## PRINCIPLE 6



MAINTENANCE AND BUILDING SERVICE

# PRINCIPLE 6: Maintenance and Building Service



## **Principle**

The university was established over 143 years ago and is likely to continue far into the future. Its continued viability depends on the creation of a campus that is long-lasting, easily maintained, and easily serviced.

The university's campus and facilities shall be designed to meet long-term university needs and to be efficiently maintained and operated in accordance with the principle refinements below.

## **Pattern Summary**

(Refer to "Principle 11: Patterns" on page 60 for the complete pattern text.)

- Enough Storage
- Flexibility and Longevity
- Hierarchy of Streets
- Materials and Operations
- Shielded Parking and Service Areas
- Sustainable Development

## **Principle Refinements**

The following principle refinements apply campus-wide when considering new construction and renovations.

Facilities Services coordinates building and landscape repair and maintenance projects. (See Facilities Services description on page 16 and refer to the *Campus Design Standards*.) All such projects must meet applicable Plan principles and patterns whether or not they are subject to Campus Planning Committee review.<sup>10</sup>

#### Maintenance

- (a) Construct new buildings and remodel existing space with high-quality, durable materials and finishes that require a low level of maintenance, and employ construction methods that minimize the need for frequent maintenance by specialized personnel.
- (b) When use of materials or methods requiring a greater level of maintenance is proposed, their selection must be justified in terms of (1) the nature and intensity of the intended use; (2) the context of the building or space with regard to the site or its location within the building; and (3) the relative cost of the higher maintenance requirement over the expected useful lifetime of the building. Consult Facilities Services during this evaluation.
- (c) To the maximum extent possible, select fixtures, hardware, and other consumable materials for installation in university buildings that avoid the need to maintain an extensive inventory of parts. To the extent practicable, use materials that are compatible with existing materials.

<sup>&</sup>lt;sup>10</sup> The Campus Planning Committee is not involved in building and landscape maintenance and repair projects.

#### **Building Service**

- (a) For each campus building or building complex, establish a designated building service area. Each service area should provide facilities for loading and package delivery, garbage and trash collection, recycling, and parking for maintenance and service vehicles. (Refer to diagram below.)
- (b) Integrate the location and design of service areas into the building and landscape design so they are not detrimental to the campus aesthetic. Also refer to the principle refinement addressing landscape screening on page 33.



**Diagram of Designated Building Service Areas** 

#### **Campus Utilities and Infrastructure**

The University of Oregon is served by a variety of utilities that are essential to campus operations. The university's central plant produces steam for heat, chilled water for cooling, and standby power for emergency operations. The university also maintains its own communications systems (including telephone, data, and wireless data), life-safety systems (consisting of a series of emergency call boxes across the campus), and security/access systems for monitoring and managing the use of the buildings and some exterior campus spaces.

A system of tunnels connects on-campus buildings to the central plant north of the Millrace. This tunnel system represents a significant capital expenditure and ensures ease of distribution and maintenance of the services it contains.

The following utilities are distributed through the tunnel system:

- Steam
- Electricity
- Chilled Water
- Communications (includes telephone and data)
- Life safety and security/access

The following utilities are buried on the campus:

- Water
- Sanitary Sewer
- Storm Sewer
- Natural Gas
- (a) All plans adopted for individual building projects shall include an assessment of utility systems and other infrastructure improvements required to support the project. Unless the president specifically agrees to the contrary in advance or unless provisions for these improvements are included in a separately authorized project, sufficient funds for effecting the required infrastructure improvements shall be included in the budget for the proposed project.
- (b) Major projects should include the cost of extending the tunnel system in the calculation of their infrastructure and utility needs.

- (c) New utility distribution lines for utilities currently within tunnels (see list above) shall be located within tunnels. Other utilities not currently in tunnels can be buried.
- (d) Generally, accessory equipment such as transformer vaults are to be buried or located inside buildings to eliminate clutter, preserve the campus character, and prevent equipment damage. HVAC equipment may be located on roofs if it is not in public view.

The Campus Planning Committee may recommend exceptions to this general rule when no safe or practical means of meeting this requirement exists. A plan that contemplates locating accessory equipment partially or wholly above ground is to be reviewed by the Campus Planning Committee. Facilities and equipment so located are to be secured and screened in a manner that minimizes both hazards to personal safety and adverse visual impact. (Refer to the separate *Telecommunications Facilities Guidelines.*)

- (e) To the extent practicable and consistent with other principles, utility systems and system components are to be compatible with university systems and system components.
- (f) All utilities systems must be designed for flexibility and change and installed for ease of access for maintenance and repair.
- (g) Consider opportunities to improve campus-wide utility systems in consultation with Facilities Services and tie into building projects when possible.
- (h) Selection and installation of telephone/ data cable equipment will be coordinated through the Telecommunications Services Office of the Department of Business Affairs. Refer to separate Telecommunications Facilities Guidelines.