

SOIL EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION: THE PURPOSE OF THIS PROJECT IS THE DEVELOPMENT OF A 9.9 ACRE TRACT OF LAND INTO AN "AIRBORNE EXPRESS" REGIONAL DISTRIBUTION HUB. THIS TRACT IS OWNED BY AND TO BE DEVELOPED BY "DELAVER AND CO." THIS SITE IS LOCATED ON TOM ANDREWS ROAD, N. HANCOCK, VIRGINIA, AND IS TO BE SUBDIVIDED FROM A TRACT OFFICIALLY DESIGNATED AS TAX PARCEL 8530101. EXISTING SITE CONDITIONS: THE SITE IS CURRENTLY PASTURE, AND DRAINS IN A SOUTHERLY DIRECTION TO TOM ANDREWS ROAD, AND IN A WESTERLY DIRECTION TO AN EXISTING LOCALIZED DEPRESSION. ADJACENT PROPERTY: SEE SHEET C3. SOILS: THE BASIC SOIL MATERIAL, AS IDENTIFIED BY THE U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, GENERAL SOIL MAP IS FREDERICK-LOD-ROCK OUTCROP. CRITICAL AREAS: THE SILT FENCE BARRIERS SHALL BE REGULARLY INSPECTED AND CLEANED/OVERLAPPED AS REQUIRED. THE STORM DRAIN INLET PROTECTION MEASURES SHALL BE INSPECTED AND CLEANED FOLLOWING EACH RUNOFF PRODUCING RAINFALL. THE TEMPORARY SEDIMENT BASIN SHALL BE RESTORED TO ORIGINAL VOLUME ONCE THE SILT FENCE IS WITHIN 5.79' OF THE TOP OF BERM (ELEV. 1099.21).

EROSION AND 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.

