Seedbed Preparation: Loosen upper three inches of soil be raking, discing or other acceptable means before seeding. (If not previously loosened)

Soil Amendments: In lieu of soil test recommendations, use on the following 1) Preferred — Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf) before seeding.

Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sf). 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sf) before seeding Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 through April 30 and August 1 through October 15, seed with 60 lbs per acre (1.4 lbs/1000 sf) of Kentucky 31 Tall Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass. During the period of October 16 through February 28, protect site by: Option 1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option 2) use sod. Option 3) seed with 60 lbs/acre Kentucky 31 Tall

Mulching: Apply 1-1/12 to 2 tons per acre (70 to 90 lbs/1000 sf) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gailons per acre (8 gai/1000 sf) for anchoring.

Maintenance: inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

Fescue and mulch with 2 tons/acre well anchored straw.

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. (If not previously loosened)

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf),

Seeding: For periods March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovegrass (0.07 lbs/1000 sf). For the period November 16 through February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sf) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.

Refer to the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.

SEDIMENT CONTROL NOTES

- 1. A minimum of 48 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction. (313—1855)
- 2. All vegetative and structural practices are to be installed accordingly to the provisions of this plan and are to be in conformance with the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment
- 3. Following initial soil disturbances or redisturbance, permanent or temporary stabilization shall be completed within: a) 72 hours for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 5 calendar days as to all other disturbed or graded areas on the project site.
- 4. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control for Permanent Seedings (Sec. G-III) Sod (Sec. G-IV). Temporary Seeding (Sec. G-II) and Mulching (Sec. G-I). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- 6. Site Analysis: Total Area of Site: Area to be Disturbed 0.23 Ac.± Area to be roofed or paved: 0 Ac.± 0.23 Ac.± Area to be vegetatively stabilized:
- Offsite Waste/Borrow Area: Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance. Additional sediment controls must be provided, if deemed necessary by the
- Howard County DILP Sediment Control Inspector. 9. Quantities and estimates shown are for sediment control purposes only.
- Contractor shall prepare his/her own quantity estimates to his/her satisfaction. * All excess material shall transported to a suitable spoil site with appropriate sediment control measures as required.

350 c.y.±

GENERAL NOTES:

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Department of Public Works / Bureau of Engineering / Construction Inspection Division at (410) 313—1880 at least five (5) working days prior to the start of work.
- 3. The contractor shall notify "Miss Utility" at least 48 hours prior to any excavation work being done.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD).
- The existing topography is taken from an aerial survey with two foot contour intervals prepared
- by Wings Aerial Mapping Co., Inc dated December 15, 1996. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monument Nos. 28R1 and 28R2 were used for this project.
- . Water is private. Sewer is private.
- 8. The contractor shall be responsible to confirm/locate any existing utilities within the limits
- The floodplain study for this project was prepared by R.M. Mochi Group, P.C. dated May 15, 1997 and was approved September 1997.
- The wetlands delineation study for this project was prepared by American Land Concepts dated May 30, 1997 and was approved September 1997.
- 11. No traffic study is required for this project.
- Project Background Subdivision nome: Tax Map:

Part of Parcel 19 Zoning: Election District:

Total Area:

21.0 Standard and specification

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

To provide a suitable soil medium for vegetation growth. Soils of concern have low moisture content, low nutrient levels, low

Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter
- a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
- The soil material is so shallow that the zone material is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
- The original soil to be vegetated contains material toxic to
- d. The soil is so acidic that treatment with limestone is not
- II. For the purpose of these standards and specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having stopes steeper than 2:1 shall have the appropriate stabilization shown on plans.
- Construction and Material Specifications Topsoll salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of the topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA—SCS in cooperation with Maryland Agricultural Experimental Station.
- Topsoil Specifications Soil to be used as topsoil must meet the following:
- Topsoil shall be a loam, sandy loam, clay loam, sit loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slog, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
- II. Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnsongrass, nutsedge, poison lvy, thistle, or others as specified.
- III. Where the subsoil is either highly ocidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tiliage operations as described in the following procedures.
- II. For sites having disturbed areas under 5 acres:
- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization Section 1 Vegetative Stabilization Methods and Materials.
- III. For sites having disturbed areas over 5 acres.
- On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following
- a. pH for topsoil shall be between 6.0 and 7.5. If the tested soll demonstrated a pH of less than 6.0, sufficient lime shall be perscribed to raise the pH to 6.5 or higher.
- b. Organic content of topsoil shall be not less than 1.5 percent by weight.
- c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
- d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit

Note: Topsoil substitutes or amendments, as recommended by qualified agronomist or soil scientistand approved by the appropriate approval authority, may be used in lieu of natural

- ii. Place topsoil (If required) and apply soil amendment as specified in 20.0 Vegetative Stabilization Section Vegetative Stabilization Methods and Materials.
- When topsoiling maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and
- Grades on the great to be topsolled, which have been previously established, shall be maintained, albeit $4^{\circ}-8^{\circ}$ higher in elevation.
- III. Topsoli shall be uniformly distributed in a 4" 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sadding or seeding can proceed with a minimum of additional soil preparation and ge. Any irregularities in the surface resulting from tolling or other operations shall be corrected in order to prevent the formation of depressions or water packets,
- lv. Topsoli shall not be placed while the topsoli or subsoli is in a frozen or muckly condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- Alternative for Permanent Seeding Instead of applying the full amounts of time and commercial fertilizer, composted studge and amendments may be applied as
- i. Composted Studge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribed amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
- Composted studge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
- b. Composted studge shall contain at least 1 percent nitragen, 1.5 percent phosphorus, and 0.2 percent potassium and have a Ph of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements
- Composted sludge shall be applied at a rate of 1 ton / 1,000

iv. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb. / 1,000 square feet, and 1/3 the normal lime application rate.

HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH ADATE

DETAIL 22 - SILT FENCE DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE 10' MAXIMUM CENTER TO EARTH FILL PIPE AS NECESSARY -16' HINIMUM HEIGHT D ** GEDTEXTILE CLASS 'C'-MINIMUM 6' DF 2'-3' AGGREGATE OVER LENGTH AND VIDTH OF STRUCTURE EXISTING GROUND PROFILE -- × 50' HINIHUM-PERSPECTIVE VIEW 10° MINIMAN ENBED GEOTEXTILE CLASS F FENCE POST DRIVEN A PLAN VIEW STANDARD SYNBOL CROSS SECTION NO E STANDARD SYNBOL Construction Specification Length - minimum of 50' (¥30' for single residence Lot). JOINING TWO ADJACENT SILT 2. Width - 10' minimum, should be flared at the existing road to provide a turning Construction Specifications . Fence posts shall be a ninimum of 36' long driven 16' minimum into the 3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior ground. Wood posts shell be 11/2" x 11/2" square (al ni nun) cut, or 13/4" di aneter to placing stone. **The plan approval authority may not require single family (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot. 4. Stone - crushed aggregate (2" to 3") or rectal ned or recycled concrete . Geotextile shall be fastened securely to each fence post with wire ties equivalent shall be placed at least 6" deep over the length and width of the or staples at top and mid-section and shall meet the following requirements

5. Surface Water - all surface water flowing to or diverted toward construction 50 lbs/in (min.) Test MSHT 509 Test MSHT 509 entrances shall be piped through the entrance, hal ntaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a 20 (bs/in (nin.) 0.3 gal ft*/ ni nute (nax.) Testi MSNT 322 nountable bern with 5:1 slopes and a minimum of 6° of stone over the pipe. Pipe has Filtering Efficiency 75% (nin.) to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized 3. Where ends of geotetic te fabric come together, they shall be overlapped folded and stapled to prevent sediment bypass. according to the amount of runoff to be conveyed. A 6' minimum will be required. 5. Location - A stabilized construction entrance shall be located at every point 4. Slit Fence shall be inspected after each rainfall event and naintained when where construction traffic enters or leaves a construction site. Vehicles leaving but ges occur or when sediment occurve atl on reached 50% of the fabric helight. the site must travel over the entire length of the stabilized construction entranc PAGE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE
E - 16 - 3 VATER MANAGEMENT ADMINISTRATION SDIL CONSERVATION SERVICE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT F - 17 - 3 VATER MANAGEMENT ADMINISTRATION SCIIL CONSERVATION SERVICE DETAIL 33 - SUPER SILT FENCE STABILIZED CONSTRUCTION ENTRANCE

34" HENEMUN 21/2" IN AMETER equivalent shall be placed at least 6' deep over the length and width of the FILTER CLOTH-Construction Speci fications

Tensi Le Modul us

. Fencing shall be 42' in height and constructed in accordance with the Latest Haryl and State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42' fabric and 6' length

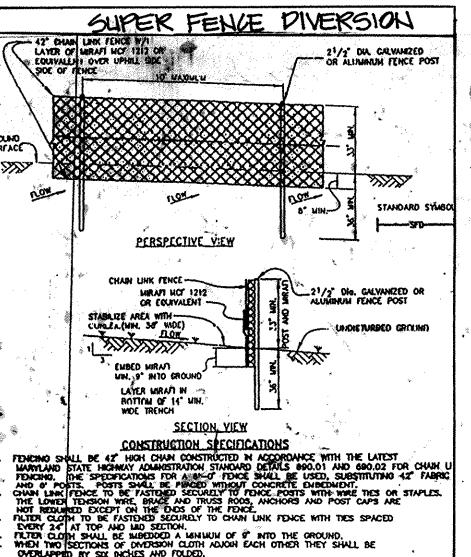
2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not regulated except on the ends of the fence. 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced

every 24° at the top and mid section. i. Filter cioth shall be embedded a minimum of 8' into the ground. 5. When two sections of filter cloth adjoin each other, they shall be overlapped

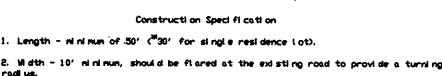
5. Not interconce shall be performed as needed and silt buildups removed when "bulges" level op in the slit fence, or when silt reaches 50% of fence height

7. Filter cloth shall be fastened securely to each fence post with eire ties or staples at top and nid section and shall neet the following requirements for 50 lbs/in (nin.) Tensilie Strength 20 ibs/in (nin.)

50 lbs/in (nin.) Test MSNT 509
20 lbs/in (nin.) Test MSNT 509
0.3 gal/ft²/ninute (nax.) Test MSNT 322
75% (nin.) Test MSNT 322 Filtering Efficiency 75% (nin.) SUIL CONSERVATION SERVICE



APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT

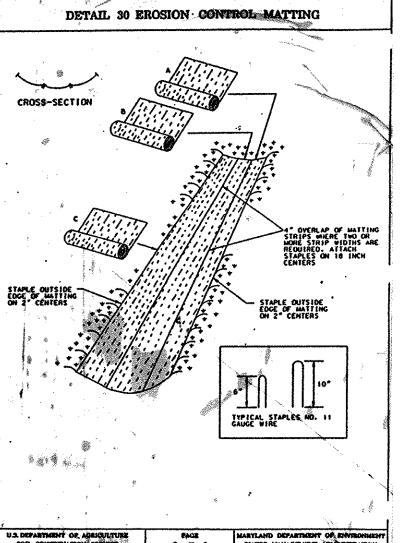


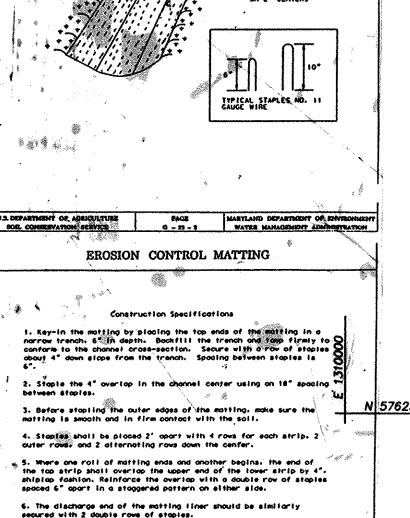
1. Stone - crushed aggregate (2" to 3"), or recial ned or recycled concrete

