

## EROSION & SEDIMENT CONTROL NARRATIVE:

### PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO PROVIDE DEMOLITION, GRADING, AND CONSTRUCTION OF A BUILDING ADDITION & PARKING AREA FOR THE SITE AND TO CONNECT THE BUILDING TO PUBLIC SANITARY SEWER. THIS PROJECT WILL DEVELOP 0.426 ACRES INCLUDING PARKING AND BUILDING AREAS WITH ASSOCIATED UTILITY CONSTRUCTION. THE OVERALL SITE IS 0.426 ACRES AND IS CURRENTLY ALREADY CONSTRUCTED. THE PROPOSED DEVELOPMENT WILL CAPTURE PORTIONS OF RUNOFF BY MEANS OF A FILTERRA SYSTEM. LARGER STORM EVENTS WILL CONTINUE TO DRAIN TO THE EXISTING STORMWATER MANAGEMENT BASIN THAT EXISTS ADJACENT TO THE SITE. ALL RUNOFF EVENTUALLY REACHES THE EXISTING SWM BASIN.

### EXISTING CONDITIONS

THE SITE SLOPES FROM NORTHEAST TO SOUTHWEST, WITH MINOR PORTIONS OF RUNOFF DRAINING TO THE NORTH (AIRPORT ROAD) WHICH IS COLLECTED BY AN EXISTING STORM PIPE AND PIPED TO THE STORMWATER MANAGEMENT BASIN, LOCATED TO THE SOUTHWEST OF THE SITE. SLOPES RANGE FROM 1% TO 15%. THE SITE IS ALREADY DEVELOPED WITH PAVEMENT AND BUILDING.

### ADJACENT PROPERTY

ADJOINING OWNERS ARE SHOWN ON THE PLANS. THE SUBJECT PROPERTY RECENTLY WENT THROUGH A REZONING PROCESS.

### SOILS

AS IDENTIFIED BY THE U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, GENERAL SOIL MAP, THE BASIC SOIL MATERIAL IS FREDERICK-URBAN LAND (ZONE 21C).

### CRITICAL EROSION AREAS

ANY SLOPES GREATER THAN 3:1 SHALL BE INSPECTED REGULARLY. IF EROSION PROBLEMS APPEAR PRIOR TO STABILIZATION, BLANKET MATTING SHALL BE INSTALLED ON THESE SLOPES.

IN AREAS WHERE SEDIMENT LADEN WATER IS BEING PUMPED FROM A LOCATION, THE PUMPED RUNOFF SHALL BE FILTERED THROUGH A FILTER BAG BEFORE BEING RELEASED DOWNSTREAM.

### EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE STATED ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH MINIMUM STANDARDS AND SPECIFICATIONS OF THE LATEST EDITION OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK".

### STRUCTURAL PRACTICES

TEMPORARY CONSTRUCTION ENTRANCE (3.02) -- A STONE PAD, LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE, TO REDUCE THE SOIL TRANSPORTED ONTO PUBLIC ROADS AND OTHER PAVED AREAS.

A TEMPORARY CONSTRUCTION ENTRANCE HAS BEEN INCLUDED IN THIS PROJECT AND IS SHOWN ON THE DRAWINGS. RELOCATION OF THE CONSTRUCTION ENTRANCE MAY BE REQUIRED.

SILT FENCE (3.05) -- A TEMPORARY SEDIMENT BARRIER CONSTRUCTED OF POSTS, FILTER FABRIC AND, IN SOME CASES, A WIRE SUPPORT FENCE, PLACED ACROSS OR AT THE TOE OF A SLOPE OR IN A MINOR DRAINAGE WAY TO INTERCEPT AND DETAIN SEDIMENT AND DECREASE FLOW VELOCITIES FROM DRAINAGE AREAS OF LIMITED SIZE; APPLICABLE WHERE SHEET AND RILL EROSION OR SMALL CONCENTRATED FLOWS MAY BE A PROBLEM. MAXIMUM EFFECTIVE LIFE OF 6 MONTHS.

SILT FENCE WILL BE USED ON THIS PROJECT AND IS SHOWN ON THE DRAWINGS.

TEMPORARY RIGHT-OF-WAY DIVERSION (3.11) -- A RIDGE OF COMPACTED SOIL OF LOOSE GRAVEL CONSTRUCTED ACROSS A DISTURBED RIGHT-OF-WAY OR SIMILAR SLOPING AREA TO SHORTEN THE FLOW LENGTH WITHIN THE DISTURBED STRIP AND DIVERT THE RUNOFF TO A STABILIZED OUTLET. EARTHEN DIVERSIONS ARE APPLICABLE WHERE THERE WILL BE LITTLE OR NO CONSTRUCTION TRAFFIC WITHIN THE RIGHT-OF-WAY, AND GRAVEL STRUCTURES ARE APPLICABLE WHERE VEHICULAR TRAFFIC MUST BE ACCOMMODATED.

A TEMPORARY RIGHT OF WAY DIVERSION WILL BE USED ON THE WESTERN MOST ENTRANCE WHEN INSTALLED.

TEMPORARY SEEDING (3.31) -- ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER ON DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR PERIODS OF 30 DAYS TO ONE YEAR BY SEEDING WITH APPROPRIATE RAPIDLY-GROWING PLANTS.

TEMPORARY SEEDING WILL MOST LIKELY NOT BE NECESSARY DUE TO THE TIMING OF THE PROJECT. SHOULD A DELAY OCCUR, TEMPORARY SEEDING WILL BE USED AS NECESSARY.

PERMANENT SEEDING (3.32) -- ESTABLISHMENT OF PERENNIAL VEGETATIVE COVER BY PLANTING SEED ON ROUGH-GRADED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR MORE OR WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED ON FINE-GRADED AREAS.

PERMANENT SEEDING WILL BE USED ON ALL FINISHED AREAS OUTSIDE OF THE PARKING AND DRIVEWAY AREAS.

SOIL STABILIZATION BLANKETS AND MATTING (3.36) -- THE INSTALLATION OF A PROTECTIVE BLANKET (TREATMENT 1) OR A SOIL STABILIZATION MAT (TREATMENT 2) ON A PREPARED PLANTING OF A STEEP SLOPE, CHANNEL OR SHORELINE.

BLANKET MATTING WILL BE USED ON SLOPES AS SHOWN ON THE PLANS

### MANAGEMENT STRATEGIES

1. SILT FENCE, CONSTRUCTION ENTRANCE, AND RIGHT OF WAY DIVERSION SHALL BE INSTALLED AS THE FIRST STEP OF THE CONSTRUCTION PROCESS.

2. ONCE THE PROPOSED STRUCTURES ARE INSTALLED, DEMOLITION AND CONSTRUCTION MAY OCCUR

3. AFTER CONSTRUCTION OF THE PROPOSED ENTRANCE, THE CONSTRUCTION ENTRANCE MAY NEED TO BE RELOCATED. THE RIGHT OF WAY DIVERSION SHALL BE INSTALLED ADJACENT TO THE ENTRANCE.

4. ALL AREAS SHALL BE SEEDED WITH PERMANENT STABILIZATION AS SOON AS THEY REACH FINAL GRADE.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES.

6. ONCE THE SITE HAS BEEN STABILIZED, THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MAY BE REMOVED AND THOSE AREAS BROUGHT TO FINAL GRADE AND STABILIZED.

### PERMANENT STABILIZATION

ALL DISTURBED AREAS SHALL RECEIVE PERMANENT STABILIZATION ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", STD AND SPEC. 3.32 AS SOON AS THOSE AREAS ARE BROUGHT TO FINAL GRADE. FOR PERMANENT SEEDING MIXTURE SEE THE EROSION AND SEDIMENT CONTROL DETAIL SHEET.

### MAINTENANCE

ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE CHECKED DAILY AND AFTER ALL SIGNIFICANT RAINFALL. IN PARTICULAR:

1. SILT FENCE SHALL BE CHECKED REGULARLY TO ENSURE THAT THE FABRIC HAS NOT BEEN UNDERMINED OR HAS DETERIORATED. SEDIMENT SHALL BE REMOVED WHEN LEVEL OF BUILDUP REACHES HALFWAY UP THE BARRIER.

2. AREAS WHICH HAVE RECEIVED SEEDING SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND OF GRASS IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDED AS REQUIRED.

3. BLANKET MATTING SHALL BE INSPECTED AFTER RAINFALL EVENTS FOR DAMAGED AREAS. IF FOUND, REPAIR DAMAGED SLOPE AREAS AND REPLACE MATTING AS NECESSARY.

### GENERAL EROSION & SEDIMENT CONTROL NOTES: (TABLE 6-1)

ES-1. Unless otherwise indicated, all vegetative and structural erosion & sediment control practices will be constructed and maintained according to minimum standards and specifications of the Virginia Erosion and Sediment Control Handbook, latest edition, and Virginia Regulations 4VAC50-30 Erosion & Sediment Control Regulations.

ES-2. Not utilized in this locality.

ES-3. All erosion and sediment control measures, identified within the initial erosion & sediment control plan, 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, or approval letter from the locality of the property being used to borrow or waste material.

