Stig Owens, PE Sekiv Solutions 14207 Pond Chase Place Midlothian, VA 23113

> RE: The Hillside 9216 Quioccasin Rd POD2023-00111

Dear Mr. Owens:

The Department of Public Utilities has completed a review of the water and sewer plans that are part of the plan of development submitted to the Planning Department March 15, 2023.

DPU recommends approval of these plans by the Director of Planning.

Please address the following comments before submitting the construction plans for signature.

General:

1. An Information Sheet for Preparation of Agreements for Water and/or Sewer Service has not been submitted. Provide a completed F-5 (Information Sheet for Legal Agreement) from Henrico DPU Standards. The Information Sheet allows the Department of Public Utilities to prepare the Water and Sewer Agreements which must then be executed by the Owner and the County prior to approval of building permits or prior to the utility preconstruction meeting and authorization to proceed with utility construction. It is recommended that the Information Sheet be submitted as soon as possible to avoid delays in either of these steps. Preparation of the Agreements may take up to 15 days after receipt of the Information Sheet and execution by the County after execution by the Owner may take up to 10 days. Conflicts between the completed Information Sheet and the plans may generate additional review comments.

C-000 (Cover Sheet):

2. Provide original signature and date on the engineer seal. A facsimile of seal, signature and date is acceptable on all other sheets.

C-101 and C-102:

3. Label the size and material of all existing water and sewer mains shown within the plan sheet.

C-105:

4. It's difficult to distinguish between the proposed and existing utility easements. Darken the proposed utility easements so it can be clearly seen on the plan.

- 5. DPU has no information pertaining to the recordation of the utility easement located on Parcel 750-746-1820. If this easement is not recorded, then it will need to be recorded with this project. A tech-memo will not be issued until the offsite easement is recorded for the proposed sanitary sewer extension.
- 6. Change the easement reference from "water and sewer easement" to "utility easement."
- 7. No fence is allowed over top of the proposed utilities nor within the utility easement. If a fence is desired, provide a gate where the fence crosses the sewer main. Be advised, the gate posts would need to be located outside of the utility easement and the sewer main will need to be centered within the gate post.
- 8. Relocate the sewer lateral connection (north of MH-3) from the sewer main to connect directly to the manhole.
- 9. Provide a typical callout for the sanitary sewer laterals. Include the size, material, slope, and detail number of the sewer laterals.
- 10. Provide a note indicate the sanitary sewer laterals are private and maintained by the Owner.
- 11. Provide a cleanout at the edge of the utility easement for the 6" lateral to serve the Parcel 750-746-3104.
- 12. The sanitary sewer design is not acceptable at this time until the Structure's Finish Floor Elevation is provided on the utility plans. Additional comments may be generated once this information is provided on the plans.
- 13. Label the distance from the water line to either the face or back of curb.
- 14. Include the size of the corp. stop, size and material of the domestic service line, and detail numbers in the typical callout for the water meters.
- 15. Provide 2-3' separation between water services on opposite sides of the pipe.
- 16. The valve that is part of the tapping sleeve & valve should be installed near the connection. Also, ensure the valve is not located in the driveway apron.
- 17. Show the location of the stormcapture detention system access manhole on the utility plan.
- 18. The detention system will conflict with the installation of the sanitary sewer laterals due to the depth of the laterals and detention system. Review and redesign the sewer laterals and/or detention system.
- 19. Since this is one property, one water meter and one sewer lateral for the building would be acceptable. If the Owner choses to subdivide the property and sell individual lots then individually meters and sewer laterals for each unit would be required.
- 20. Provide a profile or cross section detail of the domestic service line crossing the detention system.
- 21. Update the utility quantities per the plan comments.
- 22. Provide the Parcel numbers for the adjacent property owners.

C-201:

23. Sanitary sewer stationing should be provided on the profile, but the stationing should begin at the most downstream manhole and increase upstream with equalities at each junction manhole. Minimize stationing changes by using the longest chain of sanitary sewer line run in the same stationing sequence.

- 24. Decrease the slope of the sanitary sewer to ensure the sanitary sewer can serve the basement level of the homes and to avoid the sanitary sewer from going over the water main near STA 1+30.
- 25. Change the material type of the water main from "PVC" to "DI" where there is 100% backfill. The material of the pipe needs to transition at the water fittings.
- 26. Remove the deflection in the water main between STA 0+90 and 1+30 and keep the water main straight.
- 27. If sewer will be installed over the water main, both water and sewer pipes will need to be ductile iron.
- 28. Show proposed grading at the water main connection. The grade lines are cut off due to the tapping sleeve & valve reference.

<u>C-202:</u>

29. Show all water and sewer pipes/service crossings on the storm sewer profiles.

C-507:

- 30. Are there division walls or fire walls between each unit?
- 31. How was the Total Floor Area calculated?

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4508 or John Yi 501-4511.

Sincerely,

Alice Thompson Utilities Engineer

cc: Maurice Naylon, Walutes Capital, LLC

bc: Ralph Claytor

Marchelle Sossong

Daniel Ivy

Kristin Smith, Planning

ANT/vr