

December 16, 2021

Laura Anderson, PE  
Kimley-Horn and Associates, Inc.  
1700 Willow Lawn Drive, Suite 200  
Richmond, VA 23230

**RE:** Sheetz at Regency  
1401 N Parham Rd  
File No: 1662; POD2021-00509

Dear Ms. Anderson:

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 November 29, 2021.

DPU recommends approval of these plans by the Planning Commission.

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 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. The DPU Monitoring and Compliance Division is currently reviewing the NOI form information. Any comments requiring further action will be forwarded to you upon receipt by our office.
3. P.E. Seal with original signature and date is required on the Cover Sheet. A facsimile of seal, signature and date is acceptable on all other sheets.

**CE-101 (Demolition & Phase I ES&C Plan):**

4. Reference the size and meter number for the existing meter to be abandoned.
5. Specify on the plan the existing meter will be abandoned with this project.
6. Provide a note indicating all existing utilities to be abandoned shall be abandoned in accordance with DPU Standards 1.4.01C and 10.3.10.
7. Show the location of the existing fire hydrant at the intersection of Quiocasin Rd and Starling Dr.

**CG-301 (Stormwater Profiles):**

8. Show the water and sewer main crossings on the storm sewer profiles.

**CU-101 (Utility Plan):**

9. Provide four northing/easting points on the plans.
10. Is the existing utility easement (DB 1675, PG 927) located east of the proposed building shown correctly on the utility plan? The easement does not align with the existing sanitary sewer main.
11. Label the material of the existing water main.
12. Ensure the existing water main will maintain the 3.5' of minimum of cover with the proposed grading.
13. Change the easement callout around the proposed fire hydrant from "Waterline Easement" to "Utility Easement."
14. The proposed clearance bar structure for the Kiosk area cannot be installed within the utility easement.
15. Shift the island for the proposed order Kiosk so the existing water main will not be installed within the proposed gutter pan.
16. Label the material of the proposed irrigation service line between the water main connection and water meter.
17. Reference the demand for the irrigation meter on the plan.
18. The corp. stop and service line for the proposed irrigation meter must be one size larger than the water meter size.
19. Label the size of the domestic backflow preventer and reference the detail number and sheet location of the backflow preventer detail in the backflow preventer callout.
20. Provide the direction of flow arrows on the existing sewer main.
21. Combine the flow of the sewer laterals before the lateral enters the monitoring manhole.
22. Provide the internal angle at the doghouse manhole.
23. Provide a table to address the raising of existing manholes to finished grade. This table should include:
  - a. Existing top elevation.
  - b. Proposed top elevation.
  - c. Amount of modification required, i.e. vertical feet of raising or lowering.
  - d. Proposed method of adjusting each manhole. Phase of construction each manhole modification is to be done.
24. Provide a note that a maximum of 12" adjustment may be done utilizing pre-cast riser rings to raise frame & cover. For additional height adjustment, pre-cast manhole sections must be installed. Decreasing manhole depth must be done by removal/replacement of pre-cast manhole sections.
25. The proposed storm sewer pipe is too close to the existing manhole (SSMH1). Relocate the storm sewer a minimum of 8' from the manhole
26. The proposed lighting structure located in the island east of the trash enclosure near the entrance to the site is too close to the existing sewer line. Lighting structures should be installed 10' from the water and sewer mains/utilities.
27. Provide the GIS MH ID for the existing manholes.

**CU-301 (Water Model and Fire Flow Calculations):**

28. Provide signatures on the Domestic Meter Sizing Form and Fire Flow Estimate Form.
29. The domestic demand for a Combined Fixture Value Total of 202 is approximately 60 gpm. Update the Water Model Results as necessary.
30. The minimum demand for fire flow is 500 so a Fire Flow Demand of 1500gpm should be pulled in the Water Model.

**Sheet CU-302 (Utility Profiles):**

**REVISED CONSTRUCTION PLANS REQUIRED**

31. Drop stack connections cannot be installed on the monitoring manholes. Remove the drop stack connection at SSMH-1 and tie the sewer lateral to the bench of SSHM-1.
32. The invert in(s) at SSMH are incorrect. Review and revise as necessary.
33. Per the drop connection detail (D-130), a minimum of 2'-6" must be provided between pipe invert and drop connection invert.
34. Show the drop connection at SSMH-1 and specify the drop connection invert on the sanitary sewer profiles.

**Sheet CU-105 (Utility Details):**

35. Provide the Typical Installation Reduced Pressure Backflow Preventer Irrigation System with Meter (D-410), Typical Fire Hydrant detail (D-495), 1-1/2" AND 2" Meter Setting with Corporation Stop (D-534), Thrust Blocking details (D-700) on the plans.
36. Remove the 1 1/2" AND 2" Meter Setting with Tapped Plug and 1 1/2" AND 2" Meter Setting detail (D-525-1 and D-525-2) from the plans.

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

Sincerely,



Alice Thompson  
Utilities Engineer

cc: Tony Caruso  
  
bc: Ralph Claytor  
Marchelle Sossong  
Megan Gallagher  
Daniel Ivy  
Planner, Aimee Crady  
  
ANT/vr

**REVISED CONSTRUCTION PLANS REQUIRED**