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.

01 MARCH TO 30 APRIL  
WINTER RYE (SECALE CEREALE) @ 2 1/2 LB / 1000 SF  
OR ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) @ 1 1/2 LB / 1000 SF  
OR KOREAN LESPEDEZA (LESPEDEZA STIPULACEA) @ 1 1/2 LB / 1000 SF

01 MAY TO 15 AUGUST  
GERMAN MILLET (SETARIA ITALICA) @ 1 LB / 1000 SF  
OR WEEPING LOVEGRASS (ERAGROSTIS CURVULA) @ 5 1/2 OZ / 1000 SF  
OR KOREAN LESPEDEZA (LESPEDEZA STIPULACEA) @ 1 1/2 LB / 1000 SF

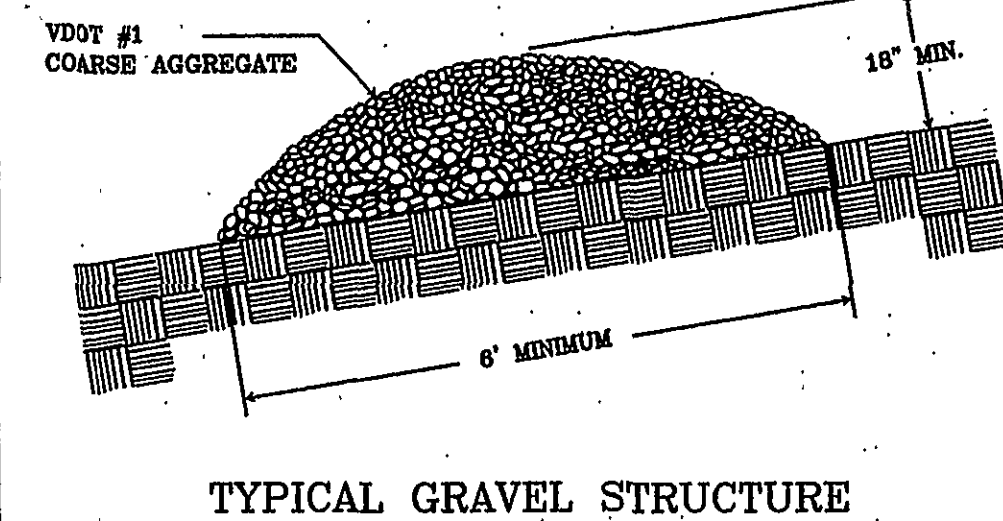
15 AUGUST TO 01 NOVEMBER  
WINTER RYE (SECALE CEREALE) @ 1 LB / 1000 SF  
OR ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) @ 1 LB / 1000 SF

MULCH: SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 3rd ED.

SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. MAX. SEEDING DEPTH SHALL BE 1/4 INCH.

**TEMPORARY SEEDING MIXTURE**  
**VA ESCH STD & SPEC 3.31**

## TEMPORARY RIGHT-OF-WAY DIVERSIONS



### 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 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  
FARNHAM RYE @ 1/2 LB / 1000 SF

140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE

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

MULCH: SHALL BE USED OVER ALL SEEDED 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 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 HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. MAX. SEEDING DEPTH SHALL BE 1/4 INCH.

**PERMANENT SEEDING MIXTURE**  
**VA ESCH STD & SPEC 3.32**

### MINIMUM STANDARDS

Yes No NA

[X] [ ] [ ] MS-1 TEMPORARY AND PERMANENT 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 TO DENUDED AREAS TO REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE LEFT DORMANT FOR MORE THAN 1 YEAR.

**PRACTICES ARE SHOWN ON THE PLAN AND ADDRESSED IN THE NARRATIVE. TEMPORARY AND PERMANENT SEED SPECIFICATIONS ARE PROVIDED. LIME, FERTILIZER, AND MULCHING ARE ADDRESSED. DISTURBED AREAS TO RECEIVE PAVEMENT OR STONE ARE SHOWN ON THE PLAN.**

[X] [ ] [ ] MS-2 DURING CONSTRUCTION, STOCKPILES, BORROW AREAS, AND DISPOSAL AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE SITE.

**OFF-SITE WASTE AND BORROW NOTES ARE ON THE PLANS. BORROW MATERIAL IS NEEDED FOR THIS PROJECT. THE BORROW LOCATION SHALL BE PROVIDED TO THE LOCALITY AND MAY REQUIRE AN EROSION CONTROL PLAN FOR THE BORROW LOCATION, DEPENDANT UPON THE REQUIREMENTS OF THE LOCALITY WHERE THE MATERIAL IS BEING BORROWED.**

[X] [ ] [ ] MS-3 PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. UNIFORM GROUND COVER, MATURE ENOUGH TO SURVIVE AND INHIBIT EROSION IS CONSIDERED PERMANENT VEGETATION.

