STORM SEWER DESIGN MANUAL

FIRST EDITION

GUILFORD COUNTY PLANNING AND DEVELOPMENT DEPARTMENT

GREENSBORO, NORTH CAROLINA

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ACKNOWLEGEMENT

This manual was prepared in part from excerpts taken from <u>Elements of Urban Stormwater Design</u> by H. Rooney Malcom, P.E. and the <u>Erosion and Sediment Control – Planning and Design Manual</u> by the North Carolina Department of Environment and Natural Resources. Guilford County wishes to acknowledge these groups for assistance and preparation of their respective manuals.

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FOREWORD

Storm Drainage Design is an integral part of Erosion and Sediment Control, Water Quality Protection, and Flood Control and Stormwater Management.

This manual covers the fundamentals of storm drainage runoff calculations and storm sewer design. The Storm Sewer Design Manual addresses the Rational and SCS methods of runoff calculations, pipe sizing, culvert design, open channel flow, and Guilford County Development Ordinance requirements.

This manual is intended primarily to provide guidance to design professionals (engineers, surveyors, etc.) in preparing drainage calculations for proposed development sites. However, it also is intended to provide information to all citizens of Guilford County who are concerned with storm drainage.

As a "design manual", the intent is to provide guidelines or minimum standards, not to dictate the design of the professional. Several different practices are listed and at least one should be suitable and useable on most any site with careful planning. It should be looked upon as a road map whereby citizens and developers can achieve an understanding of storm drainage basics and designers can have a consistency of storm drainage design.

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