

December 5, 2022

Michael Elabarger Town of Rolesville 502 Southtown Circle Rolesville, North Carolina 27571

**RE:** The Point Phases 11-13 Construction Drawings

Case Number: CD 22-05

Response to 1<sup>st</sup> Construction Drawing Review Comments

AWH-20000

The following are the response comments for the above-mentioned project. Our response comments are in **bold**.

#### **PLANNING DEPARTMENT**

1. Submit a completed Property Owner Consent Form.

McAdams Response: The Owner Consent Form will be forward as soon as is obtained from the owner.

2. Provide a written response to All the comments with next submittal.

McAdams Response: This letter includes all written responses to the previous comments.

3. Add "CD 22-05" on every sheet of the Plan set; somewhere consistent, unobtrusive.

McAdams Response: We have included the above number on the re-submitted plans.

4. Revise dates on Plan set to reflect the Resubmittal.

McAdams Response: The re-submitted plans include revision dates associated with this re-submittal.

5. PR 20-06 was approved by the Town Board on 09/06/2022 with 2 conditions regarding funds to the Town to address off-site improvements; please add/note these clearly on the Cover Sheet; please speak to how/when Applicant plans to fulfill these Conditions. After CD approval, the next authority action of the Town would be acceptance of infrastructure and/or signature of a Final Plat.

McAdams Response: Following the Town Board meeting on 09/06/2022, further discussions are underway regarding these conditions.

6. Please provide an overall update on where the TIA off-site road improvements (SUP 18-09 Condition #3) stand. CD 20-06 for Phases 1,2,6,9 is already approved (and undergoing a revision currently) and thus 'ahead' of this CD Application in regards of delivering built transportation improvements.



McAdams Response: The following is a summary of the TIA off-site road improvements listed in SUP 18-09 Condition #3 and the current status:

# North of US 401 Bypass:

- Construction is not anticipated to begin until Spring/Summer 2023. Genovesa Drive Right-of-Way will be dedicated prior to start of construction.
- Construction drawings include the required stub from Genovesa Drive extension to the east.
- The preliminary subdivision plat for Phases 11, 12, and 13 was submitted with the required updated TIA. The plat was approved on September 6, 2022.

#### US 401 Bypass:

• The traffic signals at the intersections of US 401 at East Young Street and the Superstreet U-turns will be coordinated prior to the 135<sup>th</sup> building permit for home construction. No building permits have been issued to date.

# **US 401 Bypass Eastbound at East Young Street:**

 The storage of the eastbound right-turn lane on US 401 Bypass will be extended by approximately 175 feet to provide 400' of storage and appropriate tapers at the time of commercial development (retail/office tract). At this time, there is no anticipated timeframe for the commercial development.

## **East Young Street at Quarry Road/North Site Driveway:**

- A northbound left-turn lane will be constructed on East Young Street with 100 feet of storage and
  appropriate tapers prior to the issuance of the 99th building permit for a home South of the 401 No
  building permits have been issued to date.
- A northbound right-turn lane will be constructed on East Young Street at Quarry Road with 100 feet of storage and appropriate tapers at the time of commercial development (retail/office tract). At this time, there is no anticipated timeframe for the commercial development.
- A southbound right-turn lane will be constructed on East Young Street with 100 feet of storage and appropriate tapers prior to the issuance of the 99th building permit for a home South of the 401 Bypass. No building permits have been issued to date.
- The existing westbound left-turn lane will be restriped on Quarry Road to a shared left/through lane prior to the issuance of the 99th building permit for a home South of the 401 Bypass. No building permits have been issued to date.
- An exclusive left-turn lane with 275 feet of storage and appropriate tapers and a shared through/right lane will be provided on the North Site Driveway prior to the issuance of the 99th building permit for a home South of the 401 Bypass. No building permits have been issued to date.
- A full signal warrant analysis for a traffic signal at East Young Street and Quarry Road/north site access ("Warrant Analysis") will be provide prior to the approval of the plat containing the 325th lot (of the lots South of 401 Bypass) to be developed upon the subject property. At this time, no plat has been prepared; however, plat preparation for the first 266 lots is anticipated to begin soon. Plat preparation for the next set of lots to include the 325<sup>th</sup> lot, is not anticipated before Summer 2023.



