NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SYSTEM ENGINEERING
TECHNICAL REVIEW FORM

DISTRIBUTION SYSTEMS
(N.J.A.C. 7:10-11.10)

_____ 1322001
Water Purveyor PWSID#

☑ Water Main Extension *Answer Section A, B2, B3 and C and enclose form PA-05E*

☑ Replacement Mains *Answer A, B1, B3 and C*

☐ Transmission Main *Answer A, B1, B3 and C*

Proposed Piping Information: (exclude ≤ 2 inch service lines)	Diameter (in.)	Length (LF)	Material
	8"	2,432 LF	DIP
	Total Length (LF)		

A. Construction Standards

The undersigned hereby certifies that the proposed water mains will be constructed in conformance with the requirements of N.J.A.C. 7:10-11.10 et. seq. and specifically that:

	YES	NO	N/A
1. Is there a minimum pressure of 20 psi at street level under all flow conditions? (N.J.A.C. 7:10-11.10(d)1)	☑	☐	☐
2. For an average demand less than 1 MGD, are all distribution mains at least six inches in diameter? (N.J.A.C. 7:10-11.10(d)2)	☑	☐	☐
3. For higher demands are all distribution mains at least eight inches in diameter? (N.J.A.C. 7:10-11.10(d)2)	☑	☐	☐
4. If not, is justification provided by hydraulic analysis? (N.J.A.C. 7:10-11.10(d)2)	☐	☐	☑
5. Is the maximum flow velocity less than 5 fps for mains up to 16 inches in diameter? (N.J.A.C. 7:10-11.10(e)2)	☑	☐	☐
6. Is the maximum flow velocity less than 10 fps for mains greater than 16 inches in diameter? (N.J.A.C. 7:10-11.10(e)2)	☐	☐	☑
7. Are the distribution mains laid in a loop system to eliminate deadends? (N.J.A.C. 7:10-11.10(e)1)	☑	☐	☐
8. Does each deadend have a fire hydrant or flushing device with flow greater than 2.5 fps? (N.J.A.C. 7:10-11.10(e)1)	☑	☐	☐
9. Does the flushing device terminate above grade? (N.J.A.C. 7:10-11.10(e)1)	☑	☐	☐
10. Are all distribution mains covered with a minimum of 3.5 feet of earth? (N.J.A.C. 7:10-11.10(e)3)	☑	☐	☐

A. Construction Standards (Cont...)	YES	NO	N/A
11. Are water mains disinfected prior to use in accordance with N.J.A.C. 7:10-11.6(d)?	☑	☐	☐
12. Is there adequate separation of water mains and sanitary or industrial sewers? (N.J.A.C. 7:10-11.10(e)5)	☑	☐	☐
13. At sewer crossings, is there adequate separation or protection in accordance with N.J.A.C. 7:10-11.10(e)5?	☑	☐	☐
14. Are there n-1 valves at intersections of water mains? (N.J.A.C. 7:10-11.10(e)6)	☑	☐	☐
15. Do water services and plumbing comply with the Plumbing Subcode? (N.J.A.C. 7:10-11.10(e)7)	☑	☐	☐
16. Are any proposed surface water crossings satisfactory to the Department? (N.J.A.C. 7:10-11.10(f))	☐	☐	☑
17. Are chambers or pits containing gate valves, properly drained? (N.J.A.C. 7:10-11.10(g)1)	☑	☐	☐
18. Are chambers or pits containing air-relief valves or blowoffs properly drained? (N.J.A.C. 7:10-11.10(g)1)	☑	☐	☐
19. Are chambers or pits containing meters or similar appurtenances properly drained? (N.J.A.C. 7:10-11.10(g)1)	☑	☐	☐
20. Air-relief valves not directly connected to a storm or sanitary sewer? (N.J.A.C. 7:10-11.10(g)2)	☑	☐	☐
21. Blowoff or flushing device(s) not directly connected to a storm or sanitary sewer? (N.J.A.C. 7:10-11.10(g)2)	☑	☐	☐
22. Chamber or pit not directly connected to a storm sewer or sanitary sewer? (N.J.A.C. 7:10-11.10(g)1)	☑	☐	☐
23. Is the open end of all automatic air-relief pipes one foot above grade? (N.J.A.C. 7:10-11.10(g)3)	☑	☐	☐
24. Is the open end of all automatic air-relief pipes downfacing or mushroom cap? (N.J.A.C. 7:10-11.10(g)3)	☑	☐	☐
25. Is the open end of all automatic air-relief pipes provided with an insect screen? (N.J.A.C. 7:10-11.10(g)3)	☑	☐	☐
26. Is the open end of all manual air-relief pipes at the top of the chamber? (N.J.A.C. 7:10-11.10(g)3)	☑	☐	☐
27. If high water table, is the open end one foot above ground and protected? (N.J.A.C. 7:10-11.10(g)3)	☑	☐	☐

A. Construction Standards (Cont...)

If you answered "No" to any of the above questions, the Engineer's Report must provide the reasoning for the deviation from the regulations. Identify below where in the Engineer's report that deviation reasoning is given.

