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| **Project Name:** |       | **Date:** |       |
| **Engineer Name:** |       | **AK P.E. License No.:** |       |
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| This checklist is required for the construction of new, the modification of existing, and/or the extension of existing water distribution mains and raw water transmission mains.**Note:** When completing this checklist, please answer the question and also include where in the submittal detailed information is found for each submittal requirement. Please be as specific as possible (specify document name, page number, section number, paragraph, etc.). This will accelerate the review process. |

| **Submittal Requirements** | ***Regulatory Reference*** |
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| 1. **Drawings and Specifications:** Do drawings and specifications for construction of the distribution system and raw water transmission mains include piping materials, joints, thrust blocking, bedding, and the plan and profile for the water mains?
 | *18 AAC 80.205(a)(2)* |
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| 1. **Flow:** Are the engineer’s calculations used as basis of design for the water main sizing, peak demand flow rates, and velocities included in the submittal?
 | *18 AAC 80.205(a)(4)**18 AAC 80.205(b)(2)* |
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| 1. **Service Pressure:** Do the engineering calculations demonstrate that as designed, the proposed distribution main will be capable of maintaining at least 20 psi of service pressure at the highest elevation or pressure zone under peak demand flow conditions?
 | *18 AAC 80.205(a)(5)* |
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| 1. **Thrust Blocking:** What thrust blocking design information is provided?
 | *18 AAC 80.205(a)(4)* |
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| 1. **Freeze Protection:** What freeze-protection design information is provided?
 | *18 AAC 80.205(a)(4)* |
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| 1. **HDPE Pipe**: If the project proposes HDPE water mains, has the submitting engineer:
2. Consulted with the manufacturer to ensure the appropriate resin was selected for the climate
3. Specified the manufacturer’s weldability testing recommendations
4. Specified joint construction
5. Specified the welder qualifications, fusion QA/QC, and equipment certification, maintenance, and calibration for fused joints
 | *18 AAC 80.205(b)(9)* |
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| 1. **Dead End Water mains:** If the proposed distribution configuration creates dead end water mains, how has the engineer addressed operation and maintenance to avoid adverse water quality affects?
 | *18 AAC 80.205(b)(9)* |
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| 1. **Flushing:** Which areas does the engineer identify which can be isolated during flushing for construction and on-going maintenance?
 | *18 AAC 80.205(b)(9)* |
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| 1. **Fire Hydrants:** Are any proposed water lines to a single fire hydrant or do any proposed water service lines have a fire hydrant? If so, is the line designed for use as a regulated water main?
 | *18 AAC 80.200* |
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| 1. **Temporary Distribution:** If the project proposes to replace a water distribution main, how will water distribution be provided during construction? Does the project specify that if the contractor decides to install a temporary distribution system, it must be pre‑approved by the DEC Drinking Water Program? The contractor must submit information to address backflow prevention, materials of construction, separation distances, disinfection, flushing, sampling, pressure and flow requirements, and personnel responsible for periodic inspection and upkeep. DEC may request additional information not listed here.
 | *18 AAC 80.205(b)(9)* |
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| 1. **Water Main Disinfection:** Which specifications address disinfection of the water mains and transmission mains before use? If AWWA Standard C651 is not specified, does the proposed method include adequate detail for the contractor to implement? How will cross-connection control be accomplished to prevent backflow into the PWS during flushing and disinfecting the new mains?
 | *18 AAC 80.205(b)(9) 18 AAC 80.010(d)(2)* |
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| 1. **Seasonal System Startup:** If this is a seasonal system, are written startup procedures included for approval during this review?
 | *18 AAC 80.205(b)(9)* |
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| 1. **Seasonal System Shutdown:** If this is a seasonal system, do the shutdown procedures specified for approval during this review include information on how the distribution is drained or prepared for the time it is not in operation? Please detail the use of antifreeze, draining to sumps, and potential cross-connection or contamination, etc.
 | *18 AAC 80.205(b)(9)* |
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| 1. **Contaminated Sites:** Is documentation provided showing the Contaminated Sites Program’s webmap has been consulted to determine the proximity of the project to contaminated sites? The Contaminated Sites Program’s webmap can be accessed at <http://www.arcgis.com/home/item.html?id=315240bfbaf84aa0b8272ad1cef3cad3>. If the project is going to be near or go through an active contaminated site, is documentation provided that the DEC Contaminated Sites Program staff was contacted regarding proper site controls for dealing with contaminated soils and/or contaminated groundwater? Are design considerations included for protecting drinking water from contamination?
 | *18 AAC 80.205(b)(9)* |
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| 1. **Horizontal Separation Distances:** If the project proposes any existing or new water and sewer mains within 10 horizontal feet of each other, discuss how the design and construction will meet the regulatory requirements. If any of the regulatory requirements cannot be met for any length of water main within 10 feet of a sewer main, has a separation distance waiver been requested (Checklist No. 7.1)?
 | *18 AAC 80.020(f)(3)* |
| **Note:** Storm sewer mains, catch basins, manholes, and lift stations need to maintain the same separation distance from water mains as sanitary sewer mains, manholes, and lift stations. |
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| 1. **Water Sewer Main Crossings:** If the project proposes any crossing of existing or new water and sewer mains, discuss how the design and construction will meet each of the regulatory requirements. If any of the regulatory requirements cannot be met for a crossing of water and sewer mains, has a separation distance waiver been requested (Checklist No. 7.1)?
 | *18 AAC 80.020(f)(3)* |
| **Note:** Storm sewer mains, catch basins, manholes, and lift stations need to maintain the same separation distance from water mains as sanitary sewer mains, manholes, and lift stations. |
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| 1. **Utilidors:** If the project proposes any existing or new water and sewer mains in a utilidor together, discuss how the design meets the regulatory requirements. If any of the regulatory requirements cannot be met for a utilidor with water and sewer mains, has a separation distance waiver been requested (Checklist No. 7.1)?
 | *18 AAC 80.020(f) &(g)* |
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| 1. **Separation to Septic System:** If there will be any septic tanks, soil absorption systems, or any line connecting them directly above or below at any distance or within 10 horizontal feet of a water main, has a separation distance waiver been requested (Checklist No. 7.1)? DEC may request information for parts of the wastewater system farther than 10 feet from the water main to evaluate the risk of it affecting the part of the system being waived in the event of a wastewater system failure.
 | *18 AAC 80.200* |
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