

Sedimentation & Erosion Control: Standards & Requirements

Please check the box next to items applicable to your project. By doing so you acknowledge potential standards to be applied to the proposed development.

1. **Sec. 96.04 Applicability:** Erosion and sedimentation control regulations are applicable and a Land Disturbance Permit is required if the project includes disturbances of land *equal to or greater than one acre*.
2. **Sec. 96.08 Design Standards** - Erosion and sedimentation control measures, structures, and devices shall be planned, designed, and constructed to provide protection from the calculated maximum peak rate of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the latest edition of the United States Department of Agriculture, Natural Resources Conservation Service's "National Engineering Field Handbook", or other acceptable calculation procedures.
3. **Sec. 96.12 Operation in Lakes or Natural Watercourses** - Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall minimize the extent and duration of disruption of the stream channel. Where relocation of a stream forms an essential part of the proposed activity, the relocation shall minimize changes in the stream flow characteristics.
4. **Sec. 96.08 Standards for High Quality Water (HQW) Zones** - Land-disturbing activities to be conducted in High Quality Water Zones must be designed as follows:
 1. **Limit on Uncovered Area** - Uncovered areas in HQW zones must be limited at any time to a maximum total area of 20 acres within the boundaries of the tract.
 2. **Maximum Peak Rate of Runoff Protection** - Erosion and sedimentation control measures, structures, and devices within HQW zones shall be planned, designed and constructed to provide protection from the runoff of the twenty-five year storm which produces the maximum peak rate of runoff as calculated according to procedures in the latest edition of the United States Department of Agriculture Natural Resources Conservation Service's "National Engineering Field Handbook" or according to procedures adopted by any other agency of this state or the United States or any generally recognized organization or association.
 3. **Sediment Basin Design** - Sediment basins within HQW zones shall be designed and constructed according to the following criteria:
 1. use a surface withdrawal mechanism, except when the basin drainage area is less than 1 acre
 2. have a minimum of 1,800 cubic feet of storage area per acre of disturbed area
 3. have a minimum surface area of 325 square feet per cfs of the twenty-five year storm (Q25) peak flow
 4. have a minimum dewatering time of 48 hours
 5. incorporate 3 baffles, unless the basin is less than 20 feet in length, in which case 2 baffles shall be sufficient
 4. **Grade** - Newly constructed open channels in HQW zones shall be designed and constructed with side slopes no steeper than two horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other forms of ditch liners proven as being effective in restraining accelerated erosion. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.
5. **Riparian Buffer Rules:**

Due to the location of this project, it should be noted that a rule to protect and maintain existing buffers along watercourses in the Neuse River Basin became effective on July 22, 1997. The Neuse River Riparian Area Protection and Maintenance Rule (15A NCAC 2B.0233) applies to all perennial and intermittent streams, lakes, ponds and estuaries in the Neuse River Basin with forest vegetation on the adjacent land or "riparian area".
6. **Senate Bill 1020** - "SECTION 3.(h) Additional standards for land-disturbing activities in the water supply watershed":
 1. Erosion and sedimentation control measures, structures, and devices shall be planned, designed, and constructed to provide protection from the runoff of the 25-year storm
 2. Sediment basins shall be planned, designed, and constructed so that the basin will have a settling efficiency of at least seventy percent (70%) for the 40-micron size soil particle transported into the basin by the runoff of the two-year storm that produces the maximum peak rate of runoff
 3. Newly constructed open channels shall be planned, designed, and constructed with side slopes no steeper than two horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit steeper slopes or where the slopes are stabilized by using mechanical devices, structural devices, or other acceptable ditch liners.