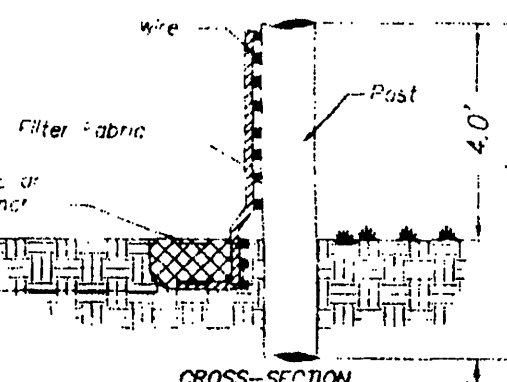
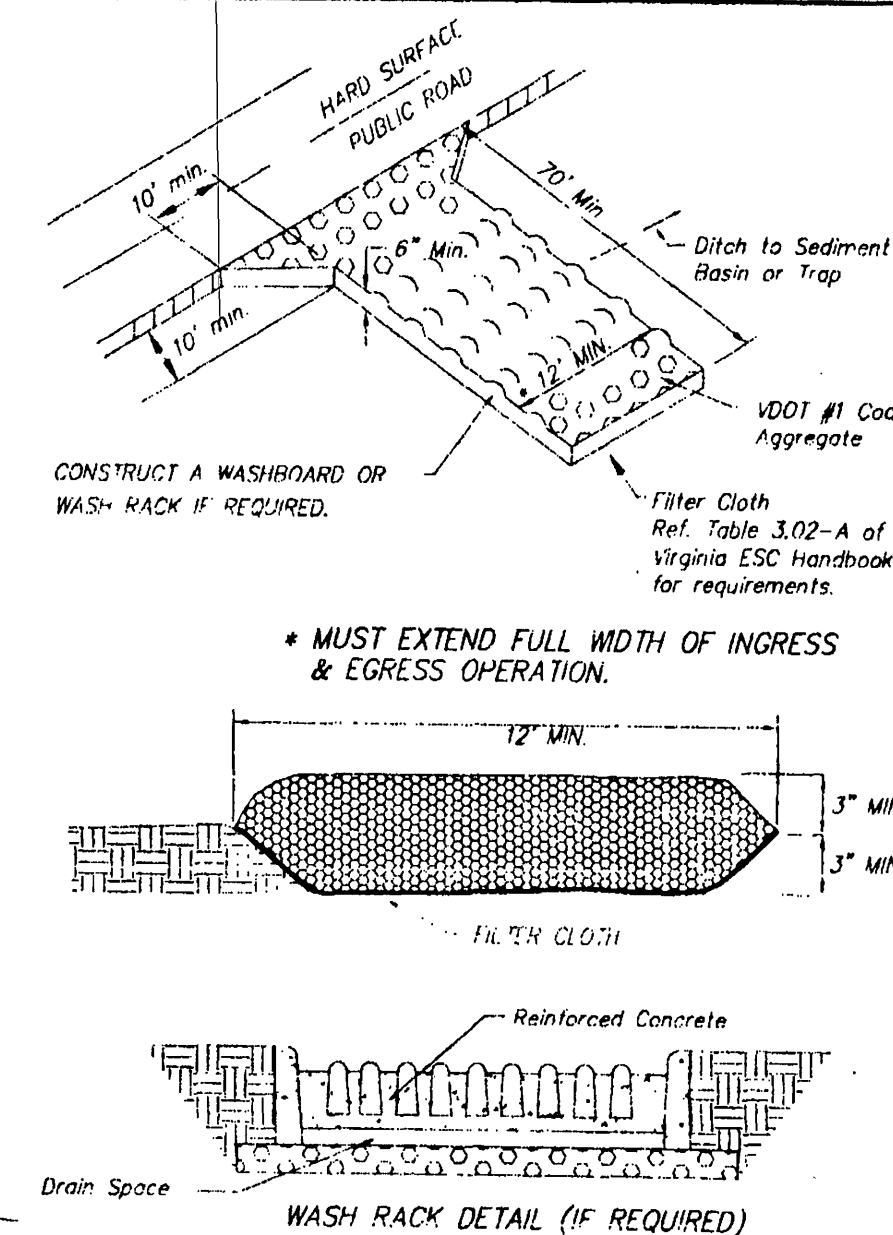
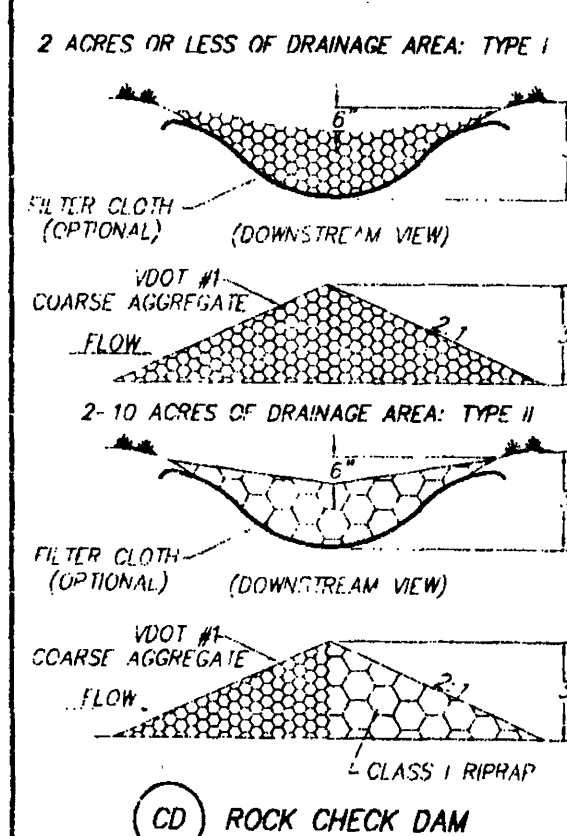
- PRIOR TO ANY WORK BEING PERFORMED ON THE PROPOSED PROJECT, A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE PROVIDED OFF OF THE EXISTING PAVEMENT. THE ENTRANCE SHALL BE CONSTRUCTED OF GRADED 3" STONE TO A MINIMUM DEPTH OF 6". THE ENTRANCE SHALL ALSO RUN FOR A MINIMUM DISTANCE OF NOT LESS THAN 70' FROM THE EXISTING PAVEMENT EDGE. THE ENTRANCE SHALL BE CONTINUALLY MAINTAINED, INSPECTED, REPAIRED, OR OTHERWISE BE KEPT IN GOOD ORDER THROUGHOUT THE CONSTRUCTION PERIOD.
- 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 IS TO FOLLOW: CONTROL AT POINTS OF FLOW, AND OTHER POINTS OF CONCENTRATION SHOWN SHALL BE CONSTRUCTED IN PLACE FIRST.
- AFTER THE INSTALLED CONTROL DEVICES ARE FOUND TO BE FUNCTIONAL, THE CONTRACTOR SHALL IMMEDIATELY PROCEED WITH CLEARING, GRUBBING, AND PRELIMINARY GRADING OPERATIONS. ALL EXPOSED DENUDED AREAS SHALL BE SEEDDED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING, AND SHALL BE ACCOMPANIED WITH THE SOIL EROSION CONTROL HANDBOOK.
- IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL. IN PARTICULAR:
 - THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION TO PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC HIGHWAYS.
 - ALL SILT FENCE BARRIERS AND INLET PROTECTIONS SHALL BE CHECKED REGULARLY FOR UNDERMINING AND SEDIMENT BUILDUP.
 - ALL SEEDDED AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDDED AS NEEDED.
- 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 EROSION CONTROL MEASURES. THIS WORK SHALL BE ACCOMPLISHED IN A NEAT AND ORDERLY MANNER.

