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

> RE: Preserve at Turner Farm Section 1 10915 Opaca Lane File No. 5528 POD2021-00340

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.

### C9&10 (Layout and Utility Plan):

- 5. Provide additional fire hydrants at street intersections per DPU Standards by placing an additional hydrant at Opaca Lane and Maben Hill Lane (lot 73) and at Opaca Lane and Olive Branch Road (lot 63).
- 6. Relocate the proposed fire hydrant near lot 43 to be outside of the sidewalk. It appears that there is more sufficient area at the corner of lot 25.
- 7. Show and label to remove the existing flushing hydrants within Maben Hill Lane and Opaca Lane to the tie to the existing 8" waterlines.
- 8. Provide water services for lots 64 and 65.
- 9. In accordance with the profiles, show the waterline adjustment locations where waterline crosses storm pipes # 35-36 and 31-30.
- 10. Correctly label the length of sewer run between manholes 10 and 11 to match the distance shown on the profile.
- 11. Revise the material of the proposed sewer main between manhole 18 and the existing manhole to DI.
- 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. Provide benchmarks consistent with DPU Spec. 5.5 L. (Add note for contractor reestablishing benchmarks if temporary and can be disturbed).
- 15. Provide sanitary sewer laterals for lots 69, 70 and 43.
- 16. Label DI lateral for lot 51 since connecting to DI sewer main.
- 17. Provide standard utility easement for the proposed water mains outside of the R.O.W within section 2 at the end of Maben Hill Lane and Turner Farm Road.
- 18. Consistently label and show the number of proposed valves at the intersection of Maben Hill Lane and Opaca Lane.
- 19. Coordinate sanitary lateral locations being installed with outfall sewer for future lots in section 2 with the changes made on section 2 plans.
- 20. Remove the two additional water services shown for future lots within section 2 since these are too close to the barricades, not under pavement, and are already shown to be installed under the section 2 plans.
- 21. Show and label existing sanitary sewer main within Opaca Lane and existing water services and sewer laterals in the vicinity of the temporary cul-de-sacs for Opaca Lane and Maben Hill Lane. Meter boxes and sanitary lateral SIPs will need to be adjusted to meet DPU Standards based on field locations versus removal of the cul-de-sacs.
- 22. Provide additional valves at end of each of the existing waterlines to separate new water main construction from existing waterline and customers.
- 23. Correctly label the material of the existing 30' sanitary sewer main as RCP.
- 24. Extend sewer main upstream of manhole 12 to pass the property line of lots 50/51 so that laterals for lots 50 and 51 can be connected to this sewer pipe instead of the existing 24" sewer main.
- 25. 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."

# C13-C17 (Road, Utility and Storm Profiles):

- 26. Revise all utility profiles in accordance with utility comments.
- 27. Profile the sanitary sewer main from manholes 8 to 9.
- 28. 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.
- 29. Revise all the 8"x8" crosses to 8"x8" tees in all profiles.
- 30. The following comments pertain to Turner Farm Road profile:
  - Show the pipe invert (in) symbol for the incoming sewer 4-5 at manhole 5.
  - Label the 8"x8" tee and 8" valve near STA 10+00.
  - Show and label the fire hydrant at the intersection of Opaca Lane and Turner Farm Road.
- 31. The following pertain to the Sanitary Sewer Ex to 18 profiles:
  - Coordinate sewer main length between the plan and profile.
  - Label sewer pipe as DI.
- 32. The following comments pertain to Sanitary Sewer EX to 9 profiles:
  - Revise the material of sewer main between manhole 9 and existing manhole to DI.
  - Show stationing at the bottom of the grid and at manholes.
- 33. Provide top and invert elevations for manhole 16 within the Maben Hill Lane profile.
- 34. Show the existing 24" sanitary sewer crossing near the level spreader within Storm Sewer 20 to 10 profile.

### L1 (Conditional Landscape Plan):

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

Joseph Faudale, PE August 27, 2021 Page 3

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 Q. 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