**ENGINEERING AND ENVIRONMENTAL SERVICES**

***Stormwater Division***

120 East Parrish Street, 1st Floor, Durham, NC 27701

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

**REZONING PLAN SUBMITTAL 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. **REQUIRED ITEMS CHECKLIST**

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|  |  | 1. **General Requirements** |
|  |  | Stormwater Impact Analysis (SIA) including narrative report and drainage calculations sealed and signed by North Carolina Professional Engineer. |
|  |  | Jordan Lake (Cape Fear) / Falls Lake (Upper Neuse Basin) / Lower Neuse Basin ( circle one).  (If *Jordan Lake* is circled, completion of Section D. below is required)  (If *Falls Lake* is circled, completion of Section D. below is required)  (If *Lower Neuse Basin* is circled, completion of Section F. below is required) |
|  |  | INSIDE / OUTSIDE (circle one) Water Supply Watershed  (If INSIDE Water Supply Watershed completion of Section G. below is required) |
|  |  | Show ALL Riparian Stream Buffers on the plan. Diffuse flow into stream buffers is required. (Complete Section C. where required) |
|  |  | Floodplain located on site: Yes / No (circle one). A copy of floodplain map with site boundary shown is required and the 100-year floodplain with base flood elevations (if applicable) must be shown on the site plan. |

The following checklist outlines submittal requirements. Check the box to the left of each item to indicate the submittal requirements have been met and supporting documentation is attached.

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|  |  | 1. **Stormwater Rule Requirements** |
|  |  | Durham County Soils map with site boundary shown |
|  |  | USG 7.5 Minute Quadrangle with site boundary shown |
|  |  | Introduction narrative describing the site conditions in pre- and post-development conditions including a description of site improvement changes. |
|  |  | Drainage area maps (existing and proposed) with discharge analysis points and time of concentration paths |
|  |  | Site area delineated, scale and north arrow |
|  |  | Sub-basins delineated for pre- and post-development conditions with acreage |
|  |  | Analysis points clearly identified and labeled |
|  |  | Segmented TR-55 time of concentration flow paths showing each segment |
|  |  | Methodologies and procedures described |
|  |  | Site plan or grading plan identifying pre- and post-development drainage patterns |
|  |  | Pre- and post-development times of concentration calculated using the TR-55 segmented approach |
|  |  | Calculations for the pre- and post-development discharges for the 1-, 2- and 10-year 24-hour storm using TR-55, TR-20, HEC-HMS, HEC-1 or Rational Method. The discharge point for these calculations is the property boundary. |
|  |  | If floodplain on site, 100-year floodplain with base flood elevations provided as well as copy of floodplain map with site boundary |
|  |  | Conclusion providing detailed findings |
|  |  | SCM(s) provided (as per NCDENR BMP Manual) (indicate quantity): |
|  |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  | Not required |
|  |  | SCM Benefits: \_\_\_\_\_\_ control 1-, 2- and 10-year discharge |
|  |  | Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  | Not required |
|  |  | Report from NCDWQ Approved Accounting Tool |
|  |  | 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)** |
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|  |  | 1. **Riparian Stream Buffers** |
|  |  | A copy of the Durham County Soils map and the USGS 7.5 Minute Quadrangle with the site indicated has been provided. Diffuse flow into buffers is required. |
|  |  | All Durham County stream buffers are shown on the plan for intermittent and perennial streams shown on the Durham County Soils map or the USGS 7.5 Minute Quad. Diffuse flow into buffers is required. |
|  |  | NCDENR documentation for approval of buffer impacts provided. |
|  |  | Stream delineations (Cape Fear / Neuse Basin). If in Neuse Basin, provide NCDENR Division of Water Quality documentation. If in Cape Fear Basin, provide report as required by Section 14-153(b)(3)(i) of the County Stormwater Ordinance. |

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|  |  | 1. **Jordan Lake Basin Requirements** |
|  |  | **Note: If a single family, detached and duplex residential development, or recreational facility disturbs < 1 acre or a multi-residential development or a commercial, industrial, or institutional facility disturbs < 0.5 acres then all items below are N/A.** |
|  |  | Pre- and post-development nitrogen / phosphorous calculations using the Jordan Falls Lake Stormwater Nutrient Accounting Tool. |
|  |  | Offsite reduction calculations (if necessary). Site plan will not be approved until payment is verified in the form of a receipt. |
|  |  | Redevelopment calculation nutrient loading (if necessary). |

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|  |  | 1. **Falls Lake Basin Requirements** |
|  |  | **Note: If a single family, detached and duplex residential development, or recreational facility disturbs < 0.5 acre or a multi-residential development or a commercial, industrial, or institutional facility disturbs < 12,000 square feet then all items below are N/A.** |
|  |  | Pre- and post-development nitrogen / phosphorous calculations using the Jordan Falls Lake Stormwater Nutrient Accounting Tool. |
|  |  | Offsite reduction calculations (if necessary). Site plan will not be approved until payment is verified in the form of a receipt. |
|  |  | Redevelopment calculation nutrient loading (if necessary). |

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

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|  |  | 1. **Water Supply Watershed Requirements** |
|  |  | Indicate the water supply watershed overlay district(s) the project is located within. |
|  |  | Provided BMP for 85% TSS removal or narrative explaining why it is not provided |
|  |  | BMP Provided: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

1. **ENGINEER CERTIFICATION**

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

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

Engineer Professional Seal: