PROJECT NARRATIVE

A. PROJECT DESCRIPTION

1. GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF APPROXIMATELY 800 LINEAR FEET OF 24–INCH GRAVITY SEWER PIPE, EIGHT PRECAST CONCRETE MANHOLES, AND ABANDONMENT OF EXISTING 18–INCH SEWER IN–PLACE ALONG TINKER CREEK. THE EXISTING 18–INCH PIPE UNDER THE ROUTE 24/TINKER CREEK BRIDGE WILL BE ENLARGED TO 24–INCH DIAMETER USING THE PIPE BURSTING TECHNIQUE. THE ENTIRE ALIGNMENT WILL BE WITHIN THE TOWN OF VINTON RIGHT–OF–WAY.

PROPOSED LAND–DISTURBING ACTIVITIES CONSIST OF EARTHWORK ASSOCIATED WITH TRENCHING AND BACKFILLING OF THE SEWER LINES AND MANHOLES, RESEEDING THE LAWN AREA TO EXISTING CONDITIONS, AND THE RELATED EROSION AND SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION MEASURES AS SHOWN ON THE PLANS. THERE WILL BE NO DISTURBANCE OF THE EXISTING CREEK IN THE VICINITY OF THE EXISTING 18" PIPE. THIS PIPE WILL REMAIN IN PLACE AND WILL BE INJECTED WITH GROUT FROM THE EXISTING MANHOLES TO STABILIZE. PERMANENT RIPRAP WILL BE PLACED ON THE CREEK BANK IN THE LOCATION OF THE NEW 24" SEWER PIPE.

SITE CONSISTS OF APPROXIMATELY 0.4+/– ACRES (16,200 SQUARE FEET), WHICH WILL BE DISTURBED TO CONSTRUCT THIS PROJECT, OF WHICH APPROXIMATELY 0.2+/– ACRES (8,100 SQUARE FEET) IS FOR THE SEWER LINE INSTALLATION.

2. INTENDED SEQUENCE

MAJOR COMPONENTS OF THE PROJECT WHICH DISTURB SOILS ARE ANTICIPATED TO OCCUR AS FOLLOWS: CLEARING AND GRUBBING, TRENCHING OF SEWER LINE AND MANHOLES, BORROW AND BACKFILLING, SLOPE STABILIZATION OF CREEK BANK, FINAL GRADING AND RESEEDING OF LAWN AREA.

B. EXISTING SITE CONDITIONS

THE PROPOSED PROJECT IS LOCATED IN THE FLOODPLAIN OF TINKER CREEK, ENTIRELY WITHIN THE TOWN OF VINTON RIGHT–OF–WAY AND SANITARY SEWER EASEMENT. APPROXIMATELY 79% OF THE ALIGNMENT IS LOCATED IN A MODERATELY SLOPED (APPROXIMATELY 10%), MOWED LAWN AREA WITH SOME GRAVEL PATCHES. ABOUT 65 FT OF PIPE WILL BE INSTALLED IN THE CREEK BANK (50% SLOPE). VEGETATION ON THE CREEK BANK CONSISTS OF RIPARIAN SHRUBS AND TREES. REMAINING PORTION OF THE ALIGNMENT (APPROX 100 FT) IS LOCATED UNDER THE RT 24/TINKER CREEK OVERPASS IN TERRAIN ENTIRELY VOID OF SHRUBS, TREES, OR GRASS.

C. ADJACENT AREAS

ADJACENT TOPOGRAPHY TO THE EAST (UPHILL SIDE) CONSISTS PRIMARILY OF MODERATE TO STEEPLY SLOPING URBAN AREA. TINKER CREEK LIES TO THE WEST ON THE DOWNHILL SIDE, AND ALL SURFACE DRAINAGE FLOWS TO TINKER CREEK.

