

COMMONWEALTH OF VIRGINIA

County of Henrico

October 12, 2022

Chris Thompson, PE The Site Design Company 268 High Street Petersburg, VA 23803

> RE: Element by Westin at Short Pump Towne Center 11768 W. Broad St POD2021-00524

Dear Mr. Thompson:

We have reviewed the construction plans submitted to the Planning Department on September 21, 2022.

Please address the following comments and **resubmit revised construction plans** for review. Water and Sewer Green Card Agreements that must be executed by the Owner and the County for water and sewer improvements **have** been executed.

General:

- 1. Provide a hydraulic flow analysis of water system to ensure fire hydrants on site can provide 1,000 GPM with greater than 20 psi. As previously commented, the flow analysis must include all the allocation for required peak domestic demands plus fire demand and pipe head loss/elevation to the most critical hydrant or combination of hydrants. The water pump(s) information such as average use and capacity will be needed to run the model and provided the pump information on the plan.
- 2. DPU has been informed of a new restaurant in Short Pump Towne Center. This is replacing an existing restaurant and has some increase to the domestic water fixture counts. Please update water demand summary with the new restaurant fixture count.
- 3. P.E. Seal with original signature and date is required on the Cover Sheet. A facsimile of seal, signature and date is acceptable on all other sheets.
- 4. Our modeling team is evaluating the sanitary sewer analysis that was provided. We will contact you if there is any comment or concern.

C4.1 (Off-Site Sanitary Sewer Plan & Profile):

- 5. Replace the manhole S10 and S12 with new manholes. Reference the removal of the manholes on the demolition view and reference to install new manholes in the utility plan view and the profile.
- 6. Provide a step-by-step sequence of construction that includes the pump-around and manholes that will be utilized for pumps. Include the pump size/capacity in the sequence or separately.

Chris Thompson, PE October 12, 2022 Page 2

- 7. Proposed 8" pipes (drops) in the manhole S10 and S12 need to be entering the manhole with matching crown to the out pipe (20" pipe).
- 8. Add a note stating that, "All existing water and sanitary sewer to be abandoned shall be abandoned in accordance with DPU Specs. 1.4.01C. and 10.3.10." for the demolition.

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

Sincerely,

John Yi

Utilities Engineer

cc: Nick Patel, Magan & Sons, LLC