

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

The purpose of this project is to construct a grocery and retail stores with associated parking areas on 22.86 acres.

EXISTING SITE CONDITIONS

The proposed development is located to north of Valley Gateway Boulevard, to the southwest of Carson Road, and southeast of Challenger Avenue in Roanoke County. The existing site is undeveloped woodland with a stream.

ADJACENT AREAS

The undeveloped area is bordered on the north by three residential properties owned by Frances Thrasher Life Estate, Michael Malone and F&W Properties Inc.; and to the east by Challenger Avenue (Route 460); and to the south by property owned by Tract B Roanoke Gateway LLC, Valley Gateway Boulevard and Integrity Drive; and to the west by Carson Road (Route 758).

SOILS

The Soil Survey of Roanoke County classifies the soils in this area as 1) Chiswell-Litz and 2) Groseclose-Litz complex. Chiswell-Litz soils consist of strongly sloping, well drained soils, and consist of about 45% Chiswell, 30% Litz and 25% other soils. Groseclose-Litz soils consist of moderately steep, well drained soils, and consist of about 45% Groseclose, 30% Litz and 25% other soils. Both soils have high erosion potential. Onsite investigation is generally required to determine specifics of the soil in a particular area.

OFF-SITE AREAS

No off-site work is proposed at this time. The location of all off-site fill or borrow areas associated with the construction of this project will be provided to Roanoke County Department of Community Development. An Erosion Control Plan or measures may be required for this area. All stockpiles areas are to be stabilized.

CRITICAL EROSION AREAS

The potential critical erosion areas are at the banks of the stream and at the adjoining property owned by Michael Malone, Frances Thrasher Estate, and Roanoke Gateway, LLC.

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 specifications of the handbook. The minimum standards of the VESCR shall be adhered to unless otherwise waived or approved by a variance.

STRUCTURAL PRACTICES

1. Temporary Construction Entrance (Section 3.02)

One temporary construction entrance will be installed. Vehicles will be washed to limit tracking onto public roads. Should tracking occur the road will be immediately cleaned.

2. Silt Fence (Section 3.05)

Temporary silt fences will be installed as indicated on the site plan.

3. Temporary Seeding (Section 3.31)

Temporary seeding will be placed on all disturbed areas that will not be brought to final grade within one year or less. Temporary seeding will aid in the reduction of dust and sediment. Temporary seeding will be Annual Ryegrass (100#/ac), Feb 16 - April 30, German Millet (60#/ac), May 1 - Aug. 31.

Permanent Seeding (Section 3.32)

After final grading permanent seeding will be employed to reduce erosion and sediment yield. Seeding specifications: permanent seeding will be Kentucky Bluegrass, blended to contain 4 or more varieties, with no one variety exceeding 50%. The seeding will be applied at 140 lb. per acre, on slopes 2:1 or greater a mixture of Crown Vetch (50%), Perennial Ryegrass (40%), and Redtop (10%) will be used. All seeding, with required associated practices, will be in accordance with all applicable sections of the Virginia Erosion and Sediment Control

Inlet Protection (Section 3.07)

Inlet protection will be placed at all storm structure inlets to prevent sediment from entering the system.

Outlet Protection (Section 3.18)

Outlet Protection will be placed at all storm structure outlets to clean and slow sediment laden runoff.

Construction Road Stabilization (Section 3.03)

All roads and parking areas on the site shall be stabilized with gravel immediately after grading. Traffic is prohibited from entering drainage swales or streams unless absolutely necessary.

Surface Roughening (Section 3.29)

Surface Roughening will provide a rough soil surface with horizontal depressions that will promote a vegetative stand.

Soil Stabilization Blanket (Section 3.36)

Soil Stabilization Blankets will stabilize steep slopes and help prevent erosion.

Diversion Dike (Section 3.52)

Diversion Dikes will divert sediment laden runoff to collecting measures. All diversion dikes that exceed 2% in slope must be stabilized in accordance with vesch std. & spec. 3.17 (stormwater conveyance channel).