GENERAL COMMENTS:

- THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
- THE CITY OF ROANOKE RESERVES THE RIGHT TO ADD TO, DELETE, OR OTHERWISE CHANGE EROSION CONTROL DEVICES AS MAY BE DETERMINED NECESSARY BY WRITTEN NOTIFICATION TO THE CONTRACTOR.
- NO WORK SHALL PROCEED ON THE SITE UNTIL THE PROPER AUTHORIZATION OR PERMIT HAS BEEN OBTAINED FROM THE CITY OF ROANOKE.
- THE ENGINEER, T. PARKER & SON, ASSUMES NO RESPONSIBILITY FOR ANY WORK BEING PERFORMED.

KEY TO SOIL EROSION CONTROL MEASURES

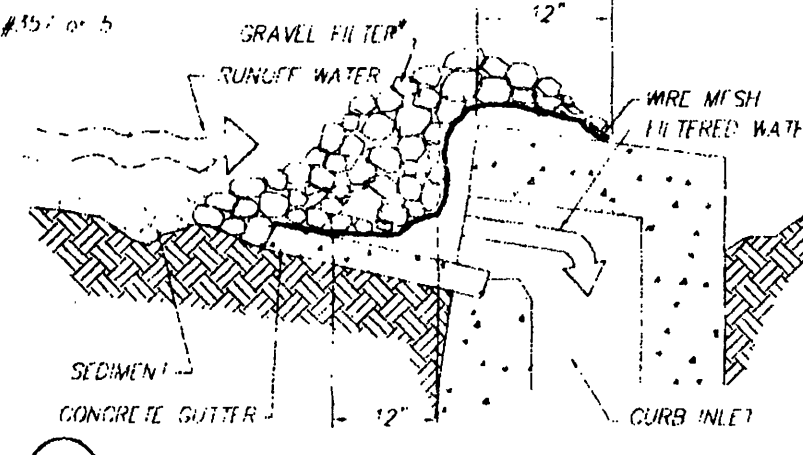
- SF SILT FENCE BARRIER**
A SILT FENCE BARRIER SHALL BE PROVIDED BELOW ALL AREAS TO BE GRADED, SUCH THAT SEDIMENT-LOAM RUNOFF IS INTERCEPTED PRIOR TO ENTERING THE PUBLIC RIGHT OF WAY OR ADJOINING PROPERTIES. THIS BARRIER SHALL BE INSPECTED AND CLEANED / REPLACED AS REQUIRED FOLLOWING EACH RUNOFF PRODUCING RAINFALL.
- CE CONSTRUCTION ENTRANCE**
A CONSTRUCTION ENTRANCE SHALL BE PROVIDED OFF OF TOM ANDREWS ROAD AS SHOWN. THIS ENTRANCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD, SUCH THAT THE TRACKING OF MUD AND DIRT ONTO PUBLIC STREETS IS MINIMIZED.
- SB TEMPORARY SEDIMENT BASIN**
A TEMPORARY SEDIMENT BASIN IS TO BE PROVIDED AT THE LOCATION OF THE NEW STORMWATER MANAGEMENT DETENTION POND AS SHOWN. THE DIMENSIONS AND STORAGE CAPACITY OF THE BASIN IS TO BE THE SAME AS THE DETENTION POND. SEE DETAILS, THIS SHEET.
- IP INLET PROTECTION**
ALL STORM DRAINAGE STRUCTURES SHALL BE PROTECTED FROM THE INFILTRATION OF SEDIMENT BY MEASURES SHOWN HEREON.
- PS PERMANENT SEEDING**
ALL DENUDED AREAS OF EXPOSED HARD SURFACING SHALL BE TOPSOILED, SEEDDED, STRAW-MULCHED, AND WATERED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. REPEAT APPLICATIONS SHALL BE MADE UNTIL A SUSTAINABLE STAND OF GRASS IS ACHIEVED.
- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE 1992 EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, AS WELL AS IN ACCORDANCE WITH THE APPLICABLE DETAILS SHOWN HEREON.



