

October 28, 2022

Chris Shust, PE
Balzer and Associates Inc.
15871 City View Drive, Suite 200
Midlothian, VA 23113

**RE: Farm Winery
1522 & 1526 Burning Tree Road
POD NO. 2022-00513**

Dear Mr. Shust:

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 14, 2022.

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

General:

1. An information sheet for Preparation of Agreements for Water and/or Sewer Service is required but has not yet been submitted. The information Sheet allows the Department of Public Utilities to prepare the Water and Sewer Agreements that must then be executed by the Owner and the County prior to approval of the utility plans or building permits. It is recommended that the Information Sheet be submitted as soon as possible to avoid delays on approval of plans. Preparation of the agreements may take up to 15 days after receipt of the Information sheet. Execution by the County after execution by the Owner may take up to 10 days. Conflicts between the completed Information Sheet and the plans may generate additional review comments.
2. Update the Engineering Report. Sewer Design Form, Water Local Review Program, and NOI Form are not required for this project and should had been check "No" on the Engineering Report. Provide the lowest pressure at peak flow.

Cover Sheet:

3. Provide an original engineering signature and date on the cover sheet.
4. Update the quantities list.

C03: Demolition and ESC Phase 1 tree Protection Plan:

5. Clarify what are you using the 2 wells for?

C05: Utility Plan:

6. Show all the valves on the water line along Burning Tree Road that you would need to shut off to cut in the tee. Reference the distance from the proposed 16"x8" tee to the existing valve at the intersection of Burning Tree Road and Settlers Ridge Boulevard. You could use a 16"x8" tapping sleeve and valve instead of cutting in the tee.
7. The water meter needs to be located inside of the utility easement.
8. Relocate the proposed meter southward near the area of the bend. Use 1-1/2" corporation stop to connect to the side of the proposed 8" water line. Use 1-1/2" copper service pipe from the

corporation stop to the meter. Label to install the 1" meter per details D-520&D-525. Continue using 1-1/2" pipe from the meter to the building for the water service.

9. Show the location of the backflow preventer inside of the building per detail D-405. Label the size of the backflow preventer.
10. Clarify what is the gray rectangle on the water line near the bend? It needs to be moved off the waterline and out of the utility easement.
11. Eliminate the bend as it is not necessary.
12. Place the proposed fire hydrant at the end of the proposed 8" water line for adequate flushing of the water main.
13. An additional fire hydrant might be required by the Fire Department since two hydrants is required per your Fire Flow Estimate Form.
14. Provide a symbol for the 8" plug at the end of the proposed 8" water main north of the last fire hydrant tee.
15. Revise the length of the proposed 8" water line.
16. Clarify why is the drain field on your neighbor property instead of your property? Has VDH reviewed and approved your design for the drain field and septic system?
17. Show the location of the reserve drain field.
18. Provide a 20 feet wide utility easement across the property in the rear for future sanitary sewer extension per master plan.
19. Add the following note: "Electronic markers (ball type) shall be installed on all water mains and sewer gravity mains in accordance with specification 2.2.05N and 4.2.02E of the 2014 DPU Design and Construction Standards."
20. Add the following notes:
 - Disruption to domestic water service and fire protection shall be minimized to the fullest extent possible.
 - Waterline valves will only be operated by DPU personnel or under DPU supervision.
 - Fire division is to be notified prior to any disruption of fire protection.
21. Reference the CWB and CSB 230NW.

C12.1: Utility Details:

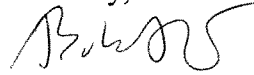
22. Revise the meter sizing form to have a 1" meter instead if a 5/8" meter. Buildings with tank type water with a 48 Combined Fixture Value need a 1" meter per standard 4.2.07 E5. Makes changes on the utility plan as well.
23. Fill out the type of occupancy in the Fire Flow Estimate Form. Clarify the exposure and communication factor in the Fire Flow Estimate Form. Revise the number of hydrants required to be 2 instead of 1 based on the required fire flow of 1500gpm.

L01: Landscaping Plan:

24. We recommend rerouting the water service from the meter to the building to avoid conflict with the trees.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4601 or Nolan Ekers at 501-4992.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bob Dao', with a stylized flourish at the end.

Bob Dao
Utilities Engineer

cc: Trevor Ferguson, Kaneik & Trevor Ferguson

bc: Ralph Claytor
Marchelle Sossong
Daniel Ivy
Spencer Norman, Planning

BQD/