

15A NCAC 02H .1061 MDC FOR TREATMENT SWALES

The purpose of this Rule is to set forth the design requirements for treatment swales that are constructed to meet the requirements of this Section. Vegetated conveyances that are designed to convey stormwater from a project but are not intended to remove pollutants shall not be subject to this Rule, but instead shall meet the requirements of Rule .1003(2)(c) of this Section.

- (1) SHWT. Swales shall not be excavated below the SHWT.
- (2) SHAPE. Swales shall be trapezoidal in cross-section with a maximum bottom width of six feet. Side slopes stabilized with vegetative cover shall be no steeper than 3:1 (horizontal to vertical). Steeper vegetated slopes may be accepted on a case-by-case basis provided that the applicant demonstrates that the soils and vegetation will remain stable in perpetuity based on engineering calculations.
- (3) SWALE SLOPE AND LENGTH. The longitudinal swale slope shall not exceed seven percent. The swale slope and length shall be designed to achieve a flow depth of six inches or less during the 0.75 inch per hour storm and a minimum hydraulic retention time of four minutes.
- (4) GRASS SPECIFICATION. The grass species in the swale shall be:
 - (a) non-clumping and deep-rooted;
 - (b) able to withstand a velocity of four feet per second;
 - (c) managed at an average of six inches; and
 - (d) not be cut lower than four inches.
- (5) CONVEYANCE OF LARGER STORMS. Swales shall be designed to non-erosively pass the ten-year storm.

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