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Crabtree Creek Nature Park – Crabtree Creek Watershed Project

Date: January 25, 2023
To: Wake County Government
From: Dylan Coley, PE
Re: Crabtree Creek Nature Park
151 Keybridge Drive, Morrisville, NC 27560

Wake County Staff Reviewers,

Please accept this cover letter and associated attachments for your review of the Town of Morrisville’s Crabtree Creek Nature Park project. Preliminary discussions between Wake County, the Town, and CLH took place in early 2021. As a brief summary, the project proposes to renovate the existing park, which contains a parking lot, an athletic field, and a greenway. The athletic field, constructed by a private developer in the 1990s, placed fill within the Lake Crabtree flood pool without approval of Wake County/NRCS. The renovation project is different from typical projects subject to the Crabtree Creek Watershed Policy, as it proposes to remediate (remove) the fill that was placed during construction of the athletic field.

A summary of the Crabtree Creek Watershed Project Policy submittal requirements follows:

1. A written request with details as to the proposed project and its location to the County Structure. The written request must identify: 1) the parties (including the property owner) seeking relief and the scope of the proposed project, 2) the specific modification sought to the impacted Structure, 3) an explanation of hardship/ evidence that there is no alternative location for the proposed development or alternative design that would eliminate the requested modification, and 4) the compelling public benefit to be achieved by the proposed project.
 - a. ***Status: Crabtree Creek Nature Park is an existing public park owned by the Town of Morrisville, currently consisting of a parking lot, an athletic field, and a greenway connection. The proposed project would renovate the park by revising the parking lot and pedestrian walkways on site, adding a restroom/shelter building, a playground, and an elevated boardwalk. The new park would be an attractive destination to a larger section of the public than the current park. The project is unique in the nature of its modification request. Rather than adding fill within the flood easement, the project seeks to remove fill that had been placed without approval when a private developer constructed the athletic field during the 1990s. No new fill within the flood easement is proposed as part of this project. The attached engineering drawings and cut/fill analysis show the specific modification (remediation) to the flood easement.***
2. Municipal or county approval of a preliminary development plan or site plan allowing the proposed project within the identified Structure.
 - a. ***Status: Project has received municipal approval.***

3. Signed and sealed engineered plans with a cut/fill analysis performed by a North Carolina professional licensed engineer proposing a new flood pool area to offset the impact of development and resultant fill material proposed to be placed in the existing Structure. Said plans must include the professional licensed engineer certification of “no net loss” in the impacted Structure and a mitigation plan.
 - a. **Status: NRCS and Wake County accept the methodology used to calculate the remediation volume of fill previously placed in the flood pool. Signed and sealed engineering drawings must be presented to complete project review. NRCS approval will be required to achieve full project approval. (see attached 2021 letter, cut/fill methodology presentation, and signed engineering drawings)**
4. Appraisal by a North Carolina licensed appraiser which includes the fair market value of any land rights, property interests, or easements proposed to be conveyed in association with the request.
 - a. **Status: Morrisville is exempt from the appraisal requirement as Morrisville own the property in question being developed. (see attached 2021 letter)**
5. A performance bond issued by a licensed North Carolina Surety Company with a AAA bond rating, guaranteeing construction and completion all required cut and fill work and any related construction work to be completed upon approval.
 - a. **Status: Wake County will accept the performance bond associated with the construction contract.**
6. An agreement to indemnify and hold Wake County harmless for any resultant damage or flooding that may occur as a result of the proposed modification, which shall run with the land to any successors and assigns of the property owner.
 - a. **Status: Wake County will consider a written agreement with the Town of Morrisville to satisfy indemnity requirements. (see attached 2021 letter)**
7. An agreement to obtain a maintenance bond (to be executed only in the event of final approval under this policy) issued by a licensed North Carolina Surety Company with a AAA bond rating, for a perpetual term, requiring future maintenance and repair by the property owner, its successors and assigns, necessitated by the modification to the Structure.
 - a. **Status: Wake County will consider a written agreement with the Town of Morrisville in lieu of requiring a maintenance bond. (see attached 2021 letter)**
8. Letter of credit in an amount to cover all costs and expenses associated with the proposed project.
 - a. **Status: Wake County will accept a general obligation bond upon Town Council action approving the bond issuance. (see attached 2021 letter)**

Provided with this submittal are a series of attachments:

- letter outlining previous discussions for this project between the Town of Morrisville and Wake County. This letter covers the majority of the 8 items required for preliminary staff level review as outlined in the Crabtree Creek Watershed Project Policy
- Engineer’s opinion of previous construction’s impact on the Lake Crabtree flood pool, with cut/fill analysis methodology to determine the remediation volume
- signed and sealed engineering drawings

Sincerely,
For CLH design, p.a.

Dylan Coley, PE