

commonwealth of virginia \mathbf{County} of $\mathbf{Henrico}$

May 26, 2022

Jonathan Winks, P.E. Timmons Group 4701 Owens Way, Suite 900 Prince George, VA 23875

RE: Residence Inn Airport
500 W Williamsburg Rd

FILE NO: 5565; POD NO: 2022-00055

Dear Mr. Winks:

We have reviewed the construction plans submitted to the Planning Department on May 5, 2022.

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. An Information Sheet for Preparation of Agreements for Water and/or Sewer Service has not been submitted. 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 pre-construction 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.
- 2. Revised F-1 (Engineering Report) wasn't included in this submittal. As previously commented, the average design flow within the Water System Design is required to be in GPM. Review and updated subsequent calculation as necessary. Resubmit the form with the next submittal.
- 3. As previously commented, per the Water and Sewer Design Calculation, the lowest resident pressure in the system at total design peak flow is referenced as 30 psi. Provide a copy of the water model results to DPU for review.
- 4. The landscape and lighting plans cannot be approved until the final utility layout is approved by DPU.

C0.1 (Cover Sheet):

5. Update Material Quantities per the plan comments.

C1.7 (Utility Notes and Details):

6. Total Floor Area (effective area) appears to be incorrect. The area should be calculated with 100% of largest floor (or an area with fire rated wall) plus 50% of rest of floors (or areas with fire rated wall). If each floor is 25,792 sq ft, it will be 25,792+12,896+12,896+12,896=64,480. Calculation shown appears to have 25,792 sq ft and rest of floors are 40,028 sq ft.

C1.8 (Utility Notes and Details):

7. Replace D-425 with D-435 and reference D-435 on the utility sheet(s).

C2.0 (Existing Conditions and Demolition Plan):

- 8. As previous commented, reference the deed book and page number (DB & PG) for the utility easement around the existing sewer main parallel to Audubon Dr.
- 9. Show the existing fire hydrant that will be removed on Trampton Rd. This is called out in the utility sheet as to be relocated.

C4.0 (Utility Plan):

- 10. Show the fire hydrant on Audubon Dr.
- 11. Show the existing water main on Audubon Dr in dash like shown on Trampton Rd.
- 12. Is there a way to re-arrange the underground retentions to relocate water main out of parking spaces and grass area? This is to install water main under the pavement and out of parking area in accordance with the DPU Standards.
- 13. The water main need to be accessible all time. Relocate the water main out of the parking space.
- 14. As previous commented, label the size and material of the domestic service line between the water main connection and meter and for the fire line between water main connection boundary valve.
- 15. Revise the easement line to be visible (by changing line type scale or other method).
- 16. As previously commented, provide the internal angles at sanitary sewer manholes.
- 17. Show the water main adjustment of 8" water main crossing the storm pipe near Audubon Dr
- 18. Is there need of 8" sanitary sewer lateral pipes (when upstream pipes are 6")? If not revise the sanitary sewer to 6" and make the sanitary sewer lateral slope to min 2.08% at the public sanitary sewer.
- 19. Label MH3 as a doghouse manhole.
- 20. MH3 appears to be in the sidewalk? Manholes are not allowed in the sidewalk. You can eliminate this manhole with 6" lateral connection to the sanitary sewer main.
- 21. If 6" lateral is sufficient to serve this property, relocate the connection approximately 20' west of current connection point. This will be able to install monitoring manhole in the island and have a better angle of the storm crossing.
- 22. Label manhole 2 as the monitoring manhole.
- 23. The fire hydrant cannot be relocated. The fire hydrant will need to be abandoned and returned to DPU and replace with a new fire hydrant.
- 24. All fire hydrants need to be at least 50' away from the structure. If this is not possible exception will be needed. Relocate fire hydrants or submit an exception request letter to the director of DPU.

- 25. Install the boundary valve for the fire line at the edge of the easement line.
- 26. Additional water valve is needed for the fire line at the tee.
- 27. The dedicated fire hydrant is not accessible for fire trucks. Relocate the dedicated fire hydrant to be accessible with the fire truck.
- 28. Remove the 8" gate valve between the tee branch for the fire line and vertical alignment as it is not needed.
- 29. Include the response to previous comment #52 on providing utility easement to the future development of the adjacent property in the plan.

C4.1 (Sanitary Sewer & Waterline Profiles):

- 30. Revise the sanitary sewer pipe size and slope as needed.
- 31. Label MH2 as monitoring manhole and reference the detail.
- 32. Eliminate all drop connections between the sanitary sewer main and the monitoring manhole (MH2).
- 33. Label the minimum separation between storm pipes and sanitary sewer pipes in the sanitary sewer profile.
- 34. Relocate water connections (service and fire) out of the vertical adjustment.
- 35. Show the sanitary sewer crossing in "Waterline 2 Profile".

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

Sincerely,

John Yi

Utilities Engineer

cc: Neil Amin, Shamin Hotels, Inc.