

SOIL EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION:

THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT A SANITARY SEWER MAIN ALONG BROADLAWN ROAD AND LYNNHOPE DRIVE AND INSTALL PRIVATE SANITARY SEWER LATERALS. SEVENTEEN (17) LATERALS ARE PLANNED FOR THIS PROJECT. SIX (6) LATERALS ARE PLANNED TO BE INSTALLED BY DIRECTIONAL DRILLING UNDER LYNNHOPE DRIVE AND BROADLAWN ROAD. THE SANITARY SEWER MAIN WILL DISTURB NO MORE THAN A 20' WIDE STRIP AS IT IS INSTALLED. THE AMOUNT OF LAND DISTURBANCE IS ESTIMATED AS FOLLOWS: 1000 LF X 20' AVERAGE WIDTH = 20,000 SF PLUS 11' LATERALS AT 15' X 10' (11X15X10 = 1,650 SF), TOTALING 21,650 SF OR 0.5 ACRES. NO IMPERVIOUS IMPROVEMENTS ARE PROPOSED AT THIS TIME.

THE CONTRACTOR SHALL INSTALL SILT FENCE FOR CULVERT INLET PROTECTIONS AND PERMANENT SEEDING.

EXISTING SITE CONDITIONS:

THE SITE CURRENTLY DRAINS IN A SOUTH-WESTERLY DIRECTION TOWARD BROADLAWN ROAD.

THE PROJECT BEGINS WITHIN THE PUBLIC RIGHT OF WAY OF TEMPLE DRIVE AND EXTENDS ALONG BROADLAWN ROAD TO GARSTLAND DRIVE AND ALONG LYNNHOPE DRIVE TO AIRVIEW ROAD. EASEMENTS HAVE BEEN PREPARED WHERE THE PROJECT CROSSES ADJACENT PROPERTIES.

SOILS:

AS IDENTIFIED BY THE U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, GENERAL SOIL MAP, THE BASIC SOIL MATERIAL IS HAYESVILLE-EVARD-URBAN LAND.

CRITICAL AREAS:

THE SILT FENCE CULVERT INLET PROTECTIONS SHALL BE INSTALLED AS SHOWN ON THE PLANS ALONG LYNNHOPE DRIVE. CULVERT INLET PROTECTIONS SHALL BE PLACED TO KEEP SEDIMENT OUT OF EXISTING CULVERTS. ALL SILT FENCE SHALL BE INSTALLED AND CHECKED REGULARLY. THE CONTRACTOR SHALL PROVIDE PERMANENT SEEDING WITHIN SEVEN (7) DAYS OF OBTAINING FINAL GRADES. THE CONTRACTOR SHALL HAVE EQUIPMENT ON-SITE TO KEEP SEDIMENT OFF EXISTING PAVED AREAS.

ADJACENT PROPERTY: SEE PLAN SHEET FOR ADJOINING PROPERTY OWNERS.

EROSION & SEDIMENT CONTROL MEASURES:

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", THIRD EDITION.

1. REGARDLESS OF FUTURE DEVELOPMENT PLANS, THE CONTRACTOR SHALL IMMEDIATELY INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLANS. THIS WORK SHALL BE COORDINATED IN ORDER OF THE WORK WHICH IS TO FOLLOW: CONTROL AT CENTERS OF FLOW, AND OTHER POINTS OF CONCENTRATION SHOWN SHALL BE CONSTRUCTED IN PLACE FIRST.

2. AFTER THE INSTALLED CONTROL DEVICES ARE FOUND TO BE FUNCTIONAL, THE CONTRACTOR SHALL IMMEDIATELY PROCEED WITH DEMOLITION, CLEARING, AND PRELIMINARY GRADING OPERATIONS. ALL EXPOSED DENUDED AREAS SHALL BE SEEDD WITHIN SEVEN (7) DAYS AFTER FINAL GRADING, AND SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", THIRD EDITION.

3. IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL. IN PARTICULAR:

A. MEASURES SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAYS.  
B. ALL SILT FENCE BARRIERS AND INLET PROTECTIONS SHALL BE CHECKED REGULARLY FOR UNDERMINING AND SEDIMENT BUILDUP.

C. ALL SEEDD AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDD AS NEEDED.

4. FOLLOWING THE COMPLETION OF DEVELOPMENT AND STABILIZATION OF ALL AREAS AND AFTER IT HAS BEEN DETERMINED THAT EROSION OR SEDIMENTATION IS NO LONGER OCCURRING ON THE SITE OR AT ITS BOUNDARIES AND THAT DRAINAGE FLOWS ARE FUNCTIONING ACCORDING TO DESIGN, THE CONTRACTOR MAY THEN BEGIN TO REMOVE THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES. THIS WORK SHALL BE DONE IN A CAREFUL, NEAT, ORGANIZED MANNER.