**THE ESTABLISHMENT AND MAINTENANCE OF PERMANENT VEGETATIVE STABILIZATION BEEN ADDRESSED IN THE NARRATIVE.**

[X] [ ] [ ] MS-4 INSTALL SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT, CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY, AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

**SEDIMENT TRAPPING FACILITIES ARE SHOWN ON THE PLAN, SPECIFIED IN THE NARRATIVE, AND SPECIFICALLY STATED TO BE INSTALLED AS A FIRST STEP IN LAND-DISTURBING ACTIVITIES. (RIGHT OF WAY DIVERSION AND SILT FENCE ARE THE MEASURES SHOWN)**

[ ] [ ] [X] MS-5 STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES (DAMS, DIKES, AND DIVERSIONS) IMMEDIATELY AFTER INSTALLATION.

[ ] [ ] [X] MS-6 SEDIMENT TRAPS AND BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA. MINIMUM STORAGE OF 134 CY PER ACRE OF DRAINAGE AREA. TRAPS SHALL CONTROL ONLY DRAINAGE AREAS LESS THAN 3 ACRES. BASINS ARE REQUIRED FOR DRAINAGE AREAS GREATER THAN 3 ACRES, THE OUTFALL SYSTEM SHALL MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING THE 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO BARE EARTH CONDITIONS OR THOSE CONDITIONS EXPECTED TO EXIST DURING BASIN UTILIZATION.

[X] [ ] [ ] MS-7 CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER TO MINIMIZE EROSION. EXCESSIVELY ERODING SLOPES, WITHIN ONE YEAR OF PERMANENT STABILIZATION, SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZATION MEASURES UNTIL THE PROBLEM IS CORRECTED.

**SLOPES HAVE BEEN IDENTIFIED AS A CRITICAL EROSION AREA, TEMPORARY AND PERMANENT STABILIZATION MEASURES ARE SHOWN ON THE PLANS AND ADDRESSED IN THE NARRATIVE. BLANKET MATTING OR OTHER STABILIZATION MEASURE IS IDENTIFIED ON THE PLANS.**

[ ] [ ] [X] MS-8 CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE. **RUNOFF IS CONTROLLED BY CURB/CURB & GUTTER.**

[ ] [ ] [X] MS-9 WHEN WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

**CONTRACTOR SHALL INSPECT FOR SEEPING FROM A SLOPE FACE. IF ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND PROVIDE MEASURES SUCH AS SURFACE ROUGHENING, SUBSURFACE DRAINS OR OTHER MEASURES ONCE THE SOURCE OF SEEPAGE HAS BEEN IDENTIFIED.**

[ ] [ ] [X] MS-10 ALL INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

**THE FILTERRA STRUCTURE IS DELIVERED WITH PROTECTIVE MEASURES ALREADY IN PLACE.**

[ ] [ ] [X] MS-11 ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED (CONVEYANCE CHANNEL AND RECEIVING CHANNEL) PRIOR TO THE NEWLY CONSTRUCTED STORMWATER CONVEYANCE OR PIPES BEING MADE OPERATIONAL.

[ ] [ ] [X] MS-12 WORK WITHIN A LIVE WATERCOURSE. PRECAUTIONS TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT, AND STABILIZE WORK AREA. NON-ERODIBLE MATERIAL SHALL BE UTILIZED FOR CAUSEWAY AND COFFERDAMS. EARTHEN FILL SHALL BE ARMORED BY NONERODIBLE COVER MATERIALS.

[ ] [ ] [X] MS-13 CROSSING A LIVE WATERCOURSE MORE THAN TWICE IN SIX MONTH PERIOD REQUIRES CONSTRUCTION OF A TEMPORARY STREAM CROSSING, CONSISTING OF NON-ERODIBLE MATERIAL REQUIRED.

[ ] [ ] [X] MS-14 ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.

[ ] [ ] [X] MS-15 THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

[X] [ ] [ ] MS-16 UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA: NO MORE THAN 500 LF OF TRENCH MAY BE OPEN 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 DISCHARGED IN A MANNER NOT ADVERSELY AFFECTING FLOWING STREAMS OR OFF-SITE PROPERTY.

**DEWATERING THROUGH A FILTER BAG IS DISCUSSED IN THE NARRATIVE.**

[X] [ ] [ ] MS-17 WHEN CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ON TO THE PAVED SURFACE. THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA.

