

August 30, 2021

Joseph Faudale, PE
The Bay Companies
8500 Bell Creek Road
Mechanicsville, VA 23116

**RE: Preserve at Turner Farm Section 2
10915 Opaca Lane
File No. 5529 POD2021-00341**

Dear Mr. Faudale:

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 August 6, 2021 and received by DPU on August 11, 2021.

DPU recommends approval of these plans by the Planning Commission.

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

General:

1. Agreements have not been executed at this time. Agreements must be executed prior to the authorization to begin utility construction or approval of building permits or prior to subdivision plat approval. An Information Sheet for the Preparation of Utility Agreements has not been submitted for review. If the Information Sheet is incomplete when submitted, we will send you comments for correction and resubmittal. If the required Information Sheet is complete when submitted, an Agreement will be forwarded to the Owner for signature within 21 days.
2. Revise the waterline hydraulic calculations based on subsequent comments regarding additional fire hydrant locations required.

Cover Sheet:

3. Revise water and sewer material quantities in accordance with all comments.

C3 (Master Utility Plan):

4. Revise this sheet in accordance with utility comments for both sections 1 and 2.

C9 (Layout and Utility Plan):

5. Coordinate sewer design between plan and profile as there are different lengths of sewer shown on each sheet.
6. Provide a flushing hydrant at the end of Maben Hill Lane per DPU Standards.

7. Eliminate unnecessary waterline within Turner Farm Road and Maben Hill Lane that is beyond the last fire hydrant or flushing hydrant.
8. Waterline beyond last tee at intersection of Maben Hill Lane and Harvest Trail Lane can be reduced to 6" or, if using tapping saddles for water services, can be further reduced to 4".
9. Add a valve on the north side of the tee at intersection of Maben Hill Lane and Harvest Trail Lane.
10. Provide an additional fire hydrant at the street intersection per DPU Standards by placing an additional hydrant at Harvest Trail Lane and Maben Hill Lane (lot 25).
11. Show and label all vertical waterline adjustment areas within the plan view in accordance with what is shown in the profiles.
12. Reference county water and sewer book in the bottom right corner of the utility plan.
13. Reference on the plans and use county survey monuments.
14. Locate laterals for lots 14, 24, and 25 to be at least 10' from adjacent lot boundary. Extend sewer and locate manhole 6 further so that sewer laterals cross near to perpendicular to minimize road repair impact in future maintenance.
15. Remove unrecorded utility easement references where right of way will be dedicated over them.
16. Sewer main from manholes 7 to 8 can be PVC with same material for the laterals.
17. Consistently label and show the number of proposed valves at the tees at either end of Harvest Trail Lane and coordinate with what is shown in the profile.
18. Correctly label the material of the existing 30' sanitary sewer main as RCP.
19. Add a prominent note stating that "Where the pressure at the service tap exceeds 80 psi, the provisions of the Uniform Building Code shall apply in providing pressure reducing devices."
20. Specify cast iron compression tapping saddles for the 6 laterals connecting to the existing 24" trunk sewer.

C11-C12 (Road, Utility and Storm Profiles):

21. Revise all utility profiles in accordance with utility comments.
22. For all sanitary sewer profiles, provide separate sewer stationing starting at the most downstream connection and proceeding upgradient with equalities at each junction manhole. Minimize stationing changes by using the longest chain of sewer line runs in the same stationing sequence. Locate sewer stationing away from road stationing to provide clarity.
23. Revise all the 8"x8" crosses to 8"x8" tees in all profiles.
24. The following comments pertain to Harvest Trail Lane Road profile:
 - Sewer depth appears excessive. Coordinate with Section 1 and raise sewer to more shallow depths so that lateral depths exceeding 12 feet can be minimized or eliminated if possible.
 - Show and label all lateral connections deeper than 12 feet if there are any left after redesign to reduce excessive sewer main depth.
 - Show the pipe invert (in) symbol for the incoming sewer at manhole 8.
 - Coordinate sewer main length between the plan and profile.

- Sewer main from manholes 7 to 8 can be PVC.
- Provide at least 0.10' drop in invert elevation across manhole 7.

L1 (Conditional Landscape Plan):

25. Tree plantings must be located outside of all utility easements or at least 10 feet away from utilities within right of ways.

If you have any questions concerning the above noted comments or the plans, please contact me at 501- 4501 or Ireini Botros at 501- 4512.

Sincerely,

John L. Clark
John L. Clark, P.E.
Utility Engineer

cc: Jeremy Swink, Stanley Martin Companies, LLC

bc: M. Sossong
R. Claytor
M. Gallagher
D. Ivy
I. Botros
Aimee Crady, Planning

JLC/vr