Joshua Krolewski, PE The Bay Companies 8500 Bell Creek Road Mechanicsville, VA 23116

> RE: Gateway at Landmark Section 1 Location: 501 Old Memorial Drive File No: POD2023-00075

Dear Mr. Krolewski:

The following is in response to the construction plans submitted to the Department of Planning dated February 21, 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. 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. An Information Sheet for the Preparation of Utility Agreements has been submitted and is being reviewed. If the Information Sheet is incomplete, we will send you comments for correction and resubmittal. If the Information Sheet is complete, an Agreement will be forwarded to the Owner for signature within 21 days.
- 2. The separate overall water and sewer utility plan submitted shall be approved by DPU for this development prior to approval of Section 1 or any section of this development.
- 3. A certificate to construct (CTC) from DEQ will be required for this project since average design flows exceed 40,000 gpd.
- 4. Revise and resubmit the Project summary report and Engineering Report in accordance with all plan comments and water model updates. Also, show separate PVC and DI quantities on the Project Summary Report.
- 5. As previously mentioned, DPU is still waiting on corrosive soil study results.
- 6. Planning is requested to provide DPU with a copy of the HOA covenants for this project for review when available.

Water Hydraulic Model:

- 7. Provide the following changes within the pipe date and update model results:
 - Revise pipe size and length for P-16.
 - Revise pipe lengths for P-2 and P-7.

C1 Cover Sheet:

8. Revise the materials list in accordance with all comments and the following: Include the private fire line LF and all its appurtenances and label as private.

- Separate 8" PVC and DI LF for watermains.
- There should be 12 waterline adjustments.
- Review lateral quantities.
- Review vandalproof/watertight MH quantities.

C2 Existing Conditions and Demolition Plan:

9. Correct the labeling for existing runs from Sandston Wood Sewer pump station. The run parallel to Old Memorial Drive is 8" PVC and the run angled towards Old Memorial Dr is 15" AC.

C3 Overall Plan:

- 10. Coordinate Overall utility layout with the utility plan view sheets. Include waterline utilities on this sheet as well.
- 11. Add a note that the existing private sewage pump station and force main will be abandoned and existing flows sent to proposed sewer constructed by this project by a separate plan.

C14-17 (Layout & Utility Plan):

- 12. Provide replacement current standard water services and meters connected to the new 8" water main for lots at #300, #302, #304, and #480 Old Memorial Drive, and abandon the 2" water main by cutting and capping the line at the valve as well as abandoning the old services and meter boxes. **The developer will be granted credits toward connection fees in accordance with County Policy for this work**. Add a note that the existing meters are to remain in the meter box so that DPU Operations will pick them up after interconnections are made. Interconnection on the private side of each water service will have to occur in coordination with property owners and County plumbing inspections. In addition, add the following meter numbers and meter sizes for the existing meters on the plan view:
 - #300-5/8" meter, no.46200938, 3/4" service line
 - #302-5/8" meter, no. 46200934, 3/4" service line
 - #304-5/8" meter, no. 08017393, 3/4" service line
 - #480-3/4" meter, no. 09019159, 3/4" service line
- 13. Revise the plan view to show the installation of the watermain along Old Memorial Dr to be included in the open cut.
- 14. Show a waterline adjustment for the 8" watermain crossing under storm structures 302 and 303.
- 15. Provide all callout information for private fire line with the relevant details and sizes for the FDC Siamese connection and RPDA.
- 16. Move the boundary valve to be at the edge of the utility easement.
- 17. Locate fire hydrants to be at least 50' away from buildings 1 and 7 or provide an exception request to the Director of Public Utilities with a justification for the exception.
- 18. Sanitary sewer MHs 114-Ex200 will need to be vandalproof/watertight. Label them as such including call out to detail D-155. Update profiles accordingly.

