

FORWARD

About the City of Wilson, NC

The City of Wilson is a municipal corporation serving the City of Wilson and its Extraterritorial Jurisdiction (ETJ). Our services are funded entirely from our rates and fees, which reflect legal requirements to use the "cost of service" approach in setting rates, fees, and charges. The City of Wilson provides services within a basic framework of State and Federal law and agreements with the Towns and County regarding the extension and provision of public water and sewer services.

Manual Introduction

The City of Wilson's Manual of Specifications, Standards, & Design (MSSD) has been compiled from state-of-the-art practices and methodologies, many of the current standards and practices used by the City of Wilson, from improvement standards used in other areas of the State of North Carolina, and from applicable enabling legislation of the State of North Carolina. This manual was prepared to facilitate ease of use by both design engineers and contractors and to establish the minimum acceptable guidelines for design and construction of municipal streets, drainage systems, utilities, and their appurtenances. The minimum requirements specified herein for the City of Wilson have been determined to be reasonable as applicable to the City of Wilson. The manual was developed and prepared by Appian Consulting Engineers, PA, Rocky Mount, NC for the City of Wilson, NC

Manual format

This manual has been divided into four basic divisions and can be used either by printing out the manual from the CD or internet or utilized solely from the CD. The electronic version of the manual permits the user to navigate the manual by using the table of contents (all headings hyperlinked to the various elements of the manual), the various numerous hyperlinks provided throughout the document, and through the "search" or "find" commands on your computer.

Standard Specifications

The standard specification section includes the following sections:

- Product Substitution
- Measurement and Payment
- Earthwork,
- Trenching, Backfilling and Compaction of Utilities,
- Curb & Gutter, Driveways, & Sidewalks,
- Water Distribution,
- Sanitary Sewer
- Storm Drainage,
- Base Course and Paving
- Segmental Retaining Walls
- Seeding, Sodding, and Groundcover

Erosion Control - permitting and plan review is administered by:

- The City of Wilson, and

- The Erosion and Sediment Control Planning and Design Manual, latest revision.

Standard Details

All structures, as well as a few non-structure type standards are high-quality drawings. Most of the standard details have been drawn in both isometric and/or exploded views.

Standard Detail sections included in manual:

- Streets and Sidewalks
- Water
- Sewer
- Storm Drainage
- Landscaping
- Erosion Control
- Water Quality (BMP's)

Design

A design section has been provided which incorporates the following:

- ❖ Utilities
 - Regulatory requirements of the NCDENR,
 - Division of Water Quality, NCAC Title 15A 2T .0200 Waste not Discharged to Surface Waters,
 - NCDENR Division of Environmental Management, Public Water Supply Section, NCAC Title 15A Subchapter 18C, Rules for Governing Public Water Supply Systems,
 - ASCE–Manuals of Reports on Engineering Practice-No. 60 “Gravity Sanitary Sewer Design and Construction,”
 - The “Recommended Standards for Sewage Works” by the Great Lakes-Upper Mississippi River Board of State Sanitary Engineers, and
 - The applicable requirements specific to the City of Wilson.
- ❖ Street Design
 - AASHTO Guide for Design of Pavement Structures
 - ITE Trip Generation, 6th Edition
 - The applicable sections of the NCDOT SuperPave Hot Mix Asphalt Quality Management System
 - The applicable requirements specific to the City of Wilson.
- ❖ Storm Drainage Design
 - Regulatory requirements of the NCDENR, Stormwater Management Site Planning & Stormwater Best Management Practices Division of Water Quality,
 - The applicable requirements specific to the City of Wilson.

Policy and Ordinance

Some of the relevant specific policies and ordinances, in their entirety, have been provided for reference. However, it is the responsibility of the designer to contact the City Engineers office if he/she needs information or copies of other project related policies and ordinances that are not included in this manual.

To the best of their ability, the authors have tried to ensure that the information presented here is correct and that the procedures are reliable. The execution of an engineering design; however, involves the judgment of the design engineer and only the engineer can ascertain

whether a technique or item of information can be applied to a given situation. Ultimately, the design engineer is responsible for his/her design meeting the intent of this manual.

Jurisdiction

The Water and Sewer Specifications and Details as well as the Water and Sewer Design Section were approved by the NC Public Water Supply Section on April 20, 2010 and became effective on that date. The balance of the Manual will become effective On September 1, 2010 and shall be applicable to all new improvements and alterations in existing improvements lying within the regulatory jurisdiction of the City of Wilson.

Variance or Modification

Any variances, alternate designs, construction methods and materials, not specifically prescribed herein, shall be subject to the approval of the City Engineer.

Copyright

This is a copyrighted document. Reuse of the printed material or standard details contained in this manual, either in whole or in part, by private concerns or individuals for the purpose of monetary gain in the preparation of municipal public facilities manuals or similar documents, without the written permission of Appian Consulting Engineers, PA, Rocky Mount, NC is strictly prohibited.

Project Team:

City of Wilson

R. Bryant Bunn, III, P.E., City Engineer

Bryan C. Spell, CPSWQ, Stormwater Program Manager

Barry Parks, Assistant Director of Public Services/Water Resources

Jake Green, P.E., Traffic Engineer

Jimmy Taylor, Engineering Services Coordinator

Randy Collins, Construction Inspector

Rick Renfrow, Construction Inspector

John Woodard, Water & Sewer Crew Supervisor

Robert Raper, Water Distribution ORC

Darryl Sanders, Sanitary Sewer ORC

Appian Consulting Engineers, PA

Bobby L. Joyner, P.E., Project/Team Leader and Author

Mike Gallina, CAD Supervisor

Tonya E. Nelms, Marketing and Business Development