUP OPERATION SHALL BE REPAIRED, RESEEDD AND REMULCHED.

SEEDING SPECIFICATIONS:

- (TS) TEMPORARY SEEDING--
WINTER -- 40 LBS. ANNUAL RYE/40 LBS. CEREALE RYE (PER ACRE)
SUMMER -- 40 LBS. ANNUAL RYE/40 LBS. FOXTAIL MILLET (PER ACRE)
FERTILIZER -- 1500 LBS. 10-18-10/ACRE
LIME -- 2 TONS/ACRE
- (PS) PERMANENT SEEDING--
SEASONAL SPECIFICATION -- PER ACRE
2/1 TO 5/15 100 LBS. TALL FESCUE
15 LBS. ANNUAL RYE
2 LBS. RED CLOVER
5/16 TO 7/31 120 LBS. TALL FESCUE
10 LBS. FOXTAIL MILLET
2 LBS. RED CLOVER
8/1 TO 9/15 100 LBS. TALL FESCUE
15 LBS. ANNUAL RYE
2 LBS. RED CLOVER
9/16 TO 1/31 120 LBS. TALL FESCUE
10 LBS. CEREALE RYE
2 LBS. RED CLOVER
- (MU) SOD--
REFER TO THE LANDSCAPE SPECIFICATION SECTIONS FOR AN APPROVED SOD MATERIAL.

FERTILIZER -- ALL SEASONS -- 1500 LBS. 10-18-10/ACRE
LIME -- ALL SEASONS -- 2 TONS/ACRE

* A MULCH COVER IS REQUIRED ON TEMPORARY AND FINAL SEEDING

* STRAW AT 80 BALES PER ACRE OR AN APPROVED MANUFACTURED MULCH/STABILIZATION MATTING MATERIAL.

VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS
MINIMUM STANDARD #1

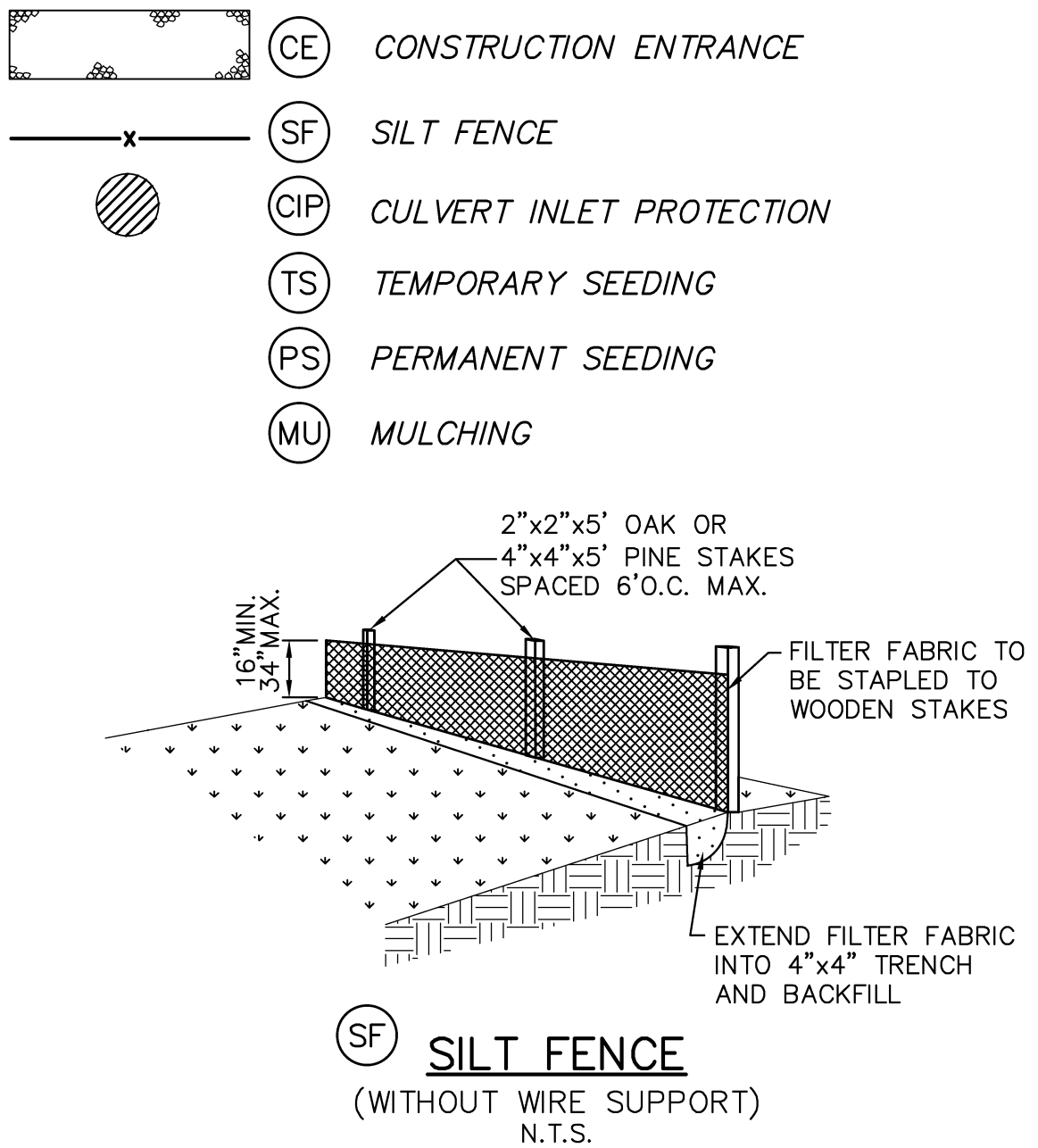
PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

MINIMUM STANDARD #16

- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
- NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGE IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
 - MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
 - RESTALLIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THIS CHAPTER.
 - APPLICABLE SAFETY CHAPTERS SHALL BE COMPLIED WITH.

- GENERAL EROSION AND SEDIMENT CONTROL NOTES
TABLE 6-1
- ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2: THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8: DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9: THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY. AN INSPECTION REPORT MUST BE FILED WITH THE BOTETOURT COUNTY EROSION & SEDIMENT CONTROL ADMINISTRATOR ONCE EVERY TWO WEEKS, BEGINNING WITH COMMENCEMENT OF THE LAND DISTURBING ACTIVITY, AND WITHIN 48 HOURS OF ANY RUNOFF-PRODUCING RAINFALL EVENT. FAILURE TO REPORT WILL BE GROUNDS FOR IMMEDIATE REVOCATION OF THE LAND DISTURBING PERMIT. REPORTS MUST BE POSTMARKED WITHIN 24 HOURS OF THE DEADLINE. A STANDARD INSPECTION REPORT FORM WILL BE SUPPLIED, WHICH SHOULD BE COPIED AS NECESSARY. THIS PROVISION IN NO WAY WAIVES THE RIGHT OF BOTETOURT COUNTY PERSONNEL TO CONDUCT SITE INSPECTIONS, NOR DOES IT DENY THE RIGHT OF THE PERMITEE(S) TO ACCOMPANY THE INSPECTOR(S).

VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES
* CHART TAKEN FROM THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (JULY 1992)



EROSION CONTROL PLAN-ASBUILT
FOR
HALES POINT WATER SYSTEM
FRANKLIN COUNTY, VIRGINIA

PROJECT NO.	20130063
G.L. NO.	298-04-A1.3
FILE NO.	G-13930
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DRAWN BY:	WCH
CHECKED BY:	BLC



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