D. OFFSITE AREAS

NO OFF–SITE AREAS WILL BE DISTURBED BY THIS PROJECT. IF IT IS NECESSARY TO IMPORT BORROW MATERIAL OR DISPOSE OF SURPLUS MATERIAL, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR THE OFF–SITE BORROW OR WASTE AREAS.

E. SOILS

USDA "SOIL SURVEY OF ROANOKE COUNTY AND THE CITIES OF ROANOKE AND SALEM, VIRGINIA," (JULY 1997) CLASSIFIES THE SITE SOILS IN THE FOLLOWING CATEGORY. NO INFORMATION IS PROVIDED FOR THE SOILS IN TINKER CREEK.

6D – CHISWELL–LITZ–URBAN LAND COMPLEX, 15 TO 35 PERCENT SLOPES. THIS MAP UNIT CONSISTS OF GENTLY SLOPING AND STRONGLY SLOPING, WELL DRAINED SOILS ON UPLAND SIDE SLOPES AND AREAS OF URBAN LAND. THE CHISWELL SOIL IS SHALLOW, AND THE LITZ SOIL IS MODERATELY DEEP. INDIVIDUAL AREAS ARE IRREGULAR IN SHAPE AND RANGE FROM 6 TO 100 ACRES IN SIZE. THE SOILS AND URBAN LAND ARE INTERMINGLED. CHISWELL SOIL CONSISTS OF DARK BROWN CHANNERY TO REDDISH BROWN VERY CHANNERY SILTY LOAM IN THE UPPER 12 INCHES AND MOTTLED REDDISH BROWN, BROWN, AND BROWNISH YELLOW SOFT SHALE BELOW 12 INCHES. LITZ SOIL CONSISTS OF DARK BROWN CHANNERY TO STRONG BROWN VERY CHANNERY SILT LOAM TO DEPTHS OF 24 INCHES. HARD GRAY AND RED SHALE OCCURS BELOW 24 INCHES. DEPTH TO A ROOT RESTRICTIVE LAYER IS 10 TO 20 INCHES. THE NATURAL DRAINAGE CLASS IS WELL DRAINED. AVAILABLE WATER CAPACITY IS VERY LOW TO MODERATE. SHRINK–SWELL POTENTIAL IS LOW. THIS SOIL IS NOT FLOODED AND NOT PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. ORGANIC MATTER CONTENT IN THE SURFACE HORIZON IS ABOUT 2 PERCENT. SURFACE RUNOFF IS RAPID, AND EROSION POTENTIAL IS HIGH.

F. CRITICAL AREAS

WORK WILL OCCUR WITHIN CLOSE PROXIMITY TO TINKER CREEK, WHICH WILL INCREASE THE POTENTIAL FOR SEDIMENT–LADEN RUNOFF TO REACH THE WATER BODY. NECESSARY MEASURES WILL BE TAKEN IN THIS AREA TO REDUCE EROSION, AND PREVENT SILT–LADEN RUNOFF FROM EXITING THE CONSTRUCTION SITE. IN PARTICULAR, THE CREEK BANK WILL BE A CRITICAL AREA FOR THE CONTRACTOR TO AVOID DISTURBING THE WATER BODY, AND CONTRACTOR WILL TAKE MEASURES TO ENSURE ITS DISTURBANCE IS MINIMAL.

G. OTHER POTENTIAL POLLUTION SOURCES

POTENTIAL POLLUTION SOURCES INCLUDE ONSITE FUELING OPERATIONS FOR CONSTRUCTION EQUIPMENT, AND THE ONSITE STORAGE OF FERTILIZER USED IN ESTABLISHING TEMPORARY AND PERMANENT SEEDING.

H. DISCHARGE FROM INDUSTRIAL ACTIVITY

NO DISCHARGES FROM INDUSTRIAL ACTIVITIES ARE ANTICIPATED ON THIS PROJECT OTHER THAN CONSTRUCTION.

