# CITY UTILITIES DESIGN STANDARDS MANUAL

Book 4
Water (W)
W2 Introduction

June 2015

## W2.01 Purpose

The purpose of this Chapter is to provide an introduction on how the Water Book is presented. The purpose of the Water Book is to provide guidance so that the design, construction and maintenance of the City's water main system will provide the level of service necessary to:

- Protect the health and welfare of residents
- Comply with local, state and federal laws
- Protect public and private property from unnecessary damage
- Protect the public from potential contaminants in the water
- Provide quality water in adequate quantity suitable for consumption
- Ensure proper operation and maintenance of public water systems

These Standards establish the minimum requirements for the design and construction of water main systems that will be owned, operated and/or maintained by the City of Fort Wayne.

# W2.02 Applicability

The Standards apply to all projects that result in water main systems that are owned, operated and/or maintained by the City of Fort Wayne and also water service lines that are owned and maintained by property owners. Water main systems include, but are not limited to:

- Water mains including service lines
- Appurtenances (valves, fire hydrants, etc.)
- Backflow Prevention
- Fire Services

For private water mains, which are wholly owned, operated and maintained by a private entity, this manual constitutes best management practices. Incorporation of these standards is highly encouraged and will be required if the transfer of the facility to the Fort Wayne City Utilities occurs in the future.

### W2.03 Variance from Standards

Variance from the Standards may be granted under specific conditions. Refer to <u>Chapter GR3 - Variances</u> of the General Requirements book for the variance procedures and requirements.

### **W2.04 Organization of Water Standards**

The Standards contain the process, procedures and technical requirements needed to comply with City of Fort Wayne water regulations. <u>Chapter W4 - Drawings and Submittals</u> outlines the minimum requirements for the submittal and acceptance of water mains.

The remaining chapters are dedicated to key water topics. Each chapter contains technical requirements including, but not limited to:

- Allowable design approaches (methods, equations)
- Minimum allowable sizing

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- Implementation limitations
- Criteria for submittal
- Minimum geometry requirements

### W2.05 Water Materials

Allowable materials and minimum requirements for use are provided in the Materials Book of the City Utilities Design Standards Manual. Relevant Chapters include:

- Chapter MA2 Introduction
- Chapter MA3 Certification of Materials
- Chapter MA4 Common Materials Requirements
- Chapter MA7 Water Materials and Testing Requirements

Materials used must comply with the Materials Standards. Deviations from the Standards may be considered in accordance with <a href="Chapter GR3">Chapter GR3</a> - Variances.

## **W2.06 Water Specifications**

City Utilities maintains a library of Master Specifications for use on City Utilities projects and may be used on other projects. Specifications are available via the City's website at:

http://www.cityoffortwayne.org/utilities/design-and-construction/master-specifications.html

The Master Specifications have been developed to support the requirements established in this manual. The Master Specifications are provided as a service to design engineers and do not waive the design engineer's responsibility or liability for the site specific design of the water main system.

# **W2.07 Compliance with Other Standards**

Compliance with these standards does not eliminate the need to comply with other applicable City, County, State and Federal ordinances, regulations and policies. These standards are intended to supplement other guides and manuals produced by the City of Fort Wayne and other agencies. Other regulations, resources and documents that shall be incorporated into these Standards include, but are not limited to the following:

- American Water Works Association (AWWA) Standards
- Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers, Recommended Standards for Water Works, latest edition. (Also referred to as Ten State Standards for Water Works)
- Indiana Department of Environmental Management (IDEM) Regulations
- Indiana Administrative Code Title 327 Water Pollution Control Board
- Indiana Administrative Code Title 675 Article 16 Plumbing Code
- Indiana Building Code
- City of Fort Wayne Code of Ordinances
- Indiana Fire Code

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- Indiana Department of Transportation (INDOT) Standard Specifications, latest edition
- Indiana Manual on Uniform Traffic Control Devices (IMUTCD), latest edition
- Fort Wayne Water Utility General Rules and Regulations
- Water Main Extension Policy
- Developer Installed Water Taps Policy
- Policy and Procedures for Water Service Disconnections Building Demolitions
- <u>Cross-Connection Regulation Fort Wayne Water Utility</u>

The provisions of this document shall be deemed as additional requirements to minimum standards required by other applicable ordinances and standards. In the case of conflicting requirements between these Standards and other referenced documents the most restrictive shall apply.

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