



PPR – ROLESVILLE, WENDELL, ZEBULON Pre-submittal Plan Review Checklist

Project Name	Reserve at Mitchell Mill			Planning Number	PSP-23-03	Jurisdiction	Rolesville
Applicant	Hopper Communities			Watershed	Lower Neuse	New or Expansion (N/E)?	New
Project Acreage	141.23 ac	Existing Impervious SF	Unknown	Proposed Impervious SF	820,532SF	Disturbed Acreage	Not provided
Residential				Nonresidential			

Review Status:	<input checked="" type="checkbox"/>	<p><u>Pre-Submittal Plan Comments</u></p> <p>Comments in red are in addition to these comments previously provided:</p> <p>Provide SIA including drainage area maps and Municipal Stormwater Tool. Retaining walls need to be outside SCM easements. All SCMs should have at least 10 ft flat perimeter that is off the slope and within the easement. Show dimensions. SCM access easements must extend to the right of way. Remove SCM easements from Neuse buffer. The “dry pond” is shown as USGS blue line. Provide NC DEQ buffer delineation or show 50 -ft Neuse buffer. Provide Neuse buffer, 401/404 approvals. Provide USCOE jurisdictional determination or remove disturbances to wetlands. Provide copy of the USGS Quad Map with delineated project limits. Provide copy of the Wake County Soil Survey map with delineated project limits. Clearly show the Limits of Disturbance (LOD). Label dam safety ID numbers for the dams. Remove greenway from Neuse buffer. How will drainage to the wetland be treated? How will this project be phased? Please label phases. Please contact Town of Rolesville floodplain administrator regarding required flood studies.</p> <p>All checked items must be addressed upon submittal of construction plans.</p>
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Submittal Package Requirements

Items marked with an “X” were noted as either insufficient or not provided. Engineer comments are in **RED** and provide the necessary requirements for either pre-construction or construction plan approval.

<input checked="" type="checkbox"/>	1.	Cover letter stating the purpose of the submission
<input checked="" type="checkbox"/>	2.	One copy of the Municipal Stormwater Tool (Site Data Sheet, Drainage Area Sheets, Site Summary Sheet, BMP Sheets, and BMP Summary sheet). The design tool is located at: http://www.wakegov.com/water/stormwater/management/program/Pages/default.aspx



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<input checked="" type="checkbox"/>	3.	Drainage Area Maps with stormwater discharge points (existing/post construction/post BMP) Drainage areas do not end at property line. Sediment basins and SCMs must account for entire DA including off site drainage.
<input checked="" type="checkbox"/>	4.	Copy of the USGS Quad Map with delineated project limits
<input checked="" type="checkbox"/>	5.	Copy of the Wake County Soil Survey map with delineated project limits
<input checked="" type="checkbox"/>	6.	Proposed Site Plan:
<input checked="" type="checkbox"/>	a.	North arrow, graphic scale, drafting version date, and legend
<input checked="" type="checkbox"/>	b.	Show all Neuse Riparian Buffers: [15A NCAC 02B.0233 & 0242]
<input checked="" type="checkbox"/>	c.	Delineation of all existing and proposed impervious surfaces: roads, well lots, recreation sites, single family residences, etc. (consistent with Municipal SW Tool inputs). Impervious table should provide a total for the site.
<input checked="" type="checkbox"/>	d.	Delineation of current FEMA boundaries (floodway, flood fringe & future/0.2%)
<input checked="" type="checkbox"/>	e.	Proposed drainage easements and widths (<i>in Feet</i>)
<input checked="" type="checkbox"/>	f.	Location and type of all proposed stormwater management structures (<i>grass swale, wet/dry detention basin, filtering/infiltration basin, bioretention, etc.</i>)
<input checked="" type="checkbox"/>	g.	Proposed easement access lanes and sediment disposal areas for future maintenance of stormwater management facilities. -Minimum 10ft perimeter outside the slope/fill of the SCM is required to be indie the SCM easement. Please adjust as necessary. For example, SCM #2 easement is on the slope.
<input type="checkbox"/>	h.	A note should be added to the recorded plat distinguishing areas of disconnected impervious (refer to town websites and ordinances for final plat requirements)

Standards and Requirements Items marked with an "X" note relevant standards to be applied to the proposed development. Notes in RED provide review comments and/or any required elements to comply with standard. References are shown in brackets for the municipalities.

ROLESVILLE: Town of Rolesville Unified Development Ordinance (UDO) Section 7.5: Stormwater Management Standards
WENDELL: Town of Wendell Unified Development Ordinance (UDO) Chapter 6: Environmental Protection, adopted 7/26/10.
ZEBULON: Town of Zebulon, NC Code of Ordinances: Chapter 151 and Chapter 152.249.

