



# ENGINEERING AND ENVIRONMENTAL SERVICES

## Stormwater Division

201 E. Main Street, 5<sup>th</sup> Floor, Durham, NC 27701

Telephone (919) 560-0739 Fax (919) 560-0740

### STORMWATER CONSTRUCTION DRAWING SUBMITTAL CHECKLIST

#### I. PROJECT INFORMATION

Project Name: \_\_\_\_\_ Phase: \_\_\_\_\_  
 Project Address: \_\_\_\_\_ Disturbed Acreage: \_\_\_\_\_  
 PIN: \_\_\_\_\_ Case #: \_\_\_\_\_  
 Legal Name of Owner: \_\_\_\_\_  
 Owner Contact: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Owner Address: \_\_\_\_\_  
 Design Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Design Contact Email: \_\_\_\_\_

#### II. SUBMITTAL REQUIREMENTS

<input type="checkbox"/>	<b>General Submittal Requirements</b>
<input type="checkbox"/>	Sign and seal of North Carolina Professional Engineer
<input type="checkbox"/>	North arrow, graphic scale, drafting version date
<input type="checkbox"/>	Boundary of entire parcel, including project limits
<input type="checkbox"/>	Stormwater Construction Drawing Submittal Checklist
<input type="checkbox"/>	Stormwater Control Measure Design Summary Worksheets (if applicable)

<input type="checkbox"/>	<b>Cover Sheet</b>
<input type="checkbox"/>	Location/Vicinity Map
<input type="checkbox"/>	Existing, demolished and proposed impervious surface area
<input type="checkbox"/>	Project name, project address, PIN Number
<input type="checkbox"/>	Stormwater Regulatory Basin (Jordan, Falls, Neuse)
<input type="checkbox"/>	Watershed Protection Overlay designation
<input type="checkbox"/>	Land Disturbance Area
<input type="checkbox"/>	Approval Case Numbers
<input type="checkbox"/>	Conditions of Approval
<input type="checkbox"/>	Title "Durham County Stormwater Submittal"

<input type="checkbox"/>	<b>Existing Conditions Plan</b>
<input type="checkbox"/>	Existing structures, buildings, and impervious surfaces
<input type="checkbox"/>	Existing contours of intervals of two (2) feet or less

<input type="checkbox"/>	<input type="checkbox"/>	Delineation of current FEMA Flood Hazard boundaries
<input type="checkbox"/>	<input type="checkbox"/>	Delineation of all Riparian Buffers
<input type="checkbox"/>	<input type="checkbox"/>	Existing Stormwater networks including pipes and structures
<input type="checkbox"/>	<input type="checkbox"/>	Existing utility services
<input type="checkbox"/>	<input type="checkbox"/>	Existing environmental features, ditches, wetlands, water bodies, forest
<input type="checkbox"/>		
<input type="checkbox"/>		<b>Demolition Plan</b>
<input type="checkbox"/>	<input type="checkbox"/>	Identify trees to be removed
<input type="checkbox"/>	<input type="checkbox"/>	Identify impervious area to be removed
<input type="checkbox"/>	<input type="checkbox"/>	Show limit of disturbance
<input type="checkbox"/>	<input type="checkbox"/>	Identify utility abandonment or removal
<input type="checkbox"/>	<input type="checkbox"/>	Include sawcut limits
<input type="checkbox"/>	<input type="checkbox"/>	Identify buildings to be demolished

<input type="checkbox"/>		<b>Site Plan</b>
<input type="checkbox"/>	<input type="checkbox"/>	Proposed improvements including buildings, roads, sidewalks
<input type="checkbox"/>	<input type="checkbox"/>	Show limits of disturbance
<input type="checkbox"/>	<input type="checkbox"/>	Proposed Stormwater easements
<input type="checkbox"/>	<input type="checkbox"/>	Location and type of all proposed Stormwater Control Measures

<input type="checkbox"/>		<b>Grading and Drainage Plan</b>
<input type="checkbox"/>	<input type="checkbox"/>	Proposed contours of intervals of two (2) feet or less and spot elevations
<input type="checkbox"/>	<input type="checkbox"/>	Proposed Stormwater easements
<input type="checkbox"/>	<input type="checkbox"/>	Finished floor elevations as required
<input type="checkbox"/>	<input type="checkbox"/>	Location and type of all proposed Stormwater Control Measures
<input type="checkbox"/>	<input type="checkbox"/>	Proposed Stormwater networks
<input type="checkbox"/>	<input type="checkbox"/>	FEMA flood risk areas
<input type="checkbox"/>	<input type="checkbox"/>	Finished floor elevations
<input type="checkbox"/>	<input type="checkbox"/>	Regulatory flood protection elevations as required
<input type="checkbox"/>	<input type="checkbox"/>	Existing and proposed improvements including buildings, roads, sidewalks
<input type="checkbox"/>	<input type="checkbox"/>	Delineate all Riparian Buffers
<input type="checkbox"/>	<input type="checkbox"/>	Limits of disturbance
<input type="checkbox"/>	<input type="checkbox"/>	SCM and applicable drainage details

<input type="checkbox"/>		<b>Stormwater Control Measure Plan</b>
<input type="checkbox"/>	<input type="checkbox"/>	Plan view, minimum 20 scale of entire SCM footprint
<input type="checkbox"/>	<input type="checkbox"/>	Cross section of SCM
<input type="checkbox"/>	<input type="checkbox"/>	SCM appropriate details (outlet structure, dissipator pad, etc.)

