

15A NCAC 02H .1050 MDC FOR ALL STORMWATER CONTROL MEASURES

The purpose of this Rule is to set forth the design requirements for all Stormwater Control Measures (SCMs) that are constructed to meet the requirements of this Section. These Minimum Design Criteria (MDC) are required for every SCM. SCMs shall adhere to the MDC associated with the specific type of SCM being implemented.

- (1) **SIZING.** The design volume of SCMs shall take into account the runoff at build out from all surfaces draining to the system. Drainage from off-site areas may be bypassed. The combined design volume of all SCMs on the project shall be sufficient to handle the required storm depth.
- (2) **CONTAMINATED SOILS.** SCMs that allow stormwater to infiltrate shall not be located on or in areas with contaminated soils.
- (3) **SIDE SLOPES.** Side slopes of SCMs stabilized with vegetated cover shall be no steeper than 3:1 (horizontal to vertical). Retaining walls, gabion walls, and other engineered surfaces may be steeper than 3:1. Steeper vegetated slopes may be accepted on a case-by-case basis if the applicant demonstrates that the soils and vegetation shall remain stable.
- (4) **EROSION PROTECTION.** The inlets of SCMs shall be designed to protect the SCM from erosion resulting from stormwater discharges. The outlets of SCMs shall be designed so that they do not cause erosion downslope of the discharge point during the peak flow from the 10-year storm event as shown by engineering calculations.
- (5) **EXCESS FLOWS.** SCMs shall include an overflow or bypass device for inflow volumes in excess of the treatment volume, or, if applicable, the peak attenuation volume.
- (6) **DEWATERING.** SCMs shall have a method to draw down any standing water to facilitate maintenance and inspection.
- (7) **CLEAN OUT AFTER CONSTRUCTION.** Every SCM impacted by sedimentation and erosion control during the construction phase shall be cleaned out and converted to its approved design state.
- (8) **MAINTENANCE ACCESS.** Every SCM installed pursuant to this Section shall be made accessible for maintenance and repair. Maintenance accesses shall:
 - (a) have a minimum width of ten feet;
 - (b) not include lateral or incline slopes that exceed 3:1 (horizontal to vertical); and
 - (c) extend to the nearest public right-of-way.
- (9) **EASEMENTS.** All SCMs and associated maintenance accesses on privately owned land except for those located on single family residential lots shall be located in permanent recorded easements. The SCM shall be shown and labeled within the easement. These easements shall be granted in favor of the party responsible for enforcing the stormwater program under which the SCMs were approved.
- (10) **SINGLE FAMILY RESIDENTIAL LOTS.** Plats for residential lots that contain an SCM shall include:
 - (a) the specific location of the SCM on the lot;
 - (b) a typical detail for SCM to be used; and
 - (c) a note that the SCM on the property has been required to meet stormwater regulations and that the property owner may be subject to enforcement procedures as set forth in G.S. 143, Article 21 if the SCM is removed, relocated, or altered without prior approval.
- (11) **OPERATION AND MAINTENANCE AGREEMENT.** The owner of the SCMs shall enter into a Operation and Maintenance (O&M) Agreement with the party responsible for implementing the stormwater program under which the SCMs were approved. The O&M Agreement shall require the owner to maintain, repair, or reconstruct the SCMs in accordance with the approved design plans and the O&M Plan. The O&M Agreement shall be referenced on the final plat and shall be recorded with the county Register of Deeds upon final plat approval. If no subdivision plat is recorded for the site, then the O&M Agreement shall be recorded with the county Register of Deeds so as to appear in the chain of title of all subsequent purchasers.
- (12) **OPERATION AND MAINTENANCE PLAN.** There shall be an O&M Plan for every project subject to this Rule. The O&M Plan shall specify all operation and maintenance work necessary for the function of all SCM components, including the stormwater conveyance system, perimeter of the device, inlet(s), pretreatment measures, main treatment area, outlet, vegetation, and discharge point. The O&M plan shall specify methods to be used to maintain or restore the SCMs to design specifications in the event of failure. O&M plans shall be signed by the owner and notarized. The owner shall keep maintenance records and these shall be available upon request by the party responsible for enforcing the stormwater program under which the SCMs were approved.

- (13) SCM SPECIFIC MINIMUM DESIGN CRITERIA (MDC). Every SCM shall follow the applicable device specific MDC pursuant to Rules .1051 through .1062 of this Section.
- (14) SCM DESIGNER QUALIFICATIONS FOR THE FAST-TRACK PERMITTING PROCESS. For the fast-track permitting process as set forth in Rules .1043 and .1044 of this Section, SCMs and components of SCMs shall be designed by persons licensed under Chapters 89A, 89C, 89E, or 89F of the General Statutes.
- (15) NEW STORMWATER TECHNOLOGIES. Applicants shall have the option to request Division approval of new stormwater technologies and associated MDC. The applicant shall submit to the Division the standards for siting, site preparation, design, construction, and maintenance of the stormwater technology as well as research studies demonstrating that the stormwater technology functions in perpetuity and is equally or more protective of water quality than the requirements of this Section. In accordance with G.S. 143-215.1 and 143-215.3, the Commission may delegate the review and approval of new stormwater technologies to Division staff and the Commission or its designee may request additional information deemed necessary to evaluate the stormwater technology. If the Commission or its designee deems that the applicant has demonstrated that the new stormwater technology shall be the same or more protective than the requirements of this Section, then the Division shall approve the use of the new stormwater technology to satisfy the requirements of this Section.
- (16) NO EXCEPTIONS TO UNAUTHORIZED PROFESSIONAL PRACTICE. This Rule creates no exceptions to the unauthorized practice of the professions described in Chapters 89A, 89C, 89E, or 89F of the General Statutes, or the rules, standards, or codes of professional conduct promulgated by the applicable professional licensing boards.

History Note: Authority G.S. 143-214.7B; 143-215.1; 143-215.3(a);
Eff. January 1, 2017.