GENERAL COMMENTS:

1. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.

2. THE APPROVING AUTHORITY RESERVES THE RIGHT TO ADD TO, DELETE, OR OTHERWISE CHANGE EROSION CONTROL DEVICES AS MAY BE DEEMED NECESSARY BY WRITTEN NOTIFICATION TO THE CONTRACTOR.

3. NO WORK SHALL PROCEED ON THE SITE UNTIL THE PROPER AUTHORIZATION OR PERMIT HAS BEEN OBTAINED FROM THE APPROVING AUTHORITY.

4. WHILE THE ENGINEER, PARKER DESIGN GROUP, HAS DESIGNED THE EROSION CONTROL MEASURES IN ACCORDANCE WITH THE VA ESCH GUIDELINES, SITE CONDITIONS OR PHASING OF CONSTRUCTION AFFECT THE E&S MEASURES. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR PERFORMANCE OR QUALITY OF ANY WORK BEING PERFORMED.

GENERAL EROSION & SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION & SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

2. THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, CHANGE, OR OTHERWISE MODIFY CERTAIN EROSION AND SEDIMENT CONTROL MEASURES WHERE FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.

3. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE PLACED IN ADVANCE OF THE WORK BEING PERFORMED, AS FAR AS PRACTICAL.

4. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAY'S WORK.

6. FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

7. REFERENCE IS DIRECTED TO "GRADING & EROSION CONTROL PLAN" FOR SITE DEPICTING EROSION AND SEDIMENT CONTROL MEASURES.

RESPONSIBLE LAND DISTURBER CERTIFICATION

THE CONTRACTOR FOR THIS PROJECT SHALL NAME ONE PERSON RESPONSIBLE FOR ALL LAND DISTURBANCE ACTIVITIES AND EROSION CONTROL MEASURES. THE PERSON NAMED SHALL HOLD A "RESPONSIBLE LAND DISTURBER CERTIFICATE" UNDER THE GENERAL ASSEMBLY REVISIONS TO THE VIRGINIA EROSION & SEDIMENT CONTROL LAW AS REVISED JULY 1, 2001. THE PERSON NAMED WILL BE IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT ALL EROSION CONTROL MEASURES. THE PERSON NAMED SHALL AFFIX SIGNED AND PRINTED NAME TO ONE COPY OF THIS EROSION CONTROL SHEET AND SUBMIT TO THE COUNTY OF ROANOKE. NO LAND DISTURBANCE ACTIVITY CAN BEGIN UNTIL THIS NAME HAS BEEN PROVIDED TO THE GOVERNING AGENCY.

NAME & CERTIFICATE #

PRINTED NAME

MINIMUM STANDARDS CHECKLIST

Yes No NA

- ☒ ☐ ☐ MS-1 Have temporary and permanent stabilization been addressed in the narrative?  
Are practices shown on the plan?  
Temporary and permanent seed specifications?  
Lime and fertilizer?  
Mulching?  
Pavement/Stone?
- ☐ ☐ ☒ MS-2 Has stabilization of soil stockpiles, borrow areas, and disposal areas been addressed in the narrative?  
Are sediment trapping measures provided?
- ☒ ☐ ☐ MS-3 Has the establishment and maintenance of permanent vegetative stabilization been addressed?
- ☒ ☐ ☐ MS-4 Does the Plan specifically state that sediment trapping facilities shall be constructed as a first step in land-disturbing activities?
- ☐ ☐ ☒ MS-5 Does the Plan specifically state that stabilization of earthen structures is required immediately after installation?
- ☐ ☐ ☒ MS-6 Are sediment traps and sediment basins specified where needed?
- ☐ ☐ ☒ MS-7 Have temporary and permanent stabilization of cut and fill slopes been adequately addressed?
- ☐ ☐ ☒ MS-8 Are paved flumes, channels, or slope drains required on cut and fill slopes where necessary?
- ☐ ☐ ☒ MS-9 Has water seeping from a slope face been addressed (e.g., Surface Roughening, subsurface drains)?
- ☒ ☐ ☐ MS-10 Is adequate inlet protection required on all operational storm sewer inlets?
- ☐ ☐ ☒ MS-11 Are outlet protection and/or channel lining required on stormwater conveyance and receiving channels?
- ☐ ☐ ☒ MS-12 Are in-stream protection measures required so that channel impacts are minimized?
- ☐ ☐ ☒ MS-13 Are temporary stream crossings of non-erodible material required where applicable?
- ☐ ☐ ☒ MS-14 (NOTE: This regulation requires that all applicable federal, state and local regulations pertaining to working in or crossing live watercourses be followed.)
- ☐ ☐ ☒ MS-15 Has immediate restabilization of areas subject to in-stream construction been adequately addressed?
- ☒ ☐ ☐ MS-16 Have stabilization of utility trenches and dewatering operations been addressed?
- ☒ ☐ ☐ MS-17 Is the transport of soil and mud onto public roadways properly controlled? (i.e., Construction Entrances, wash racks, daily cleaning of roadways, transport of sediment to a trapping facility)
- ☒ ☐ ☐ MS-18 Has the removal of temporary practices been addressed?  
Has the removal of accumulated sediment and the final stabilization of the resulting disturbed areas been addressed?
- ☒ ☐ ☐ MS-19 Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increases in peak stormwater runoff?