Check Dam (Section 3.20)

Check Dams will filter and slow sediment laden runoff in stormwater conveyance channels.

Sediment Basin (Section 3.14)

The Sediment Basin will collect sediment laden runoff from the site and allow the sediment to settle out before leaving the site.

Temporary Slope Drains (Section 3.15)

Temporary slope drains will direct concentrated runoff down the fill slope while preventing erosion.

Right-Of-Diversion (Section 3.11)

Right-Of-Diversion will prevent sediment laden runoff from entering the public right-of-way.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION & SEDIMENT CONTROL MEASURES 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 EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. THESE SYMBOLS ARE TO BE UTILIZED ON ALL EROSION CONTROL PLANS SUBMITTED TO ROANOKE COUNTY.

NOTE

ALL DIVERSION DIKES THAT EXCEED 2% IN SLOPE MUST BE STABILIZED IN ACCORDANCE WITH VESCH STD. & SPEC. 3.17 (STORMWATER CONVEYANCE CHANNEL).

2 ACRES OR LESS OF DRAINAGE AREA:

2-10 ACRES OF DRAINAGE AREA:

TEMPORARY DIVERSION DIKE

MANAGEMENT

- Construction should be sequenced so that grading operations can begin and end as quickly as possible.
- Erosion and Sediment control devices shall be installed as the first step of construction.
- Areas which are not to be disturbed shall be clearly marked by flags, signs, etc.
- The grading contractor shall be responsible for the installation and maintenance of all erosion and sediment control practices. Inspections are to be made periodically and after every significant rainfall.
- After achieving adequate stabilization, the temporary E&S controls will be cleaned up and removed.

PERMANENT STABILIZATION

All areas disturbed by construction shall be stabilized with permanent seeding immediately following finish grading. Seeding shall be done with Kentucky 31 Tall Fescue according to Std. & Spec. 3.32, PERMANENT SEEDING, of the handbook. Erosion control blankets will be installed over fill slopes which have been brought to final grade and have been seeded to protect the slopes from fill and gully erosion and to allow seed to germinate properly. Mulch (straw or fiber) will be used on relatively flat areas. In all seeding operations, seed, fertilizer and lime will be applied prior to mulching.

MAINTENANCE

In general, all erosion and sediment control measures will be checked daily and after each significant rainfall. Any items not in accordance with the Virginia Erosion and Sediment Control Handbook will be immediately replaced and/or repaired. The following items will be checked in particular:

- The gravel outlets will be checked regularly for sediment buildup which will prevent drainage. If the gravel is clogged by sediment, it shall be removed and cleaned or replaced.
- The silt fence barrier will be checked regularly for undermining or deterioration of the fabric. Sediment shall be removed when the level of sediment deposition reaches half way to the top of the barrier.
- The seeded areas will be checked regularly to ensure that a good stand is maintained. Areas should be fertilized and re-seeded as needed.
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- All soil stockpile areas are to be stabilized.

GENERAL

The erosion and sediment control measures shown on the construction plans are the minimum measures required. Due to construction phasing and other considerations all measures can not be shown. The owner, through his contractor, will employ whatever measures which may be required to assure that sediment laden runoff does not leave the site.

All materials and measures employed for erosion and sediment control will be in accordance with the Virginia Erosion and Sediment Control Handbook, latest edition.

If, during construction, additional Erosion and Sediment Control measures are deemed necessary, they shall be installed as directed by the Owner, Engineer or County agent.

STORMWATER MANAGEMENT

Calculation of runoff before and after development indicates that there will be a net increase in peak runoff as a result of project development. Consequently, stormwater will be managed by stormwater detention.

GENERAL NOTES

1. DESIGN OF DETENTION BASINS SHALL CONFORM TO THE REQUIREMENTS OF THE COUNTY OF ROANOKE DRAINAGE STANDARDS (REF. SECTIONS 503.02, 503.03, AND 505.02). THE DESIGN OF THE FACILITY AND PREPARATION OF AS-BUILT PLANS SHALL BE BY A CERTIFIED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE COMMONWEALTH OF VIRGINIA.