SPECIFIC APPLICATION

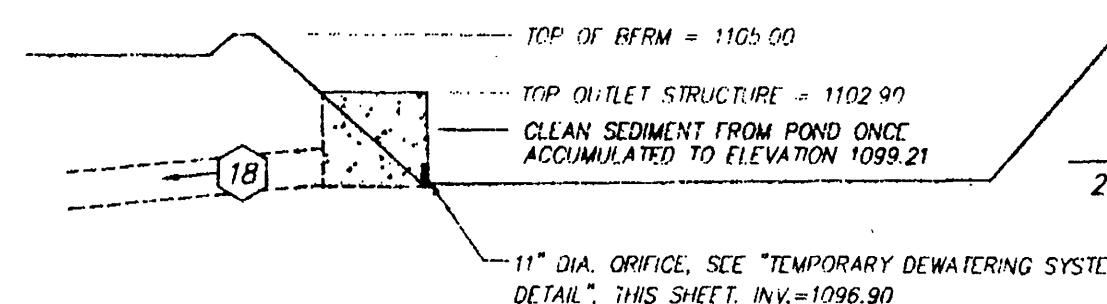
This method of application is applicable to all areas where grading or other disturbance of the site is required. It is intended to prevent erosion and sedimentation on adjacent properties and to prevent damage to the site.

• Seeding shall be 1/2 lb. of seed per 1000 sq. ft. of area.



GENERAL EROSION AND SEDIMENT CONTROL NOTES

- 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.
- 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.
- 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.
- IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ADJACENT PROPERTIES FOLLOWING EACH DAY'S WORK.
- 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.



NOTE:

THE CONTRACTOR SHALL CONSTRUCT THE STORMWATER MANAGEMENT DETENTION POND AND STORM DRAINAGE SYSTEM TO THIRLANE ROAD AND STABILIZE THESE AREAS WITH GRASS AS A FIRST STEP IN THE DEVELOPMENT OF THIS PROPERTY. SUCH THAT THE POND MAY ACT AS A TEMPORARY SEDIMENT BASIN. ONCE ALL DENUDED AREAS HAVE BEEN STABILIZED WITH VEGETATION, THE CONTRACTOR SHALL REMOVE EXCESS SEDIMENT FROM THE POND, REMOVE THE TEMPORARY DEWATERING SYSTEM, AND PERMANENTLY SEED THE DENUDED PORTIONS OF THE POND, THEREBY RETURNING THE POND TO ELEVATIONS SHOWN AS FINISH GRADE ON THESE PLANS.

TYPE A	TYPE B (SLOPES 3:1 OR STEEPER)
15 OCTOBER TO 1 FEBRUARY K-31 FESCUE @ 5 LB / 1000 SF BORZY WINTER RYE @ 1/2 LB / 1000 SF	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
1 FEBRUARY TO 1 JUNE K-31 FESCUE @ 5 LB / 1000 SF ANNUAL RYE @ 1/2 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
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	
LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE FERTILIZER: 5-20-10 @ 25 LB / 1000 SF 80-0-0 @ 7 LB / 1000 SF	
MULCH: IF REQUIRED, SHALL BE USED OVER ALL SEEDDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 1.75 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.	
SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE INSPECTOR.	
SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLOPE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.	

TOTAL DISTURBED AREA = 9.13 AC. = 397,600 SQ. FT.

REVISIONS: JUNE 5, 1996 - TO REFLECT NEW FINISH FLOOR ELEVATION - CLW

SOIL EROSION AND SEDIMENTATION CONTROL PLAN AND DETAILS FOR

AIRBORNE EXPRESS

SHOWING A NEW 109,200 SQUARE FOOT REGIONAL HUB FACILITY

SITUATE TOM ANDREWS ROAD, N.W. CITY OF ROANOKE, VIRGINIA

SCALE: AS SHOWN DATE: JUNE 01, 1996

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