I. EROSION AND SEDIMENT CONTROL MEASURES

THE CONSTRUCTION–PHASE EROSION AND SEDIMENT CONTROLS SHALL BE DESIGNED TO RETAIN SEDIMENT ON–SITE TO THE MAXIMUM EXTENT PRACTICABLE. ALL CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS' SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. IF PERIODIC INSPECTIONS OR OTHER INFORMATION INDICATES A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFFSITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS (E.G. FUGITIVE SEDIMENT IN STREET COULD BE WASHED INTO STORM SEWERS BY THE NEXT RAIN AND/OR POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORM WATER DISCHARGES (E.G., SCREENING OUTFALLS, TRASH PICKED UP DAILY).

THE FOLLOWING MEASURES WILL BE USED TO CONTROL EROSION AND SEDIMENT–LADEN RUNOFF ON THIS PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED DEPENDING ON LOCAL SITE CONDITIONS, IN ACCORDANCE WITH THE VESCH.

1. CONSTRUCTION ENTRANCE: WILL BE USED TO REDUCE MUD/SEDIMENT TRACKING ONTO GLADE ROAD. (VESCH STANDARD AND SPEC. 3.02). IF MUD OR SEDIMENT IS TRANSPORTED ONTO THE PAVED ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT AND MUD SHALL BE REMOVED FROM THE ROAD BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT AND MUD ARE REMOVED IN THIS MANNER.

2. SILT FENCE: WILL BE USED TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS AND TO PREVENT SEDIMENT FROM LEAVING THE SITE. SILT FENCE SHALL BE INSTALLED ON THE DOWNHILL SIDE OF THE WORK AREA. (VESCH STANDARD AND SPEC. 3.05)

3. RIPRAP: WILL BE USED TO PERMANENTLY STABILIZE THE CREEK BANK SLOPE AFTER THE SEWER PIPE IS INSTALLED. (VESCH STANDARD AND SPEC. 3.19)

4. TEMPORARY SEEDING: WILL BE USED TO ESTABLISH VEGETATIVE COVER AND TO REDUCE SILT RUNOFF FOR DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. (VESCH STANDARD AND SPEC. 3.31)

5. PERMANENT SEEDING: WILL BE USED TO ESTABLISH VEGETATIVE COVER AND TO REDUCE SILT RUNOFF FOR ANY AREAS NOT PAVED OR ROOFED. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. (VESCH STANDARD AND SPEC. 3.32)

J. STABILIZATION PRACTICES

1. GENERAL

NO SPECIFIC SCHEDULE OTHER THAN THOSE GUIDELINES GIVEN ABOVE IN THE DESCRIPTIONS OF THE VEGETATIVE PRACTICES WILL BE USED FOR TEMPORARY AND PERMANENT SEEDING MEASURES.

CONTRACTOR WILL MAINTAIN A LOG OF ALL MAJOR GRADING ACTIVITIES, ANY CESSATION, TEMPORARY OR PERMANENT, OF CONSTRUCTION ACTIVITY, AND WHEN STABILIZATION MEASURES ARE IMPLEMENTED. THIS RECORD WILL BE KEPT THROUGHOUT THE DURATION OF THE PROJECT. THE PERMITTEE WILL ENSURE THAT THESE RECORDS ARE UPDATED, MAINTAINED, AND BECOME A PERMANENT PART OF THIS OVERALL PLAN.

CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE. STABILIZATION MEASURES SHALL BE IMPLEMENTED ON DISTURBED AREAS AS SOON AS PRACTICABLE. EMBANKMENT WALLS, UPON REACHING FINAL GRADE, MUST BE IMMEDIATELY SEEDED AND FERTILIZED TO ENSURE PROPER STABILIZATION. PERMANENT SEEDING SHALL BE INSTALLED WITHIN 7 DAYS OF REACHING FINAL GRADE. DENUDED AREAS WHICH ARE NOT AT FINAL GRADE BUT WHICH WILL REMAIN DORMANT FOR MORE THAN 30 DAYS SHALL BE TEMPORARILY SEEDED. AREAS THAT ARE NOT TO BE DISTURBED MUST BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.

