

July 25, 2022

Zackary A. Wilkins, PE
Townes Site Engineering
1 Park West Circle, Suite 108
Midlothian, VA 23114

**RE: HCA at Gateway Square
12401 W. Broad Street
FILE NO: 5471, POD2022-00329**

Dear Mr. Wilkins:

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 on July 8, 2022.

DPU continues to recommend approval of these plans by the Director of Planning.

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

General:

1. As previously commented, 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. As previously commented, review the following comments on the Water and Sewer Design Calculations:
 - a. How was the equivalent residential units calculated? It should be calculated by dividing the Average Design Flow (GPM) by 300.
 - b. The design basis on the Water System Design is the same as the Sanitary Sewer Design. Update all subsequent calculation in the Water System Design.
 - c. Provide the Lowest Residual Pressure in System at Total Design Peak Flow under the Water System Design.

Cover Sheet:

3. Our records indicate a change in ownership for Parcel Numbers 730-765-7039 & 730-765-1853. Revise the information provided on number 1 under the Site Data accordingly and be sure to include a contact person for the Owner.
4. As previously commented, provide an original signature and date on the engineer's seal.
5. As previously commented, update the Water and Sewer Quantities per the plan comments.

6. The cover sheet references this project as a non-medical building; however, the utility plan references the building as a medical building. Coordinate cover sheet with the utility plan sheet.

C-13:

7. As previously commented, provide a note to see plans titled, "Animal Hospital at Gate Square, Dwg File No. ____ - ____, by Townes Site Engineer" for information concerning existing utilities.
8. As previously commented, the existing utilities shown on the utility plan does not coordinate with the approved Gateway Square construction plans. Update the construction plans to match the approved Gateway Square plans.
9. Revise the Dwg File No for "Gateway square" referenced on the note to "2021-100".
10. As previously commented, there are several texts overlapping the utility references. Fix the text overlap so the utility referenced can be clearly seen.
11. As previously commented, the proposed utility easements overlap the existing easements. Combine the utility easements.
12. Label the size and material of the existing sewer mains/utilities.
13. Reference plat book and page number (PB 137, PG 121) for the existing public utilities easements shown on the plan.
14. As previously commented, label the distance from the proposed water line to either the face or back of curb.
15. As previously commented, modify the utility easement reference from "Waterline Easement" to "Utility Easement."
16. Use 45° bends in place of the 90° bends in the proposed water line.
17. Relocate the 1.5" water meter in the grass island with the fire service line. No bends are allowed in the service line between the water meter and the corp. stop.
18. Shift fire hydrant connection approximately 7' so that the fire hydrant is located 4' from back of curb. The nozzles on the fire hydrant should not be blocked by parking spaces.
19. Change the fire hydrant tee connection from 8" tee to 8"x6" tee.
20. Show the valve on fire hydrant lead.
21. Reference the boundary valve.
22. Label the size and material of the fire service line before the boundary valve.
23. Provide a reference for the proposed domestic backflow preventer. Be sure to include within the callout, size, detail number and sheet location of the backflow preventer detail.
24. A RPZ fire system backflow preventer is required.
25. The detail number provided for the fire system backflow preventer is incorrect. Revise as necessary.
26. Move the fire system backflow preventer outside of the utility easement.
27. There is an extra existing valve between the existing water line and sewer line west if the existing water line stub.
28. As previously commented, the existing sewer service that will not be utilized with this project will need to be abandoned in accordance with DPU Standards. DPU recommends vacating the existing utility easement around the sewer service as well.
29. As previously commented, provide the internal angle at the manhole connection.
30. The monitoring manhole needs to be relocated out of the traffic area for the safety of the monitoring crew.

Sheet C-17:

31. As previously commented, remove the Project Summary Report Form from the construction plans. A Project Summary Report is not required for this project.

REVISED CONSTRUCTION PLANS REQUIRED

- 32. As previously commented, remove the NOI and Engineering Report (Page 1 and 2) from the construction plans. The hard copy provided with the construction plans will suffice.
- 33. As previously commented, the fixture valve for the kitchen sink is incorrect. Review and update all subsequent calculations.
- 34. As previously commented, the reduction factor on the Fire Flow Estimate Form for the sprinkler system is 50% instead of the 25%. Review and update all subsequent calculations.

Sheet C-18:

- 35. As previously commented, show all utility crossings on the water profile. Also, be sure to update the water line profile per the plan comments.

Sheet C-19:

- 36. As previously commented, several details provided on the plan will not be utilized with this project. Remove all details that do not pertain to the proposed construction plans.

Sheet C-20:

- 37. As previously commented, an irrigation backflow preventer detail has been provided; however, an irrigation meter has not been identified on the construction plans.

Sheet LI-1:

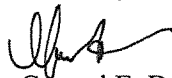
- 38. The utilities shown on the lighting plan are not in accordance with the utilities shown on sheet C-13. Revise accordingly.

Sheet LI-1:

- 39. Tree plantings must be located outside of all utility easements or at least 10 feet away from utilities within right of ways. All other proposed landscaping must not obscure visibility or hinder maintenance of above grade or at grade utilities. Any non-tree landscaping within utility easements requires the following statement on the landscaping plan: "The owner is responsible for replacement of any planting (i.e. shrubs, etc.) damaged or removed by DPU, or it's agent, as required for maintenance of county owned water and/or sewer facilities."

If you have any questions concerning the above noted comments or the plans, please contact me at 501-7314 or Alice Thompson at 501- 4508.

Sincerely,



Carmel E. Duverné
Utilities Engineer

cc: John Revercomb, Mesa Commercial, LLC

bc: Ralph Claytor
Marchelle Sossong
Rick Schwartz, DPW
Daniel Ivy
Aimee Crady, Planning

CED/tt

REVISED CONSTRUCTION PLANS REQUIRED