- The Town shall have the right to call for up to two (2) additional Warrant Analysis beginning with the approval of the plat containing the 200th lot (of the lots South of the 401 Bypass) and expiring at the approval of the plat containing the 600th lot (of the lots South of the 401 Bypass). At this time, no plat has been prepared; however, plat preparation for the first 266 lots is anticipated to begin soon.
- If a signal is warranted as part of the Warrant Analysis, traffic signal easements to accommodate traffic signal equipment shall be provided to the extent such property is owned and controlled by the property owners/developer and, within 12 months of being warranted and approved by the NCDOT, and the property owners/developer shall design, construct and install a traffic signal subject to final approval by the NCDOT. At this time, no Warrant Analysis can be called as no plat has even been submitted for review and approval.

# **East Young Street at Central Site Driveway:**

- A northbound left-turn lane will be constructed on East Young Street with 100 feet of storage and appropriate tapers prior to the issuance of the 99th building permit for a home South of the 401 Bypass. No building permits have been issued to date.
- A southbound right-turn lane will be constructed on East Young Street with 100 feet of storage and appropriate tapers prior to the issuance of the 99th building permit for a home South of the 401 Bypass. No building permits have been issued to date.
- Exclusive left and right-turn lanes will be provided on the Central Site Driveway with 125 feet of storage and appropriate tapers for the left-turn lane prior to the issuance of the 99th building permit for a home South of the 401 Bypass. No building permits have been issued to date.

#### East Young Street at Rolesville High School Driveway/South Site Driveway:

- A northbound left-turn lane will be constructed on East Young Street with 50 feet of storage and appropriate tapers prior to the issuance of the 99th building permit for a home South of the 401 Bypass. No building permits have been issued to date.
- One egress lane will be provided on the South Site Driveway prior to the issuance of the 99th building permit for a home South of the 401 Bypass. No building permits have been issued to date.

### Mitchell Mill at Rolesville Road:

• Fifty Thousand Dollars (\$50,000.00) shall be contributed to the Town of Rolesville prior to the issuance of a building permit for the 500th home (of the lots South of 401 Bypass). These funds are to be used by the Town of Rolesville to install a traffic light at the intersection of Mitchell Mill and Rolesville Road. No building permits have been issued to date.

#### **PARKS + RECREATION**

## J.G. Ferguson / Eddie Henderson

1. There are sections of the Greenway that are shown within the 50' Neuse Riparian Buffer (NRB). Per the Rolesville UDO Section 7.3.2.1, which lists 12 specific items [ (a.) through (g.)] that are Permitted within the



first 50' Stream Protection Buffer (aka the NRB) - Greenways are expressly NOT permitted within the 50' NRB.

McAdams Response: This was discussed at the TRC meeting and allowed based on existing terrain constraints in some areas outside the NRB buffer. The proposed greenway is aligned closely with the existing sanitary sewer outfall which is also in the NRB buffer.

2. Staff acknowledges the Proposed trail location was approved by the Town Board in their Approval action of PR 20-06 on 09/06/2022 – ie, the CD is consistent with the PR, as it should. However, years prior to PR 20-06, the Board approved SUP 18-09 (Fall of 2019), see excerpt below from Sheet MP1.0, that clearly showed the proposed Greenway to be OUT of the 50' NRB.

McAdams Response: This was also discussed at the TRC meeting and decided the current alignment will be permitted.

3. Remove Greenway from encroaching into 50' NRB or contact Staff to discuss.



McAdams Response: Same as above.

#### **ENGINEERING**

#### **Brian Laux**

1. Update on all sheets CD 22-05.

McAdams Response: Plan sheets have been updated with the Town of Rolesville case number.

2. While we recognize the PR was approved with this typical section, to comply with changing Town preferences, is it possible to place the sidewalk 1' off the right-of-way? This would also provide a wider boulevard for plantings and street trees if being provided.

McAdams Response: This comment was discussed at the TRC meeting and it was decided the current Typical Section would be allowed since it was also used for South section of the development.

3. Per the Rolesville greenway plan, the goal is that greenways should still be accessible; a max cross slope grade of 2% is required

If there is a reason this greenway does not intend to be accessible, please provide clarification.



McAdams Response: The greenway is intended to meet "Trail Accessibility" standards by the US Access Board. We have revised the cross-slope to be 2% maximum.