2. PERMANENT STABILIZATION

AFTER THE CONSTRUCTION IS COMPLETED, THE SITE WILL BE PERMANENTLY STABILIZED WITH PERMANENT SEEDING AND RIPRAP IN ACCORDANCE WITH VESCH STANDARD AND SPECIFICATIONS 3.19 AND 3.32.

K. STORM WATER RUNOFF CONSIDERATIONS

STORM WATER CONSIDERATIONS WERE TAKEN INTO ACCOUNT FOR THE PROPOSED SITE AREA. THE AMOUNT OF IMPERVIOUS SURFACE WILL NOT INCREASE; THEREFORE, STORM WATER RUNOFF AMOUNTS WILL NOT CHANGE BETWEEN PRE– AND POST–CONSTRUCTION PERIODS. THE DISTURBED AREA WILL BE RETURNED TO EXISTING SITE CONDITIONS. RIPRAP IS PROVIDED FOR SLOPE PROTECTION ALONG THE CREEK BANK.

L. OTHER CONTROLS

1. MATERIALS, GARBAGE, DEBRIS

NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, GARBAGE, AND DEBRIS SHALL BE DISCHARGED TO SURFACE WATERS OF THE STATE. THE PERMITTEE SHALL ENSURE THAT THESE ITEMS ARE NOT LEFT IN A LOCATION WHERE THEY COULD BE TRANSPORTED BY STORMWATER RUNOFF OFF THE SITE.

2. COMPLIANCE WITH STATE & LOCAL WASTE, SANITARY, AND/OR SEPTIC REGULATIONS

NO TEMPORARY SEWER FACILITIES ARE PLANNED FOR THE SITE DURING CONSTRUCTION.

3. EXPECTED CONSTRUCTION AND WASTE MATERIALS

CONSTRUCTION AND WASTE MATERIALS THAT COULD POTENTIALLY BE STORED ON SITE INCLUDE TOPSOIL, FILL DIRT, EXCAVATED MATERIAL, STORM DRAINAGE AND UTILITY PIPING, TANK MATERIALS, FERTILIZER FOR SEEDING OPERATIONS, STONE TO BE PLACED ON GRAVEL AREAS, STONE FOR RIPRAP, FUEL AND SILT FENCE MATERIAL.

ANY STOCKPILES OF TOPSOIL, EXCAVATED MATERIAL OR FILL DIRT THAT ARE NEEDED SHALL BE SURROUNDED ON THE DOWNSLOPE SIDE BY SILT FENCE. FERTILIZER AND GRASS SEED MUST BE KEPT IN WATERTIGHT CONTAINERS, PREFERABLY IN PORTABLE STORAGE UNITS AND OUT FROM EXPOSURE TO THE WEATHER, DURING STORAGE ON SITE. CARE MUST BE TAKEN TO MINIMIZE SPILLAGE OF FERTILIZER IF MIXING OPERATIONS ARE REQUIRED TO PREPARE THE FERTILIZER FOR APPLICATION.

