Application for STORMWATER PERMIT

P.O. Drawer 357
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Graham, NC 27253
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Development that disturbs one or more acres, whether in a single project or cumulatively over multiple phases, is required to apply for a Stormwater Permit. Development that disturbs less than one acre is not exempt if such activities are part of a larger common plan of development, even though multiple, separate or distinct activities take place at different times on different schedules.

Site

Street Address: _____

Tax#: _____ GPIN: _____

Total Acres: _____ Existing Built-Upon Acres: _____

Current Use: _____

Property Owner: _____

Phone # _____

Proposed Development

Project Name: _____

New Built-Upon Area
Total Acres: _____ % of Site: _____

Dwelling Units (if applicable)
Total #: _____ Per Acre: _____

For stormwater purposes, this development is:

☐ **Low Density**, *if no more than 24% built-upon area or no more than two dwelling units per acre*

☐ **High Density**, *if exceeds the low density thresholds*

Attachments and Checklist

This application **must be accompanied** by the following:

☐ **Site Plan, 1 copy and 1 PDF** *(see the back of this application for a checklist of items that should be shown on the site plan)*

☐ **Stormwater Calculations, 1 set** *(see pg. 3 of this application for a checklist of items that should be included)*

☐ **Operations and Maintenance Manual, 1 copy and 1 PDF** *for high density projects only (see pg. 3 of this application for a checklist of items that should be included)*

FOR OFFICE USE ONLY	
Permit #	Remarks:
Issued by:	
Issued date:	
DEVID#	

Applicant

Person to contact regarding questions or revisions to the plan

Name: _____

☐ Property Owner ☐ Engineer/Surveyor
Other _____

Company: _____

Mailing Address: _____

City, State, Zip: _____

Phone # _____

Email: _____

Owner's Certification
I hereby certify that I have read this application and agree to abide by the terms of any Stormwater Permit issued by the City of Graham.

_____
Name and Title of Owner or Authorized Agent

_____
Signature of Owner or Authorized Agent Date

Designer's Certification (only for high density projects)
I hereby certify that the design-related information submitted with this application for permit coverage was prepared under my direction or supervision and that the information is, in the exercise of my reasonable professional judgment, true, accurate and complete. I also hereby certify that the stormwater collection, treatment and control system design submitted with this application complies with all requirements of the City's Phase II Stormwater Ordinance.

_____
Name and Title of Designer

_____
Signature of Designer Date

SUBMIT 1 COPY AND 1 PDF OF A SITE PLAN, 1 SET OF CALCULATIONS, AND OPERATIONS AND MAINTENANCE MANUAL

Checklist for Stormwater Permit Site Plan

Check each item to indicate that each submittal requirement has been met and that supporting documentation is attached.

- ☐ Sheets no larger than 36”x24”, plan and profile paper
- ☐ Minimum text size of 1/8”
- ☐ Scale on plan view no smaller than 1”=50’ and on profile view no smaller than 1”=50’ horizontally and 1”=5’ vertically using a grid showing 1’ intervals
- ☐ North Carolina State Plane coordinate system
- ☐ Vicinity map on cover sheet, no smaller than 1”=200’
- ☐ Legend indicating existing and proposed lines, features and symbols
- ☐ General notes, owner’s name, telephone number and mailing address on cover sheet
- ☐ Elevations in relation to mean sea level; in profile view, labeled in 10’ intervals on the heavy lines
- ☐ Benchmark elevations and locations shown on plan view
- ☐ North arrow on plan views
- ☐ Title block on each sheet, including project title, limits, horizontal and vertical scales, original date, revisions dates, drawing number, checked by and drawn by
- ☐ Seal, sign and date by NC Professional Engineer or Landscape Architect
- ☐ Street names and state road numbers; indicate surface material of street; for proposed streets and rights-of-way, dimension and label widths back-to-back
- ☐ Proposed and existing curb and gutter, pavement, storm sewers, drainage structures, driveway pipes, water mains, sanitary sewer mains, etc; show all available elevations; show direction of flow for all sanitary sewers and storm drains; label materials and pipe sizes
- ☐ Existing utility lines; label and indicate in legend
- ☐ Final proposed locations and dimensions of all water, storm drain and sanitary sewer lines, devices to be installed on the system, catch basins, culverts, ditches; including grades, pipe sizes, elevations, assumptions, calculations, invert elevations for all inlets and manholes; profiles of sanitary sewer lines
- ☐ Existing and proposed water, storm drainage and sanitary sewer easements
- ☐ Existing and proposed topographic lines (min. 2’ interval)
- ☐ City limits, county lines and other jurisdictions
- ☐ Streams, ponds, wetlands, etc. on the site and within 50 feet of the property lines
- ☐ Floodplains and floodways
- ☐ Drainage ways and easements

