FACILITIES & OPERATIONS
ARCHITECTURE, ENGINEERING AND CONSTRUCTION
UNIVERSITY OF MICHIGAN

DESIGN GUIDELINE 328400
IRRIGATION

Scope

Designing and specifying irrigation.

Related Sections

U-M Design Guidelines

6.0 DG310000 Site Requirements
6.0 DG312500 Soil Erosion and Sedimentation Control
DG 3.1 Sustainable Design and LEED Requirements
DG 4.4.1 Landscape

U-M Standard Details

Irrigation Controller / Time Clock Installation Detail

Schematic Irrigation System Detail

Related Documents

Maintenance Priority System Campus Map
Southeast Michigan Council of Governments Low Impact Development Manual

Summary

Careful consideration should be given to the selection of plant materials that require less water to sustain their life. The designer should also consider context when preparing landscape plans and work with Campus Planning to ensure an investment in an irrigation system is warranted. For example, a landscape within an area of high-visibility and high pedestrian traffic may be more richly planted, which would warrant irrigation. U-M Grounds Services (Grounds) has developed a maintenance priority system and corresponding campus maps that can serve as a guide for where irrigation (or intensity thereof) may be appropriate.

When irrigation is warranted, U-M is committed to installing water-efficient irrigation systems with metering equipment and other high-efficiency irrigation technologies to reduce potable water consumption.

Design Requirements

Design teams shall coordinate during Schematic Design with Grounds to identify system

requirements, including components to be pre-purchased and provided by Grounds due to central control irrigation system requirements. Grounds/Owner-provided items are a project cost.

In addition to irrigation design, the Design Professional (DP) should provide plumbing, mechanical systems, electrical and irrigation system/coverage design for associated irrigation components within the building envelope and exterior to the building. Consult with Grounds to evaluate adequate capacity and flow when tying into an existing irrigation system.

The DP shall design the connection of power to the controller and pump, building penetrations and note sequencing to avoid waterproofing warranty violation.

Separate meters for irrigation measurement should also be included—coordination with the City/authority having jurisdiction through the U-M Design Manager is required. Design Professionals are not authorized to contact jurisdictional agencies outside the university without U-M permission. See the standard details Irrigation Controller / Time Clock Installation Detail as well as the Schematic Irrigation System Detail.

Contractor's plumbing/mechanical, electrical and site trades will provide (except for identified Grounds/Owner-provided items) and install (including Grounds/Owner-provided items) all irrigation components associated with the irrigation system. Owner-provided material and Contractor material and installation, which comprise a full working irrigation system, are project costs.