

# NPDES Compliance Inspection Manual

## *Appendix U*



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## Appendix U – Typical "C" Coefficients

<b>TYPICAL "c" COEFFICIENTS FOR 5- TO 10-YEAR FREQUENCY DESIGN STORMS</b>	
<b>Description of Area</b>	<b>Runoff Coefficients</b>
Business	
• Downtown areas	0.70-0.95
• Neighborhood areas	0.50-0.70
Residential	
• Single-family areas	0.30-0.50
• Multi-units (detached)	0.40-0.60
• Multi-units (attached)	0.60-0.75
Residential (suburban)	0.25-0.40
Apartment dwelling areas	0.50-0.70
Industrial	
• Light areas	0.50-0.80
• Heavy areas	0.60-0.90
Parks and cemeteries	0.10-0.25
Playgrounds	0.20-0.35
Railroad yard areas	0.20-0.40
Unimproved areas	0.10-0.30
Streets	
• Asphalt	0.70-0.95
• Concrete	0.80-0.95
• Brick	0.70-0.85
Drives and walks	0.75-0.85
Roofs	0.75-0.95
Lawns—course textured soil (greater than 85 percent sand)	
• Slope: Flat (2 percent)	0.05-0.10
Average (2-7 percent)	0.10-0.15
Steep (7 percent)	0.15-0.20
Lawns—fine textured soil (greater than 40 percent clay)	
• Slope: Flat (2 percent)	0.13-0.17
Average (2-7 percent)	0.18-0.22
Steep (7 percent)	0.25-0.35
Source: <i>Design and Construction of Sanitary and Storm Sewers</i> , with permission from the publisher, American Society of Civil Engineers, <i>Manual of Practice</i> , page 37, New York, 1960.	