2. ACCESS TO THE FACILITY MUST BE PROVIDED IN ACCORDANCE WITH THE COUNTY OF ROANOKE DESIGN AND CONSTRUCTION STANDARDS FOR DETENTION PONDS, LATEST EDITION.

3. IF THE FACILITY IS OVER FOUR (4) FEET DEEP, TAKES OVER TWO (2) HOURS TO DRAIN OR THE INTERIOR SLOPE EXCEEDS 3 (H): 1 (V), PERMANENT FENCING MAY BE REQUIRED, ADDITIONALLY, IF THE FACILITY IS IN A CONGESTED AREA OR WILL IN ANY WAY POSE A HAZARD TO THE GENERAL PUBLIC, FENCING MAY BE REQUIRED. FENCING SHALL BE A MINIMUM OF SIX (6) FEET HIGH, A MINIMUM OF STANDARD NINE GAUGE LINK FENCE, AND MUST HAVE ONE OR MORE LOCKING DOUBLE GATES (MINIMUM TEN FEET WIDE) FOR ACCESS.

4. DETENTION PONDS SHALL BE BONDED IN ACCORDANCE WITH THE ROANOKE COUNTY BONDING POLICY FOR SUBDIVISION AND SITE DEVELOPMENT. A SEPARATE BOND FOR THE DETENTION FACILITY WILL BE REQUIRED AND ADMINISTERED APART FROM THE SUBDIVISION DEVELOPMENT BOND. REFERENCE ESTIMATE - THIS SHEET.

5. REFERENCE THE COUNTY OF ROANOKE DESIGN AND CONSTRUCTION STANDARDS FOR DETENTION PONDS, LATEST EDITION, FOR ACCEPTANCE AND MAINTENANCE OF THE FACILITY. CERTIFIED AS-BUILTS ARE REQUIRED AND MUST INCLUDE:

- DIMENSIONS OF THE FACILITY
 - VOLUME & MAXIMUM DEPTH
 - ELEVATIONS OF STRUCTURES, SPILLWAYS, AND TOP
 - MATERIALS VERIFICATION INCLUDING RESULTS OF DENSITY TESTS CONDUCTED BY AN INDEPENDENT SOIL TESTING LABORATORY
 - LOCATION AND ELEVATION OF BENCHMARK
6. ONE FOOT MINIMUM FREEBOARD REQUIRED FOR THE 100 YR WATER SURFACE ELEVATION.

MS-1 Have temporary and permanent stabilization been addressed in the narrative? YES-VESCH SECTION NOTED.

Are practices shown on the plan? YES, DENOTED WITH SYMBOLS

Seed specifications? YES, IN NARRATIVE

Mulching? YES, IN NARRATIVE

Gravel? YES, IN NARRATIVE

MS-2 Have stabilization of soil stockpiles been addressed in the narrative? YES, AS SHOWN ON PHASE 1 GRADING PLAN

Are sediment trapping measures provided? YES, FOUR SEDIMENT BASINS AND FOUR TRAPS ARE PROPOSED

MS-3 Has maintenance of permanent stabilization been addressed? YES, THIS SHEET.

MS-4 Are sediment trapping facilities to be constructed as a first step in LDA? YES

MS-5 Has stabilization of earthen structures been addressed? YES, IN NARRATIVE

MS-6 Are sediment basins required where needed? YES

Detailed design calculations and specifications included for all proposed sediment traps and basins? PROVIDED IN CALCULATIONS

MS-7,8 Has stabilization of cut and fill slopes been adequately addressed? YES, IN NARRATIVE.

MS-9 (i.e. Surface Roughening, Outlet Protection) IMPLEMENTED ON PLAN.

MS-10 Are paved flumes, channels, or slope drains required where necessary? YES.

MS-11 Is adequate inlet protection required on all operational storm sewer inlets? YES, SEE PLAN.

