

Permanent and Temporary Seeding, Sodding and Mulching

SEDIMENT CONTROL NOTES

- a. The developer is responsible for the acquisition of all required easement, right and/or rights-of-way pursuant to the discharge from the erosion and sediment control practices...

- I. Site Preparation
Permanent or temporary vegetation shall be established within seven (7) days on the surface of all sediment control practices such as diversions, grade stabilization structures, berms, waterways, sediment control basins, and all slopes greater than 3 horizontal to 1 vertical (3:1) and within 14 days for all other disturbed or graded areas on the project site.

- II. Seeded Preparation and Seeding Application
Loosen the top layer of the soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment such as disc harrows, chisel plows or rippers mounted on construction equipment.

- III. Soil Amendments
Soil tests shall be made on sites over five acres to determine the exact requirements for both lime and fertilizer. For sites under 5 acres, in lieu of a soil test, apply the following:

Fertilizer Nitrogen 2 lbs/1000 sq. ft. (90 lbs/ac)
P2O5 4 lbs/1000 sq. ft. (175 lbs/ac)
K2O 4 lbs/1000 sq. ft. (175 lbs/ac)

For low maintenance areas apply 150 lbs/ac ureaform fertilizer (38-0-0) at 3.5 lbs/1000 sq. ft. in addition to the above fertilizer at the time of seeding.

Ground Limestone 2 tons/ac

- IV. Sediment Control Practice Seeding
Select a seeding mixture from table 25 or 26 in Section G of the 1994 Standards and Specifications. Document seeding on the erosion and sediment control plan using appropriate chart below.

V. Temporary/Permanent Seeding Mixtures and Rates
Select a seeding mixture from appropriate table 25 or 26 in Section G of the 1994 Standards and Specifications. Document seeding on the erosion and sediment control plan using appropriate chart below.

Table: Temporary Seeding Summary
Columns: No., Species, Application Rate (lb/ac), Seeding Dates, Seeding Depths, Fertilizer Rate (10-10-10), Lime Rate

Table: Permanent Seeding Summary
Columns: No., Species, Application Rate (lb/ac), Seeding Dates, Seeding Depths, Fertilizer Rate (10-20-20), Lime Rate

VI. Turfgrass Establishment
This includes lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance. Areas to receive seed shall be tilled by discing or by other approved methods to a depth of 3 to 5 inches, leveled and raked to prepare a proper seedbed.

VII. Mulching
All seedings require mulching. Also mulch during non-seeding dates until seeding can be done.

Mulch shall be unrotted, unchopped, small grain straw applied at a rate of 2 tons/acre or 90 lbs/1000 sq. ft. (2 bales). If a mulch anchoring tool is used, apply 2.5 tons/acre.

mechanically or by hand, to a depth of 1-2 inches. Mulch anchoring shall be accomplished immediately after mulch placement to minimize loss by wind or water.

Apply wood cellulose fiber at a dry weight of 1,500 lbs/acre. If mixed with water, use 50 lbs. of wood cellulose fiber per 100 gallons of water.

Liquid binder should be applied heavier at the edge, where wind catches mulch in valleys, and on crest of banks. The remainder of the area should appear uniform after binder application.

VIII. Sodding
Class of turfgrass sod shall be Maryland or Virginia State certified, or Maryland or Virginia State approved sod. Sod shall be harvested, delivered and installed within a period of 36 hours.

IX. Maintenance
A. Irrigate - Apply minimum 1" of water every 3 to 4 days depending on soil texture, when soil moisture becomes deficient to prevent loss of stand of protective vegetation.
B. Repairs - If stand provides between 40% and 94% ground coverage, overseed and fertilize using half of the rates originally applied.

Note: Use of this information does not preclude meeting all of the requirements of the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control Vegetative Practices.

19.0 STANDARDS AND SPECIFICATIONS

FOR LAND GRADING

Definition

Reshaping of the existing land surface in accordance with a plan as determined by engineering survey and layout.

Purpose

The purpose of a land grading specification is to provide for erosion control and vegetative establishment on those areas where the existing land surface is to be reshaped by grading according to plan.

Design Criteria

The grading plan should be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surroundings to avoid extreme grade modifications.

Many counties have regulations and design procedures already established for land grading and cut and fill slopes. Where these requirements exist, they shall be followed.

1. Provisions shall be made to safely conduct surface runoff to storm drains, protected outlets or to stable water courses to insure that surface runoff will not damage slopes or other graded areas.

2. Cut and fill slopes that are to be stabilized with grasses shall not be steeper than 2:1. (Where the slope is to be mowed the slope should be no steeper than 3:1; 4:1 is preferred because of safety factors related to mowing steep slopes.)

3. Reverse benches shall be provided whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet; for 3:1 slope it shall be increased to 30 feet and for 4:1 to 40 feet. Benches shall be located to divide the slope face as equally as possible and shall convey the water to a stable outlet.

a. Benches shall be a minimum of six-feet wide to provide for ease of maintenance.

b. Benches shall be designed with a reverse slope of 6:1 or flatter to the toe of the upper slope and with a minimum of one foot in depth. Bench gradient to the outlet shall be between 2 percent and 3 percent, unless accompanied by appropriate design and computations.

c. The flow length within a bench shall not exceed 800' unless accompanied by appropriate design and computations. For flow channel stabilization see temporary swale.

