

HOWARD SOIL CONSERVATION DISTRICT

CRITERIA FOR GRADING AND SEDIMENT CONTROL PLAN PREPARATION

The following are the minimum acceptable items to be considered in the preparation of grading and sediment control plans which are to be submitted to the Howard Soil Conservation District for review and approval. Disturbances which are cumulatively less than 5000 SF, less than 100 CY of cut/fill and less than 100 Ft of utility trench are exempt from HSCD approval. Plan approvals are valid for a maximum of 2 years.

General - Plans should include the following as applicable:

1. All plans, designs and computations for grading and sediment control which are submitted to the Howard Soil Conservation District for review and approval are to be in conformance with the criteria established in the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
2. All plans submitted to the Howard Soil Conservation District for review and approval are to contain the following Sediment Control Note: "All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto (see Standard Sediment Control Note #2).
3. Scope of the plan is to be clearly delineated and identified in the Title Block.
4. Plans are to be legible and include: scales, north arrow, vicinity map, road identification and symbols legend for all sediment control practices.
5. Developer's name, address and phone number is to be shown.
6. Engineer's name, address and phone number is to be shown.
7. Property lines and names of all adjacent property owners are to be shown.
8. Existing features, and existing and proposed contour lines based on all grading changes are to be shown (contours are to be labeled and spot elevations are to be shown).
9. Topographic data is to be extensive and accurate enough to show conditions adjacent to and downstream of the site and a minimum of 100 ft. downstream of all storm drain channel, or pond outfalls.
10. 100-year flood plain delineation, based on ultimate development of the watershed is to be shown (computations may be requested).
11. Existing and proposed improvements (building, walls, parking lots, etc.) are to be shown.
12. Existing and proposed utilities (overhead, surface and subsurface) are to be shown and properly identified.
13. Total project area and limits of proposed disturbed areas are to be indicated.
14. Maximum drainage areas for all permanent and temporary runoff control structures are to be indicated and described (including all sediment control structures).
15. Borrow or spoil areas are to be shown and cut and fill balance is to be provided. Reference to an approved active sediment control plan(s) is (are) acceptable.

16. The developer is responsible for the acquisition of all easements, rights, and/or rights of way (and proof of same) that may be required for the discharge of runoff water from sediment and erosion control practices, stormwater management practices and from storm drainage systems onto or across adjacent or downstream properties affected by this plan..
17. The developer is responsible for the acquisition (and proof of same) of all easements rights, and/or rights of way that may be required for grading and/or work on adjacent properties affected by this plan.
18. Temporary controls are to be built to control the 10-year runoff from bare upland soil.
19. Permanent controls are to be built to withstand the 100-year runoff from permanent upland development.
20. A detail of each temporary and permanent sediment control used must be provided on the plan.
21. Show all appropriate stream and wetland buffers.
22. Construction within, along or across stream channels shall, as a minimum also conform to criteria described under *Maryland's Guidelines to Waterway Construction* as published by WRA.

Storm Drainage and Stormwater Management - Plans should include the following as applicable:

1. Location and description of storm drainage system is required.
2. Proposed method of outfall stabilization that controls outfall velocities to allowable limits based on receiving channel characteristics and limitations is required (Computations are required to prove acceptability).
3. Outfall structure design and construction details are to be shown on the plan.
4. Existing and proposed permanent ponds within 200' of development, both upstream and downstream, are to be shown and designated.
5. Appropriate design, computations and specifications for all ponds which will be permanent to the site are required. Most warrant USDA-NRCS design criteria (MD-378), (including required documentation) to be adhered to for HSCD review and approval. See "HSCD Criteria for Permanent Pond Plan Preparation".
6. Method permanent ditch and channel stabilization to conform to local soil limitations and characteristics is required (computations are required to prove acceptability).
7. Where drainage areas have been significantly altered, or redirected, or where overland flow is converted to point discharge, provide sufficient documentation that the land or channel below the discharge point will not erode, for each and every drainage area.