MS-12 Are in-stream construction measures required so that channel damage is minimized? NOT APPLICABLE

Detailed specifications included for all required instances of outlet protection? YES THIS SHEET.

MS-13 Are in-stream construction measures required so that channel damage is minimized? NOT 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.) YES, PLANS TO BE REVIEWED BY DEQ. & DCR.

MS-15 Has stabilization of areas subject to in-stream construction been adequately addressed? NOT APPLICABLE.

MS-16 Is stabilization of utility trenches addressed? YES, VESCH SEC 3.25.

MS-17 Is the transport of soil and mud onto public roadways properly controlled? (i.e. Construction Entrances, Wash Racks, daily cleaning of road ways, transport of sediment to a trapping facility)? YES, CONSTRUCTION ENTRANCE PROVIDED.

MS-18 Has the removal of temporary practices been addressed? YES, IN NARRATIVE.

MS-19 Has maintenance of practices been addressed? (i.e. repair of structures and removal of accumulated sediment)? YES, IN NARRATIVE.

MS-20 Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increases in peak stormwater runoff? YES.

2 ACRES OR LESS OF DRAINAGE AREA:

2-10 ACRES OF DRAINAGE AREA:

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

1

2

3

ROCK CHECK DAM

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

1

2

3

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

1

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TEMPORARY SEDIMENT BASIN DATA

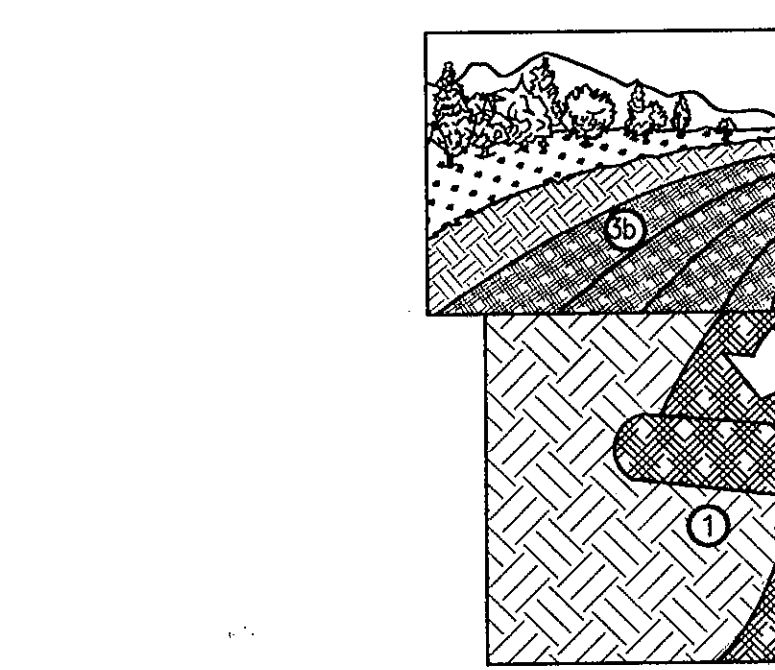
STRUCTURE

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TEMPORARY SEDIMENT BASIN DATA



ROLLED EROSION CONTROL PRODUCTS (RECP's) ARE REQUIRED ON AND ON ALL NEW 2:1 OR GREATER SLOPES.

PREPARE SOIL BEFORE INSTALLING RECP's, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.

NOTE: WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA-CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.

ROLL THE RECP'S (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. IF SLOPE IS 2:1 OR GREATER, ROLL DOWN THE SLOPE. THE RECP'S WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE, OR APPROXIMATELY 12" APART HORIZONTALLY AND VERTICALLY.

THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON RECP'S TYPE.

CONSECUTIVE RECP'S SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTH GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE RECP'S.

(ADAPTED FROM NORTH AMERICAN GREEN, EVANSVILLE, IN)

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Are practices shown on the plan? YES, DENOTED WITH SYMBOLS

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Detailed design calculations and specifications included for all proposed sediment traps and basins? PROVIDED IN CALCULATIONS

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MS-9 (i.e. Surface Roughening, Outlet Protection) IMPLEMENTED ON PLAN.