SPECIFIC ISSUES TO MS-16:

NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPEN AT ONE TIME. THE ENTIRE PROJECT INCLUDES 1000 LF OF OPEN TRENCH CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE OSHA MINIMUM REQUIREMENTS PERTAINING TO OPEN TRENCHES ADJACENT TO ACTIVE AREAS AT THE END OF EACH DAY.

EXCAVATED MATERIALS SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES WHEN POSSIBLE.

IN AREAS WHERE EXCAVATED MATERIAL CANNOT BE PLACED ON UPHILL SIDE, THE CONTRACTOR SHALL INSTALL SILT FENCE DOWNSTREAM OF STOCKPILE.

EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED 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 & PROMOTE STABILIZATION.

APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

BOND COST ESTIMATE

ITEM - E & S	UNITS	UNIT COST	QUANTITY	TOTAL
SILT FENCE CULVERT INLET PROTECTION	EA	\$ 500.00	3	\$ 1,500
PERMANENT SEEDING	ACRE	\$ 2,000.00	0.5	\$ 1000
			SUBTOTAL	\$ 2,500
			10% CONTINGENCY	\$ 250
			TOTAL	\$ 2,750

EROSION AND SEDIMENT CONTROL MEASURES:

☒ SILT FENCE CULVERT INLET PROTECTION MEETING VESCH STD. & SPEC 3.08

☒ PERMANENT SEEDING MEETING VESCH STD. & SPEC. 3.32

TYPE A (SLOPES FLATTER THAN 3:1)

15 OCTOBER TO 1 FEBRUARY  
K-31 FESCUE @ 5 LB / 1000 SF  
BORZY WINTER RYE @ 1/2 LB / 1000 SF

1 FEBRUARY TO 1 JUNE  
K-31 FESCUE @ 5 LB / 1000 SF  
ANNUAL RYE @ 1/2 LB / 1000 SF

1 JUNE TO 1 SEPTEMBER  
K-31 FESCUE @ 5 LB / 1000 SF  
GERMAN MILLET @ 1/2 LB / 1000 SF

1 SEPTEMBER TO 15 OCTOBER  
K-31 FESCUE @ 5 LB / 1000 SF  
ANNUAL RYE @ 1/2 LB / 1000 SF

TYPE B (SLOPES 3:1 OR STEEPER)

