



April 1st, 2025

Town of Rolesville Planning
c/o Michael Elabarger
PO Box 250,
Rolesville, NC 27571

Subject: **The Preserve at Moody Farm**
CID-24-09 – V2 Comment Response Letter

Dear Mr. Elabarger,

There are several noteworthy design changes within this submittal to bring to your attention prior to beginning your review:

- Lot grading and a limits of disturbance line have been incorporated into the project design.
- Sheet C5.5 has been removed from the plan set for clarity purposes. All project drainage areas have been revised and can be seen within the project SIA Report.
- Erosion and sediment control plan (E&SC) and detail sheets have been removed from the CID plan set. These plan sheets are currently under design for a submittal to Wake County scheduled for 4/4/2025. The E&SC comments #2 - #10 generated from the Town of Rolesville V2 CID submittal are being incorporated into the upcoming Wake County submittal.

Please find below the review comments received via method received dated 03/09/2025:

Town of Rolesville Planning Comments:

- 1.Comment: *Continue to* Provide a Written Response to ALL comments that clearly informs staff IF, HOW, Where (Sheet #) the comment was addressed.

Response: Written responses to all comments will be provided.

- 2.Comment: *Continue to* Add revision dates to all submittal materials.

Response: Revision dates have been added to all submittal items.

- 3.Comment: *Continue to* Bubble/cloud all changes / revisions made.

Response: Revision clouds are incorporated into this submittal. Note that revision clouds are not provided for plan updates to the erosion & sediment control sheets due to Wake County being the delegated authority on this topic.

4. Comment: REPEAT - Provide a Lighting Plan and details or explain on what sheets that information is included; Sheet Index has no reference to Lighting.

Response: Duke has provided a site lighting plan for the project which is included with this submittal, within the plan set.

Parks & Recreation – Tanner Hayslette/Eddie Henderson

1. Comment: Where the Greenway trail ends in Open Space 6 Block B near the existing pond, please loop the Greenway as shown below instead of stubbing it into the adjacent property.

Response: A hammerhead has been added to the end of the greenway at this location, allowing maintenance vehicles to turn around. A hammerhead was selected in lieu of a loop to minimize impervious and allow for a simple sawcut to remove/retrofit at future connectivity.

2. Comment: Please add the greenway cross section that includes this language: “Greenways shall be constructed with either asphalt or concrete pavement. When using asphalt, a 2-inch minimum asphalt course, Type S9.5B, with a 6-inch aggregate base course shall be provided. When concrete is used, a 4-inch minimum Portland cement concrete (PCC) with a 6-inch aggregate base course shall be provided.

Response: This note has been added to sheets C15.0 and C15.1.

3. Comment: Regardless of the material, geotextile stabilization fabric shall be placed under the compacted aggregate base course (ABC) the entire length and width of the Greenway.”

Response: This note has been added to sheets C15.0 and C15.1.

Engineering Comments:

1. Comment: The 2nd CD Submittal date should be corrected to show 2025 instead of 2024.

Response: The date has been revised.

2. Comment: Repeat: Ensure erosion control plans follow NCDEQ design criteria. There are areas where the silt fence appears to be handling a decent amount of area without any other erosion control measures. Table 6.62a in NCDEQ’s NC Erosion and Sediment Control Planning and Design Manual specifies the maximum areas silt fence can be designed for without adding additional measures. Consider adding additional diversion ditches routed towards the proposed sediment basins.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3 CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

3.Comment: Ensure silt fence outlets are located at low points along the silt fence. Please add a silt fence outlet at the low point south of the existing pond on this sheet, similar to what was shown in the previous submittal.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3 CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

4.Comment: Repeat: Dewatering bag should not be placed in way that the water will naturally flow back into the sediment basin. If water is being routed around the basins, ensure it is able to remain in the limits of disturbance and not conflicted with other erosion control measures.

a. This comment also applies to Sheets C3.8 and C3.9.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3 CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

5.Comment: There is a leader indicating “existing soil path,” however the path is not showing. Please show the path or remove the leader based on intentions for this phase of erosion control.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3 CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

6.Comment: Repeat: Specify how access to existing houses will be maintained throughout construction. If the existing dirt drive is to be maintained during Phase 1 of erosion control it should be shown on the plans.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3 CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

7.Comment: The SB#3 dewatering bag should be moved outside of the extents of the sediment basin.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3 CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

8.Comment: Repeat: Provide inlet protection around all inlets that do not have any.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3

CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

9.Comment: Please add additional contour labels northeast of SB#4.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3 CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

10.Comment: Clarify what the line through the southwest corner of SB#2 represents. If it is a contour, it should be adjusted so as not to overlap with other contours.