<input type="checkbox"/>	<b>Stormwater Impact Analysis</b>
<input type="checkbox"/>	Signature, Date and Professional Seal of North Carolina PE
<input type="checkbox"/>	Copy of Durham County Soils map with site location
<input type="checkbox"/>	Narrative describing existing conditions, proposed project improvements and stormwater compliance methods
<input type="checkbox"/>	Drainage area maps (existing and proposed) with discharge analysis points and time of concentration paths
<input type="checkbox"/>	Site area delineated, scale and north arrow
<input type="checkbox"/>	Sub-basins delineated for pre- and post-development conditions with acreage
<input type="checkbox"/>	Analysis points clearly identified and labeled
<input type="checkbox"/>	Segmented TR-55 time of concentration flow paths showing each segment
<input type="checkbox"/>	Copy of USGS 7.5 Minute Quad Map with site location
<input type="checkbox"/>	Routing of all Stormwater devices
<input type="checkbox"/>	Nutrient calculations (nitrogen and phosphorous, if applicable)
<input type="checkbox"/>	If floodplain on site, 100-year floodplain with base flood elevations provided as well as copy of floodplain map with site boundary
<input type="checkbox"/>	Summary of Results provided in the following format (see example below)

**Example Summary of Results:**

Discharge Point	Pre-Developed 1-year discharge	Post-Developed 1-year discharge	Pre-Developed 2-year discharge	Post-Developed 2-year discharge	Pre-Developed 10-year discharge	Post-Developed 10-year discharge	Detention Required? (Yes/No)

<input type="checkbox"/>	<b>Administrative Items Required</b>
<input type="checkbox"/>	Check made payable to Durham County (See <a href="http://dconc.gov/government/departments-a-e/engineering-and-environmental-services/stormwater-and-erosion-control-division/stormwater-erosion-control-fee-schedule">http://dconc.gov/government/departments-a-e/engineering-and-environmental-services/stormwater-and-erosion-control-division/stormwater-erosion-control-fee-schedule</a> for Stormwater Plan Review fees)
<input type="checkbox"/>	Financial Responsibility Ownership Form ( <a href="http://dconc.gov/home/showdocument?id=8337">http://dconc.gov/home/showdocument?id=8337</a> )
<input type="checkbox"/>	401/404 Documentation (Buffer determination letters, approvals)

**III. STORMWATER REGULATORY BASIN REQUIREMENTS**

<input type="checkbox"/>	<b>Jordan Lake Basin Requirements</b>
<input type="checkbox"/>	<b>Note: If a single family, detached and duplex residential development, or recreational facility disturbs <math>\leq 1</math> acre or a multi-residential development or a commercial, industrial, or institutional facility disturbs <math>\leq 0.5</math> acres then all items below are N/A.</b>
<input type="checkbox"/>	Pre- and post-development nitrogen / phosphorous calculations using the Jordan Falls Lake Stormwater Nutrient Accounting Tool or SNAP tool.
<input type="checkbox"/>	Redevelopment calculation nutrient loading (if necessary).

<input type="checkbox"/>	<b>Falls Lake Basin Requirements</b>
<input type="checkbox"/>	<b>Note: If a single family, detached and duplex residential development, or recreational facility disturbs <math>\leq 0.5</math> acre or a multi-residential development or a commercial, industrial, or institutional facility disturbs <math>\leq 12,000</math> square feet then all items below are N/A.</b>
<input type="checkbox"/>	Pre- and post-development nitrogen / phosphorous calculations using the Jordan Falls Lake Stormwater Nutrient Accounting Tool or SNAP tool.
<input type="checkbox"/>	Offsite reduction calculations (if necessary). Site plan will not be approved until payment is verified in the form of a receipt.
<input type="checkbox"/>	Redevelopment calculation nutrient loading (if necessary).

<input type="checkbox"/>	<b>Lower Neuse Basin Requirements</b>
<input type="checkbox"/>	<b>Note: If a single family, detached and duplex residential development, or recreational facility disturbs <math>\leq 1</math> acre or a multi-residential development or a commercial, industrial, or institutional facility disturbs <math>\leq 0.5</math> acres then all items below are N/A.</b>
<input type="checkbox"/>	Pre- and post-development nitrogen calculations using Durham County Nitrogen Calculation Tables.
<input type="checkbox"/>	Nitrogen buydown calculations (if necessary). Site plan will not be approved until payment is verified in the form of a receipt.

<input type="checkbox"/>	<b>Water Supply Watershed Requirements</b>
<input type="checkbox"/>	Indicate the water supply watershed overlay district(s) the project is located within. Circle all that apply: <i>F/J-A, F/J-B, E-A, E-B, M/LR-A, M/LR-B</i>
<input type="checkbox"/>	Provided BMP for 85% TSS removal or narrative explaining why it is not provided _____
<input type="checkbox"/>	BMP Provided: _____ <input type="checkbox"/> Not required
<input type="checkbox"/>	BMP benefits: _____ 85% TSS Removal _____ Other _____

#### IV. ENGINEER CERTIFICATION

I, \_\_\_\_\_, certify the information in this form is accurate to the best of my knowledge.

Engineer Name: \_\_\_\_\_

Engineer Contact Email: \_\_\_\_\_

Engineer Contact Phone Number: \_\_\_\_\_

Engineer Professional Seal: