

# WATER

## *26 Attachment 2*

City of Saint Marys

### **Appendix B**

#### **Suggested Best Management Practices**

- A. List of Site Conditions Suitable for Infiltration.
1. Depth of bedrock below the invert of infiltration BMPs shall be greater than or equal to two feet.
  2. Depth of seasonal high water table below the invert of infiltration BMPs shall be greater than or equal to two feet.
  3. Soil permeability test results shall be greater than or equal to 0.10 inches/hour and less than or equal to 10 inches per hour.
  4. The appropriate factor of safety, per the existing soil conditions, and per the guidance provided per the Pennsylvania Stormwater BMP Manual (current version) shall be applied to the final infiltration rate used for design.
  5. Methodologies and procedures for properly determining soil infiltration rates can be found within the Pennsylvania Stormwater Best Management Practices Manual.
  6. Setback distances or buffers of infiltration BMPs shall be a minimum of:
    - a. One hundred feet from individual water supply wells and from community or Municipal water supply wells.
    - b. Twenty feet from building foundations.
    - c. Fifty feet from septic system drain fields.
    - d. Fifty feet from karst geologic contacts such as sinkholes, closed depressions, fracture traces, faults, and pinnacles.
    - e. Twenty feet from the property line unless documentation is provided to show that all setbacks from wells, foundations and drain fields on neighboring properties will be met.
- B. Effective BMPs for Infiltration.
1. Infiltration trench.

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2. Infiltration basin/subsurface infiltration bed.
  3. Bio filters, rain gardens, bio-infiltration, bio swales.
  4. Filters for pretreatment.
  5. Dry well/seepage pits.
  6. Pervious pavement/concrete.
  7. Soil amendments.
  8. Riparian buffer restoration.
- C. Effective BMPs for Rate Control.
1. Wet ponds.
  2. Stormwater wetlands.
  3. Extended detention (dry) ponds.
  4. Vegetated swales.
  5. Floodplain restoration.
  6. Constructed filters.
  7. Runoff volume reduction BMPs listed and B and C above such as retention, infiltration and revegetation.
- D. Effective BMPs for Bioretention and Evapotranspiration.
1. Rain gardens.
  2. Green roofs.
  3. Constructed wetlands.
  4. Select, commercially available products (as approved by the municipality). Consult the Pennsylvania Stormwater Best Management Practices Manual for all available BMPs and stormwater technologies that can effectively mitigate stormwater runoff, volume, and quality issues.