

SECTION .0400 - IRRIGATION DESIGN MINIMUM STANDARDS

21 NCAC 23 .0401 SYSTEM DESIGN OBJECTIVES AND REQUIREMENTS

- (a) An irrigation contractor shall design an irrigation system so that it uniformly distributes water.
- (b) When designing an irrigation system, an irrigation contractor shall consider the following criteria:
 - (1) the soil type;
 - (2) the slope;
 - (3) the plant root depth;
 - (4) the water requirements of different plants;
 - (5) microclimates;
 - (6) weather conditions;
 - (7) the quantity, quality, and delivery pressure of the water source; and
 - (8) the long-term management of the system and the landscape it serves.
- (c) When designing an irrigation system, an irrigation contractor shall select equipment components and installation techniques that meet state and local code requirements and site requirements.
- (d) When designing an irrigation system, an irrigation contractor shall to ensure that the irrigation system is designed to uniformly distribute the water, conserve and protect water resources, and function well as a component of the overall landscape by doing the following:
 - (1) obtaining direct knowledge of site conditions by visiting it. Viewing and relying solely on plot plans to generate a design is not adequate preparation for designing an irrigation system.
 - (2) producing a design that meets all applicable state and local codes, including plumbing and electrical codes.
 - (3) when allowable by law, specifying in the plan the manufacturer, model, type, and size of all components to eliminate ambiguity during construction and to facilitate management of the system.
 - (4) selecting pipe, electrical wire, and other materials based on design parameters, environmental conditions, code requirements, and long-term management requirements of the system.
 - (5) designing the irrigation system to minimize installation and maintenance difficulties.
 - (6) selecting and placing shrubs, trees, and groundcover sprinkler and microirrigation components according to the expected size of larger specimen plants through a minimum three-year establishment period for shrubs and 10-year establishment period for trees.

History Note: Authority G.S. 89G-5;
Eff. August 1, 2011;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. September 22, 2014;
Amended Eff. November 1, 2016.