



**VIRGINIA DEPARTMENT OF TRANSPORTATION  
NORTHERN VIRGINIA DISTRICT  
GUIDELINES FOR IRRIGATION WITHIN THE STATE RIGHT OF WAY**

1. The applicant shall submit to the Virginia Department of Transportation (VDOT) for approval all plans, drawings, technical specifications, and all other documents relating to irrigation **prior** to installation in the proposed right of way (ROW). The irrigation system shall be designed and/or approved by a certified irrigation designer or professional civil or mechanical engineer.
2. The applicant is responsible for locating all existing utilities and obstructions and showing the exact locations of the utilities and obstructions on the irrigation plans.
3. All main and lateral irrigation lines shall be at least **36** inches deep.
4. All irrigation lines passing beneath a road or walk surface shall be sleeved for protection in either galvanized metal or schedule 80 PVC pipe. The protecting sleeve and the fill (depth and materials) to the bottom of the roadway subbase shall be included in the irrigation plans for VDOT's review and approval.
5. All sprinkler heads shall not elevate more than 12 inches when in operation and remain flush with ground when dormant. Each sprinkler should be designed for a fixed spray-regulating pattern (**no rotary heads**) appropriate for the area to be watered. Each sprinkler shall have a spring activated pressure regulator integral within the stem.
6. Consideration must be given to the drainage of the irrigated area. Around islands and medians as well as along the edge of pavements, underdrains and/or edge drains such as VDOT Standard UD-4 or ED-5, shall be utilized to eliminate the possibility of saturation of the subbase materials or subgrade within the roadway prism.
7. No water lines and sprinkler heads shall be located within 18 inches of a curb, sidewalk, or other hard structure. Where there is no barrier, the entire irrigation system shall be located out of the clear zone as determined by the design speed.
8. Sprinkler heads and water lines shall not conflict with locations for utilities and/or traffic information signs, or other fixed traffic control devices.
9. All irrigation on ROW shall be zoned separate from irrigation on private property.



Each zone shall be equipped with a pressure-regulating valve that increases the water droplet size.

10. All irrigation lines on the ROW shall be charged only when irrigation is in progress and shall remain uncharged during the rest of the time.
11. All exposed control devices shall be vandal resistant. VDOT personnel shall have continuous access to a manual shut off valve that will turn off water flow to that portion of the irrigation system located on the ROW. Depictions of the control panel, valve assemblies, and nozzle assemblies must be shown on the submitted plans.
12. A winterizing schedule must be submitted with the irrigation plans.
13. Following initial approval, any alternations to the plans must be resubmitted to VDOT for approval.
14. A representative of VDOT will make final approval after an inspection of the system in operation.