

December 13, 2023

Thomas Price, PE  
Timmons Group  
1001 Boulders Parkway, Suite 300  
Richmond, VA 23225

**RE: Three Lakes Park Restroom Addition  
400 Sausiluta Dr.  
POD NO. 2023-00161**

Dear Mr. Price:

We have reviewed the construction plans submitted to the Planning Department on November 27, 2023. Please address the following comments and **resubmit revised construction plans** for review.

**General:**

1. Provide the design fire flow and the lowest residual pressure in system at total design peak flow in the water and sewer design calculations. It's the 2<sup>nd</sup> page of the Engineering Report.

**Cover Page:**

2. Provide an original signature and date on the Engineering Seal.
3. Update the utility quantity list per the comments made.

**Utility Plan C5.10 & C5.11:**

4. Label to adjust all existing water lines per D-485 not D-454.
5. Notify Mr. Steve Hart and add a note to the utility plan stating that DPU will not be responsible for replacing the special flagstone pavers to do repair or maintenance to the existing water line under the flagstone pavers in the future.
6. Delete the gate valve and tee if you are using a corporation stop to make the tie in.
7. Label the pipe between the 4" water line and the meter to be 2" copper.
8. Label to install the meter per detail D-534 instead of D-530 & D-535 since you are planning to use a corporation stop to make the tie-in instead of cutting in a tee and valve.

**Utility Notes and Details C5.20:**

9. Replace detail D-530 and D-535 with detail D-530.
10. Add detail D-700.

**Storm Sewer Profiles C6.30:**

11. Update the label for the vertical line adjustment detail to be D-485.

**Pump Station Plan U1.00-U1.10:**

12. The force main on the far left side from the existing sanitary sewer 204SE018 to the nature center is 3". The force main from the bathroom pump station to the existing 3" force main is 2".
13. Show GIS elevations at the existing manhole in addition to your surveyed elevations.
14. Verify the location of the 2" or 3" force main tying into manhole 204SE011. What is this force main for? Where is this force main going? Where is the pump station for this force main?
15. Provide elevation in addition to the dimensions shown in pump station detail. Provide the invert in where the 6" lateral enter the pump station. Provide elevation of the bottom of the pump station. Provide high-water alarm elevation.

16. Break the distance from the building to the pump station into two. Dimension the distance from the building to the clean-out and from the clean-out to the pump station.
17. Provide elevation at the clean-out near the pump station.
18. Provide the invert in and invert out at the pump station. The invert in is the invert of the 6" lateral coming into the pump station. Label the invert 106.90 to be the invert out instead of invert in. Provide the bottom elevation of the pump station.
19. The invert in at the pump station is currently labeled as 106.90 but shown to be at elevation 107.90.
20. Label the proposed clean-out next to the existing manhole. Show the elevation at the clean-out.
21. Use dash line to show the existing manhole.
22. Label the distance, pipe size, material, and slope from the clean-out to the existing manhole.
23. The invert in and invert out at the existing manhole is labeled as 115.10 and 114.83 but shown to be 116.10 and 115.83.
24. The invert in of the 6" PVC should not be labeled as force main. The 6" should be gravity from the clean-out to the existing manhole.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4601 or Nolan Ekers at 501-4992.

Sincerely,



Bob Dao  
Utilities Engineer

cc: Steve Hart, County of Henrico Dept. of Recreation & Parks

bc: Ralph Claytor  
Marchelle Sossong  
Daniel Ivy  
Salim Chishti, Planning

BQD/djm