

October 28, 2022

Stephen Raugh, PE
Timmons Group
1001 Boulders Parkway, Suite 300
Richmond, VA 23225

**RE: Adams Elementary School- Building Addition
600 S Laburnum Ave
File No: County, POD2022-00515**

Dear Mr. Raugh:

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 October 7, 2022.

DPU recommends approval of these plans by the Board of Supervisors.

Please address the following comments before submitting the construction plans for signature.

General:

1. Agreements are not required for this County project.

Cover Sheet:

2. Include "Utility Plan" in the project title on the cover sheet.
3. Change the name of the project from "Adams Elementary School" to "Adams Elementary School Building Addition."
4. Provide original signature and date on the engineer's seal.

Sheet C200:

5. Reference the size of the existing dual water meter. See Sheet C401 as well.
6. The meter number referenced for the existing dual water meter is incorrect.

Sheet C401:

7. Provide three (3) N/E points on the plan.
8. A dedicated fire hydrant and siamese connection is required for the proposed sprinkler system
9. The building does not meet DPU 350' hose lay requirements. Additional fire hydrants are required for this project.
10. Label the size and material of the proposed fire service line between the boundary valve and water line connection.
11. Reference the detail number and sheet location of the backflow preventer detail in the backflow preventer reference.

Sheet C402:

12. The roughness coefficient of the pipe is not acceptable for a pipe more than 40 years old. Review and revised as necessary.
13. The Required Fire Flow for this project is 1500gpm. In the Flow Demand Criteria, H-1 pulled 1000gpm and H-2 pulled 375gpm. The total pulled should equate to the required fire flow. H-2 should pull 500 gpm.

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14. What is achievable ISO Demand referenced in the Residual Pressure Results?
15. Based on the Residual Pressure Results, the existing water line does not have the minimum 20psi for fire protection requirements at the worst-case hydrant. The existing 6" water line will need to be upgraded.

Sheet C412:

16. Two fire hydrants are required for a Required Fire Flow of 1500gpm. Revise the ISO Form (F-9).
17. The Combined Fixture Value Total is incorrect. Do not round the Combined Fixture Value Total.

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: Aaron Brooks, County Schools

bc: R. Claytor
M. Sossong
D. Ivy
A. Crady, Planning

ANT/vr