



Existing Grouted Rip Rap Swale Detail

10-year Event			100-year Event		1000	Maximum Channel		
Q	64.08	cfs	Q	107.93	cfs	Q	212.37	cfs
V	23.8	fps	V	27.36	fps	٧	32.67	fps
depth	0.57	ft	depth	0.73	ft	depth	1	ft
Top Width	7.02	ft	Top Width	8.33	ft	Top Width	10.5	ft
Area	2.69	sq ft	Area	3.94	sq ft	Area	6.5	sq f
WettedP	7.16	ft	WettedP	8.51	ft	WettedP	10.75	ft

2122 Carolina Ave, SW Roanoke, VA 24014 Ph: 540-387-1153

Richmond, VA 23220 Phone: 804-358-2947 Fax: 804-359-9645

authorization of PDG will be at the sole risk of the individual or entity utilizing said documents

REVISIONS:

DRAWN BY: **CHECKED BY:**

September 18, 2017

SHEET TITLE: Grading & **ESC Plan** SCALE:

SHEET NO.

General Erosion and Sediment Control Measures & Construction Sequence

• Contractor shall install initial Erosion and Sediment Control (E&SC) measures prior to demolition.

 Contractor shall maintain the Construction Entrance per VA ESCH Std. & Spec 3.02, as needed, for the duration of the permit.

• Contractor shall install, or verify a prior correct installation, of Silt Fence and all other initial E&SC

measures as shown on Plans. Then the Contractor may begin grading and installation of storm pipe. Install Inlet Protection as

needed as storm is installed. As final grades are achieved, necessary soil stabilization E&SC measures are to be installed. Once the site has been stabilized, the temporary E&SC measures may be removed and those areas brought to final grade and stabilized. The Contractor shall coordinate with local program Authority prior to removing the E&SC measures. All measures shall be removed within 30 days after final site stabilization or after temporary measures are no longer needed, unless otherwise authorized by the

The Silt Fence and Inlet Protection shall be removed from the project once all disturbed areas are

local program Authority. All E&SC measures to be altered or removed require local program

stabilized and permanent vegetation is established The use of a filter device shall be used to de-water sediment laden water.

1. The Contractor shall review the Erosion & Sediment Control (E&SC) Narrative for phasing of E&SC measures. The Contractor shall comply with local codes in observing E&SC measures both on and off the site. Refer to the Virginia Erosion and Sediment Control Handbook (ESCH) for details and specifications of those E&SC items found on these drawings.

2. The Contractor shall provide all grading, general excavation, and finish grading as indicated on the drawings. Work shall be accomplished in accordance with VDOT Standards and Specifications. All fills and backfills shall be uniformly compacted to at least 95% of the Standard Proctor maximum

requires compliance for Water Quality, a Stormwater Pollution Prevention Plan, and maintenance

4. All earth slopes and denuded areas shall be seeded and mulched as required for stabilization within seven (7) days of completion of excavation operations. Reference is directed to the seeding

FIELD REVISION #1 - 12.14.2017 SHIFT LOCATION OF STORM PIPE DUE TO EX. ELECTRICAL DUCT BANK ADJUST SEWER CONNECTION BASED ON ACTUAL FIELD CONDITION

> City of Roanoke Planning, Building, & Development COMPREHENSIVE DEVELOPMENT PLAN

> > FIELD REVISION APPROVED

by Adrian Gilbert 12/26/2017

EROSION AND SEDIMENT CONTROL MEASURES

Using 2013 BMP Specifications. Provide the following: CE) CONSTRUCTION ENTRANCE MEETING VA ESCH STD. & SPEC. 3.02

(IP) INLET PROTECTION MEETING VA ESCH STD. & SPEC. 3.07

TEMPORARY SEEDING MEETING VA ESCH STD. & SPEC. 3.31

SF SILT FENCE MEETING VA ESCH STD. & SPEC. 3.05

PS PERMANENT SEEDING MEETING VA ESCH STD. & SPEC. 3.32 MULCHING MEETING VA ESCH STD. & SPEC. 3.35

BLANKET MATTING MEETING VA ESCH STD. & SPEC. 3.36 DC DUST CONTROL MEETING VA ESCH STD. & SPEC. 3.39

OP OUTLET PROTECTION VA ESCH STD. & SPEC. 3.18 (Existing Grouted Rip Rap)

density. The Contractor shall provide positive drainage at all times.

3. A DEQ VSMP registration statement is not required for this project (less than one-acre). The City logs shall be kept on site and available for review when requested.