DINWIDDIE COUNTY

PLANNING, ZONING, CODE COMPLIANCE AND ENVIRONMENTAL

DRY SWALE

Construction Inspection Checklist

Project Name: _____ Date: _____

PRE-CONSTRUCTION MEETING:

	YES	NO	N/A
Pre-construction meeting with the contractor designated to install the dry swale has been conducted.			
Identify the tentative schedule for construction and verify the requirements and schedule for interim inspections and sign-off.			
Subsurface investigation and soils report supports the placement of a dry swale in the proposed location.			
Impervious cover has been constructed/installed and area is free of construction equipment, vehicles, material storage, etc.			
All pervious areas of the contributing drainage areas have been adequately stabilized with a thick layer of vegetation and erosion control measures have been removed.			
Area of the dry swale has not been impacted during construction.			
Stormwater has been diverted around the area of the dry swale and perimeter erosion control measures to protect the facility during construction have been installed.			

EXCAVATION:

	YES	NO	N/A
Compare the dry swale surface and invert design elevations with the actual constructed elevations of the inflow and outlet inverts and adjust design elevations as needed.			
Area of dry swale excavation is marked and the size and location conforms to plan.			
If the excavation area has been used as a sediment trap: verify that the bottom elevation of the proposed stone reservoir is lower than the bottom elevation of the existing trap.			

EXCAVATION:

	YES	NO	N/A
For Level 2 dry swale, ensure the bottom of the excavation is scarified prior to placement of stone.			
Subgrade surface is free of rocks and roots, and large voids. Any voids should be refilled with the base aggregate to create a level surface for the placement of aggregates and underdrain (if required).			
No groundwater seepage or standing water is present. Any standing water is dewatered to an acceptable dewatering device.			
Excavation of the dry swale has achieved proper grades, longitudinal slope, and the required geometry and elevations without compacting the bottom of the excavation.			
Certification of Excavation Inspection: Inspector certifies the successful completion of the excavation steps listed above.			

FILTER LAYER, UNDERDRAIN, AND STONE RESERVOIR PLACEMENT:

	YES	NO	N/A
All aggregates, including, as required, the filter layer (choker stone & sand), the stone reservoir layer or infiltration sump conform to specifications as certified by quarry.			
Underdrain size and perforations meet the specifications.			
For Level 2 installations: placement of filter layer and initial lift of stone reservoir layer aggregates with underdrain or infiltration sump, spread (not dumped) to avoid aggregate segregation; or			
Impermeable liner, when required, meets project specifications and is placed in accordance with manufacturers specifications.			
Sides of excavation covered with geotextile, when required, prior to placing stone reservoir aggregate; no tears or holes, or excessive wrinkles are present.			
Placement of underdrain, observation wells, and underdrain fittings (45 degree wyes, cap at the upstream end, etc.) are in accordance with the approved plans.			
Elevations of underdrain and outlet structure are in accordance with approved plans, or as adjusted to meet field conditions.			
Placement of remaining lift of stone reservoir layer as needed to achieve the required reservoir depth.			
Certification of Filter Layer and Underdrain Placement Inspection: Inspector certifies the successful completion of the filter layer and underdrain placement steps listed above.			

DRY SWALE SOIL MEDIA PLACEMENT:

	YES	NO	N/A
Soil media is certified by supplier or contractor as meeting the project specifications.			
Soil media is placed in 12-inch lifts to the design top elevation of the dry swale. Elevation has been verified after settlement (2 to 4 days after initial placement).			
Side slopes of ponding or flow area are feathered back at the required slope (no steeper than 3H:1V).			
Dry swale length, bottom width, side slopes, and longitudinal slope are in accordance with the approved plans.			
Certification of Soil Media Placement Inspection: Inspector certifies the successful completion of the soil media steps listed above.			

PRETREATMENT AND CHECK DAM INSTALLATION:

	YES	NO	N/A
Placement of energy dissipators and pretreatment practices (forebays, gravel diaphragms, etc.) are installed in accordance with the approved plans.			
Riser, overflow weir, or other outflow structure is set to the proper elevation and functional; or.			
External bypass structure is built in accordance with the approved plans.			
Appropriate number and spacing of check dams are installed in accordance with the approved plans (verification of energy dissipators at downstream toe, depth keyed into dry swale flow line, and tied back into dry swale side slopes).			
Apply erosion control matting as required by approved plans or as needed to ensure adequate stabilization.			
All external erosion and sediment control practices have been removed.			
Follow-up inspection and as-built survey/certification has been scheduled.			
GPS coordinates have been documented for all dry swale installations on the parcel.			

Inspector Name:_____ Date:_____

Signature:_____