Rhode Island Stormwater Design and Installation Standards Manual

RIDOT Workshop
How to Use the Revised Manual
August 25, 2011

Who Should Use the Manual?

Designers
AND
Maintenance and Construction Crews
AND
Planners

Why does the Manual have so many pages??

A. Looks more impressive that way
B. Great paperweight
C. Nice, heavy spider killer
D. Contains important requirements and guidance
E. All of the above
Steps 1 and 2

- What criteria are relevant to your project?
- Other local ordinances to consider?
  - Topography
  - Drainage area delineations
  - Soil, groundwater, geologic constraints
  - Zoning restrictions

Steps 3 and 4

- What volume requirements must be met? ($Re_v$, $WQ_v$, $CP_v$, $Q_p$)
- What BMPs can be used?
  - Incorporate LID into your project at the initial design stages, before building layouts are finalized.
Steps 5 and 6

• Develop conceptual design
• Coordinate with review agencies
• Collect more data and revise as necessary
• Move forward with a design that meet standards 1-9

Important Sections of the Manual Relevant to Each Standard

• Standard 1 (LID)
  - Chapt. 3.3.1,
  - Chapt. 4,
  - Appendix A, and
  - App. D (design exmp)

• Standard 2 (Recharge)
  - Chapt. 3.3.2,
  - Chapt. 4.6 (SW Credit)
  - Chapt. 5 & 6 for pretreatment
  - App. D (design exmp),
  - App. F (specs), and
  - App. H.1 (soil testing)

Cont’d

• Standard 3 (WQ)
  - Chapt. 3.3.3,
  - Chapt. 4.6 (SW Credit),
  - Chapt. 5,
  - Chapt. 6,
  - App. B (landscaping),
  - App. D (design exmp),
  - App. F (specs),
  - App. H.3 (pollutant loading analyses), and
  - App. J (TAP)
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Cont’d

• Standard 4 (C_p)
  - Chapt. 3.3.4,
  - Chapt. 5,
  - Chapt. 7,
  - App. D (design exmp),
  - App. H.4 (short-cut sizing),
  - App. I (River/Stream Order), and
  - App. K (H/H Modeling Guidance)

Cont’d

• Standard 5 (Q_p)
  - Chapt. 3.3.5 and 3.3.6,
  - Chapt. 5,
  - Chapt. 7,
  - App. D (design exmp),
  - App. I (River/Stream Order), and
  - App. K (H/H Modeling Guidance)

Cont’d

• Standard 6 (Redevelopment/Infill)
  - Chapt. 3.2.6,
  - App. C (retrofit options)
• Standard 7 (Pollution Prevention)
  - App. G (Pollution prevention and source control)
• Standard 8 (LUHPPLs)
  - Tables 3-2 and 3-3,
  - Chapt. 5
• Standard 9 (Illicit Discharges)
  - Chapt. 3.2.9
Steps 7 and 8

- Develop appropriate ESC plan to meet Standard 10
- Develop appropriate O&M plan to meet Standard 11
- Specific requirements in Chapters 5-7
- Add'l guidance/checklists in App. E

Step 9

- Final Plan meeting all requirements

Refer to Appendix A throughout design process
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LID for Linear Transportation Projects:
RI SW Manual