

## A-4. Built-Upon Area

**N.C.G.S.143-214.7(b2):** For purposes of implementing stormwater programs, "**built-upon area**" means impervious surface and partially impervious surface to the extent that the partially impervious surface does not allow water to infiltrate through the surface and into the subsoil. "Built-upon area" does not include:

- a slatted deck;
- the water area of a swimming pool;
- a surface of number 57 stone, as designated by the American Society for Testing and Materials, laid at least four inches thick over a geotextile fabric;
- a trail as defined in G.S. 113A-85 that is either unpaved or paved as long as the pavement is porous with a hydraulic conductivity greater than 0.001 centimeters per second (1.41 inches per hour); or
- landscaping material, including, but not limited to, gravel, mulch, sand, and vegetation, placed on areas that receive pedestrian or bicycle traffic or on portions of driveways and parking areas that will not be compacted by the weight of a vehicle, such as the area between sections of pavement that support the weight of a vehicle.

The owner or developer of a property may opt out of any of the exemptions from "built-upon area" set out in this subsection.

NOTE: The above definition of "built-upon area" applies only to state stormwater programs.

Some additional guidance on using #57 stone in accordance with the statute is as follows:

- The #57 stone may not be mixed with other aggregate material;
- "**Geotextile fabric**" means a permeable geosynthetic comprised solely of non-biodegradable textiles. [15A NCAC 2H .1002(19)]
- The #57 stone and geotextile fabric may not be placed on top of an impervious material, such as crusher run or asphalt;
- The #57 stone area may not use an underdrain system that discharges without treatment; and
- The soil on which the 57 stone will be placed (subgrade) should not be mechanically compacted prior to installation; however, the statute does not prohibit this.

**Figure 1: Number 57 Stone**



Although #57 stone laid on geotextile fabric and trails that meet the minimum hydraulic conductivity standard are not considered built-upon area to determine whether a project is high density or low density, these areas shall be accounted for in the design of SCMs required in high density projects. Per 15A NCAC 02H .1050, SCMs shall be sized to account for runoff from all surfaces draining to the system unless the applicant can demonstrate that those areas will not produce stormwater runoff. The requirement to account for runoff from all surfaces for purposes of SCM sizing is consistent with rule 15A NCAC 2H .1003(3).

Any size stone or aggregate used on portions of projects that receive infrequent vehicular traffic (approximately twice a month or less) may be counted as pervious regardless of the depth of the stone layer. This includes applications such as decorative landscaping, drainage swales, weed control, and the area within the fenced yard at electrical substations.

If an applicant plans to install a surface that does not meet one of the five exemptions to built-upon area called out in N.C.G.S.143-214.7(b2), he has the option of demonstrating to the permitting authority that the proposed surface allows an adequate level of stormwater infiltration to be considered either pervious or partially pervious. The information the applicant provides shall be based on engineering calculations and the results of research studies showing that the proposed surface provides equal or better infiltration rates as the surrounding pervious surfaces and that it shall function in perpetuity.