**CONSTRUCTION ENTRANCE IS SHOWN OFF OF EXISTING PAVEMENT. THE CONSTRUCTION ENTRANCE IS DISCUSSED IN THE NARRATIVE.**

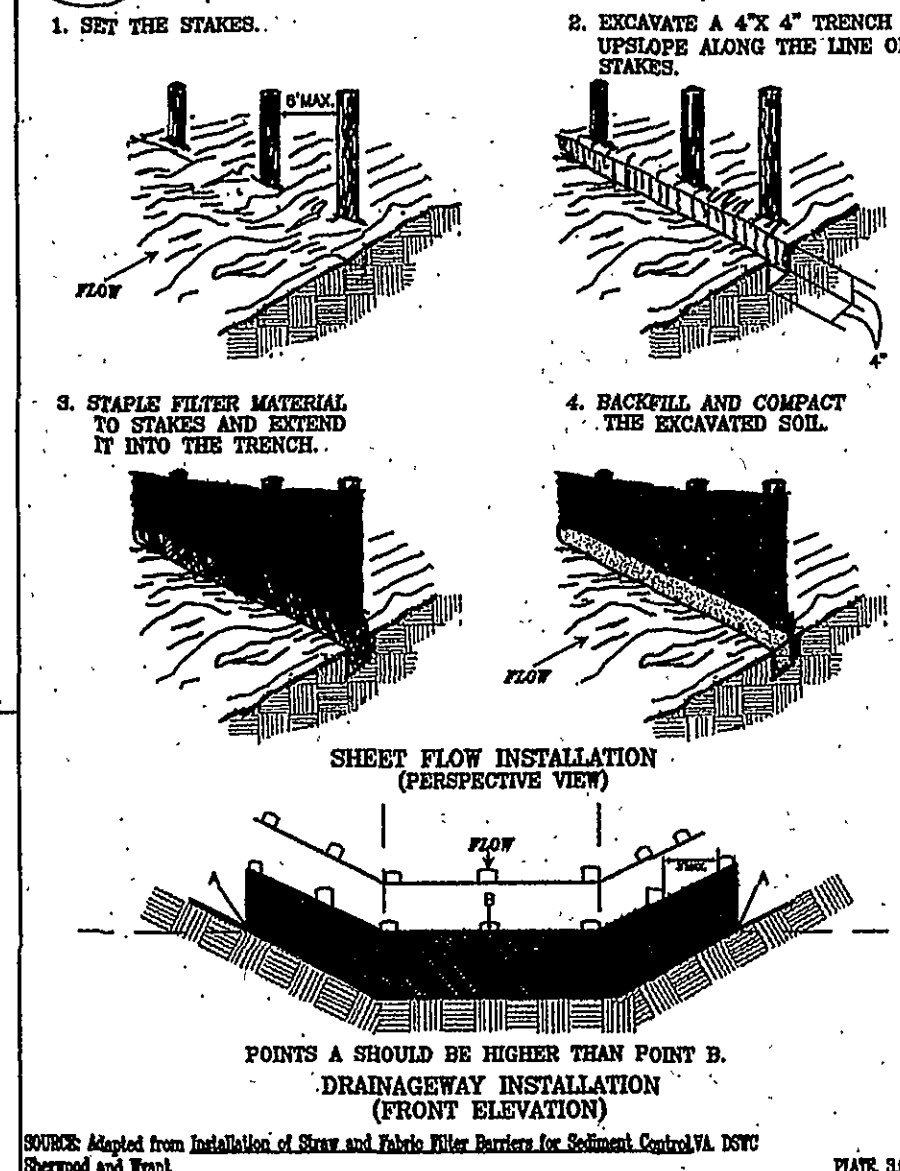
[X] [ ] [ ] MS-18 WITHIN 30 DAYS AFTER THE FINAL SITE STABILIZATION, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED. TRAPPED SEDIMENT AND DISTURBED SOIL AREAS AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