MS-10 Are paved flumes, channels, or slope drains required where necessary? YES.

MS-11 Is adequate inlet protection required on all operational storm sewer inlets? YES, SEE PLAN.

MS-12 Are in-stream construction measures required so that channel damage is minimized? NOT APPLICABLE

Detailed specifications included for all required instances of outlet protection? YES THIS SHEET.

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MS-14 (NOTE: This regulation requires that all applicable federal, state and local regulations pertaining to working in or crossing live watercourses be followed.) YES, PLANS TO BE REVIEWED BY DEQ. & DCR.

MS-15 Has stabilization of areas subject to in-stream construction been adequately addressed? NOT APPLICABLE.

MS-16 Is stabilization of utility trenches addressed? YES, VESCH SEC 3.25.

MS-17 Is the transport of soil and mud onto public roadways properly controlled? (i.e. Construction Entrances, Wash Racks, daily cleaning of road ways, transport of sediment to a trapping facility)? YES, CONSTRUCTION ENTRANCE PROVIDED.

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MS-20 Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increases in peak stormwater runoff? YES.

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1

2

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ROCK CHECK DAM

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

1

2

3

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

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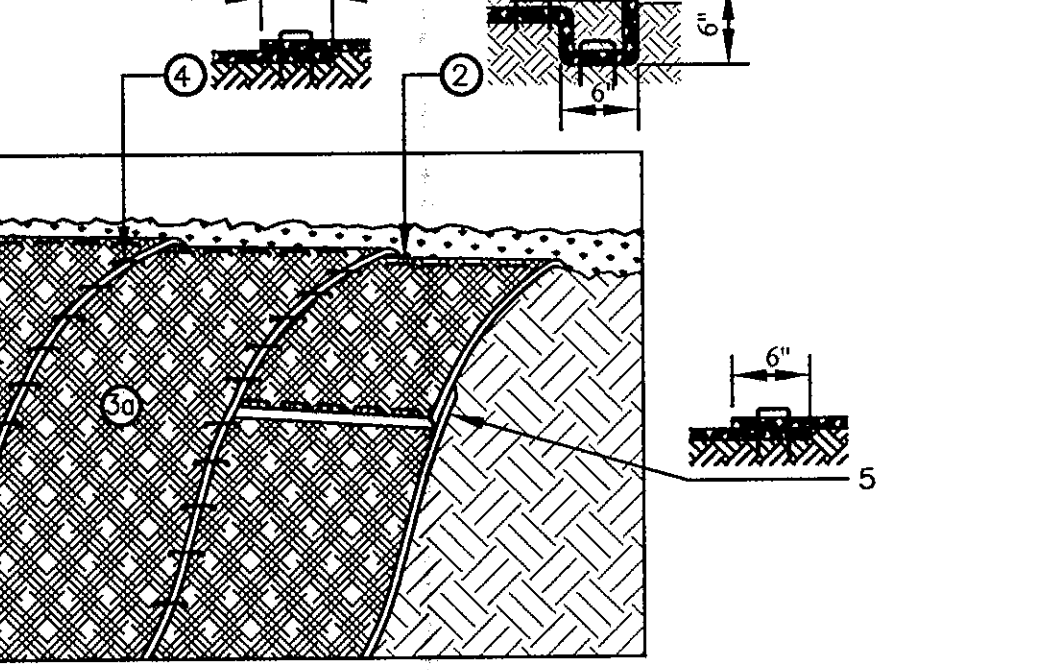
TEMPORARY SEDIMENT BASIN DATA

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CONSTRUCT A WASHBOARD OR WASH RACK IF REQUIRED.

Filter Cloth Ref. Table 3.02-A of Virginia ESC Handbook for requirements.

12" MIN.

3" MIN.

3" MIN.