Site Drainage Features

- ☐ Existing and planned drainage patterns (include off-site areas that drain through project)
- ☐ Existing stormwater control systems
- ☐ Sub-watershed delineation showing drainage areas
- ☐ Extent and number of disturbed acres
- ☐ Proposed impervious areas
- ☐ Soil type and special characteristics
- ☐ Name and classification of receiving water course

For High Density Projects Only

- ☐ Signed and sealed statement on the plans certifying that the design of all stormwater management facilities and practices will control and treat the runoff from the from the first one inch of rain over the total drainage area, that the designs and plans are sufficient to comply with applicable standards and policies found in the *Stormwater BMP Design Manual*, and that the designs and plans ensure compliance with the City’s Phase II Stormwater Ordinance
- ☐ Type of BMP (e.g. wet pond, rain garden, etc)
- ☐ Narrative description of proposed stormwater system, including where runoff originates (e.g. roofs, roads), its conveyance within the project, its treatment and its conveyance from the project to the receiving water body
- ☐ Profile along the centerline of the principal spillway/ outfall pipe extending below the protected outfall or to the downstream structure
- ☐ Elevations of the “water quality” surface, temporary storage water surface and the 10 and 100 year storms
- ☐ Stage-storage table for each BMP
- ☐ *If BMP to also treat construction runoff*, steps to restore to original design condition
- ☐ Construction specifications
- ☐ Sequence of construction
- ☐ Individual drainage areas for each BMP
- ☐ Construction drawings and details for permanent measures
- ☐ Size and location of culverts
- ☐ Size and location of subsurface drainage conveyances
- ☐ Disclosure of party ultimately responsible for operation and maintenance of the stormwater system

Checklist for Stormwater Permit Calculations & Operations and Maintenance Manual

Check each item to indicate that each submittal requirement has been met and that supporting documentation is attached.

Stormwater Calculations

- ☐ Narrative description of calculations (methods, variables, results, etc) and results
- ☐ A statement that "stormwater BMPs designed in accordance with North Carolina Department of the Environment and Natural Resources Division of Water Quality's *Manual of Stormwater Best Management Practices*"
- ☐ Time of concentration for pre/post development conditions
- ☐ Pre- and post-construction runoff calculations for each outlet from the site (at peak discharge points)
- ☐ Pre- and post-construction design calculations and hydrographs
- ☐ Design calculations of culverts and storm sewers
- ☐ Discharge and velocity calculations for open channel and ditch flows (easements and rights-of-way)
- ☐ Design calculations of cross sections and method of stabilization of existing and planned channels (include temporary linings)
- ☐ Design calculations and construction details of energy dissipators below culvert and storm sewer outlets (diameters and apron dimensions)
- ☐ Amount and type of existing and proposed land use

Operation and Maintenance Manual

for each BMP, for high density projects only

- ☐ Narrative description of the purpose and operation of the BMP
- ☐ Detailed list, description and procedure of routine maintenance items
- ☐ Detailed list, description and procedure for non-routine maintenance items
- ☐ Maintenance schedule
- ☐ Steps needed to restore BMP in the event of a failure
- ☐ Maintenance checklist and inspection form
- ☐ BMP construction drawings; replace with record drawings when BMP is complete
- ☐ Latitude and longitude of each BMP