

## MEMORANDUM

TO: Consulting Engineers and Involved Parties

FROM: North Dakota Department of Health  
Division of Municipal Facilities

RE: Pipe Diameter of Water Mains for Trailer Courts

DATE: September 17, 1984 (Revised March 9, 2012)

This Department discourages the use of undersized water mains; however, in order to lend continuity to the design and construction of water systems for trailer courts and mobile home parks, this Department has established a policy regarding minimum pipe diameters. These minimum pipe sizes are intended to provide water flows sufficient for domestic purposes only. Fire protection must be provided as required by the Division of Food and Lodging. Fire hydrants may not be connected to water mains less than six (6) inches in diameter.

These guidelines for the sizing of water mains are based on the quantity of water provided by the main versus a nominal demand and pressure drop due to friction losses experienced within the main. In establishing this policy, certain assumptions were utilized. These include a system velocity of five (5) feet per second (fps), fourteen (14) fixture units per trailer, a source pressure of fifty (50) pounds per square inch (psi), and an average lot width of fifty (50) feet.

<b>Number of Trailers</b>	<b>Minimum Pipe Diameter</b>
1-6	2"
7-19	3"
20-25	4"
26 or more	6"

Any deviation from the above criteria requires the documentation of water distribution system characteristics, and is the responsibility of the person or persons designing the system.