Draft Outline for Chapter 5
2000 Maryland Stormwater Design Manual (09/17/2007)

Chapter 5. Environmental Site Design

5.0 Introduction
- 5.0.1 Background
- 5.0.2 Impacts of Imperviousness
- 5.0.3 Requirements of the Stormwater Management Act of 2007

5.1 Environmental Site Design
- 5.1.1 Definition
- 5.1.2 Basic Concepts
- 5.1.3 Addressing the Unified Sizing Criteria

5.2 Planning Techniques
- 5.2.1 Introduction
- 5.2.2 Identifying and Protecting Sensitive Resources
- 5.2.3 Expanding and Enhancing Buffers
- 5.2.4 Reducing Impervious Cover
  - Clustering
  - Narrow Streets
  - Reduced Parking & Shared Driveways
  - Green Roofs
  - Permeable Pavements and Grid Pavers
    - In HSGs A & B
    - In HSGs C & D

5.3 Treatment Using Nonstructural and Micro-Scale Practices
- 5.3.1 Introduction
- 5.3.2 Nonstructural Practices
  - Disconnection of Rooftop Runoff
  - Disconnection of Non-Rooftop Runoff
  - Promoting Sheet Flow to Buffers
- 5.3.3 Using Micro-Scale Practices to Treat Runoff
- 5.3.4 Retention Practices
  - Submerged Gravel Wetlands
  - Rain Water Harvesting (Cisterns & Rain Barrels)
- 5.3.5 Infiltration Practices
  - Landscape Infiltration
  - Infiltration Berms
  - Dry Wells
- 5.3.6 Filtering Practices
  - Micro-Bioretention (Commercial/Industrial Applications) - includes parking lot islands and planter box variations

- Rain Gardens (Residential Applications) – includes excavated, planter box, and terraced variations
- Landscape & Tree Planters – includes linear tree pits, sidewalk planters
- Grass Swales & Bio-Swales
- Tree-Swales (Alternating Side Slope Plantings & Tree Check Dams)
- Enhanced Filtering Systems – includes techniques to provide recharge in filtering systems

5.3.7 Other Practices

- Grass Filter Strips
- Vegetated Buffers

5.4 Reserved for Redevelopment

5.5 Reserved for Existing Development and Retrofitting

5.6 Reserved for Special Criteria for Sensitive Waters