ROGERS WATER UTILITIES SEWER SYSTEM ROGERS, ARKANSAS

SPECIFICATIONS FOR GRAVITY PVC SEWER PIPE, PVC SEWER SERVICE PIPE & FITTINGS REVISED FEBRUARY 2006

1. **SCOPE**

This specification covers gravity PVC sewer pipe, sewer service pipe and fittings for sewage water or other liquids, with push-on joints. Only pipe materials listed in this specification shall be used for sanitary sewer mains and service lines unless authorized by the Manager of the Rogers Water Utilities.

2. GENERAL REQUIREMENTS OF GRAVITY PVC SEWER PIPE

- a. This specification covers sewer pipe, 8 in., 10 in., 12 in. and 15 in. in sizes. The minimum diameter of gravity PVC sewer pipe is 8 inch.
- b. The sewer pipe shall conform to all the minimum requirements of ASTM D3034-00 (Type PSM) and shall have a cell classification of 12454 or 12364 as defined in Specifications D1784.
- c. The sewer pipe shall have a minimum Standard Dimension Ratio (SDR) of 26.
- d. The minimum pipe stiffness (F/dY) at 5 percent deflection shall be 115 psi for all pipe sizes when tested in accordance with ASTM Method of Test D2122.
- e. All sewer pipes shall be tested in accordance with ASTM D2122, D2152 and D2444.
- f. All joints shall be push-on conforming to ASTM D3212. All gaskets shall be a lock-in elastomeric rubber (at point of manufacture) and conforming to ASTM F477.
- g. Each length of pipe furnished shall bear all identification markings as specified in Section 12 of ASTM D3034-00.
- h. Lubricant furnished for lubricant joints shall be as recommended by the manufacturer. The lubricant container must be labeled with the manufacturer's name.

GRAVITY PVC SEWER PIPE, PVC SEWER SERVICE PIPE AND FITTINGS 03-01 SPECIFICATIONS

3. GENERAL REQUIREMENTS OF PVC SEWER SERVICE PIPE

- a. This specification covers sewer service pipe, 4 inch and 6 inch in sizes. The minimum diameter of gravity PVC sewer service pipe is 4 inch.
- b. The sewer service pipe shall conform to all the minimum requirements of ASTM D3034-00 (Type PSM) and shall have a cell classification of 12454 or 12364 as defined in Specifications D1784.
- c. The sewer service pipe shall have a minimum Standard Dimension Ratio (SDR) of 26.
- d. The minimum pipe stiffness (F/dY) at 5 percent deflection shall be 115 psi for all pipe sizes when tested in accordance with ASTM Method of Test D2122.
- e. All sewer service pipes shall be tested in accordance with ASTM D2122, D2152 and D2444.
- f. All joints shall be push-on conforming to ASTM D3212. All gaskets shall be a lock-in elastomeric rubber (at point of manufacture) and conforming to ASTM F477.
- g. Each length of pipe furnished shall bear all identification markings as specified in Section 12 of ASTM D3034-00.
- h. Lubricant furnished for lubricant joints shall be as recommended by the manufacturer. The lubricant container must be labeled with the manufacturer's name.

4. GENERAL REQUIREMENTS OF FITTINGS

- a. This specification covers heavy wall SDR 26 sewer fittings such as wyes with an outlet 4 inch branches and end caps, end plugs and bends of 4 inch and 6 inch in size. Saddle type PVC fittings are not allowed on new construction.
- b. All sewer fittings shall be molded and conform to ASTM F1336 and ASTM D3034-00 and shall be manufactured from high molecular weight compound having a minimum cell classification of 12454 or 13343 as prescribed in ASTM D1784.
- c. All molded wyes shall have a minimum of SDR-24 thickness for body of the fitting and all outlets of 4 inch branches (bodies) shall have a minimum thickness of a SDR-24.

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d. All joints shall be push-on conforming to ASTM D3212. All gaskets shall be a lock-in elastomeric rubber (at point of manufacture) and conforming to ASTM F477 and F913.

5. QUALITY ASSURANCE

- a. The Rogers Water Utilities may, at no cost to the manufacturer, subject random gravity PVC sewer pipe, sewer services and fittings to testing by an independent laboratory for compliance with these standards. Any visible defect or failure to meet the quality standards herein will be grounds for rejecting.
- b. All gravity PVC sewer pipe, sewer service pipe and fittings shall be domestically manufactured.

The following manufactures are approved for gravity PVC sewer pipe, sewer service pipe and fittings.

APPROVED GRAVITY PVC SEWER PIPE AND SERVICE PIPE MANUFACTURERS LIST

Johns Mansfield (J-M Pipe) Company Certain Teed Corporation North American Pipe Corporation Diamond Plastics Corporation Jet Stream Plastic Pipe Co. Northern Pipe Products Inc.

APPROVED GRAVITY PVC SEWER FITTING MANUFACTURERS LIST

IPEX, Inc./Multi Fittings HARCO GPK Products , Inc.

Previous Specifications

December 2004