MEMORANDUM

Date: November 30th, 2023

To: Michael Elabarger

From: Jacqueline Thompson, PE

Subject: Parker Ridge Young Street Connector

CID 23-08, 2nd Submittal Town of Rolesville, NC

This memo summarizes the review of the construction infrastructure documents submitted by BGE, dated 10/09/2023 (received 11/03/2023).

Sheet CO-0

- 1. Please complete the site data table, to include the following information:
 - a. Pre/post development impervious areas
 - b. Current and proposed use for property

Sheet CO-2

- 2. Please include the following notes and specifications within this General Notes sheet or provide within appropriate plan sheets:
 - a. Seedbed preparation notes
 - b. Ground stabilization notes
 - c. The full City of Raleigh Utility Notes- reference the City of Raleigh construction design manual.

Sheet C1-0

3. Sheet C1-0 should have a matching title block for consistent formatting; if not, it at least needs to be plotted on the same size sheet.

Sheet C2-0

- 4. Please include a site detail sheet for the site details shown in this site plan.
- 5. Please label the taper length for the sidewalk transition from 10' to 5'.
- 6. Provide a label calling out signage; please include a sign detail on a detail sheet.
- 7. Please check the leader for the project connection to Parker Ridge Subdivision. The project limits appear to be different than what the leader is pointing at. Anything "By Others" or existing should be shown in grey to make the project limits clear.
- 8. Specify the material to be used for pavement and include pavement cross section detail.
- 9. Please remove RIP RAP block that is not attached to any storm structures.

- 10. Leaders for C1 and C2 are pointing at nothing. Please review and revise accordingly.
 - a. Confirm the stop bar is located 4' behind the crosswalk, per the LDO.

Sheet C3-0

- 11. Please include all the utility details for the proposed water line. Additionally provide details for the proposed sanitary sewer lines. Reference City of Raleigh Design Manual for standard details.
- 12. Please provide a label denoting the separation between the waterline and sanitary sewer, to ensure minimum separation is met. (10' min. typ')
- 13. Please confirm what is being included in this project for sanitary sewer. Show existing or "By Others" in grey, or add label.
- 14. Please provide a label denoting the separation between the storm structure and waterline, to ensure minimum separation is met. (5' min Typ')
 - a. Confirm the minimum separation is being met between the storm and water at structures, pipes and bends.

Sheet C4-0

- 15. Please provide the details related to the grading and storm sewer plans. le. catch basin, pipe embedment, drainage inlet, etc.
- 16. Catch basin CB 316C is not shown on this sheet, please verify location of this catch basin if it is to be part of this storm system.
- 17. Confirm all pipe have the required minimum cover over them.
 - a. CB 316C appears to only have 0.3' cover based on the provide rim and invert elevations with an 18" pipe.

Sheet C5-0

- 18. Provide silt fence surrounding the entire specified limits of disturbance area.
 - a. This comment also applies to Sheet C5-1.
- 19. Update the construction sequence note to denote that the construction of sediment basins should occur prior to installing any diversion ditches or pipes. Please correct the construction sequence.

Sheet C6-0

- 20. Please provide the separation dimension for the vertical crossing shown.
- 21. Please include slope labels for the sanitary sewer.
- 22. Is the sanitary sewer being installed by this project or by others? If by this project, where is the connection being made? Please adjust the plans, add labels, and extend the profile as necessary to show what the limits of this project are.

Storm Drainage and Erosion Control Calculations

Page 4

1. Confirm if the drainage flow from adjacent roadway improvements is to be included in this storm sewer analysis. The Young Street Improvement Plans indicate that there will be a drainage system tying into this storm system.

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- 2. For a 90-degree pipe connection a drop of 0.2' is required, please provide an appropriate drop.
- 3. Please adjust the structure label and location to provide clarity. This comment applies to all pages and labels containing the analysis profiles.

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4. Clarify how the area highlighted is being managed through erosion control measures.