## Sheet C1.00 – Existing Conditions:

4. Please label linework.

McAdams Response: The linework in question has been removed since it is a proposed easement and should not be shown on the Existing Conditions sheet.

## Sheet C2.00 – Overall Site Plan:

5. Please adjust leader to match the correct linework for the easement.

McAdams Response: The leader has been corrected.

### Sheet C2.01 - Site Plan Area "A":

6. Please provide a pedestrian ramp for accessibility.

McAdams Response: An accessibility ramp has been added to the revised plans.

7. Adjust text for legibility.

McAdams Response: The text overlap has been corrected.

8. If this label is for the 20' easement, move label into easement.

This label is not included in the legend. Please include for clarity.

McAdams Response: The legend is shown on all applicable sheets and was pointed out at the TRC meeting.

9. Confirm what this label is and what area it is referring to. There are no adjacent labels or linework.

McAdams Response: The label is intended to indicate locations for private storm drainage easements. The label in question has been removed.

## Sheet C3.00 – Overal Grading and Storm Drainage Plan:

10. Grading does not appear to tie into wall. Please confirm.

McAdams Response: The grading does tie in with the wall. This is shown more clearly on sheet C3.02.

## Sheet C3.01 – Grading and Storm Drainage Plan Area "A":

11. Label low point contour for clarity.

McAdams Response: The contour has been labeled.



# Sheet C3.02 - Grading and Storm Drainage Plan Area "B":

12. Please confirm who is responsible for the retaining wall (HOA, homeowner, etc.)? An easement may be needed for the wall.

McAdams Response: The HOA is responsible for maintaining retaining walls in open areas. Easements can be added for walls on private lots, but this was not done for the South section of The Point.

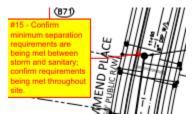
13. Please confirm 1' cover is your intention. We recommend a minimum of 18" if possible. It appears your other YI systems have approx. 2' cover in most places.

McAdams Response: This particular run of pipes is bucking grade. For that case, we would rather have a foot of cover at the most upstream inlet to keep the downstream cover as shallow as possible.

### Sheet C4.01 – Utility Plan Area "A":

14. Confirm what this label is and what area it is referring to. There are no adjacent labels or linework.
McAdams Response: There is no label at this location. There is a an "Open Space" delineation which has been added to the Site Plan legend.

15. Confirm minimum separation requirements are being met between storm and sanitary; confirm requirements being met throughout site.



McAdams Response: This was discussed at the TRC meeting. Tim Beasley stated the minimum separation is 3' and 5' is preferred. We checked all the locations shown with this comment and after adjusting a few sanitary sewer alignments, all separations are within the minimum 3' between sewer and storm drainage.

16. Please confirm the minimum separation is being met between water, sewer and storm.



McAdams Response: This was discussed at the TRC meeting. Tim Beasley stated the minimum separation is 3' and 5' is preferred. We checked all the locations shown with this comment and after



adjusting a few sanitary sewer alignments, all separations are within the minimum 3' between sewer and storm drainage.

17. Services should be located outside of drainage easements.

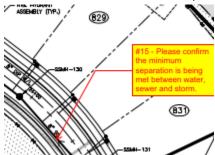
McAdams Response: The water service has been located away from the drainage easement.

18. Please define area or remove label.

McAdams Response: There is no label shown.

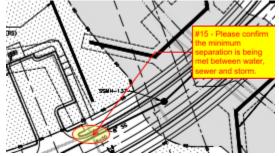
## Sheet C4.02 – Utility Plan Area "B":

19. Please confirm the minimum separation is being met between water, sewer and storm.



McAdams Response: This was discussed at the TRC meeting. Tim Beasley stated the minimum separation is 3' and 5' is preferred. We checked all the locations shown with this comment and after adjusting a few sanitary sewer alignments, all separations are within the minimum 3' between sewer and storm drainage.

20. Please confirm the minimum separation is being met between water, sewer and storm.



McAdams Response: This was discussed at the TRC meeting. Tim Beasley stated the minimum separation is 3' and 5' is preferred. We checked all the locations shown with this comment and after adjusting a few sanitary sewer alignments, all separations are within the minimum 3' between sewer and storm drainage.



