

March 23, 2022

Steve Worthington, P.E.
Christopher Consultants
11551 Nuckols Road, Suite Z-1
Glen Allen, VA 23059

**RE: Coca-Cola Mid-Atlantic Bottling
4530 Oakleys Lane
FILE NO. 4533; POD2022-00098**

Dear Mr. Worthington:

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 March 8, 2022.

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 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. Provide an Overall Master Utility Plan that show the locations of all existing water and sewer lines and utilities.
3. Provide a hydraulic water model for the proposed water system design.
4. Landscaping and lighting cannot be approved until the final construction layout is approved.
5. Review the below comment from Monitoring & Compliance:
 - a. Monitoring & Compliance is currently in the process of providing a modification to Coca-Cola's Industrial Wastewater Permit that will include loading limits for COD, so we need to account for the flow from the railcar process in order to accurately calculate these loadings. This waste stream consists of fructose, which is a main ingredient in their product and has a high concentration of COD. Since this process bypasses pretreatment, there is no way to measure volumes being discharged to the sewer system.
 - b. There is non-domestic water flowing through the lateral that is coming from the Railcar Unloading facility. The industrial wastewater from the railcar facility will need to be re-routed to go through the pretreatment system.

Cover Sheet:

6. Plans should have an original signature and date on the engineer's seal.

Sheets C300-C302:

7. Provide a note to see plans titled, "Coca-Cola Bottling Facility Expansion DWG File No. 2005-011, by Prime Engineering Incorporated" for information concerning existing utilities onsite.
8. Show the location of all existing water and sanitary sewer lines per the approved 2005-011 as-built plans. Several utilities are missing from the plan sheet and do not coordinate with DPU records.
9. Have the existing utilities shown on the plan been field verified?
10. Provide a note on the plan indicating all existing utilities to be abandoned shall be done in accordance with DPU Standards 1.4.01C and 10.3.10.
11. Label the size and material of the water and sewer pipes shown on the plan.
12. Include 4 northing/easting points on the plan sheet.
13. Label the sanitary sewer as "Private" on the plans.

Sheet C410:

14. Label the distance from the water main to either the face or back of curb.
15. Show the location of the water line adjustment by provide an oval or bubble around the area to be adjusted for storm sewer crossings.
16. Change the reference of the easement callout from "Waterline Easement" to "Utility Easement."
17. Th fence cannot be installed over top of the proposed water main. Either provide a gate over top of the water main with the gate posts located out of the utility easement or provide an encasement pipe around the water main where the fence crosses the water main.
18. There appears to be several lighting structures within the utility easement. Shift the lighting structures out of the utility easement.
19. Provide a boundary valve on the proposed fire service line per D-476.
20. The proposed fire hydrant lead located parallel to the storm sewer pipe between STR-135 and 136 is too long and the fire hydrant is not accessible for fire trucks. DPU recommends installing a grass island and relocating the hydrant in the grass island. Consult with Fire concerning the location of the fire hydrant.
21. Use a 16" x 12" tapping sleeve & valve to connect to the existing water main in Oakley's Lane to avoid a water main shut down.
22. Remove the proposed 16" gate valve near the proposed tee connection on the 16" water main. Installing a gate valve on the existing water main will cause a water main shut down.
23. Specify the horizontal separation between the fire hydrant and storm structure (STR-600).
24. Show the approximate location of the backflow preventers in the building.

Sheet C411:

25. Provide a note specifying the proposed fire system and domestic service line for the Warehouse Expansion will not connect to the existing building. There shall be no cross connections between the existing and proposed buildings.
26. How will cutting and removing portion of the existing water line affect fire flow and pressures? Evaluate the pressures in the water system with the removal of the existing water main.
27. Per DPU records, the existing water system design is not looped; therefore, removing portion of the water line will interfere with services to the back of the building, the Railcar Unloading facility building and the proposed Maintenance building addition that is currently under review through the POD process.

Sheet C412:

28. There is an existing force main that was installed with the 2005 as-built plans in the location of the proposed force main. DPU recommends surveying the site to ensure the force main was installed and can be utilized for this project.
29. Update the sanitary sewer profile per the comment above.

Sheet C415:

30. There is an error in the fixture value calculation for kitchen sink. Review and revise the Total Combined Fixture Value Total and Maximum Demand.
31. Will there be Class A Door with 2hr rated fire walls between the two buildings? If not, then the building cannot be counted as a separate building.

Sheet C610:

32. Show the water fitting symbols (valves, reducers, bends, etc.) located on the water main.
33. Use (4) 45°bends to adjust the water main under the storm crossings.

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: Darren Gonsalves, CCBCC Operations LLC

bc: Ralph Claytor
Marchelle Sossong
Daniel Ivy
Megan Gallagher
Tony Greulich, Planning

ANT/vr