IF OVERNIGHT STORAGE OF FUEL IS REQUIRED, THE FUEL STORAGE CONTAINER MUST BE EQUIPPED WITH A FUELING MECHANISM DISABLE DEVICE. TO MINIMIZE THE AFFECT OF ANY POTENTIAL SPILLS, MAINTAIN ALL ON–SITE FUELING OPERATIONS AS FAR AWAY FROM SURROUNDING WETLANDS, SURFACE WATERS AND DRAINAGE FACILITIES AS IS PRACTICAL. DAILY INSPECTIONS OF THE FUEL STORAGE CONTAINER MUST BE IMPLEMENTED TO DETECT THE PRESENCE OF LEAKS. THE FUELING OPERATOR SHALL HAVE A SAFE FILL SHUTDOWN, AND TRANSFER PROCEDURE IN PLACE TO MINIMIZE SPILLAGE DURING FUELING ACTIVITIES. THE OPERATOR MUST MAINTAIN A FULLY EQUIPPED SPILL KIT ON SITE AT ALL TIMES WITH THE STORED FUEL. THE KIT MUST AT LEAST INCLUDE ABSORBENT MATS OR MATERIAL TO CLEANUP ANY SPILLED FUEL. FOR ANY FUEL SPILL ON SITE EQUAL TO OR EXCEEDING 25 GALLONS, IMMEDIATELY CREATE AN APPROPRIATELY SIZED BERM AROUND THE AREA OF SPILLAGE TO MINIMIZE SURFACE MOVEMENT OF THE FUEL. CONTACT LOCAL HAZMAT AUTHORITIES, THE ENGINEER, AND THE REGIONAL DEQ OFFICE AS QUICKLY AS POSSIBLE TO REPORT THE SPILL AND SEEK FURTHER ASSISTANCE WITH SPILL CLEANUP.

CONSTRUCTION MATERIALS WHICH COULD BE CARRIED OFFSITE BY STORMWATER (PLASTICS, PAPER, TIMBER, ROOFING MATERIALS, ETC) SHALL BE PICKED UP DAILY AND PLACED IN APPROPRIATE WASTE DISPOSAL CONTAINERS.

M. MAINTENANCE

ALL EROSION AND SEDIMENT CONTROL STRUCTURES AND SYSTEMS SHALL BE MAINTAINED, INSPECTED, AND REPAIRED AS NEEDED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED AT LEAST EVERY 14 DAYS AND AFTER EACH RAIN EVENT OVER 0.5 INCHES OF PRECIPITATION. THE FOLLOWING ITEMS SHALL BE CHECKED IN PARTICULAR:

1. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO GLADE ROAD. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR THE WASHING AND REWORKING OF EXISTING STONE AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.

2. SILT FENCE SHALL BE CHECKED FOR UNDERMINING OR DETERIORATION (OF THE FABRIC) AND CLEANED WHEN SEDIMENT LEVELS HAVE REACHED HALF OF THE SILT FENCE HEIGHT.

3. THE SEEDED AREAS SHALL BE CHECKED EVERY 2 DAYS TO ENSURE THAT A GOOD STAND OF GRASS IS MAINTAINED. GRASSED AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES TO THE SATISFACTION OF LOCAL REVIEW AUTHORITIES, AS WELL AS THE INSTALLATION OF ADDITIONAL MEASURES AS NEEDED TO ENSURE THAT SEDIMENT–LADEN RUNOFF DOES NOT LEAVE THE SITE.

N. INSPECTION

DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 48 HOURS OF THE END OF A STORM EVENT THAT IS 0.5 INCHES OR GREATER. IN THOSE AREAS THAT HAVE BEEN FINALIZED, TEMPORARILY STABILIZED, OR RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS, INSPECTIONS SHALL TAKE PLACE AT LEAST ONCE A MONTH.

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. E&SC MEASURES SHALL BE CHECKED TO SEE THEY ARE OPERATING CORRECTLY. AT ACCESSIBLE DISCHARGE POINTS, INSPECTION SHALL TAKE PLACE TO ENSURE THESE CONTROL MEASURES ARE EFFECTIVE AT PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED IF DISCHARGE POINTS ARE INACCESSIBLE. SITES OF VEHICLE ENTRANCE OR EXIT SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.

IF EXISTING CONTROL MEASURES OR BEST MANAGEMENT PRACTICES (BMPS) REQUIRE MODIFICATION OR ADDITIONAL MEASURES, SUCH CHANGES SHALL BE MADE WITHIN 7 CALENDAR DAYS OF THE INSPECTION OR BEFORE THE NEXT ANTICIPATED STORM EVENT, AS IMPLEMENTATION IS PRACTICABLE.

