

May 26, 2023

Steven Worthington, PE
Christopher Consultants
11551 Nuckols Road
Suite Z-1
Glen Allen, VA 23059

RE: Parkside Townes
LOCATION: 5401 Whiteside Road
FILE NO.: POD2022-00030

Dear Mr. Worthington:

We have reviewed the construction plans submitted to the Planning Department on May 10, 2023. Please address the following comments and **resubmit revised construction plans** for review. Water and Sewer Agreements that must be executed by the Owner and the County for water and sewer improvements **have not** been executed.

General:

1. Agreements have not been executed at this time. Agreements must be executed prior to the authorization to begin utility construction or approval of building permits. An Information Sheet for the Preparation of Utility Agreements has not been submitted for review. If the Information Sheet is incomplete when submitted, we will send you comments for correction and resubmittal. If the required Information Sheet is complete when submitted, an Agreement will be forwarded to the Owner for signature within 21 days.
2. An exception request and updated Engineering Report and Project Summary Report were not received by DPU with this submittal. Please email in or send attached to the next engineering response letter.
3. As previously commented, perform a corrosive soil study by taking soil samples along the proposed waterline alignment are in accordance with Henrico DPU standard 4.2.02G. Provide protection of water main and appurtenances against aggressive soils in accordance with DIPRA recommendations and the DI pipe manufacturer recommendations.

C201 Site Details

4. Are there any fire division walls or building separation walls between the townhomes? Building code requires one or the other per R302.2.2 on common walls in the VA Residential Code 2018 edition. Also, ISO fire flow of 2125 will round up to 2250gpm and would require 3 FHs.

C300-C301 Existing Conditions and Demolition Plan

5. If the existing waterline easement was not recorded, it will need to be included in the application for the offsite easement and recorded prior to plan approval or to subdividing the property.
6. Show GIS ID of existing fire hydrant. 284NE003H
7. Show recorded utility easement for trunk sewer where sewer for this project will drain too.

C351 Master Utility Plan

8. Show and label all manhole information related to connection to existing trunk sewer. Label where connection will occur.
9. Add note regarding HOA ownership of sanitary lateral to the master utility plan sheet.

C400-C402 Site and Utility Plan

10. As previously commented, provide bearings for all sewers on the plan view.
11. Provide and show an easement for sanitary sewer MH30 to ExMH6.1. Additionally, adjust easements around fire hydrants to have at least 8' of clearance all around.
12. Include "f/c" or "b/c" on plan view call outs when specifying the distance between the waterline to the face or back of the curb.
13. Add circle for vertical waterline adjustment at other large storm pipe at intersection of Whiteside Road and Pine Fringe Place.

14. There are two storm structures on Landing Hill Lane that do not meet separation requirements from sanitary sewer main. Adjust these structures so that there is at least 5' edge to edge separation from sewer main.
15. Adjust water meter connections for Block W lot 4 and Block V lots 4&5 to have minimum separation of 3'.
16. The fire hydrant between blocks E and H must not be further than 7' from the curb per D-495.
17. The flushing hydrant at the end of Landing Hill Street does not have enough separation from the storm structure. Show flushing hydrant going to the left and parallel to the Block R lot 4 water service with at least 5' separation.
18. As previously commented, remove the call out of the waterline adjustment for the fire hydrant to the left of storm structure 140.
19. Relocate the lights along Block O to be out of the utility easement.
20. Relocate the water meter serving Block O lot 4 to be closer to the intersection of Stage Landing Road & Greenpark Way to keep it out of the waterline adjustment.
21. Adjust the waterline near Landing Hill Street and Greenpark Road so that there is 10' of separation from sewer main.
22. Provide a fire hydrant at the corner of Landing Hill Lane and Landing Hill Street (Block L lot 6) to provide adequate hose lay for buildings along Landing Hill Lane. Waterline can be extended while maintaining 6' separation (OD to OD) from storm pipe. Hydrant H4 can be relocated to this location.
23. Provide confirmation that the run of sewer from MH8.1 to MH8 will not be constructed under the Drybridge Commons offsite sewer plans. Otherwise, this run of sewer shall be abandoned with this plan.

C405 (Water and Sewer Details)

24. Include an updated water and sewer material quantities list. It was previously shown on this sheet but is now missing.

C610-C611 (Waterline Profiles)

25. Show valve symbols on all waterline profiles.
26. Regarding Greenpark Road Waterline Profile:
 - Correct the "Connection to..." labels to say revised street names.
27. Revise the following for Whiteside Drive Waterline Profile:
 - Change "drive" to "road" in profile title.
 - Show and call out the missing 45° bend at the connection point.
 - Show the waterline adjustment needed for the hydrant at STA17+75 as called out on the plan view. Please be reminded that bends are not allowed within fire hydrant leads.
28. Revise the following for Landing Hill Street Waterline Profile:
 - Coordinate the end of this profile with what is shown and called out on the plan view.
29. Revise the following for Greenpark Way Waterline Profile:
 - Combine and rotate bends at the waterline adjustment near STA12+80. Revise callout wording to say, "rotate first two vertical bends horizontally to achieve a combined 11.25° horizontal deflection." Use this same wording on the plan view. This same method can apply to the last two vertical bends for the other 11.25° bend.

C610A Water Model

30. Label all pipes on the map.
31. List junction nodes and elevations within the pipe report table.
32. Correctly label ex. 12" main.
33. There are duplicate pipe labels for P-2 within the pipe report.
34. Model results must show pressures for ISO fire flow and how the fire flow is divided up between multiple hydrants.

C613 Sanitary Profiles

35. Label separation distance (OD-OD) between bottom of storm pipe and top of sanitary sewer in both profiles on this sheet.

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L100 Landscape Plan

36. Show all utilities with easements.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4993 or John Clark at 501-4501 for any necessary clarifications.

Kiara L Korkuc

Kiara Korkuc
Utilities Engineer

cc: Craig Shelton – HHHunt Communities
Abigail Rogers – Young Men's Christian Association of Greater Richmond

bc: Marchelle Sossong
Daniel Ivy
John Clark
Aimee Crady, Planning

KLK/djm