**REMOVAL OF MEASURES ARE DISCUSSED WITHIN THE NARRATIVE.**

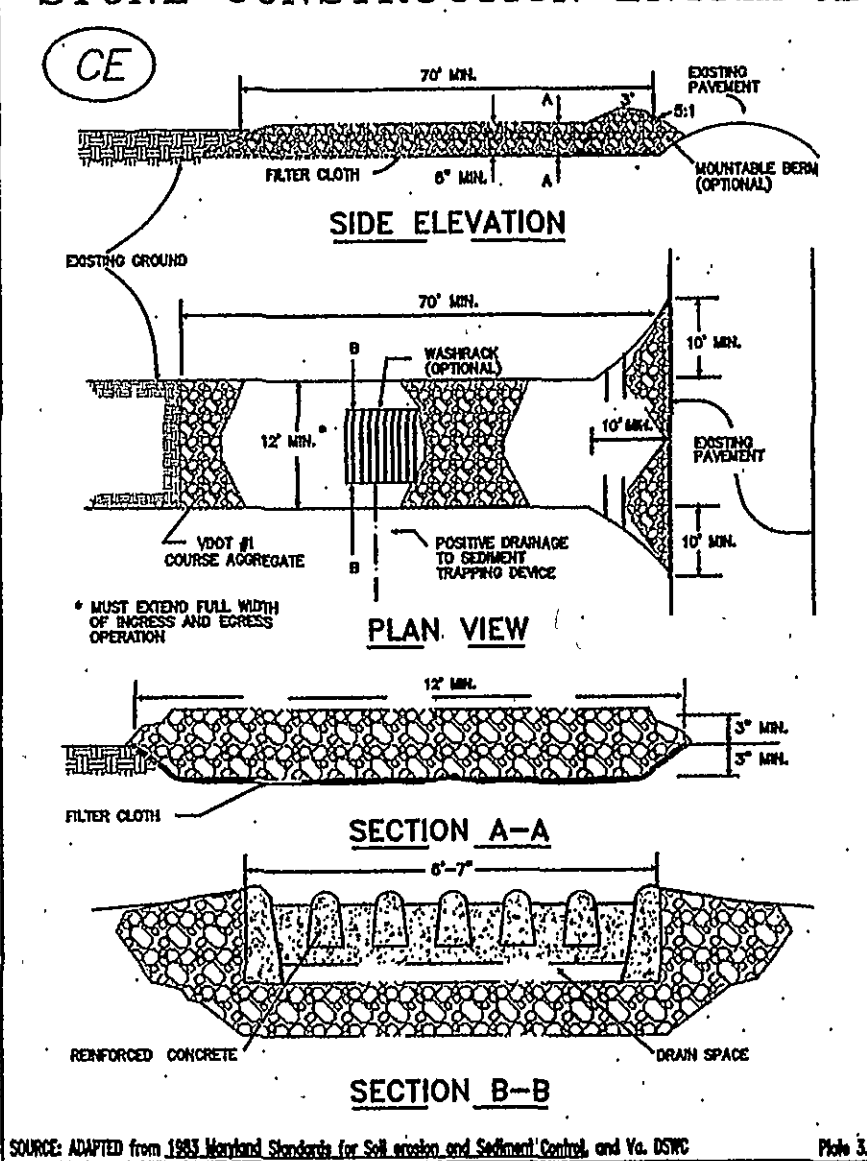
[X] [ ] [ ] MS-19 PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SHALL BE ADEQUATELY PROTECTED FROM EROSION AND SEDIMENT DEPOSITION DUE TO INCREASES IN VOLUME, VELOCITY, AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION.