## <u>Sheet C5.05 – Plan and Profile:</u>

21. Please confirm the need for a curve. It appears the grades on each side are both 1.80%.

McAdams Response: The curve at this location was an error and has been removed.

## Sheet C6.01A - Erosion Control Plan - Stage 1 Area "A":

22. Please adjust the plans so no color shows through and the existing sewer is visible.

McAdams Response: All entities shown with color have been corrected.

23. Sediment can flow directly into skimmer bay in this area. Please connect the two interior baffles to prevent this from happening.

McAdams Response: The baffles have been adjusted as requested.

## Sheet C6.02A - Erosion Control Plan - Stage 1 Area "B":

24. Confirm plans do not plot in color; adjust layers as necessary.

McAdams Response: All entities shown with color have been corrected.

# **Storm Drainage Calculations:**

25. All HGLs must be contained within pipe for 10-year storm event.

McAdams Response: The "HGL" at line 414-415 is within the pipe. Circled HGL elevation is 370.75. The invert is 370.10. Since it is a 12" diameter pipe, the top of pipe is 371.10. 371.10 > 370.75.

26. All HGL must remain within pipe for 10-year storm events.

McAdams Response: In this case, the HGL is above the outlet end of the pipe due to the pipe discharging into a SCM with 10-yr water surface elevation being considerably higher than normal crown. There are several cases similar to this on the site. We have shown all these pipes to be "O-Ring" gasketed to prevent blow-out at the joints.

### **WAKE COUNTY WATERSHED MANAGEMENT**

#### **Janet Boyer**

1. The plans have been submitted to Wake County for permitting review. The review will be completed by 12/21/22. [No comments provided on this CD specifically.]

McAdams Response: Noted.

## **COR PUBLIC UTILITIES**

### **Time Beasley**

1. Please email me the public water and sewer permit applications. Once received, I'll email the assigned permit numbers for these phases of the dev and the development fees (these fees must be paid prior to CD

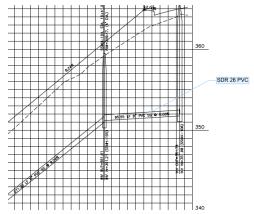


approval). All of the offsite sanitary sewer improvements identified by the downstream SS study must be approved, constructed and accepted by Raleigh prior to these phases recording lots. You may need to include a note on the cover stating this.

McAdams Response: The note, or approval condition, has been added to the Cover sheet.

## Sheet C5.08 – Plan and Profile:

2.



McAdams Response: The pipe material has been revised to SDR26 PVC at all locations over 12' Deep.

### Sheet C5.09 – Plan and Profile:

- 3. Sewer with an installation depth greater than 12' should be specified as SDR 26 PVC.
  - McAdams Response: The pipe material has been revised to SDR26 PVC at all locations over 12' Deep.
- 4. The aerial design should include the following:
  - a. Carrier pipe: use restrain joint DIP @ 1.0% min grade.
    - McAdams Response: All redlines pertaining to the aerial sewer crossing have been added to sheet C5.09.
  - b. Steel casing: use 8" larger diameter & 0.375" wall thickness. Drain, vent & extend 4.0' into creek bank.

    McAdams Response: All redlines pertaining to the aerial sewer crossing have been added to sheet

    C5.09.
  - c. Cross 3.0' min above creek bottom &/or 1.0' min above Q25 elevation.
    - McAdams Response: The crossing is about 2.5 feet above the 25-yr water surface elevation.
  - d. MH rims must be raised 3.0' above Q100 or 12" above grade, seal-tight & vent stack to 3.0' above Q100.
    - McAdams Response: The 100-yr water surface elevation has been added to the profile and is more than 3 feet below the rim elevations.



e. Specify max span per CORPUD detail.

McAdams Response: A span of 39 feet has been shown on the profile.

f. Specify deep foundation (pile @ 15.0' min bury) or shallow foundation (reinforced concrete pier @ 3.0' min bury) per geotech report.

McAdams Response: We added shallow foundations with the verification of the Geotechnical Engineer.

g. Class I rip-rap apron for slope stabilization & protection.

McAdams Response: The rip-rap armoring has been added.

Consideration of this response is greatly appreciated. If you should have any questions or require additional information, please do not hesitate to contact me at 919. 361. 5000.

Sincerely,

**MCADAMS** 

Mike Sanchez, PE

Group Manager, Residential

MS/md