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MEMORANDUM

Date: December 4, 2024
To: Michael Elabarger
From: Jacqueline Thompson, PE
Subject: Reserve at Mitchell Mill
CID-24-04; 2nd Submittal
Town of Rolesville, NC

This memo summarizes the review of Construction Plans for Reserve @ Mitchell Mill submitted by Strongrock Engineering, dated 11/01/2024 (received 11/04/2024).

Based on the number of comments that were not addressed due to the ongoing development of the Construction Drawings as the site is realized, the plans were not reviewed in full as a second submittal and additional comments may follow in subsequent submittals, based on updates. Most comments listed below are repeat comments from the first submittal.

Sheet C6.1:

1. **REPEAT** - Please confirm if the overhead power has an existing easement that will need to be removed during plating.
2. **REPEAT** - Remove drainage easement from the lot area square footage calculations.
 - a. This comment applies to all lots. Your previous comment response was related to overhead power, not the drainage.
3. **REPEAT** - All pedestrian ramps should be defined for what type/detail they should be constructed as; include the relevant details.
4. **REPEAT** – The striping is shown on the plan, but the signing is not clear. It appears stop signs are shown, but a signing/striping plan should be considered. Additional signs to include (if applicable), but not limited to: Speed limit, Pedestrian Crossings, Dead End/Future Roadway, No Parking, etc.
5. **REPEAT** – The sidewalk and sidepath should be considered for revision based on previous conversations throughout the PSP submittals. Please let us know if there are any concerns with revising. It was previously discussed (during PSP and CID) about adjusting this walk/crossing so the sidewalk doesn't end at a dead end. Due to the bridge and no improvements being done across the bridge, there is very little chance for future connecting in this location to the south. Is there a reason the sidewalk can't end at the intersection? Since there is nowhere to go the farther south you go, it seems like adding additional infrastructure is fairly meaningless.

Sheet C6.3:

6. **REPEAT** - Confirm the property lines and retaining wall locations. There appears to be a couple of areas of overlap.

Sheet C-6.4:

7. **REPEAT** - The sidewalk and sidepath should be considered for revision based on previous conversations throughout the PSP submittals. Please let us know if there are any concerns with revising. It was previously discussed (during PSP and CID) about adjusting this walk/crossing so the sidewalk doesn't end at a dead end. Due to the bridge and no improvements being done across the bridge, there is very little chance for future connecting in this location to the south. Is there a reason the sidewalk can't end at the intersection? Since there is nowhere to go the farther south you go, it seems like adding additional infrastructure is fairly meaningless.

Sheet C-6.8:

8. **REPEAT** - Please confirm if there is enough room for a vehicle parked in the north-most parking stall in the trailhead parking lot to back out. It is fairly common to have a bump out in parking lots like this to allow backing out.
 - a. Please confirm if there will be an aisle striped next to the handicap spot.
9. **REPEAT** - Confirm if pedestrian ramps will be located at the trailhead parking entrance.
10. **REPEAT** - Please confirm the status of the offsite plans for Mitchell Mill Rd. The signing and striping, as well as widening widths and construction information should be included/notes added.

Sheet C-9.1:

11. **REPEAT** - A profile or elevation information needs to be provided for SCM #6 Wet Pond outlet pipe; Please confirm there is not a crossing conflict with existing sanitary sewer.
12. Please clarify if the areas for the off-street multi-use path will be graded or matching existing grade. If any grading is to occur, they need to be included in the plans as plan and profile. If the plan is to match existing grade with limited disturbance, information needs to be included on the plans to define the section and how the construction of the path is to occur.

Sheet C-9.2:

13. **REPEAT** - Verify slopes near the greenway path, across the road from Lot 78.
 - a. Max slopes are 3:1, but it looks like the goal is to try to tie into something that is much steeper; the retaining wall may need to wrap around.
14. **REPEAT** - A typical section for the greenway should be included; per the Town's Standards Manual, the greenway should have 2' shoulders and 3:1 slopes or flatter.
15. Please clarify if the pollinator garden areas will be graded or matching existing grade. If any grading is to occur, they need to be included in the plans as plan and profile. If the plan is to match existing grade with limited disturbance, information needs to be included on the plans to define the section and how the construction of the path is to occur.

Sheet C-9.3:

16. **REPEAT** – Add contour labels.

Sheet C-9.4:

17. Impacts to 100-year flood zone will require additional stormwater analysis; please include the stormwater calculations and confirm the required permitting is being pursued.
18. **REPEAT** – Add a detail and dimensioning for the riprap.

Sheet C-11.0:

19. The Town of Rolesville follows the NCDOT Subdivision Roads Minimum Construction Standards minimum design criteria; the minimum K value is 30 for crest and sag curves on level terrain for local roads.
 - a. This comment applies to all profiles and curves.
20. **REPEAT** – Profiles for the greenway need to be included.

Sheet C-11.6:

21. **REPEAT** - With the steep grades for streets, sidewalks will not be ADA compliant. Please review and adjust as much as possible.
22. **REPEAT** - The maximum grade allowed for local streets when approaching an intersection is 5% for the last 100 feet of pavement, per the Town's Standards Manual.
23. **REPEAT** - With the steep street grades, please think through the catch basins and how drainage will flow past them; consider double catch basins on the steeper sloped roads.

Sheet C-11.19:

24. **REPEAT** - Please confirm the grading limits with the roadway linework at the end of Monkeywrench Street. A temporary construction easement may be needed.

Sheet C-11.26

25. **REPEAT** - Jonesville Road has proposed utilities and sidewalk; the proposed grade profile should be shown since new pavement and curb are being constructed.

Sheet C-11.28 – C11.30

26. **REPEAT** – Confirm minimum cover is being provided. The dimension labelled is not actually 3 feet.

Sheet L-2.4:

27. **REPEAT** – Profiles for the greenway need to be included.
28. Boardwalk plans and details need to be included; reference the Town Standards Manual for Town requirements.

Sheet D-1.0:

29. **REPEAT** - A 2' concrete flush curb will be required for alleys to provide support of the pavement, and additional driving surface for fire and garbage access.
 - a. We recognize the pavement width has been increased from 16' to 20', but the minimum lane width for the Town Standards is 12'; If alleys will use less than 12' lanes, please account for the concrete flush curb to support the pavement. Also, "No Parking" signs should be shown on the CD plans.
30. **REPEAT** - Plantings are not allowed within the 5' strip, per the Standards Manual; the area between the curb and sidewalk is considered a utility strip. A planting buffer will be needed behind ROW/sidewalk. Please revise.
31. Please include a typical section for the greenway; it doesn't appear the greenway section is defined within the plans.

Sheet D-1.1:

32. Wake County Details should be used for all Erosion and Sediment Control. NCDOT Details should be used for Street and Storm. City of Raleigh Details should be used for Sewer and Water.