**DESIGN MEASURES HAVE ADDRESSED THIS REQUIREMENT.**

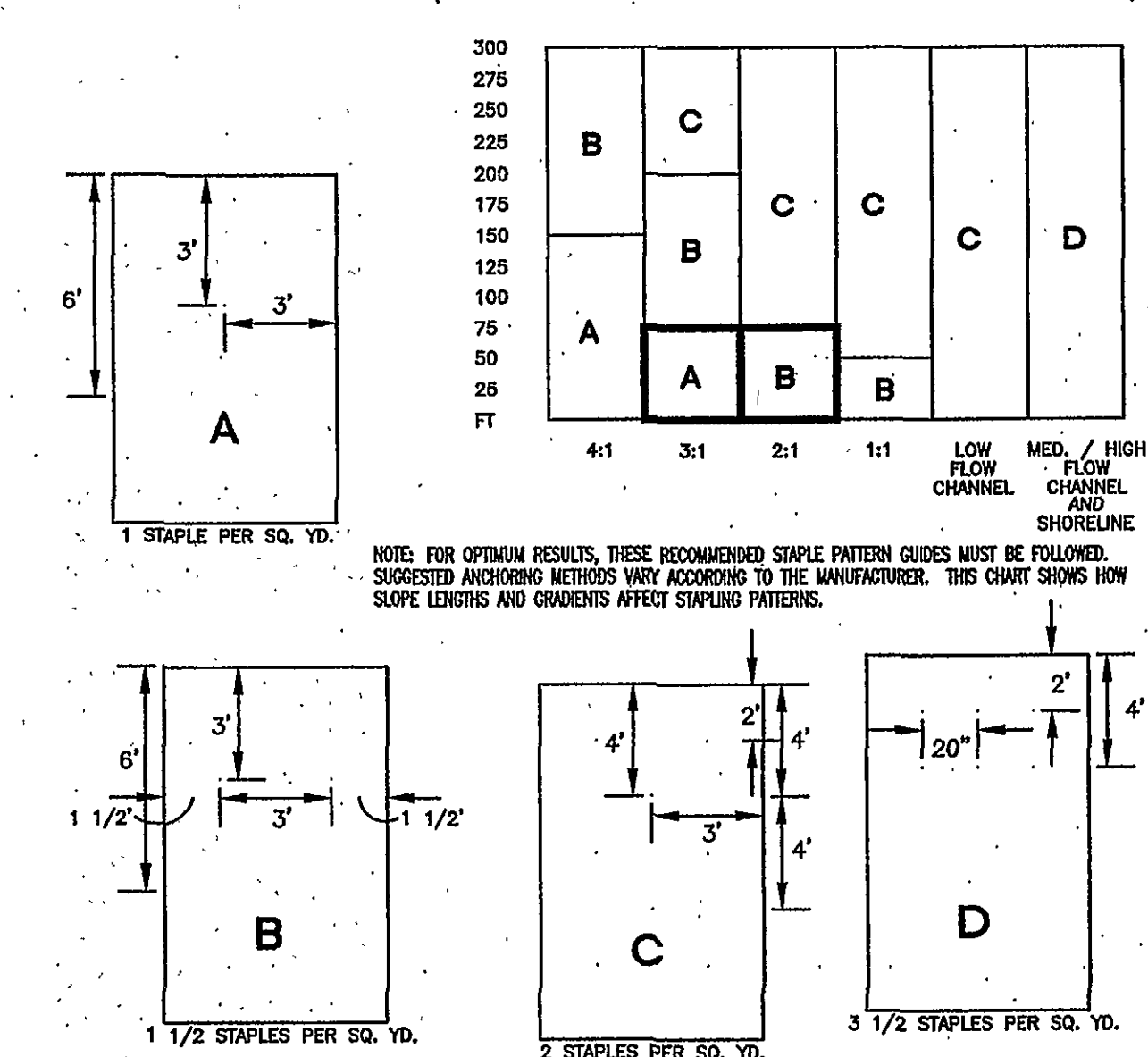
## CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)



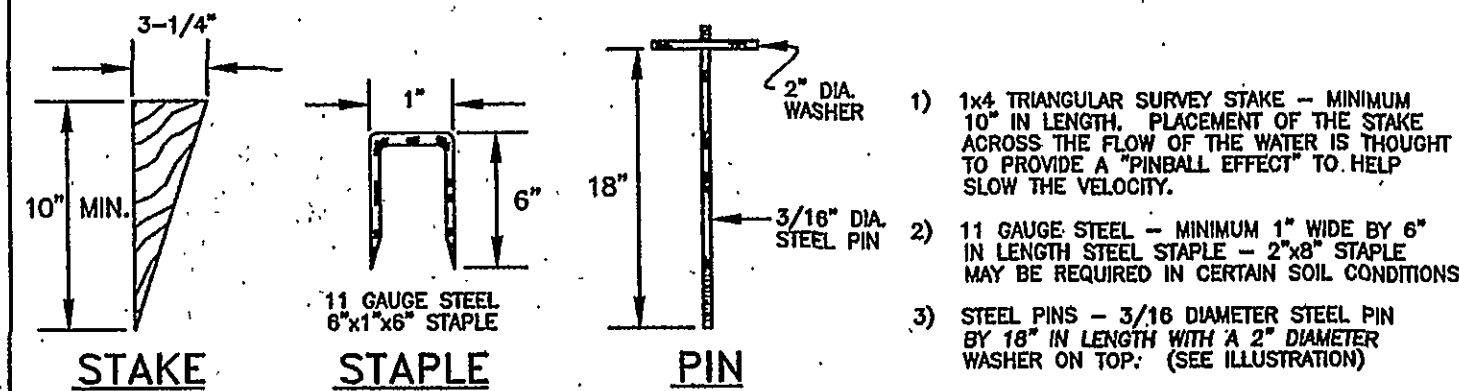
## STONE CONSTRUCTION ENTRANCE



## GENERAL STAPLE PATTERN GUIDE FOR TREATMENT - 2 (SOIL STABILIZATION MATTING)



## STAKES, STAPLES, & PINS TREATMENT - 2 SOIL STABILIZATION MATTING



THE CONTRACTOR SHALL UTILIZE SOME MEASURE OF BLANKET MATTING, SOIL STABILIZATION, OR HYDROMULCH MATERIAL TO STABILIZE DISTURBED SLOPES AT 3:1 SLOPE OR STEEPER.