Response: Please note that we are currently working toward the second project submittal for Wake County erosion and sediment control and have removed these sheets from the Town of Rolesville V3 CID submittal. All Town of Rolesville V2 CID erosion and sediment control comments are being considered in current/future design.

11.Comment: Extend the WP#2 access easement to include the full extents of the access path around the pond.

Response: The access easement has been revised to include the full extents of the path around the pond.

12.Comment: Repeat: slopes are not to exceed 3:1 without additional steps taken for stabilization. Slopes of 3:1 or less are recommended. The geotechnical report also recommends that permanent slopes do not exceed 3:1. Due to environmental impacts, if the engineer chooses to go steeper we will allow it, but a railing must be installed adjacent to sidewalk. In addition, appropriate stabilization needs to be provided on the steeper slopes, such as rolled erosion control products.

Response: A pedestrian safety rail has been added to the project design, see C4.2 and C4.3. A rolled erosion control product is to be incorporated into future E&SC design where slopes steeper than 3:1 are utilized.

13.Comment: The storm drainage easement along lot 25 may be reduced based on the updated storm pipe locations in this area.

Response: The storm drainage easement has been revised in accordance with the current storm pipe locations.

14.Comment: There appears to be a low point near CB 308 and CB 306 that is not being collected. Please adjust storm design as necessary to prevent any pooling here.

Response: Storm design has been revised to newly added lot grading. All low points have been addressed with new/revised stormwater infrastructure.

15. Comment: Repeat: Extents of headwalls should be clearly shown on plans. Ensure grading meets maximum slope requirements.

a. This comment also applies to Sheet ***

Response: The headwall grading has been revised so the contours tie into the headwall more clearly and the slope has been revised to not be as steep. We have tried to show this as best we can and believe the contractor should have room to work to ensure that the slopes going into the headwall don't exceed 3:1.

16. Comment: The slope at the existing cemetery access point is currently very steep. Please ensure grades allow for easy access to the cemetery.

Response: The slopes at the existing cemetery access point have been reduced as much as possible without adding additional site infrastructure. The longitudinal slope in this area has been reduced to ~11.50%.

17. Comment: Repeat: There appears to be a low point south near CB 510 and YI 509 that is not being collected. Please adjust storm design as necessary to prevent any pooling here.

Response: Storm design has been revised to newly added lot grading. All low points have been addressed with new/revised stormwater infrastructure.

18. Comment: The proposed contours at the low point of the multiuse path west of WP#4 indicate that the path is not appropriately sloped to avoid water from pooling up. Please adjust contours and/or grading in this location as needed.

Response: The low point has been raised to ensure water will drain off of the greenway which is superelevated. Please also see sheet C15.0 for the revised profile.

19. Comment: The contours along Cranapple Lane do not appear to be showing correctly. Please adjust them to show the correct grading.

Response: The contours have been revised to show the correct grading.

20. Comment: Ensure the design shown on the plan set (all acreages, drainage areas, storm layout, etc.) matches that shown in the SIA report. This comment applies to all drainage sheets and SIA report pages.

Response: All information/data in the plan set now matches the information/data seen in the project SIA Report. Sheet C5.5 has been removed from the plan set for clarity purposes. All project drainage areas can be seen within the project SIA Report.

21. Comment: Repeat: Ensure minimum drop requirements in storm structures are met. A minimum of 0.1' is required for angles between 0-45 degrees and a 0.2' drop is required for angles between 45-90 degrees.

Response: Drops within storm structures have been revised across site to accommodate design requirements, where applicable.

22. Comment: There are proposed contours by HW 613 that are not tying in to existing. If these contours are meant to be there, please show how they are tied in, otherwise remove them.

Response: These contours were meant to tie back into the headwall, this has been revised.

23. Comment: Repeat: To meet the Town of Rolesville requirements, all vertical curve lengths shall be in 50-foot increments.

a. This comment applies to all street profiles.

Response: All vertical curve lengths have been corrected so they are now in 50' increments.

24. Comment: Repeat: Ensure the proposed grade is tying in to the existing surface on the Tansley Crest Loop profile.

Response: The proposed grade has been revised so that it more clearly ties into the Kalas Falls Phase 1 road surface which is currently under construction.

