**ENGINEERING AND ENVIRONMENTAL SERVICES**

***Erosion Control Division***

201 E. Main Street, 5th Floor, Durham, NC 27701

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

**EROSION AND SEDIMENTATION CONTROL PLAN REVIEW CHECKLIST**

1. **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: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **SUBMITTAL REQUIREMENTS**

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|  |  | **Financial Responsibility/Ownership Form (Durham County Ordinance 3.8.2)** |
|  |  | Completed, signed and notarized FR/O Form |
|  |  | Accurate application fee payable to Durham County ($100.00 per acre < 1 acre, $125.00 per acre > 1 acre with no ceiling amount) |
|  |  | Certificate of assumed name, if the owner is a partnership |
|  |  | Name of Registered Agent (if applicable) |
|  |  | Copy of the most current Deed for the site. Please make sure the deed(s) and ownership information are consistent between the plan sheets, local records and this form. |
|  |  | Latitude & longitude (in decimal degrees) at the project entrance |

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|  |  | **Location Information per Durham County UDO Section 3.8.2** |
|  |  | Project location & labeled vicinity map (roads, streets, landmarks) |
|  |  | North arrow and scale |
|  |  | Identify River Basin |
|  |  | Provide a copy of site denuded area located to scale on applicable USGS quadrangle and hardbound copy of NRCS Soil Survey. Submit relevant buffer determination letters. |

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|  |  | **NPDES Construction Storm Water General Permit per Section II.B** |
|  |  | Designation on the plans where the 7 or 14 day ground stabilization requirements apply |
|  |  | Designation on the plans the location of the concrete washout area and stockpile requirements, include detail and setback requirements |
|  |  | Design of basins with one acre or more of drainage area for surface withdrawal |
|  |  | **General Site Features (Plan elements) (Durham County Ordinance 3.8.2, 12.10.6, 12.10.7)** | |
|  |  | Property lines & ownership ID for adjoining properties | |
|  |  | Existing and proposed contours (topographic lines) | |
|  |  | Locations of staging, material laydown, parking, and stockpile | |
|  |  | Limits of disturbed area (provide acreage total, delineate limits, and label). Be sure to include all access to measures, lots that will be disturbed, demolition areas, and utilities that may extend offsite. | |
|  |  | Planned and existing building locations and elevations | |
|  |  | Planned & existing road locations & elevations, including temporary access roads. | |
|  |  | Lot and/or building numbers | |
|  |  | Hydrogeological features: rock outcrops, seeps, springs, wetland and their limits, streams, lakes, ponds, dams, etc. (include all required local or state buffer zones and any DWR/City/County Riparian Buffer determinations) | |
|  |  | Easements and drainage ways, particularly required for offsite affected areas. Include copies of any recorded easements and/or agreements with adjoining property owners. | |
|  |  | Profiles of streets, utilities, ditch lines, etc. | |
|  |  | Stockpiled topsoil or subsoil, staging, material laydown, and parking locations | |
|  |  | If the same person conducts the land-disturbing activity unless the borrow or waste activity is regulated under the Mining Act of 1971, or is a landfill regulated by the Division of Waste Management. If the land-disturbing activity and any related borrow or waste activity are not conducted by the same person, they shall be considered separate land-disturbing activities and must be permitted either through the Sedimentation Pollution Control Act as a one-use borrow site or through the Mining Act | |
|  |  | Location and details associated with any onsite stone crushing or other processing of material excavated. If the affected area associated with excavation, processing, stockpiles and transport of such materials will comprise 1 or more acres, and materials will be leaving the development tract, a mining permit will be required | |
|  |  | Submit required Army Corps 404 permit, Water Quality 401 certification, ***and associated impact maps***. (e.g. stream disturbances of 150 linear feet) | |

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|  |  | **Erosion and Sediment Control Measures (Durham County Ordinance 12.10.3-9)** |
|  |  | Legend (provide appropriate symbols for all measures and reference them to the construction details) |
|  |  | Location of temporary and permanent measures |
|  |  | Phased erosion control for existing conditions, grading, and permanent storm water, etc. |
|  |  | Construction drawings and details for temporary and permanent measures. Show measures to scale on plan and include proposed contours where necessary. Ensure design storage requirements are maintained through all phases of construction. |
|  |  | Maintenance requirements for measures and contact person responsible for maintenance. |