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, naintaining positive drainage. Pipe Installed through the stabilized construction entrance shall be protected with a nountable bern with 5:1 slopes and a ninimum of 6' of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6° nini num will be required.

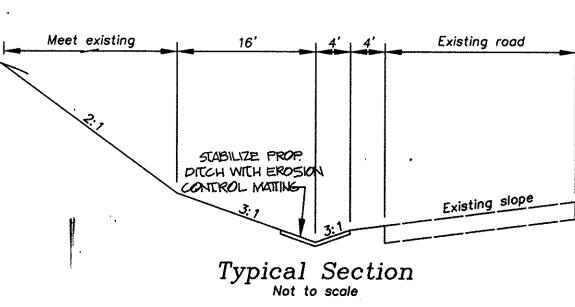
5. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles Leaving the site must travel over the entire length of the stabilized construction entrance.

PAGE MARYLAND DEPARTMENT OF ENVIRONMENT F = 17 - 3A VATER MANAGEMENT ADMINISTRATION SUIL CONSERVATION SERVICE



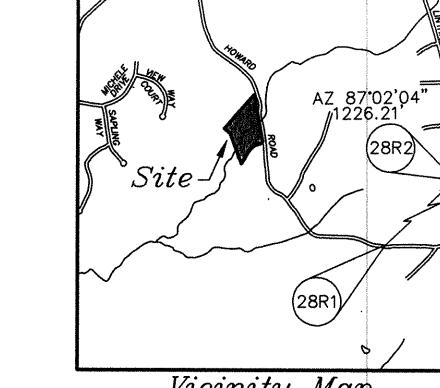


Note: If flow will enter from the edge of the motting then the orea-A DEPARTMENT OF AGRICULTURE FAGE MARYLAND DEPARTMENT OF 80G. CONSERVATION SERVICE G - 24 - 24 WATER MANAGEMENT ADMI APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.



SEQUENCE OF CONSTRUCTION:

- 1. Obtain all required permits, approvals and licenses from the appropriate agencies.
- 2. Notify Howard County Construction Inspection Division (410) 313-1880 at least five (5) working days prior to starting work.
- 3. NSTALL' SUPER FENCE DIVERSION TO ESTABLISH THE LIMITS OF DISTURBANCE AND PROVIDE TREE PROTECTION, INSTAUREMAINING SEDIMENT CONTROL DEVICES. 4. Clear and grub within limits of disturbance and grade slope according to plan.
- 5. Seed and mulch disturbed area. LINE PROPOSED DITCH WITH EROSION CONTROL. MATTING.
- 6. When all contributing areas to a sediment control device has been stabilized, and with permission of the Sediment Control Inspector, the device may be removed.



Scale: 1" = 2000'

Vicinity Map

W.E. 450.4 N 576750 Une of sight easemer GAccess and maintendace bareement with HQAY CONSERVATION

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ENGINEER'S CERTIFICATE I certify that this plan for erosion and sediment control represents a practical and ppal knowledge of the site conditions and that it e requirements of the Howard County Soil Conservation Distalet

* HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF HIGHWAYS

DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION

Soil Conservation District or their authorized agents, as are deemed necessary.

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done accordance

training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County

with this plan of development and plan for erosion and sediment control and

that all responsible personnel involved in the construction of this project will

have a certificate of attendance at a Department of the Environment approved

Plan

Scale: 1" = 50'

OF