SOIL STABILIZATION BLANKETS & MATTING: VESCH STD & SPEC 3.36  
TREATMENT-1: DEGRADABLE SOIL STABILIZATION BLANKET

EXAMPLES: LANDSCAPE SUPPLY (NORTH AMERICAN GREEN) P300, C350, C125  
EQUIVALENT SUPPLIERS

USE TO HELP ESTABLISH VEGETATIVE GROWTH, TEMPORARY MEASURES.

TREATMENT-2: NON-DEGRADABLE SOIL STABILIZATION BLANKET

EXAMPLES: LANDSCAPE SUPPLY (NORTH AMERICAN GREEN) P550  
PYRAMAT

HYDRO MULCH: COMBINATION OF THERMALLY REFINED WOOD AND MULTI DIMENSIONAL TACKIFIER INSTALLED DURING THE HYDROSEEDING PROCESS OF STEEP SLOPES. MATERIAL CAN BE USED IN PLACE OF TREATMENT-1.

EXAMPLES: COMBED FIBERS HYDRO MULCH 2200  
MAT, INC SOIL GUARD

HYDROGRASS - GEOTEX  
EQUIVALENT SUPPLIERS

INSTALLATION RATE PER MANUFACTURER RECOMMENDATIONS

APPLICATION RATES: 3:1 OR FLATTER, USE 3,000 LBS/AC  
2:1 USE 3,500 LBS/AC

PRODUCT CONTENTS: THERMALLY REFINED WOOD FIBER = 80%  
BLENDED MULTI-DIMENSIONAL HYDRO-COLOID BASED TACKIFIER = 10%

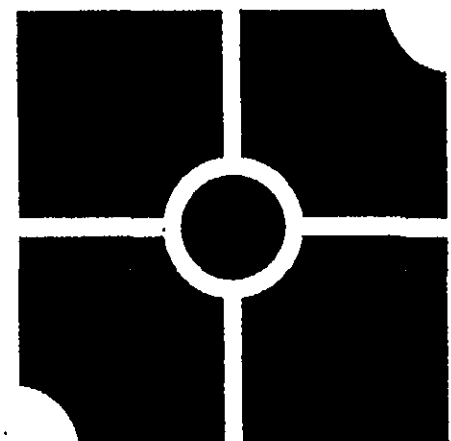
GREEN COLOR  
MOISTURE: 10-13% +/- 2%

APPLICATION: RAIN DOWN ON SURFACE TO IMPROVE SOIL COVERAGE.  
APPLY FROM OPPOSING DIRECTIONS TO

MUST CURE OR DRY COMPLETELY TO BE EFFECTIVE.  
SHOULD NOT BE APPLIED WITHIN 24 HOURS OF EXPECTED RAINFALL.

**SOIL STABILIZATION BLANKETS/MATTING/HYDROMULCH**  
**VA ESCH STD & SPEC 3.36**

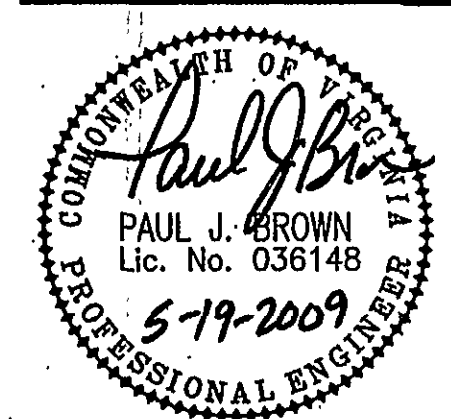
FOR THE PURPOSE OF THIS PROJECT, THE CONTRACTOR SHALL ANTICIPATE UTILIZATION OF SOIL STABILIZATION BLANKETS - TREATMENT 2, WITH STAPLE PATTERNS A & B FOR SLOPES.



**parker**  
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**Comprehensive Site Plan for**  
**Oakey's Renovations & Addition**  
5416 Airport Road, N.W.  
Tax No. 6640108  
City of Roanoke, Virginia

### REVISIONS:

Address City Review Comments  
Date: 05-19-2009

DESIGNED BY: PJB

DRAWN BY: PJB

CHECKED BY: PJB

SCALE: 1" = 20'

DATE: April 22, 2009

### SHEET TITLE:

**Erosion & Sediment**  
**Control Notes &**  
**Details**

**C05**  
05 OF 09  
PROJECT NUMBER:  
08-0306-03