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418 South Dawson Street
Raleigh, NC 27601

Phone: (919) 719-1800
Bolton-Menk.com

MEMORANDUM

Date: April 2, 2024
To: Michael Elabarger
From: Jacqueline Thompson, PE
Subject: The Learning Center Rolesville
SDP 23-07, 3rd Submittal
Town of Rolesville, NC

This memo summarizes the review of site plan documents submitted by Kimely Horn, dated 10/31/2023 (received 03/05/2024).

Sheet C1.0

1. The reduction of the perimeter buffer and building setback to 7' will require variance approval (VAR-24-01).
 - a. This comment also applies to Sheet C2.3
2. Repeat: Verify and update the existing vegetation/tree lines shown. (Street view shows tree line to continue south behind the existing storm pond and there only appears to be shrubs along the Sonic Drive-in property border, not a tree line.)

Sheet C2.0

3. Verify and update callouts that reference details on a particular sheet. Ensure the reference sheet matches the actual location of the detail.
 - a. This comment applies to multiple sheets.
4. Proposed ADA curb ramp leads traffic into the middle of the intersection of Old Rodgers Road and South Main Street. The preference is to have a direction ramp across Old Rogers Road to connect with the existing ramp/crosswalk.
5. Provide ADA curb ramp detail via NCDOT 2024 section 848.05/.06 for proposed ADA curb ramps.
 - a. This comment also applies to Sheet C8.0.

Sheet C2.1

6. It appears sheet C2.1 has been shifted. The location of items on this sheet do not appear consistent with those of the rest of the plan set and there are several leaders that don't seem to be in the correct position. Adjust sheet as required.
7. The legend on several sheets is overlapping a data table or is cut off. Adjust sheets so legend is legible and does not overlap other items.

- a. This comment applies to multiple sheets.

Sheet C3.0

8. Storm FES-02 and associated rip rap pad are proposed within sanitary sewer easement. Adjust location of FES and rip rap out of sanitary sewer easement or coordinate with the City of Raleigh to obtain approval for storm structures placed within sanitary sewer easement.
9. Ensure all storm pipes are designed to a minimum slope of 0.5% or greater.
10. Clarity is needed for SCM access easement, pond delineation, and pond contours. The repeat use of a dashed line type makes it very difficult to differentiate all the lines in this area.
11. Repeat: The proposed 15" RCP culvert along Old Rogers Rd requires 18" minimum of ground cover above the storm pipe.
12. CO-1 has been updated from a catch basin to clean out. Clarity and labels are needed on the function of this cleanout, how storm water will now be collected in this area, and connection to the storm system.
13. The outlet of FES-01 appears to end at pond slope. Confirm there are no concerns over washing. I recognize that the slope of pipe is minimal but consider another location for FES.
14. Based on top and bottom of wall elevations, the retaining wall appears to end before the outlet storm pipe between CB-04 and FES-01 but is shown extending beyond the outlet storm pipe. Verify where the wall will end and adjust plans as needed.
15. Provide pipe information (length, material, slope, inverts) for connection from trench drain to structure CB-04.
16. Clarify the purpose of having the underground detention next to stormwater pond, and their function together. Provide calculations for underground detention for review.
17. The highlighted area appears to be draining off site. Revise grading or adjust stormwater system as needed to capture stormwater in this area.
18. Repeat: Provide spot grades on ADA spaces and ramp for compliance review.
19. Several leaders appear to point to incorrect objects or no objects at all. Review labels and adjust as required.
 - a. This comment applies to multiple sheets.
20. Storm structures connecting into NCDOT drainage system will need to be reviewed by NCDOT and Hydraulic Division for flow rate being added into their existing system. NCDOT to provide requirements for encroachment and permitting on storm connection.

Sheet C4.0

21. Septic to be tied into existing force main will need approval from City of Raleigh.

Sheet C5.0

22. Although drainage areas are less than one acre, we suggest a form of sediment mitigation device on site.
23. Repeat: Revise construction sequence to match plans.

24. Repeat: All clearing is shown in phase 2 will need to be done then when the basin is installed. No erosion control basin is shown on this phase. Revise the construction sequence to match plans.

Sheet C5.1

25. Repeat: Provide inlet protection on all structures.

Sheet C10.0

26. Bedding and trench, backfill section, and cleanout details have been removed. Details are still needed. Use City of Raleigh standard details for sewer and water.

Stormwater Report

27. Update drainage area and pond calculations with additional area based on added trench drain.