INCLUDE INSPECTION REPORTS OF ALL STORMWATER AND EROSION & SEDIMENT CONTROL MEASURES ALONG WITH ANY REQUIRED ACTIONS AS A RESULT OF INSPECTIONS, WITH THE STORMWATER POLLUTION PREVENTION PLAN. THESE REPORTS SHALL INCLUDE THE NAME AND QUALIFICATIONS OF THE INSPECTOR, DATES OF INSPECTION, MAJOR OBSERVATIONS AND ACTIONS TAKEN IN RESPONSE TO INSPECTIONS. MAJOR OBSERVATIONS INCLUDE THE LOCATION OF DISCHARGE OF SEDIMENT OR POLLUTANT FROM THE SITE, LOCATIONS OF BMPS THAT NEED TO BE MAINTAINED, LOCATIONS OF BMPS THAT FAILED TO OPERATE OR PROVED INADEQUATE, AND LOCATIONS WHERE ADDITIONAL BMPS ARE NEEDED THAT DIDN'T EXIST AT THE TIME OF INSPECTION. THESE REPORTS SHALL INCLUDE INCIDENTS OF NONCOMPLIANCE. IF THE REPORT DOES NOT INCLUDE ANY NONCOMPLIANCE INCIDENTS, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND PERMIT.

O. NON–STORM WATER DISCHARGES

NO NON–STORM WATER DISCHARGES OTHER THAN THOSE PERMITTED BY THE VPDES GENERAL PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES ARE ANTICIPATED DURING THIS PROJECT.

GENERAL EROSION & SEDIMENT CONTROL NOTES:

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.
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.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
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.
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.
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.
8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
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.

EROSION & SEDIMENT CONTROL MINIMUM STANDARD CHECKLIST

MS–1 Have temporary and permanent stabilization been addressed? YES
MS–2 Has stabilization of soil stockpiles been addressed? Are sediment trapping measures provided? NA
MS–3 Has maintenance of permanent stabilization been addressed? YES
MS–4 Are sediment trapping facilities to be constructed as a first step? NA
MS–5 Has the stabilization of earthen structures been addressed? NA
MS–6 Are sediment basins required? NA
MS–7 Has stabilization of cut and fill slopes been addressed? YES
MS–8 Are paved flumes, channels, or slope drains required? NA
MS–9 Is adequate drainage or protections needed for the slope face? YES
MS–10 Is adequate inlet protection required on all operational storm sewer inlets? NA
MS–11 Are channel lining and/or outlet protection required on storm water conveyance channels? NA
MS–12 Are in–stream construction measures required on storm water conveyance channels? NA
MS–13 Are temporary stream crossings of non–erodible material required? NA
MS–14 Are all applicable federal, state and local regulations pertaining to working in or crossing live watercourses met? NA
MS–15 Has re–stabilization of areas subject to in–stream construction been addressed? NA
MS–16 Has the stabilization of utility trenches been addressed? NA
MS–17 Has the transport of soil onto public roadways been addressed? YES
MS–18 Has the removal of temporary practices been addressed? Has maintenance of practices been addressed? YES
MS–19 Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increase in peak storm water runoff? NA

PERMANENT SEEDING RATES (IN POUNDS OF SEED PER ACRE)

SOUTHERN PIEDMONT AND COASTAL PLAIN	FEB 1 – APRIL 30	MAY 1 – AUG 30	SEPT 1 – NOV 15	NOV 16 – JAN 31
NORTHERN PIEDMONT AND MOUNTAINS	FEB 1 – MAY 15	MAY 16 – AUG 15	AUG 16 – OCT 15	OCT 16 – JAN 31
GRASS TYPE	MIXTURE A	MIXTURE B	MIXTURE C	MIXTURE D
BERMUDAGRASS OR KENTUCKY BLUEGRASS	175	175	175	175
TURF–TYPE TALL FESCUE	25	25	25	25
WEEPING LOVEGRASS	20	–	24	–
FOXTAIL MILLET	–	80	8	–
RYE	20	–	8	8
TOTAL WEIGHT	240	280	240	208

