

06/04/2024

To: Town of Rolesville Planning Department
502 Southtown Circle
Rolesville, NC 27571

SUBJECT: Reserve at Mitchell Mill 3rd Submittal PSP-23-03 Engineering Comment Response

In response to review comments provided on 04/02/2024, we are providing the following comment responses:

Sheet C-1.0:

1. Based on a Town Board meeting agenda, the greenway quantity for this project was a condition of the zoning; this calls for 2.3 miles +/- of greenway. What is being provided according to the site information table is substantially lower than that. Parks and Rec will make the final approval but please explain the discrepancy. Confirm parcel information.

SREG RESPONSE: The greenway length is correct, 30' ROW (per 4/16 meeting - the 2.3 mile length of greenway was deemed a miscalculation. The proposed length is acceptable)

2. Please include the following sheets with the next submittal:
 - Signed sealed survey/TOPO

SREG RESPONSE: Signed and sealed survey is included with this submittal.

3. Confirm what utility improvements will be required along Jonesville Rd and Mitchell Mill Rd, and confirm if these will be separate plans or included in future submittals.

SREG RESPONSE: Water and sewer improvements will be required, these are included in the CD submittal.

Sheet C-5.0:

4. Show setback table or add note to reference to see cover for setback requirements. (LDO Article 3.1.2)

SREG RESPONSE: Reference to cover sheet added for setback requirements

5. Add the greenway to the legend.

SREG RESPONSE: Greenway has been added to the legend.

6. Show buffers for Commercial Lot between commercial and residential zoning.

SREG RESPONSE: Appropriate buffers for the commercial lot are now shown

Sheet C-5.1:

7. Town of Rolesville uses the terminology "side path". Revise to reflect the Towns standard terminology.

SREG RESPONSE: All 10' walks have been re-labeled as 10' side paths.

8. Side paths should remain 10' wide and taper after pedestrian ramps and crosswalks. The pedestrian ramps should match the largest width of adjacent greenways/sidewalks. Revise to reflect this condition.

SREG RESPONSE: side paths have been revised to taper after the ramp, ramps still need to be adjusted to be 10' wide.

9. Remove the public drainage easements from single family calculations for each lot.

SREG RESPONSE: The lot size calculation has been adjusted to no longer include the drainage easement area

Sheet C-5.2:

10. Remove the proposed public drainage easement from the buildable area calculations for each lot.

SREG RESPONSE: Please provide township code reference for this requirement.

Sheet C-5.3:

11. Lots 111 through 113 appear to cross in the Stream H Buffer. Remove lot areas inside the stream buffers.

SREG RESPONSE: Lot dimensions have remained the same as per NCDEQ Section 15A NCAC 02B .0714 (11) (v) (i)

12. The retaining wall along Lots 111 through 113 is inside the inner stream buffer. Revise design as BUA is not allowed inside the inner stream buffer.

SREG RESPONSE: Retaining wall has been adjusted to no longer encroach on the zone 2 buffer.

13. Confirm intent for open space on Lot 109.

SREG RESPONSE: This area has been incorporated into Lot 109

14. Label frontage improvements on Gro Peg Rd that will be occurring or call out the sheets they will be defined on.

SREG RESPONSE: This area has been labeled as future improvements to Gro Peg Rd

15. Stream E is being cut in half and cut off from its drainage area. Confirm if the intent is to install a culvert. It appears there is a private drainage easement being provided; clarify how drainage will get from one side to the other.

SREG RESPONSE: These improvements can be seen on Sheet C8.3

Sheet C-5.4:

16. Confirm if improvements to the bridge on Jonesville Rd are being completed as part of this project. Sidewalk and Side path cannot just end, and the continuity needs to be thought through. Please clarify intent.

SREG RESPONSE: No improvements are being made to the Jonesville Rd bridge. Sidewalk and sidepath connections across the bridge are still to be determined by NCDOT

17. Please review and revise the lane layouts for Jonesville Rd. A shared turn lane along a road with no turning options seems unnecessary, and a possible issue through an intersection.

