DEPARTMENT OF PUBLIC UTILITIES 804-501-4517

COUNTY OF HENRICO

INTER - OFFICE MEMORANDUM

TO:

Mike Kennedy, Planning

FROM:

Alice Thompson, Public Utilities

SUBJECT:

Townhomes at Discover United Methodist Church (POD2021-00293)

DATE:

August 2, 2021

We have reviewed a preliminary plan for the referenced project submitted to the Planning Office on July 14, 2021. This preliminary plan proposes to construct 25 townhome units. Our comments are intended to provide guidance for requirements for design and construction of the water and sewer service that will be provided by the County systems. Construction plans for water and sewer shall be designed in accordance with DPU Standards. The levels of detail provided in the following comments are based on the amount of detail provided on the plan.

General:

- 1. The extent of water and sewer requirements cannot be determined for the parcel until complete construction plans that include a separate Utility Plan Sheet (Water and Sewer Plan) have been submitted.
- 2. Construction Plans for review will need to be sealed and signed by a Professional Engineer or a Land Surveyor B.
- 3. Agreements for water and sewer service will be required for this project.
- 4. The sanitary sewer design to serve the proposed townhomes is not acceptable due to the building's finish floor elevations. Also, the proposed sewer lateral should have a minimum of 5' of cover to the easement line. The sanitary sewer will need to be extended from the existing manhole located (off Lauderdale Dr) on the Discovery Methodist Church site to serve the proposed townhomes.
- 5. Include a demolition plan for the abandonment of the existing 6" onsite water line and fire hydrant located at the entrance off Gayton Rd.
- 6. Fire protection requirements cannot be determined for this project at this time. ISO calculations have not been provided with this plan. The need for fire hydrants and hydrant locations will be determined after ISO calculations have been provided and reviewed.
- 7. Fire hydrant should be installed at a minimum of 50' from the structure. Relocate the fire hydrant (between Unit 7, Block C and Unit 1, Block D) on the opposite side of the drive aisle in the grass island.
- 8. Change the size of the proposed domestic service lines from "3/4" water services" to "1" water services" between the water main connections and meter boxes.
- 9. Label the distance from the water main to either the face or back of curb.
- 10. The existing 6" onsite water line will need to be abandoned at the main. A new tap to the 12" water main will be required to connect the 8" water line to the 12" main in Gayton Rd.
- 11. Label the distance from the proposed water meters to the building structure.
- 12. Two valves are required at tee. Provide additional valves on the 8" water main.

- 13. Provide a typical callout to include the size, material, and slope for the proposed the sanitary sewer laterals. Be advised, DI laterals are required on DI mains.
- 14. Provide benchmarks no more than 500 apart along the lines of the construction but outside of the limits of construction.
- 15. Reference the parcel numbers for the adjacent property Owners on the plan.
- 16. Include a sanitary sewer and water line profile within the construction plans.
- 17. Label the material of the proposed and existing water and sewer pipes shown on the plan.
- 18. Provide a 20' utility easement around all public mains and appurtenances (i.e., meters, boundary valves, water mains, and fire hydrants).
- 19. Provide four northing/easting points on the plan.
- 20. Provide internal angle at the proposed manhole connection and upstream manholes.
- 21. Sewer mains located in inaccessible areas should be ductile iron.
- 22. Add the following note, "Connections to existing manholes without stubs or bricked-up openings shall be the equal of either Kor-N-Seal w/stainless steel expander ring or Press-Seal w/nylon expander sleeve installed by core drilling manhole and in strict accordance with manufacturer's specifications."
- 23. Include the following items with the construction plan submittal:
 - Local Review form (F-10).
 - DPU Engineering Report (Form F-1) with project checklist and water and sewer design calculations.
 - Water system flow availability request (Form F-7).
 - Other related DPU utility details.

If you have any questions, please call me at 501-4508 or John Yi at 501-4511.

Sincerely,

Alice Thompson Utilities Engineer

cc: Stig Ownes, PE Sekiv Solutions

bc: Ralph Claytor Marchelle Sossong

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