Grading and Sediment Control - Plans are to address the following as applicable:

1. The plan is to address all aspects of the project from initial clearing to final stabilization of all disturbed areas of the site.
2. All planned structural measures (temporary or permanent) are to be shown on a plan view of the site.
3. Design considerations and computations are to be provided for all structural practices to verify their acceptability. The minimum data is to be that specified in the current *MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, 2011* and revisions thereto.

4. If grading or sediment control is presented on two or more sheets, provide a composite-overall plan showing how the practices planned on individual sheets tie together.
5. Standard symbols are to be used to indicate all planned temporary practices.
6. Symbols are of acceptable for permanent practice designations.
7. Grading shown on all plans submitted to HSCD for review and approval must be in conformance with the minimum criteria established by the *Standards and Specifications for Land Grading*.
8. A Construction Schedule, Sequence of Construction, or Schedule of Activities is to be provided for all plans. This schedule is to detail how and where sediment control activities or installations are to take place chronologically with respect to all phases of construction. The sequence shall begin with “obtain a grading permit”, followed by the installation of sediment control practices, then other construction activities, such as clearing, rough grading, storm drain installation, curb and street installation, building construction, paving, final stabilization. The last item shall be the removal of sediment control practices only upon receiving permission from the Ho. Co. Sediment Control Inspector.
9. The standard set of HSCD “Sediment Control Notes” must appear on all plans with a completed sit analysis.
10. Permanent and temporary seeding notes must be provided on plan, (see HSCD custom notes).
11. Provide spot elevations for dikes and swales installed at <1% grade.
12. Contours within traps must be shown.
13. All permanent ditches swales and other areas of concentrated flow must receive protection in form of either sod, jute/excelsior matting, or rip-rap.
14. Horizontal dewatering devices are not permitted.

Certification and Approval Blocks - are required on all grading and sediment control plan sheets as follows:

1. Appropriate Developer (owner’s) Certification is to be provided and signed with name printed under signature.
2. Appropriate Engineer’s Certification is to be provided, signed and name printed under signature, and sealed.
3. Howard Soil Conservation District approval block is to be provided.

Additional Basic Principles of Erosion and Sediment Control

1. Keep erosion and sediment controls simple, i.e., use future SWM ponds for E/S control wherever possible and do not block inlets which outfall to sediment basins.

2. Design site to involve as little cut and fill as possible. Retain the natural topography and ground cover as much as possible.
3. Do not grade or put controls in stream buffers, wetland buffers, steep slopes, or wooded area.
4. Do not outfall controls onto steep slopes, or near public/private structures.
5. Construct side ditches, culverts and storm drains as early in sequence as possible, before any grading, so that they may be used to divert and pass clean or treated runoff.
6. Isolate and treat construction area (dirty) runoff from clean off-site runoff.
7. Put yourself in “contractor’s shoes” i.e., do not create impossible or dangerous conditions which force compromise.
8. Study the “standard detail” for each E/S control type used and be sure it fits and makes sense.
9. Divert storm drain temporarily to traps and keep until all upland drainage areas are permanently stabilized.
10. Include “Water Quality” (401), “Wetland” (404), WRA, and DNR permits numbers on plans and include any of their specific restrictions or details requested, within the plans.

The HSCD is always receptive to innovative ideas as long as they achieve at least the minimum criteria for E/S control and safety. If there is a need for additional information or if there are questions or concerns regarding the intent, clarity or understanding of the criteria, the Howard District welcomes the concerns regarding the intent, clarity or understanding of the criteria, the Howard District welcomes the opportunity to discuss them.

Interested persons, developers or engineers are invited to contact the District office for an appointment to discuss the criteria in detail or to provide additional information regarding specific items of interest.

Engineering newsletters are published periodically by the HSCD to provide information on new plan requirements and other items of interest. Copies may be obtained from the HSCD website (www.howardscd.org).

Always stay in touch with the HSCD for copies of the most current revisions to E/S control criteria (410-313-0680).