SREG RESPONSE: The unnecessary left turn arrows have been removed, see sheets C5.4 & C5.6

18. Please confirm and label side setbacks. This comment applies to all sheets

SREG RESPONSE: Side setbacks have been labeled as typical on all site plan sheets

Sheet C-5.5:

19. The overhead power along Jonesville Rd will need to be relocated with the addition of this right only turn lane.

SREG RESPONSE: Overhead Power has been revised, please see Sheets C5.4 and C5.6

20. The private R/W's are not a consistent width. Please label accordingly.

SREG RESPONSE: Labels have been updated to say variable width private R/W

21. Label the buffers for Commercial Lot between commercial and residential zoning.

SREG RESPONSE: All buffers have been labeled, see site plan sheets

Sheet C-5.6:

22. Label the dashed line behind Lots 110 and northeast to clarify what it represents.

SREG RESPONSE: This line has been labeled

23. Continue the curb and gutter through crosswalks.

SREG RESPONSE: curb and gutter has been revised to continue through the crosswalks

24. Show and label the buffers for Commercial Lot between commercial and residential zoning.

SREG RESPONSE: All buffers have been labeled, see site plan sheets

Sheet C-5.7:

25. Clarify the intent for the space south of the Street J cul-de-sac. The sidewalk should not just end unless justified for future improvements or the use of this space is understood.

SREG RESPONSE: Label has been added for the intended use of this space. Also, the sidewalk has been revised

Sheet C-5.8:

26. Stream G is being cut in half and cut off from its drainage area. Confirm if the intent is to install a culvert. It appears there is a private drainage easement being provided; clarify how drainage will get from one side to the other.

SREG RESPONSE: These improvements can be seen on Sheet C8.3

Sheet C-5.9:

27. Please label and dimension all buffers/setbacks. Show and label buffers for Commercial Lot between commercial and residential zoning.

SREG RESPONSE: All buffers and setbacks have been labeled

Sheet C-6.0:

28. Confirm the following waterline sizes:

- 12" for Road I & J Corridors
- Waterline for Jonesville Rd
- Mitchell Mill Rd

SREG RESPONSE: The waterline sizes shown on the plans are confirmed with City of Raleigh.

Sheet C6.2:

29. Label the easement to SCM #5 between Lots 79 & 80.

SREG RESPONSE: This easement has been labeled

30. Avoid unnecessary wetland impacts when possible. Revise the outfall of SCM #4 so the easement doesn't impact the wetlands.

SREG RESPONSE: The outfall pipe has been adjusted

Sheet C-6.4:

31. Pull the outfall behind Lots 92 & 93 back so that drainage easement is out of 100-year floodplain.

SREG RESPONSE: The outfall pipe has been adjusted

32. The proposed wetland impact near EX SSMH #11 is not included in wetland impacts on Existing Conditions Sheet C-3.0.

SREG RESPONSE: This wetland impact is now shown on Sheet C3.0

33. Confirm if the line along Jonesville Rd, behind Lot 102, is a proposed retaining wall, and label accordingly.

SREG RESPONSE: Retaining wall has been labeled

34. The sewer is being shown going under the proposed retaining wall near Jonesville Rd, behind Lot 102; consider alternative design options if possible.

SREG RESPONSE: Sewer has been adjusted to no longer run under retaining wall

35. Avoid wetland impact from outfall behind Lot 102. The outfall is designed to go through or under the retaining wall. Confirm this will be the designed intent.

SREG RESPONSE: The outfall has been pulled back to no longer impact the wetlands. The retaining wall has also been adjusted to no longer conflict with the storm pipe

36. A 5:1 access to the easement is desired for maintenance; confirm if the design will allow this or if a headwall is required.

SREG RESPONSE: A headwall is proposed, see Sheet C7.4

Sheet C-6.5:

37. Please verify if the SCM access and maintenance easement continues behind SCM 7.

SREG RESPONSE: This is confirmed. The maintenance and access easement has been labeled

38. Label the storm easement and/or SCM access easement near Lots 83 – 87.

SREG RESPONSE: Drainage and Access easement has been labeled

39. There is no fire truck access along Public Alley 2 due to 16' alley, if parking allowed. Please review and adjust accordingly.

SREG RESPONSE: The location of this fire hydrant has been updated to provide firetruck access. See sheet C7.5 near Lots 130 and 141

Sheet C-6.6:

40. All fire hydrants outside of the proposed public R/W will require an easement.

a. This comment applies to multiple sheets.

SREG RESPONSE: All hydrants have a 3x3 City of Raleigh Water Line Easement (CORWLE)

41. SSMH #46 is currently 40' deep; Please review if other options are available. Additional easement width may be required.

SREG RESPONSE: The sewer routing has been re-designed

42. The hydrant is located on Lot 48 property; consider shifting slightly to place on property line.

SREG RESPONSE: This hydrant location has been revised

43. COR to provide final sewer approval but sewer will need extended on Street S for future development.

SREG RESPONSE: This is noted

Sheet C-7.1:

44. The private drainage easement for OCS #408 to FES #320 is crossing the public sewer easement. COR to provide final approval.