- 19. As previously commented, show the lateral for BLDG 3 connecting to the sanitary sewer. Currently, it is shown connecting to the water main.
- 20. Correct the lead lines meant for the lateral mentioned above and the lateral serving BLDG 4 as they are pointing to storm pipes. Also, correct lead line for water meter and service to building 3.
- 21. Adjust the proposed easement to adequately cover all FHs. There should be at least 8' clearance all around FHs.
- 22. Add label for the locations of the temporary gates at street stubs.
- 23. Show an open cut around the water meter service line for lot 1.
- 24. As previously commented, move lot 1 sanitary lateral 20' towards the road so that it is further away from the buildable area and allows room for private cleanouts on the lateral not owned by DPU.
- 25. Show a manhole at the intersection of Bettner Road and Old Memorial Drive.
- 26. Revise lengths of sewer main from manholes 102 to 15 to match scaled length on plans.
- 27. Correct matchline page numbers on C15.
- 28. Relocate water service for building 4 to the water main in Destination Way. Truncate water main off Destination Drive to the edge of pavement.

C22 Offsite Grading, Drainage, & Utility:

- 29. Coordinate the scale on this page with specified measurements of the sewer lengths. Should it be 1" =30'?
- 30. Label the private 6" PVC force main on this sheet since the label at the top of the page is cut off.
- 31. Laterals cannot be installed with offsite sewer or sewer outside of Gateway at Landmark Section 1 until there is approval of a conditional/preliminary plat showing lot locations.

C23 Old Memorial Drive and Storm Sewer profiles:

- 32. As previously commented, show, and label all laterals that are 12' deep. There are multiple missing; update all profiles accordingly.
- 33. Regarding Old Memorial Drive profile:
 - Provide a match line on this profile and its continuation on the next page.
 - Coordinate the location of the 8" plug with what is shown on the plan view. Should be closer to STA11+50.
 - Show the missing crossing of the 6" PVC force main.
 - Show the vertical waterline adjustment and missing crossing of storm pipe near STA14+60.
 - Show the other *in pipe* on MH 113.
 - Show a completed scale for this profile.

C24 Old Memorial Drive and Storm Sewer profiles:

- 34. Regarding Old Memorial Drive profile:
 - Provide a match line on this profile to coordinate with the profile on the previous page.
 - Show the other *in pipe* for MH102.
- 35. Regarding Destination Way profile:

- Show other *in pipe* on MH108.
- Coordinate the location of the 8" plug with what is shown on the plan view. Should be closer to STA12+75.
- 36. Regarding Storm Sewer 37-30 profile:
 - The 8" WL crossing should be under the storm pipe.
- 37. Regarding Destination Drive profile:
 - Show the missing crossings of EX15" san sewer and 6" force main.
 - Label MH107 as vandalproof/watertight
 - Correct the location of "6" sanitary lateral building 4".
- 38. Regarding Storm Sewer 36-35:
 - Correct the location of the 15" san sewer crossing near STA10+75.

C25 Storm Sewer profiles:

- 39. Correct the sizing of the private fire line throughout the profiles.
- 40. Regarding Storm 63-59 profile:
 - Show the missing fire line crossing near STA12+30.
 - Show sanitary laterals crossing with separation distance specified.
- 41. Regarding Storm 85-EX80 profile:
 - Storm structure 82 should be 81.
 - Correct the overlapping labels at structure 83.
 - Show the missing 8" PVC san sewer crossing near STA13+10.
- 42. Regarding Storm 314-M10 profile:
 - Show the missing 8" water line crossings.
 - The water crossing near STA17+75 should be 2" CIP.
- 43. Regarding Storm M12-M14 profile:
 - Show the missing utility crossings.

C26 Storm Sewer and Utility profiles:

- 44. There is a missing profile for the utilities along Portal Drive. New comments may be generated.
- 45. Darken the text information for MH EX200.
- 46. Show the other *in pipe* for MH 113.

C63 Utility Details:

- 47. Revise the following for the ISO fire flow:
 - Construction factor should be 1.5. Revise remainder of the calculations accordingly.
- 48. Include detail D-525 for water meters.

L01 Lighting:

49. Show light poles outside of all utility easements or at least 10 feet from water and sewer utilities.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4993 or John Clark at 501-4501 for any necessary clarifications.

Sincerely,

Kiara L Korkuc

Kiara Korkuc Utilities Engineer

cc: Dennis Harlow – G and G Limited

Phillip Parker – Henrico County Vo/Tech Ed Foundation, INC

Daniel Caskie – The Bay Companies, Inc.

bc: Marchelle Sossong

Ralph Claytor Daniel Ivy John Clark

Christina Goggin, Planning

KLK/vr