TEMPORARY SEEDING RATES (IN POUNDS OF SEED PER ACRE)

SOUTHERN PIEDMONT AND COASTAL PLAIN	FEB 1 – APRIL 30	MAY 1 – AUG 30	SEPT 1 – NOV 15	NOV 16 – JAN 31
NORTHERN PIEDMONT AND MOUNTAINS	MAR 1 – APR 30	MAY 1 – AUG 15	AUG 16 – OCT 31	NOV 1 – FEB 28/29
SEED TYPE	MIXTURE A	MIXTURE B	MIXTURE C	MIXTURE D
OATS	50	–	–	–
RYE	35	–	35	35
FOXTAIL MILLET	–	30	–	–
ANNUAL RYEGRASS	35	–	35	40
WEEPING LOVEGRASS	–	10	–	–
KOREAN LESPEDEZA	15	15	–	–

COMMONWEALTH OF VIRGINIA
6-27-08
ROSANNE THERESA MARR
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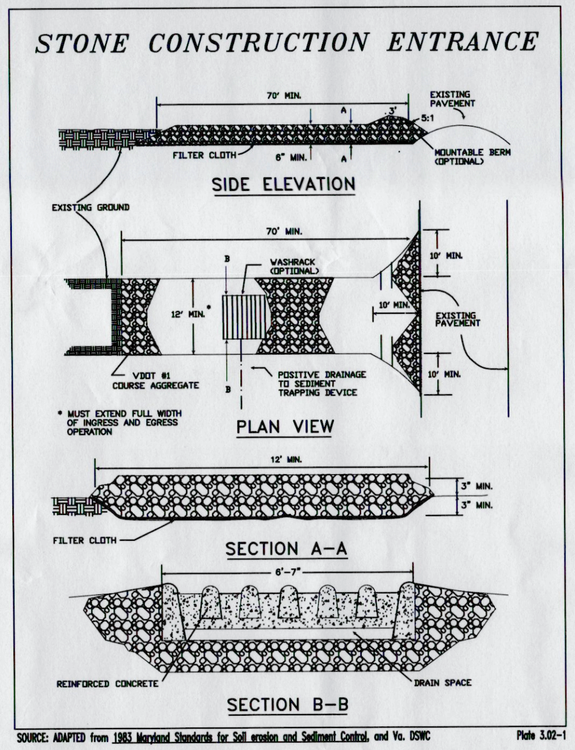
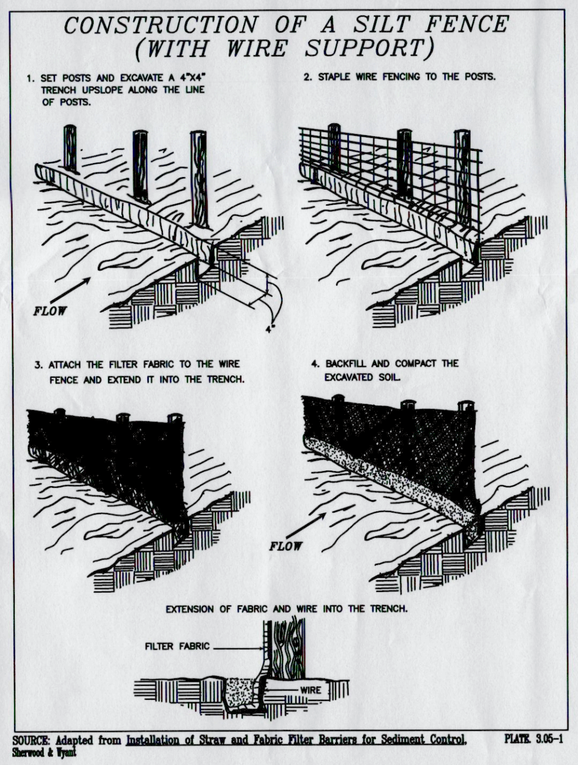
STONE CONSTRUCTION ENTRANCE



