Claire Smith Shirley, PE Gradient 1406 Laburnum Park Blvd Richmond, VA 23227

RE: Cool Lane Apartments

LOCATION: 1900 Cool Lane

FILE NO: 5518 POD NO: 2021-00254

Dear Ms. Shirley:

We have reviewed the construction plans submitted to the Planning Department on June 18, 2021 and received by DPU on June 22, 2021.

Please address the following comments and **resubmit revised construction plans** for review. Water and Sewer Agreements with Henrico County DPU are not required for this project since property is already billed/served by the City of Richmond for sewer and domestic water service.

Sheet C2.5(erosion control ph. 2)

1. A note should be added that the installation of storm sewer from structures 2 -4 shall be coordinated with utility crossings for the existing fire line and sanitary lateral and any conflicts resolved with adjustments as shown on the utility plan.

Sheet C3.2(Utility Plan)

- 2. As previously commented on the preliminary plan, the fire line backflow prevention and detector meter system must be brought up to current DPU and state standards. Therefore, label to abandon and remove the existing detector check assembly and vault and install a reduced pressure detector assembly in accordance with either DPU D-430(external above ground) or D-435(inside building) and include the appropriate detail on the plans. The existing 5/8" detector meter shall be returned to Henrico DPU Operations. Reuse of the existing vault is not acceptable for the new assembly since it is below grade.
- 3. As previously commented, label recorded deed book and page number for Henrico County onsite water utility easements. If these were not recorded, easement plats shall be submitted to the County for review and recordation with this project.
- 4. Label dedicated fire hydrant as per D-495.
- 5. Show exact location of the reduced pressure detector assembly if installed within the building.

Sheet C3.3(utility calculations)

- 6. Revise Henrico DPU fire flow calculations as follows:
 - The construction type shown as non-combustible does not match the attached original building construction data sheets which clearly indicate wood joists, wood siding, wood trim, pine and plaster, and pine flooring. The exterior appears to be brick and may possibly be just a veneer. Please review and confirm.
 - Provide detail calculations on the total effective floor area value. The basement area does not need to be included in the total since it is C1 or C2 occupancy. Also, 50% of the floor area of each floor above the main 1st floor must be included in the total.

- 7. Henrico County does not certify flow availability based on hydrant flow test information, but uses a system hydraulic model. Please provide a completed Water System Flow Request (form F-7) with associated information to the attention of Marcello Forehand in our office. Assumed flow must at least cover the required flow per ISO calculations and the max day domestic water demand.
- 8. Provide certification from the City of Richmond that the City hydrant at the southwest corner of the property frontage can be used to provide at least 1000 gpm.

Sheet C3.4(utility notes & details)

9. Replace detail D-420 with either D-430 or D-435 based on installation location of the reduced pressure detector assembly.

Sheet C4.2(storm sewer profiles)

10. Show specific depth, size and material of pipe at the crossings for the water fire line and sanitary sewer lateral. Show how any conflicts will be addressed on the plan and profiles.

Sheet L1.0(overall planting)

- 11. All trees shall be located at least 10 feet from DPU utilities and outside of utility easements. See tree on southeast front corner.
- 12. Light poles shall also be located at least 10 feet from DPU utilities and outside of utility easements.

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, PE Utilities Engineer

Attachment

cc: Julie Anderson, Virginia Supportive Housing

bc: Ralph Claytor
Jen Cobb, DPW
Megan Gallagher
Ireini Botros

Mike Kennedy, Planning

JLC/vr