25. Comment: Repeat: Typically, grade change is not to exceed 3% without a vertical curve. Due to this being allowed on a previous project and with this project being under the UDO and not LCO/S, if you feel confident in your design then we can proceed as designed. If there are issues after construction, the inspector's acceptance will dictate any changes that may need to be made in the field for safe and comfortable driving conditions. Please keep in mind that going forward on projects, the Town will be enforcing grade change exceeding 3% to have a vertical curve.

Response: Noted, thank you.

26. Comment: Repeat: To meet NCDOT and the Town of Rolesville requirements, K values as defined in the Town's Standards Manual will be required. In the case of stopping conditions, the minimum K value is 14 for residential local roads.

a. This comment applies to all street profiles.

Response: K-values not previously meeting NCDOT and the Town of Rolesville standards have been revised, or vertical curves have been removed in place of grade breaks.

27. Comment: Label minimum separation between storm and sanitary sewer on the "Sewer Outfall (A) at Vintage Vinery Court" Profile.

Response: Minimum separation label has been added.

28. Comment: Adjust the proposed grade leader on the "CB 503 to FES 500" Profile so that it is pointing to the proposed grade rather than existing. If the proposed grade is meant to extend to where the leader is, please ensure the linework is shown correctly on the plans.

Response: The leader has been revised.

SIA Report:

29. Comment: On the Pre-Development Point of Discharge Area Map, please ensure the colors shown accurately represent the pre-development conditions. Update the legend as necessary to include all existing conditions.

Response: The Pre-Development Point of Discharge Map has been updated accordingly. The legend has been updated. Note that the existing dirt/gravel road is calculated as impervious due to it being compacted from extended vehicular use.

30. Comment: On the Post-Development Point of Discharge Area Map, there is a drainage area near the intersection of Woodlyn Park Dr and Tansley Crest Loop that is not defined. Please include a label for this section so it is clear how it was considered for the calculations.

Response: This area is now labeled properly as POD 2B #1.

31. Comment: Ensure all inlet drainage areas accurately match contours. If the intent is to swale drainage to a particular inlet, the swale should be shown on the plans.

Response: All swales or permanent diversion ditches are shown and labeled within the CID plan set. The existing Moody Homestead is situated at a local high point on the site. The existing Moody Homestead lot naturally drains to the surrounding proposed storm infrastructure.

32. Comment: When adjusting plans to ensure low points are being collected, make sure to update drainage areas/storm calculations to match those adjustments.

Response: Low points have been addressed with new lot grading and revised stormwater infrastructure design. The area of concern sheet flows to the right-of-way and eventually to CB 308. Drainage areas and storm calculations have been updated in this area.

33. Comment: The drainage area for PDD #4 on the Permanent Diversion Ditch Drainage Areas map does not match the existing contours. Please update the drainage area to accurately reflect the area draining towards PDD #4.

Response: All permanent diversion ditches have been revised with lot grading. Please see revised "Post-Development Ditch Areas" exhibit in Appendix B of the project SIA Report.

34. Comment: Verify the time of concentration calculations. Make sure sections with defined channels are taken into account in the channel flow portion of the calculations.

Response: Time of concentration calculations have been updated.

35. Comment: The HGL must remain in the storm pipes for the 10-year storm.

Response: HGL remain in the pipes during the 10-year storm event, as seen in the revised modeling with the project SIA Report.

36. Comment: Please ensure the Post POD 1 and Post POD 2 peak flows are both shown (as two separate values) so it can easily be seen that the post-development flows at those points do not exceed the pre-development flows.

Response: These flows have been separated in modeling and can now be seen within Table 3 and Table 4 of the SIA Report as well as Appendix D.

Wake co Watershed Mgt – Kevin Zelaya/Elizabeth Powell

V2- Letter of Disapproval (SEC-137279-2024/SWF-137381-2024) issued 01-15-2025 to Applicant.

Response: We are in the process of resubmitting SEC-137279-2024/SWF-137381-2024 documentation to Wake County for review.

NCDOT – Jacob Nicholson

V2 – NCDOT Driveway Permit / Encroachment Agreement have been submitted, V1 Comments have been provided.

Response: We are in the process of resubmitting E051-092-24-01477 and D051-092-24-00202 documentation to NCDOT for review.

COR Public Utilities – Tim Beasley

Review is complete. Please email me for the water/sewer permit numbers and Raleigh development fees associated with this development.

Response: Noted, thank you.

Sincerely,



Roman Cook
Project Engineer
American Engineering Associates – Southeast, PA