
TABLE OF CONTENTS

FORWARD

Preface	iii
Acknowledgements	iii

INTRODUCTION

Objective of the Manual	v
Organization of the Manual	v
Users of this Volume	v
How to Use this Volume	vi
Regulatory Status of the Manual	vii
How to Get Printed Copies of the Manual	viii
How to Find the Manual on the Internet	viii
Contact Information	viii

CHAPTER 1 – STORMWATER MANAGEMENT PLANNING AND DESIGN

1.1 The Need for Stormwater Management	1.1-1
1.2 Stormwater Management Standards	1.2-1
1.3 Unified Stormwater Sizing Criteria	1.3-1
1.4 Stormwater Better Site Design	1.4-1
1.5 Stormwater Site Planning	1.5-1

CHAPTER 2 – STORMWATER HYDROLOGY

2.1 Methods for Estimating Stormwater Runoff	2.1-1
2.2 Storage Design	2.2-1
2.3 Outlet Structures	2.3-1

CHAPTER 3 – STRUCTURAL STORMWATER CONTROLS

3.1 Structural Stormwater Controls Overview	3.1-1
3.2 General Application Structural Stormwater Controls	3.2-1
3.2.1 Stormwater Ponds	3.2-3
3.2.2 Stormwater Wetlands	3.2-23
3.2.3 Bioretention Areas	3.2-43
3.2.4 Sand Filters	3.2-59
3.2.5 Infiltration Trenches	3.2-75
3.2.6 Enhanced Swales	3.2-89

3.3 Limited Application Structural Stormwater Controls	3.3-1
3.3.1 Filter Strip	3.3-3
3.3.2 Grass Channel.....	3.3-11
3.3.3 Organic Filter	3.3-17
3.3.4 Underground Sand Filter.....	3.3-21
3.3.5 Submerged Gravel Wetlands.....	3.3-25
3.3.6 Gravity (Oil-Grit) Separator	3.3-29
3.3.7 Porous Concrete.....	3.3-33
3.3.8 Modular Porous Paver Systems.....	3.3-41
3.3.9 Alum Treatment System	3.3-47
3.3.10 Proprietary Structural Controls.....	3.3-51
3.4 Detention Structural Stormwater Controls.....	3.4-1
3.4.1 Dry Detention / Dry ED Basins.....	3.4-3
3.4.2 Multi-Purpose Detention Areas	3.4-9
3.4.3 Underground Detention.....	3.4-13

CHAPTER 4 – STORMWATER DRAINAGE SYSTEM DESIGN

4.1 Stormwater Drainage Design Overview.....	4.1-1
4.2 Minor Drainage System Design.....	4.2-1
4.3 Culvert Design.....	4.3-1
4.4 Open Channel Design.....	4.4-1
4.5 Energy Dissipation Design.....	4.5-1

APPENDIX A – RAINFALL TABLES FOR GEORGIA

APPENDIX B – SOILS INFORMATION FOR GEORGIA

APPENDIX C – MISCELLANEOUS SPECIFICATIONS

APPENDIX D – STRUCTURAL STORMWATER CONTROL DESIGN EXAMPLES

- D1 Stormwater Pond**
- D2 Bioretention Area**
- D3 Sand Filter**
- D4 Infiltration Trench**
- D5 Enhanced Swale**

APPENDIX E – STRUCTURAL CONTROL MAINTENANCE CHECKLISTS

APPENDIX F – LANDSCAPING AND AESTHETICS GUIDANCE

APPENDIX G – STORMWATER COMPUTER MODELS

APPENDIX H – GEORGIA SAFE DAMS ACT