

ANDREW M. CUOMO Governor **HOWARD A. ZUCKER, M.D., J.D.**Commissioner

**SALLY DRESLIN, M.S., R.N.** Executive Deputy Commissioner

November 17, 2017

Kirk Rother, P.E. Consulting Engineer, PLLC 5 St. Stephen's Lane Warwick, NY 10990

Re: Zimmerman Road Water Main Extension Fallsburg WHO-LS-SF (T) Fallsburg, Sullivan County, NY

Dear Mr. Rother:

The New York State Department of Health, Monticello District Office is in receipt of engineering plans, engineer's report, and technical specifications related to the Zimmerman Road water main extension proposed in the Town of Fallsburg.

The documents received on September 29, 2017 have been reviewed and we offer the following comments:

- 1. Please revise plans to illustrate the limits of the existing and proposed water district boundaries to include the expanded service area along Zimmerman Road.
- 2. Please indicate the status of Town Board approval for the proposed water district boundary changes that include the expanded service area.
- 3. Plans shall include a detail drawing for a typical service connection to the water main which includes a curb valve, valve box, gooseneck, and corporation stop with proper depth of burial.
- 4. Please provide a detail drawing for the meter vault serving Eden Woods and include an approved backflow prevention device within the existing meter vault or other location on this service line.
- 5. Please revise plans to indicate the nearest fire hydrant location on Hasbrouck Road. Fire hydrants should be located at each street intersection and spaced no more than 600 feet apart.
- 6. The fire hydrant detail drawing requires a note stating that if ground water is encountered within 7 ft. of the ground surface, the hydrant weep hole shall be plugged. The hydrant should be labeled by affixing a brass tag stating that the hydrant has been plugged and must be pumped dry after each use.
- 7. The water main profile drawing indicates a high point near the connection to an existing 10-inch water main on Hasbrouck Road. Please propose a hydrant or automatic air release valve, or indicate the location of an existing hydrant sufficient to expel air from this high point.
- 8. AWWA C600-17 specifies the allowable leakage during hydrostatic pressure testing of ductile iron pipe and related appurtenances not to exceed  $L = \frac{SD\sqrt{-P}}{148,000}$  (units of gallons per hour). Please revise 33 11 13-9, Item 9 "Hydrostatic and Leakage Testing" with correct value of 148,000 in the equation for leakage allowance.
- 9. Technical Specifications Section 33 11 13-8, "Disinfection of Water Piping System" calls for flush and disinfect system in accordance with 33 13 00. The documents received for review do not include 33 13 00. Please include section 33 13 00 with specifications for disinfection of the proposed water main and appurtenances in accordance with AWWA C651 (current revision).

- 10. References in Section 33 11 13 should include AWWA C651 "Disinfecting Water Mains". Please revise.
- 11. Technical Specifications Section 33 11 13-8, Item 3.7, "Service Connections" refers to 33 12 13. Section 33 12 13 is not included in the documents received for review. Please include Section 33 12 13 with your next document submission.
- 12. Technical Specifications Section 33 11 13-8, Item 3.9, "Field Quality Control" references Section 01 40 00 Quality Requirements: Testing and Inspection Services. Section 01 40 00 is not included in the documents received for review. Please include Section 01 40 00 with your next document submission.

Please provide a response to these comments, along with the necessary document revisions for review. We have attempted to make this review as complete as possible; however, additional comments may be necessary based upon review of revisions or new information received. If you have any questions, please contact me at (845) 794-2045 or email: glenn.illing@health.nv.gov.

Sincerely,

Glenn D. Illing, P.E. Professional Engineer 1

cc: Mollie Messenger, CEO, (T) Fallsburg Will Illing, P.E., (T) Fallsburg File