15 MARCH TO 1 MAY  
CROWN VETCH @ 1/2 LB / 1000 SF  
PERENNIAL RYEGRASS @ 1/2 LB / 1000 SF  
RED TOP @ 1/8 LB / 1000 SF

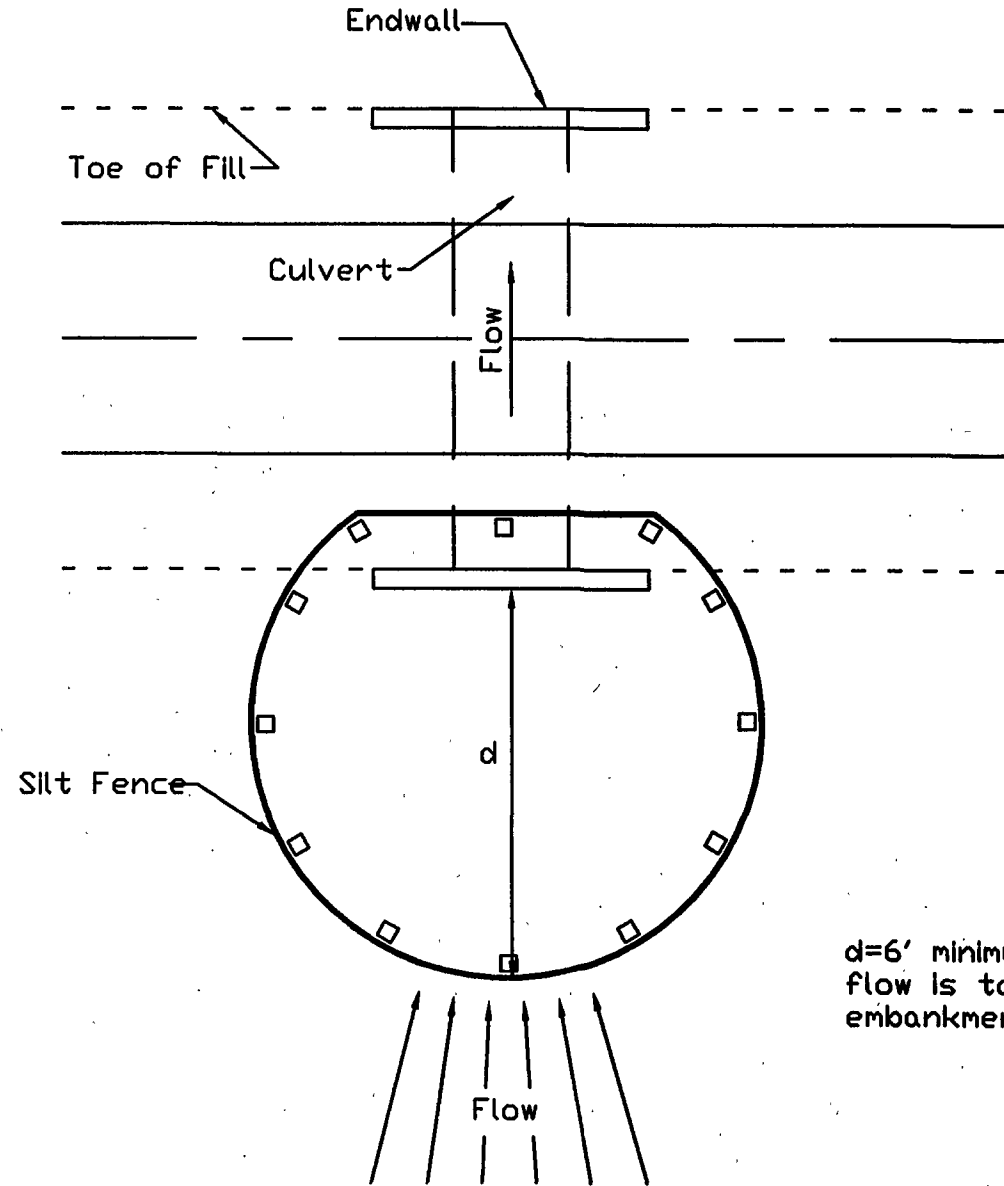
15 AUGUST TO 1 OCTOBER  
CROWN VETCH @ 1/2 LB / 1000 SF  
PERENNIAL RYEGRASS @ 1/2 LB / 1000 SF  
RED TOP @ 1/8 LB / 1000 SF

LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE

FERTILIZER: 5-20-10 @ 25 LB / 1000 SF  
38-0-0 @ 7 LB / 1000 SF

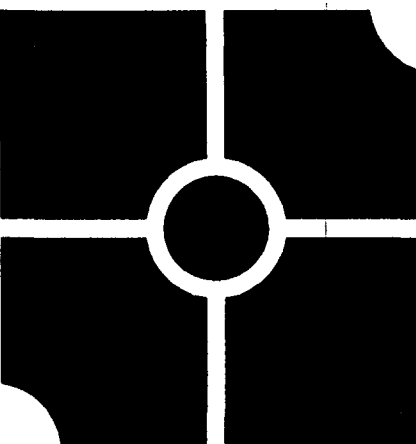
MULCH SHALL BE USED OVER ALL SEEDD AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3.35 OF THE VA ESCH.  
SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDLINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED WITHIN THE VA ESCH.  
ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE INSPECTOR.  
SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRASEEDER ON A FIRM, FRIABLE SEEDBED. MAX SEEDING DEPTH SHALL BE 1/4 INCH.

☒ PERMANENT SEEDING MIXTURE  
VA ESCH STD & SPEC 3.32



☒ CULVERT INLET PROTECTION

WWW.ID# 6X5PF8



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Sanitary Sewer Extension Along  
Broadlawn Rd. & Lynnhope Dr.  
For Western Virginia Water Authority  
Blks 1, 3, & 7, Sec 1, Covehaven Court  
City of Roanoke, VA

REVISIONS:


DESIGNED BY: SLR

DRAWN BY: SLR

CHECKED BY: PJB

SCALE: As Shown

DATE: June 1, 2006

SHEET TITLE:

Erosion  
Sediment Control  
Notes & Details

C05  
05 OF 05  
PROJECT NUMBER:  
06-0140-01