Reinforced Concrete

Drain Space

WASH RACK DETAIL (IF REQUIRED)

TEMPORARY CONSTRUCTION ENTRANCE

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STRUCTURE

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TEMPORARY SEDIMENT BASIN DATA

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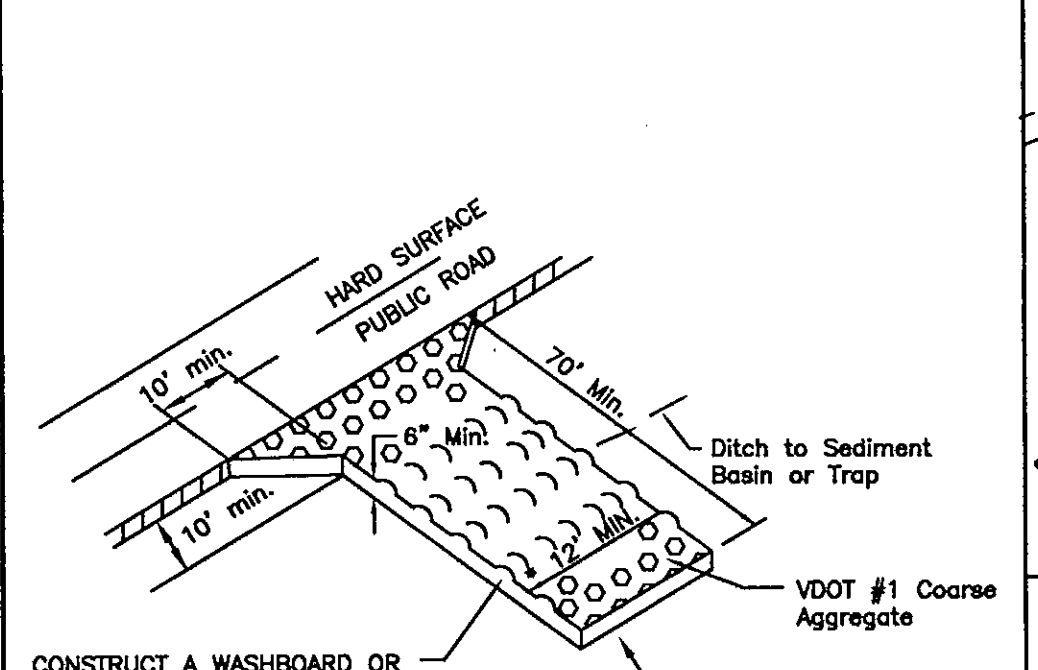
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STRUCTURE

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SPECIFIC APPLICATION

This method of inlet protection is applicable of curb inlets where ponding in front of the structure is not likely to cause inconvenience or damage to adjacent structure and unprotected areas.

* Gravel shall be VDOT #3, #57 or 5 coarse aggregate.

IP GRAVEL CURB INLET SEDIMENT FILTER

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2. ACCESS TO THE FACILITY MUST BE PROVIDED IN ACCORDANCE WITH THE COUNTY OF ROANOKE DESIGN AND CONSTRUCTION STANDARDS FOR DETENTION PONDS, LATEST EDITION.

3. IF THE FACILITY IS OVER FOUR (4) FEET DEEP, TAKES OVER TWO (2) HOURS TO DRAIN OR THE INTERIOR SLOPE EXCEEDS 3 (H): 1 (V), PERMANENT FENCING MAY BE REQUIRED, ADDITIONALLY, IF THE FACILITY IS IN A CONGESTED AREA OR WILL IN ANY WAY POSE A HAZARD TO THE GENERAL PUBLIC, FENCING MAY BE REQUIRED. FENCING SHALL BE A MINIMUM OF SIX (6) FEET HIGH, A MINIMUM OF STANDARD NINE GAUGE LINK FENCE, AND MUST HAVE ONE OR MORE LOCKING DOUBLE GATES (MINIMUM TEN FEET WIDE) FOR ACCESS.

