



## **Standard for Storm Water Management Design Parameters**

### **Basis for Design Requirements**

The University of Texas (UT) holds a Municipal Separate Storm Sewer System (MS4) Permit which requires UT to do the following:

- Limit the increase in erosion and discharge of pollutants in stormwater as a result of new development or re-development
- Implement a comprehensive master planning process to include all new development and re-development
- Provide resources for the long term maintenance and operation of the best management practices

### **Design Parameters**

The following are design and construction parameters that help meet the required objectives. These are pre-requisites from the Sustainable Sites Initiative (SITES) Version 2. Designs for stormwater management must be implemented and must meet these requirements.

The prerequisites are as follows:

*Context P1.1: Limit development on farmland*

*Context P1.2: Protect floodplain functions*

*Context P1.3: Conserve aquatic ecosystems*

*Context P1.4: Conserve habitats for threatened and endangered species*

*Pre-Design P2.1: Use an integrative design process*

*Pre-Design P2.2: Conduct a pre-design site assessment*

*Pre-Design P2.3: Designate and communicate Vegetation and Soil Protection Zones*

*Water P3.1: Manage precipitation on site*

*Water P3.2: Reduce water use for landscape irrigation*

*Soil+Veg P4.1: Create and communicate a soil management plan*

*Soil+Veg P4.2: Control and manage invasive plants*

*Soil+Veg P4.3: Use appropriate plants*

*Materials P5.1: Eliminate the use of wood from threatened tree species*

*Construction P7.1: Communicate and verify sustainable construction practices*

*Construction P7.2: Control and retain construction pollutants*

*Construction P7.3: Restore soils disturbed during construction*

*O+M P8.1: Plan for sustainable site maintenance*

*O+M P8.2: Provide for storage and collection of recyclables*



## **Standard for Storm Water Management Design Parameters**

Note the following regarding particular pre-requisites.

### ***Pre-Design P2.3 Designate and communicate Vegetation and Soil Protection Zones (VSPZ)***

Not all sites will meet the criteria for designating a VSPZ. Those sites that meet the Site Context are required to designate a VSPZ.

### ***Water P3.1 Manage Precipitation on site***

Retain the precipitation volume from the 60th percentile precipitation event as defined by the U.S. EPA in the Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act (or local equivalent for projects outside the United States).

### **Engineered Design Requirements**

Detailed design drawings must be provided for stormwater management. The drawings must be signed and sealed by a Professional Engineer registered in Texas.

The maximum permissible velocity for conveying stormwater runoff for the one hundred (100) year storm is six (6) feet per second and includes all transitions to or from channels and waterways with similar or different materials. In all cases, the velocity for the one hundred (100) year storm must be non-erosive. The minimum permissible velocity for the two (2) year storm is two (2) feet per second.

For the complete SITES Rating System document contact UT Environmental Health and Safety at 512-471-3511 or [EHS-Environmentalops@austin.utexas.edu](mailto:EHS-Environmentalops@austin.utexas.edu)