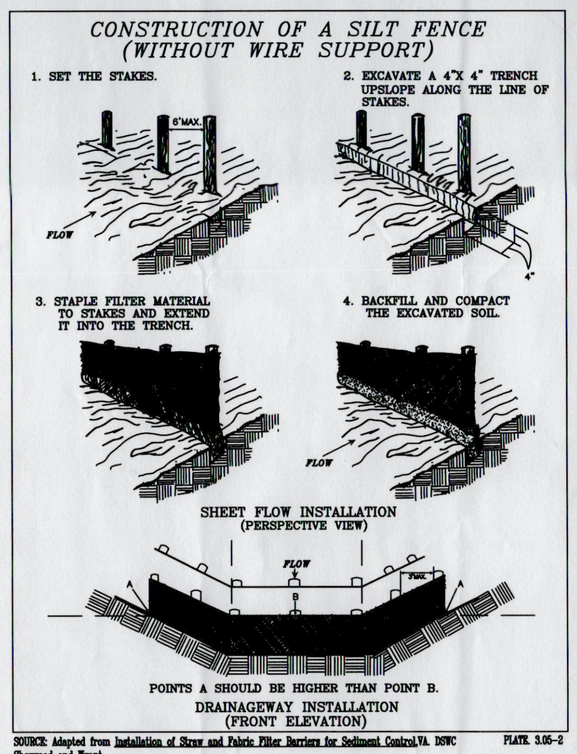
SOURCE: ADAPTED from 1983 Maryland Standards for Soil erosion and Sediment Control, and Va. DSWC — Plate 3.02–1

CONSTRUCTION OF A SILT FENCE (WITH WIRE SUPPORT)



SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood & Wyant — PLATE 3.05–1

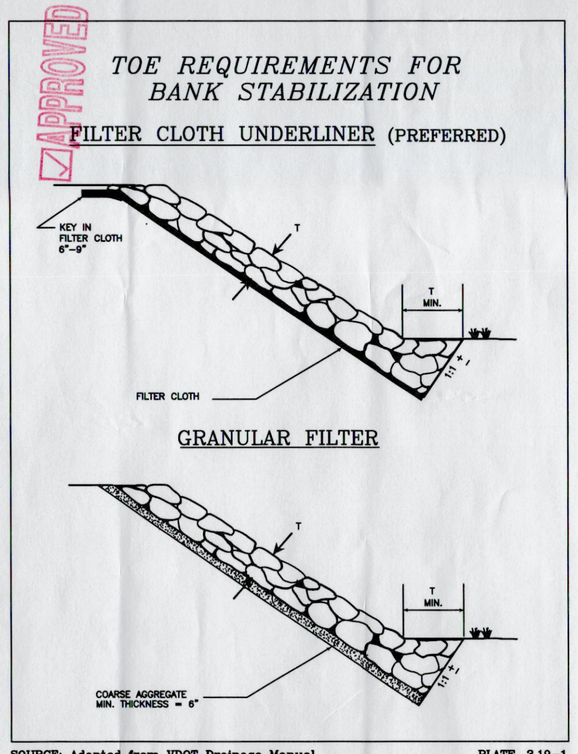
CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)



SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Va. DSWC, Sherwood and Wyant — PLATE 3.05–2

APPROVED

TOE REQUIREMENTS FOR BANK STABILIZATION



SOURCE: Adapted from VDOT Drainage Manual — PLATE. 3.19–1

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REVISIONS:

TOWN OF VINTON
TINKER CREEK SEWER INTERCEPTOR
VINTON, VIRGINIA

E&S NOTES AND DETAILS

DOCUMENT NO. 26659 – 000
SHEET 5 OF 5