Question Number	Report Page and Section	Question Number	Report Page and Section

	YES	NO	N/A
28. Does any service line supplied by this water main extension serve a facility with an unapproved water supply (such as a private well; fire pond; waste water pump station; gray water recycling; swimming pool etc.)?	☐	☑	☐

If "Yes" then either provide the physical connection permit number: _____
or the permit will be conditioned to preclude placing that service line into service until a physical connection permit has been obtained by the facility.

29. Does the pressure gradient that supplies this water main extension contain gravity storage?	☑	☐

Please note that if you answered NO above, then under N.J.A.C. 7:10-11.11(a)2, this pressure gradient is not designed to provide fire protection.

Submit appropriate engineering plans, specifications, reports, etc. to substantiate your answers

B. Water Quality Impacts

1. Transmission and Replacement Mains

	YES	NO
Does the application include transmission or replacement mains and other distribution pipework improvements?	☑	☐
If "Yes", answer the following items.		
a. Do these improvements change detention times in the distribution system?	☐	☑
If "Yes", explain how these changes affect the detention times in the distribution system:		

b. For replacement mains, identify the following:
   i. Material of old main(s): cast iron
   ii. Material of new main(s): DIP

	YES	NO	N/A
If the pipe material will change, does it impact the efficacy of any installed corrosion control process?	☐	☑	☐
If "Yes" explain the effect and mitigation.			

1. Transmission and Replacement Mains (Cont...)

	YES	NO
c. For replacement mains, have you identified any customer lead service lines (including lead goosenecks) along these lines?	☐	☑
If "Yes", are you intending to replace the lead service line?	☐	☐
If "Yes", will the full length be replaced?	☐	☑
If the full length is being replaced, is it a Lead and Copper sampling site?	☐	☐

If "Yes", a BWSE 18 form must be submitted to the Bureau following the lead service line replacement(s).

Explain actions if partial lead service line replacement will occur, including but not limited to, notification to the customer 45 days prior to replacement including potential increase in lead levels and health effects, if follow-up lead sampling will occur at each residence (strongly recommended), and how will the water system will retain a record of this lead service line and update the system's lead service line inventory. *Note, all of these actions are required if the water system is required to replace lead service lines under the Lead and Copper Rule.*

2. Water Main Extension

	YES	NO
Does the application include more than 3,000 feet of new water main?	☐	☑
If "Yes", answer the following items.		
a. Do these improvements change detention times / water age in the distribution system?	☐	☐

If "Yes", explain how these changes affect the detention times / water age in the distribution system:

	YES	NO
b. Does the pipe material change have an impact on the efficacy of any installed corrosion control process?	☐	☐

If "Yes", explain the effect and mitigation.

3. Sampling Plans

	YES	NO
Do the Lead and Copper, Water Quality Parameters (LCR), Disinfection Byproducts, and/or Total Coliform sampling plans need to be revised?	☐	☑

If "Yes", indicate which plan(s) and an explanation of why: _____

If "Yes", have your current sampling plans been approved by the Division?	☐	☑

If "Yes" provide the letter approval number and expiration date (if applicable):

Note: The revised sampling plan(s) must be available upon request.

If "No", a sampling plan must be submitted and approved prior to submission of the Placed In Service Certification.

Submit appropriate engineering plans, specifications, reports, etc. to substantiate your answers

C. Certification

a. APPLICANT'S CERTIFICATION

I certify under penalty of law that the information provided in this document is true, accurate and complete and complies with N.J.A.C. 7:10-11 et seq. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information.

Type: Name

Signature of Applicant/Owner's Authorized Representative

Type: Position

Date of Application

b. STATEMENT OF PREPARER OF TECHNICAL REVIEW FORMS, PLANS & SUPPORTING DOCUMENTATION

I hereby certify under penalty of law that the answers provided herein and the associated engineering plans and supporting documents are accurate and reflective of the project being considered for approval and hereby certify that the proposed project complies with and will be constructed in conformance with the requirements of N.J.A.C. 7:10-11 et seq. I further certify that the facilities are designed to achieve the design intent. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information.

Signature of Engineer

11/15/22
Date

40673
N.J.P.E. #

Professional Engineer's Embossed Seal

WJH Engineering

Type or Print Name of Engineering Firm