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|  |  | **Site Drainage Features (Durham County Ordinance 3.8.2, 12.10.3-4)** |
|  |  | Existing and planned drainage patterns (include off-site areas that drain through project and address temporary and permanent conveyance of Storm water over graded slopes) |
|  |  | Method used to determine acreage of land being disturbed and drainage areas to all proposed measures (e.g. delineation map) |
|  |  | Size, pipe material and location of culverts and sewers |
|  |  | Soils information: type, special characteristics |
|  |  | Soil information below culvert storm outlets |
|  |  | Name and classification of receiving water course or name of municipal operator (only where Storm water discharges are to occur) |

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|  |  | **Vegetative Stabilization (Durham County Ordinance 12.10.3-4)** |
|  |  | Area & acreage to be stabilized with vegetation |
|  |  | Method of soil preparation |
|  |  | Seed type & rates (temporary & permanent) |
|  |  | Fertilizer type and rates |
|  |  | Mulch type and rates (include mulch anchoring methods to be used) |

**Note:** Plan should include provisions for groundcover in accordance with NPDES Construction Storm Water General Permit NCG010000, 7/10/14 calendar days per Durham County Ordinance, and permanent groundcover for all disturbed areas within 7 calendar days following completion of grading.

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|  |  | **Narrative and Construction Sequence (Durham County Ordinance 3.8.2, 12.10.3)** |
|  |  | Narrative describing the nature & purpose of the construction activity |
|  |  | Construction sequence related to erosion and sediment control (including installation of critical measures prior to the initiation of the land-disturbing activity & removal of measures after areas they serve are permanently stabilized). Address all phases of construction and necessary practices associated with temporary stream bypasses, “construction in the dry”, and/or crossings |
|  |  | Bid specifications related only to erosion control |

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|  |  | **Storm Water Calculations (Durham County Ordinance 3.8.2, 12.10.3-5)** |
|  |  | Pre-construction runoff calculations for each outlet from the site (at peak discharge points). Be sure to provide all supporting data for the computation methods used (rainfall data for required storm events, time of concentration/storm duration, and runoff coefficients) |
|  |  | Design calculations for peak discharges of runoff (including the construction phase and the final runoff coefficients for the site) |
|  |  | Design calculations for culverts and storm sewers (include HW, TW and outlet velocities) |
|  |  | Discharge and velocity calculations for open channel and ditch flows ( easement & rights-of-way) |
|  |  | Design calculations for cross sections and method of stabilization for existing and planned channels (include temporary linings). Include appropriate permissible velocity and/or shear stress data. (2yr/25yr storm events) |
|  |  | Design calculations and construction details for energy dissipaters below culvert and storm sewer outlets (include stone/material specs & apron dimensions). Avoid discharges on fill slopes. |
|  |  | Design calculations and dimension of sediment basins (note current surface area and dewatering standards as well as diversion of runoff to the basins). Be sure that all surface drains, including ditches and berms, will have positive drainage to the basins. |

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|  |  | **Triassic Soils Requirements (Durham County Ordinance 12.10.4)** | |
|  |  | Project is located within the Triassic Soil Basin\*  \*May be determined using mapping tool at [www.dconc.gov/stormwater](http://www.dconc.gov/stormwater) | |
|  |  | Flocculant Application Plan including: | |
|  |  |  | Type of Flocculant to be applied, including manufacturer and supplier |
|  |  |  | Location of Application(s) |
|  |  |  | Site-Specific Dosing Systems |
|  |  |  | Person or Position responsible for Application |
|  |  | Flocculant Selection Documentation, including soil sample documentation | |
|  |  | Moderate and Steep slopes identified and matting or hydroseeding highlighted for use. | |

1. **ENGINEER CERTIFICATION**

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

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

Engineer Professional Seal: