

FILTERRA SCM DESIGN CHECKLIST

**Stormwater Management Division
c/o Development Services Department**

One Exchange Plaza, 4th Floor
Raleigh, NC 27601
Telephone (919) 996-3773

I. PROJECT INFORMATION

Project Name: _____ Phase: _____
 Project Address: _____ Disturbed Area (sf): _____
 PIN: _____ Case #: _____ Submittal Date: _____
 Previous Permit numbers (if applicable): _____
 Zoning District: _____
 Legal Name of Owner: _____
 Owner Contact: _____ Phone: _____
 Owner Address: _____
 Design Contact Person: _____ Phone: _____
 Design Contact Email: _____
 The regulatory drainage basin in which the site is located: _____
 The water supply watershed in which the site is located: _____

Function of Facility [check all that apply]:	
<input type="checkbox"/>	Nutrient (Total Nitrogen) Reduction
<input type="checkbox"/>	Green Stormwater Infrastructure
<input type="checkbox"/>	TSS Reduction
<input type="checkbox"/>	Peak Flow Rate Attenuation
<input type="checkbox"/>	<input type="checkbox"/> 1-Year event
<input type="checkbox"/>	<input type="checkbox"/> 10-Year event
<input type="checkbox"/>	<input type="checkbox"/> 100-Year event
<input type="checkbox"/>	<input type="checkbox"/> Other [_____]
<input type="checkbox"/>	<input type="checkbox"/> Other [_____]

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- II. **SUBMITTAL REQUIREMENTS** - See COR Stormwater Management Design Manual Chapter 5 for additional guidance. This completed checklist shall be submitted to the City of Raleigh with any proposed Filterra. All files shall also be submitted electronically via CD or flash drive.

Routed flows and water surface elevations (WSE) at SCM [as applicable]:			
Storm Event	Inflow	Outflow	WSE
1-Year			
10-Year			
100-Year			
____-Year			
Peak flow rates at immediate point of analysis to which the SCM drains:			
Condition	1-year	10-year	____-year
Pre-development			
Post-development			

General Design Criteria	
<input type="checkbox"/>	Sizing: The design volume of the SCM accounts for the runoff at full build-out from all surfaces draining to it (calculations provided in Stormwater Development Analysis).
<input type="checkbox"/>	Design Storm Volume: _____ cf
<input type="checkbox"/>	Dewatering: SCM has a method to draw down any standing water to facilitate maintenance and inspection.
<input type="checkbox"/>	Clean Out After Construction: SCM impacted by sedimentation and erosion control during the construction phase shall be cleaned out and converted to its approved design state.
<input type="checkbox"/>	Maintenance Access: SCM has been provided with adequate access per City standards.
<input type="checkbox"/>	Easements (except for SCMs located on single family residential lots): Includes maintenance access, entire SCM footprint, and an additional 10 ft or more around the SCM.
<input type="checkbox"/>	Single Family Residential Lots: Plats for residential lots that contain an SCM shall include the location of SCM, typical detail of SCM, and note that the SCM on the property is required to meet stormwater regulations and that the property owner may be subject to enforcement actions if the SCM is removed, relocated, or altered without prior approval.
<input type="checkbox"/>	Operation and Maintenance (O&M) Agreement.
<input type="checkbox"/>	Operation and Maintenance (O&M) Plan.

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<input type="checkbox"/>	<i>Operation and Maintenance (O&M) Manual Submittal Checklist.</i>
<input type="checkbox"/>	Erosion Protection: The SCM inlets and outlet have been designed to protect areas downstream of the discharge points from erosion resulting from peak flows for the 10-year storm event.

Specific Filterra Design Criteria	
<input type="checkbox"/>	Design Sizing: The Filterra has been sized based on the design water quality volume for the 1" rainfall event.
<input type="checkbox"/>	Impervious Drainage Area: ac
<input type="checkbox"/>	Filterra Model (dimensions):
<input type="checkbox"/>	Ponding Depth: The ponding depth is 9" or less.
<input type="checkbox"/>	Ponding Depth: in
<input type="checkbox"/>	Underdrains: The appropriate underdrain size has been proposed. <i>Note: For Filterra units up to 48 sf surface area, a 4" underdrain shall be utilized, and for units larger than 48 sf surface area, a 6" underdrain shall be utilized.</i>
<input type="checkbox"/>	Media Depth: The media depth is at least 21" inches.
<input type="checkbox"/>	Mulch Depth: The mulch depth is at least 3" inches.
<input type="checkbox"/>	Plantings: Plantings have been approved per Contech recommendations.
<input type="checkbox"/>	Cleanouts: Cleanouts have been provided at the beginning of each pipe run and at all pipe intersections and extend above the maximum ponding depth.
<input type="checkbox"/>	Bypass: The Filterra has been designed as an offline system or has been designed with Contech internal bypass mechanisms.

The SCM Plan Submittal shall also include the following elements:	
<input type="checkbox"/>	A plan view of the SCM, with grading and appropriate critical spot shots, has been provided.
<input type="checkbox"/>	A profile (showing all relevant component elevations and WSEs) through the riser, dam, and outlet structure/outfall has been provided.
<input type="checkbox"/>	Details of other required SCM elements have been provided.
<input type="checkbox"/>	All supporting design calculations (including all applicable site design calculations and drainage area exhibits) have been provided.

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III. PROFESSIONAL CERTIFICATION

Name: _____

Contact Email: _____

Contact Phone Number: _____

Professional Seal:



FOR REVIEW ONLY