4. Surface water shall be diverted from the face of all cut and/or fill slopes by the use of earth dikes, ditches and swales or conveyed downslope by the use of a designed structure, except where:

a. The face of the slope is or shall be stabilized and the face of all graded slopes shall be protected from surface runoff until they are stabilized.

b. The face of the slope shall not be subject to any concentrated flows of surface water such as from natural drainageways, graded swales, downspouts, etc.

c. The face of the slope will be protected by special erosion control materials, to include, but not limited to: approved vegetative stabilization practices (see section G), rip-rap or other approved stabilization methods.

5. Cut slopes occurring in ripable rock shall be serrated as shown on the following diagram. These serrations shall be made with conventional equipment as the excavation is made.

6. Subsurface drainage shall be provided where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.

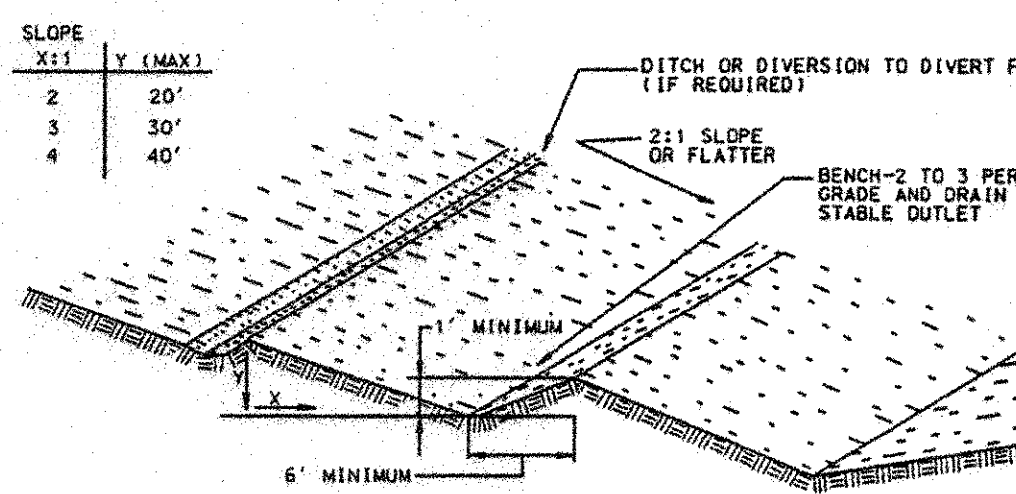
7. Slopes shall not be created so close to property lines as to endanger adjoining properties without adequately protecting such properties against sedimentation, erosion, slippage, settlement, subsidence or other related damages.

8. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. It should be free of stones over two (2) inches in diameter where compacted by hand or mechanical tampers or over eight (8) inches in diameter where compacted by rollers or other equipment.

9. Stockpiles, borrow areas and spoil shall be shown on the plans and shall be subject to the provisions of this Standard and Specifications.

10. All disturbed areas shall be stabilized structurally or vegetatively in compliance with 20.0 Standards and Specifications for Vegetative Stabilization.

DETAIL 28 - BENCHED SLOPES

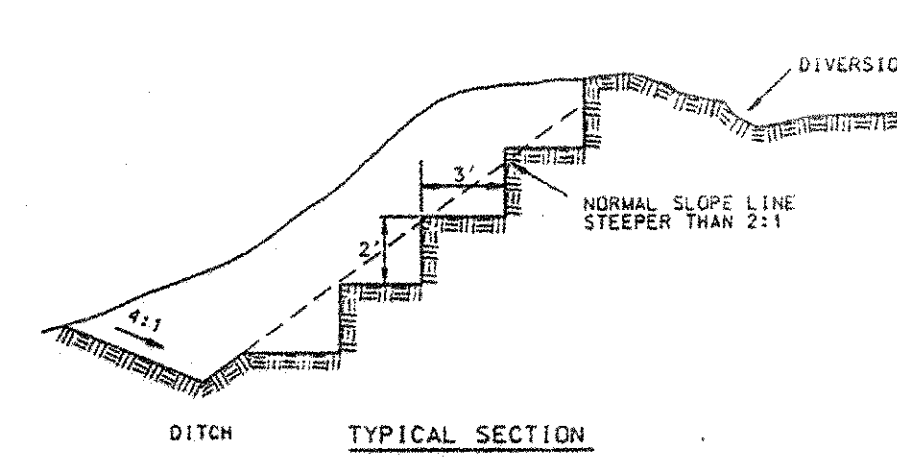


Construction Specifications

- 1. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 19-13 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 29 - SERRATED SLOPES



Construction Specifications

- 1. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.

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DATE: APRIL 2007
SCALE: N/A
DRAWING NAME: 19D09-ESN

EROSION & SEDIMENT CONTROL NOTES
PROJECT: BETH SHALOM AME ZION CHURCH
6TH ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

SHEET SC 4 OF 7
FILE No. MDPG-19D09-01

MISS UTILITY

"For location of utilities call 1-800-257-7777 48 hours in advance of any work in this area"

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD.