Bedford County Utility District Wilhem Development Flow Test April 15, 2025

On April 15, 2025, Danny Warren and I tested the existing Hydrant #465, located at the intersection of Dixon Road and Knights Campground Road. The hydrant is connected to an existing six (6) inch diameter Class 200 PVC water line. This water line is located within the Chestnut Ridge Tank pressure zone. The residual pressure was recorded at the hydrant located at Dixon Road and SR 130. This hydrant is also connected to an existing six-inch diameter water line. See the attached plan.

The purpose of the flow test is to determine if there is sufficient water supply and pressure to support a new development along Dixon Road. The development is proposing eleven (11) new residential customers. Peak demand for this development would be approximately 22 gpm (11 lots * 2 gpm/customer).

The following is a summary of results:

Time of flow test = 1:00 pm
Chestnut Ridge Tank Level = 50% full (estimated)
Thompson Shop Booster Station was not operating.

Residual Hydrant Static pressure = 130 psi

Flow at Hydrant #465 = 900 gpm Static Pressure at #465 = 118 psi Residual pressure at hydrant = 110 psi

Flow test lasted from 1:00 pm to 1:15 pm.

The estimated demand for this development as shown above, the water system can support this development.

Gene C. (Buddy) Koonce, Jr. P.E. April 15, 2025