Stormwater Management Requirements

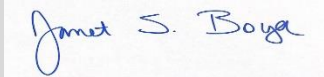


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<input checked="" type="checkbox"/>	7.	<p>Stormwater Review Required - All residential subdivision development must submit a plan to comply with the applicable municipalities' stormwater ordinance. Office, institutional, commercial or industrial development that <u>disturbs</u> greater than 20,000 square feet is required to comply with the stormwater management regulations. Development and redevelopment that disturb less than 20,000 square feet are not exempt if such activities are part of a larger common plan of development or sale, even though multiple, separate or distinct activities take place at different times on different schedules.</p> <p>Rolesville [7.5.1(E)], Wendell [Chapter 6.5(F)], Zebulon [Chapter 151.05]</p>
<input checked="" type="checkbox"/>	8.	<p>Stormwater Permit – is required for all development and redevelopment unless exempt pursuant to the Code of Ordinances. A permit may only be issued subsequent to a properly submitted, reviewed and approved stormwater management plan and permit application.</p> <p>Rolesville 7.5.1(E)(3)], Wendell [Chapter 6.5(F)(3)], Zebulon [Chapter 151.21(A)]</p> <p>Note: A permit may not be required if there are no post-construction requirements (i.e. SCMs).</p>
<input checked="" type="checkbox"/>	9.	<p>SCMs - For projects requiring stormwater treatment for quality and/or quantity control, the applicant must:</p> <ol style="list-style-type: none"> 1) comply with the NC BMP Manual Rolesville [7.5.1(G)], Wendell [6.5(H)], Zebulon [151.07] 2) as well as <i>Completion of Improvements and Maintenance</i>, prior to issuance of a certificate of compliance or occupancy. Rolesville [7.5.5], Wendell [Chapter 6.5(O)], Zebulon [Chapter 151.50 – 151.56]
<input checked="" type="checkbox"/>	10.	<p>Standards Based on Project Density- In accordance with the definitions, projects are identified as Ultra Low-Density (15% or less Built-Up Area, referred to as BUA, and less than one dwelling unit per acre), Low-Density (more than 15% BUA and no more than 24% BUA), and High-Density (24% or more BUA).</p> <p>Rolesville [7.5.4], Wendell [Chapter 6.5(M)], Zebulon [Chapter 151.35]</p>
<input type="checkbox"/>	a.	<p>Standards for Ultra-Low and Low-Density Projects:</p> <ul style="list-style-type: none"> • Use of vegetated conveyances to maximum extent practicable • Location of development and redevelopment outside Riparian Buffer and Flood Protection Zones • Recorded deed restrictions or protective covenants to ensure future development maintains consistency with approved project plans • Permanent SCMs (Stormwater Control Measures) are to be designed in accordance with and as specified in the North Carolina Department of Environmental Quality's Design Manual. • For Low-Density only, no net increase in peak flow leaving the site from the pre- development conditions for the 1 yr-24hr storm. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours. • Residential runoff after development must not exceed the Target Curve Numbers listed in the chart "Maximum Composite Curve Number, by Soil Group". • Ultra-Low and Low-Density projects may be eligible for target curve number credits. <p>Wendell Only: Nitrogen export limited to 3.6 pounds per acre per year unless project achieves classification as an LID Project.</p> <p>Rolesville [7.5.4(A)(1-3)], Wendell [6.5(M)(1-3)], Zebulon [151.35(A-C)]</p>



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	<input checked="" type="checkbox"/>	b.	<p>Standards for High-Density Projects:</p> <ul style="list-style-type: none"> • Measures shall control and treat runoff from the first inch of rain. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours. • Structural measures shall be designed to have a minimum of 85 % average annual removal for Total Suspended Solids (TSS) • Permanent SCMs (Stormwater Control Measures) are to be designed in accordance with and as specified in the North Carolina Department of Environmental Quality’s Design Manual. • No net increase in peak flow leaving the site from the pre -development conditions for the 1 yr-24hr storm. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours. • Location of development and redevelopment outside Riparian Buffer and Flood Protection Zones <p>Rolesville [7.5.4(A)(4)], Wendell [6.5(M)(4)], Zebulon [151.35(D)]</p>
	<input checked="" type="checkbox"/>	c.	<p>General Standards:</p> <ul style="list-style-type: none"> • Downstream Impact Analysis – DIA must be performed in accordance with the “10% rule”, and a copy provided with the application. <p>Rolesville [7.5.4(B)(1)], Wendell [6.5(N)(1)], Zebulon [151.36(A)]</p>
	<input type="checkbox"/>	d.	<p>Low Impact Development (LID) Classification:</p> <ul style="list-style-type: none"> • All development or redevelopment may be submitted for LID classification • Development must mimic the pre-developed hydrologic conditions of the site, as defined as “woods in good condition” for the 2-yr, 24 hr storm, within 10%. • Techniques required to achieve LID classification <ul style="list-style-type: none"> ➤ Natural site design ➤ Bio-retention systems or on-site infiltration (at least one must be used) ➤ At least two other techniques from the list provided in Rolesville [7.5.4(B)(5)(e) and Zebulon [151.36(E)(5)] ➤ At least one other techniques from the list provided in Wendell [6.5(N)(5)(e)]
Riparian Buffer Rules			
<input checked="" type="checkbox"/>	12.	<p>Due to the location of this project, it should be noted that a rule to protect and maintain existing buffers along watercourses in the Neuse River Basin became effective on July 22, 1997. The Neuse River Riparian Area Protection and Maintenance Rule (15A NCAC 2B.0233) applies to all perennial and intermittent streams, lakes, ponds and estuaries in the Neuse River Basin with forest vegetation on the adjacent land or “riparian area”.</p>	
Suggested Changes/Comments			
<input checked="" type="checkbox"/>	13.	<p style="color: red;">These comments are in addition to comments previously provided. All preliminary comments are general and do not replace permitting review. All permitting requirements must be met at construction document review.</p>	
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