SREG RESPONSE: This is noted

45. Label a few more contours for clarifying existing and proposed grades.

SREG RESPONSE: Additional contour labels have been added

Sheet C-7.6:

46. Verify that all wetland impacts are included in the existing conditions sheet calculations.

SREG RESPONSE: Sheet C3.0 now shows all wetland impacts

47. Make sure to include all outlets within the buffer in permitted impacts; adjust the location of FES #309 if possible to avoid impact.

SREG RESPONSE: FES #309 has been adjusted to outside of the stream buffer

Sheet C-7.7:

48. Please confirm if Jonesville Rd improvements will be part of this plan set. If so, include typical sections and the design for utilities.

SREG RESPONSE: The Jonesville Road improvements will be permitted under separate

cover

Sheet C-7.8:

49. Please confirm all road drainage coming from the site is ran through a SCM.

SREG RESPONSE: The storm network in this area has been revised.

50. Label a contour for clarity near the parking lot off Street C. Clarify which direction drainage occurs.

SREG RESPONSE: contour labels have been added in this area

Sheet D-1.0:

51. Please clarify if the typical pavement section shown is to be used on all roadways or just alleys.

SREG RESPONSE: This is the typical asphalt section for alleys.

52. Please confirm if the intended cross-slope for roads is the shown 2.08% or if this is a typo.

SREG RESPONSE: The 2.08% is intended as an even 0.25' difference from the crown to EOP.

Construction Drawings:

Please consider the following for CDs; These comments are shown as green in the markups and are not required for approval of the preliminary plat:

Sheet C-5.0:

A. Provide retaining wall details or label as designed by others for clarification.

SREG RESPONSE: General Note #12 has been added, retaining walls to be designed by others

B. Confirm the style of curb and gutter for the site; consider if the curb style will change with single family vs townhome and if there will be driveway cuts; please include details accordingly.

a. Referencing the Town's Standard Manual will provide guidance to start.

SREG RESPONSE: The style of curb for this project has been updated, all curb styles are shown in the legend

Sheet C-5.1:

C. Review the overhead power to confirm if there is an easement that could affect grading or layout.

SREG RESPONSE: These power poles are to be relocated, a note has been added to the plans.

Sheet C-5.7:

- D. Conditional zoning states a left turn lane shall be provided from Jonesville Rd onto Mitchell Mill Rd.

SREG RESPONSE: Striping has been revised to show a Left turn lane

Sheet C-7.0:

- E. The storm drainage package review will be required during CDs and should include 10-year storm, gutter spread, pre-post maps, impervious maps, and Inlet DA maps. For any culverts, we will also review the 25-year storm.

SREG RESPONSE: Storm calculations are included within the SIA with this CD submittal

- F. In efforts to collect drainage onsite for stormwater management, consider adding rear yard swales.
- a. Roof drainage will also need collected and managed.
 - b. This comment applies to several areas and several

sheets.

SREG RESPONSE: Rear yard swales have been added. roof drainage is being collected and accounted for in calculations

Sheet C-7.1:

- G. Plans show the drainage area behind Lots 155+ going to Jonesville Rd. NCDOT approval will be needed for this.

SREG RESPONSE: Storm drainage design has been adjusted in this area

- H. During CD's show the lot drainage routes. When side or rear drainage is crossing two or more lots, drainage easements are required.
- a. This comment applies to all grading and drainage

sheets.

SREG RESPONSE: Storm drainage design has been adjusted in this area

Sheet C-7.8:

- I. Continue the curb and gutter around this entire lot to prevent this area running off and add a structure to collect.

SREG RESPONSE: Curb and gutter has been added to the entire perimeter of the parking

lot, and structure CB#57A has been added

Sheet C-7.10:

- J. With the CD set, street and utility profiles will be required. Please make sure to include the following labels:
- c. Minimum cover over pipe
 - d. Minimum separation between crossing pipes
 - e. Pipe sizes, lengths, and slope
 - f. Manhole labels including rim and inverts
 - g. Existing ground and proposed ground
 - h. Vertical curve lengths shall be in increments of 50'
 - i. K values and maximum street grades shall be defined by terrain classification per NCDOT Subdivision Roads Minimum Construction Standards

SREG RESPONSE: This is noted. Street and utility profiles are included with this CD submittal and include all of the labels mentioned

Overall project:

Think through phasing for the project that related to street and lot development, but also utilities and drainage/stormwater management. If phasing will be a part of this project, a phasing plan should be included, and phase lines should be reflected on all sheets so site improvements and utilities can be confirmed for constructability.



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