4. DETENTION PONDS SHALL BE BONDED IN ACCORDANCE WITH THE ROANOKE COUNTY BONDING POLICY FOR SUBDIVISION AND SITE DEVELOPMENT. A SEPARATE BOND FOR THE DETENTION FACILITY WILL BE REQUIRED AND ADMINISTERED APART FROM THE SUBDIVISION DEVELOPMENT BOND. REFERENCE ESTIMATE - THIS SHEET.

5. REFERENCE THE COUNTY OF ROANOKE DESIGN AND CONSTRUCTION STANDARDS FOR DETENTION PONDS, LATEST EDITION, FOR ACCEPTANCE AND MAINTENANCE OF THE FACILITY. CERTIFIED AS-BUILTS ARE REQUIRED AND MUST INCLUDE:

- DIMENSIONS OF THE FACILITY
 - VOLUME & MAXIMUM DEPTH
 - ELEVATIONS OF STRUCTURES, SPILLWAYS, AND TOP
 - MATERIALS VERIFICATION INCLUDING RESULTS OF DENSITY TESTS CONDUCTED BY AN INDEPENDENT SOIL TESTING LABORATORY
 - LOCATION AND ELEVATION OF BENCHMARK
6. ONE FOOT MINIMUM FREEBOARD REQUIRED FOR THE 100 YR WATER SURFACE ELEVATION.

MS-1 Have temporary and permanent stabilization been addressed in the narrative? YES-VESCH SECTION NOTED.

Are practices shown on the plan? YES, DENOTED WITH SYMBOLS

Seed specifications? YES, IN NARRATIVE

Mulching? YES, IN NARRATIVE

Gravel? YES, IN NARRATIVE

MS-2 Have stabilization of soil stockpiles been addressed in the narrative? YES, AS SHOWN ON PHASE 1 GRADING PLAN

Are sediment trapping measures provided? YES, FOUR SEDIMENT BASINS AND FOUR TRAPS ARE PROPOSED

MS-3 Has maintenance of permanent stabilization been addressed? YES, THIS SHEET.

MS-4 Are sediment trapping facilities to be constructed as a first step in LDA? YES

MS-5 Has stabilization of earthen structures been addressed? YES, IN NARRATIVE

MS-6 Are sediment basins required where needed? YES

Detailed design calculations and specifications included for all proposed sediment traps and basins? PROVIDED IN CALCULATIONS

MS-7,8 Has stabilization of cut and fill slopes been adequately addressed? YES, IN NARRATIVE.

MS-9 (i.e. Surface Roughening, Outlet Protection) IMPLEMENTED ON PLAN.

MS-10 Are paved flumes, channels, or slope drains required where necessary? YES.

MS-11 Is adequate inlet protection required on all operational storm sewer inlets? YES, SEE PLAN.

MS-12 Are in-stream construction measures required so that channel damage is minimized? NOT APPLICABLE

Detailed specifications included for all required instances of outlet protection? YES THIS SHEET.

MS-13 Are in-stream construction measures required so that channel damage is minimized? NOT 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.) YES, PLANS TO BE REVIEWED BY DEQ. & DCR.

MS-15 Has stabilization of areas subject to in-stream construction been adequately addressed? NOT APPLICABLE.

MS-16 Is stabilization of utility trenches addressed? YES, VESCH SEC 3.25.

MS-17 Is the transport of soil and mud onto public roadways properly controlled? (i.e. Construction Entrances, Wash Racks, daily cleaning of road ways, transport of sediment to a trapping facility)? YES, CONSTRUCTION ENTRANCE PROVIDED.

MS-18 Has the removal of temporary practices been addressed? YES, IN NARRATIVE.

MS-19 Has maintenance of practices been addressed? (i.e. repair of structures and removal of accumulated sediment)? YES, IN NARRATIVE.

MS-20 Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increases in peak stormwater runoff? YES.

2 ACRES OR LESS OF DRAINAGE AREA:

2-10 ACRES OF DRAINAGE AREA:

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

1

2

3

ROCK CHECK DAM

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

1

2

3

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

1

2

3

TEMPORARY SEDIMENT BASIN DATA

STRUCTURE

1

2

3