Stuart W. Groseclose, P.E. McKinney & Company 100 South Railroad Ave Ashland, VA 23005

RE: 3500 West View – Luxury Apartments

3500 Cox Road

File No: 4784; POD2021-00197

Dear Mr. Groseclose:

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 May 12, 2021.

DPU recommends approval of these plans by the Planning Commission.

Please address the following 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. 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 complete when submitted, an Agreement will be forwarded to the Owner for signature within 21 days.
- 2. The is no utility plan included in the construction plans. Review the sheets included in the construction plans.
- 3. Offsite utility easements for the proposed water main must be recorded prior to receiving a techmemo for this project.
- 4. DPU is reviewing the sanitary sewer analysis. Comments will be provided to the engineer once the review is completed.
- 5. Review the following comments on the hydraulic water model/analysis:
 - a. Where did the external demand of 278gpm at J-10 come from?
 - b. The domestic demand provided on the Domestic Meter Sizing Form was not included in the model. The analysis should include domestic and fire demand.
 - c. Updated water model/analysis per plan comments.

C-002 (Existing Conditions Plan):

- 6. Provide DB and PG (deed book and page number) for the private sanitary sewer easement. See utility plan sheet as well.
- 7. Provide a note to see plans titled "Utility Plan for Cox Road Apartments Off-Site Sanitary Sewer, by McKinney and Company, DWG File No. 2017-137" for information concerning existing utilities. See utility plan sheet as well.
- 8. Label the existing 8" PVC sanitary sewer as "Private" on the plan.

C-301 (Utility Plan):

9. Correct the sheet title for C-201 from "Grading and Drainage Plan" to "Utility Plan."

- 10. Provide four (4) northing/easting points on the plan.
- 11. The material of the 12" water main in Cox Rd at STA 26+54.08 is cast iron pipe. Correctly label the material of the existing water pipe.
- 12. There is an existing water line stub near the proposed water main connection at STA 26+54.08. Field verify and show the location of the stub to ensure there will be no conflicts with the proposed water main connection.
- 13. Will the swimming pool be served by County water and sewer? If the pool will be served via plumbing line, clearly show the lines on the utility plan sheet.
- 14. Label the proposed water pipe to the face or back of the cub at multiple locations.
- 15. Fire hydrants should be installed a minimum of 50' from the proposed building. If the minimum distance cannot be obtained, provide an exception letter to DPU Standards,
- 16. Reference the size and detail numbers for the proposed backflow preventers. Also, include the sheet location of the backflow preventer details in the backflow preventer callouts.
- 17. DPU does not supply 3" water meters and permit the installation of 3" service lines. Use an 8" x 4" tee connection to connect the domestic water meter to the water main.
- 18. Provide a blow-up of the proposed domestic and exclusion meter connections. Be sure to label the connections as well as the size and material of the proposed pipes.
- 19. Provide the demand for the proposed exclusion meter.
- 20. DPU suggests installing a gate valve south of the dedicated fire hydrant "tee" connection.
- 21. The retaining wall will prevent the use of the proposed fire hydrant, thus affecting hose lay requirements. Consult with fire to ensure the fire hydrant located northeast of the building can be used to meet hose lay for the Main Entrance/Leasing Building area or if an additional fire hydrant will be required.
- 22. A monitoring manhole may be required. Comments from the Monitoring & Compliance Department will be forwarded once provided to DPU Design.
- 23. Combine the laterals before the manhole connection so that there is only one connection to the existing manhole.

C-302 (Utility Profile):

- 24. Label the pipe sizes of the proposed tapping sleeve & valve connection.
- 25. Adjust the water line under the communication conduit and 15" RCP by extending lower portion of the vertical alignment past the storm sewer crossing.
- 26. The 8" x 4" water meter connection does not match the connection size on the utility plan sheet. Coordinate the utility plan with the profile.
- 27. Raise the water main back up to 3.5' after the storm crossing near STA 14+70. Be advised, the FDC can be adjusted to go under the water main.

C-303 (Utility Profile):

- 28. Use vertical adjustments to adjust the water main at utility crossings. The water main shall maintain an minimum of 3.5' of cover.
- 29. Lines indicating bend are not visible on this sheet. Make them dark like other profile sheet.

C-306 (Utility Details):

- 30. For the Fire Flow Estimate Form:
 - a. How was the ground floor area derived? Clearly specify on the on the form.
 - b. Are there any fire separation walls with fire rated doors in the building?
- 31. If the pool will be served by County water, provide the demand of the pool on the Domestic Meter Sizing form.

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- 32. The proposed building is not apartments/residential only per the architectural plans. The building will have retail use as well. The Maximum Demand for the proposed building should be approximately 175gpm instead of 108gpm. Review and revise.
- 33. Based on the Maximum Demand (175gpm), a dual 2" meter will be adequate to serve the proposed project.
- 34. Update Material Quantities per plan comments.

Sheet Landscape and Lighting Plan:

35. This will be evaluated when all utility alignments are finalized. All trees and lighting structure must be out of utility easements and/or at least 10' away water items including fire hydrants.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4508 or John Yi at 501-4511.

Sincerely,

Alice Thompson Utilities Engineer

cc: Steven A Middleton, Commonwealth Properties, LLC.

CR APT LAND LC

bc: R. Claytor

DPW

M. Gallagher

Planner, M Kennedy

ANT/tt