Ryan Yauger, P.E. Bohler Engineering 9100 Arboretum Parkway, Suite 300 Richmond, VA 23236

> RE: Outdoor Storage Yard at 1955 Portugee Rd. 1955 Portugee Rd. POD NO: 2022-00599

Dear Mr. Yauger:

We have reviewed the construction plans submitted to the Planning Department on March 2, 2023.

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. Provide the water quantities on the plan.
- 2. Landscaping cannot be approved until final utility layout is approved on plan.
- 3. 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.

### **Cover Sheet:**

4. Provide an original signature and date on the engineer's seal.

#### **Sheet C-202 – C-207:**

5. Fire hydrants can not be relocated; it must be removed and replaced with a new hydrant. Change the callout of the fire hydrant to say, "to be removed" (TBR).

# **Sheet C-501:**

6. Update the fire flow test information to include the available flow from the 30" water line in Portugee Road since the water line connection is not in La France Rd.

#### **Sheet C-502:**

- 7. Provide a blow up of the fire hydrant connections in Portugee road to ensure no conflicts will occur between the hydrant and proposed/existing utilities.
- 8. DPU does not allow the installation of a 10" pipe. The water line will need to be upsized to a 12" pipe.

- 9. Remove the callout "by county" with the tapping sleeve and valve callout. The tapping sleeve and valve are not installed by the county.
- 10. Show a blow-up/inlet of the water line connection area in Portugee Road.
- 11. Widen the utility easement to a 20' utility easement.
- 12. Provide an easement around the fire hydrant northwest of the VIC building.
- 13. Add a gate where the water line crosses the fence for access to the water line. The water line should be centered within the gate. The gate post will need to be located out of the utility easement.
- 14. Fire hydrants cannot ne located no more than 7' from the back of curb. Review the fire hydrants off Portugee Road.
- 15. Show the valves on the fire hydrants in Portugee Road.
- 16. Reference the angle of bends on the water line.
- 17. Specify on the plans if the distance labeled from the water line is to the face or back of curb.
- 18. The service line to the water meter should be copper pipe, not a DI pipe.
- 19. Change the size of the service line and corp. stop to be 1 ½". They should be one size smaller than the water meter.
- 20. Show the location of the backflow preventor inside of the office building.
- 21. Specify the size of the domestic backflow preventor.
- 22. Show and refence the OS-75 oil separator on the plans.
- 23. Add a note stating that the motorcycle building and VIC building will not be served by water.
- 24. Change the size of the fire hydrant lead located north of STM-90 from 8" to 6" per D-495.
- 25. Show a reference to the proposed plug at the end of the water line.
- 26. As previously commented, provide four (3) N/E points on the plan.

#### **Sheet C-507:**

- 27. Remove Detail D-415.
- 28. Add the following details: D-405, D-470, D-495, D-520, D-730, D-740.

#### **Sheet C-702:**

- 29. Tree plantings located outside of all easements or at least 10' from all utilities within right of way.
- 30. The owner is responsible for replacement of any planting (i.e. shrubs, etc.) within DPU water and sewer easements that is damaged or removed by DPU, or it's agent, as required for maintenance of county owned water and/or sewer facilities.
- 31. No landscape plan can be approved until the final utility layout is approved.
- 32. Update the utilities on the landscape plan to match the utility plan.

# **Sheet C-801:**

- 33. Provide a water line profile on the utility profiles.
- 34. Add updated sheet index to include the water line profile.
- 35. Show all the water crossings on the storm profile.

#### **Sheet C-903:**

36. Show the proposed fire hydrants on the existing water line on the striping and signage plan.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4992 or Alice Thompson at 501-4508.

Sincerely,

Nolan Ekers

Nolan Ekers Utilities Engineer

cc: Brian Miller, P.E. Bohler Engineering

bc: Ralph Claytor Marchelle Sossong Mike Aust, DPW

Daniel Ivy

Tony Greulich, Planning

Alice Thompson

NBE/vr