## 26 40 00. Electrical and Cathodic Protection

## 26 41 00. Lightning Protection Systems

### 26 41 13. Lightning Protection for Structures

All building projects shall be studied to determine if there is a need for lighting protection systems. The project design team shall consult with the campus electrical engineer for input.

# 26 50 00. Lighting

## 26 50 50. General Lighting Fixture Requirements

1. Consult the UW Electric Shop to determine the standard light fixture for parking ramps. Refer to *Division 34 – Transportation and 26 56 00- Electrical*.

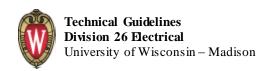
- 2. Fluorescent lamps shall be based on 4 feet Philips F32T8/TL850 whenever possible. No 8 feet lamps shall be used. Philips shall be used as reference standard, but all lamp brands meeting the DFD specifications are acceptable.
- 3. Color temperatures of lamps on campus shall be 4100K.
- 4. U-shaped lamps shall not be used.
- 5. Whenever possible, local motion controls with manual "off" switches shall be used. Where practical, ambient light detection shall also be implemented to further reduce energy consumption. Central lighting system controls shall only be used in places of assembly or wherever programmatic needs dictate their use.
- 6. All lighting fixtures shall be accessible to maintenance personnel with a simple 8 foot ladder. Final designed locations shall be at the lowest level possible, to allow the most convenient method for maintenance.

#### 26 06 00. Exterior Lighting

#### 26 56 05. Exterior Lighting Fixtures

- 1. Outdoor lighting fixtures shall be the campus standard Kim Archetype as identified below. These are a sole source item. No substitutions. DFD requires a Class 1 notice to be included in the specifications.
  - 1.1. The Archetype Model SAR for 12 foot poles and the Archetype Model AR for 25 foot poles are the campus standards.
  - 1.2. Lamps shall be LED 4100K. Use Pico prism with a lens.
  - 1.3. The Kim standard arm to connect light fixture to pole shall be used.
  - 1.4. The vertical slipfitter mount shall be round.
  - 1.5. Light fixtures shall include a photo cell control.
  - 1.6. Color of the light fixtures, light poles, arms, vertical slipfitter mounts, and base covers shall be black.
  - 1.7. Poles shall be aluminum, round, smooth (no flutes) and straight (non-tapered).
  - 1.8. The 12 feet tall, 4 inch diameter pole is the campus standard for pedestrian areas. The 25 feet tall, 6 inch diameter pole is the campus standard for vehicular areas.
  - 1.9. Base cover shall be the Kim Standard Base Cover (Round) and sit on a concrete base of 5 inch larger diameter.
- 2. The campus standard outdoor light fixture for "Historic" areas of campus is the Sternberg Main Street, Model MS6805. Use of this fixture shall be identified and approved by UW Campus Planning and Landscape Architecture. These are a sole source item No substitutions. DFD requires a Class 1 notice to be included in the specifications.
  - 2.1. Lamps shall be LED. 4100K

- 2.2. Fixture shall have decorative spikes (A).
- 2.3. Lens shall be clear seeded acrylic (CSA) unless there are concerns with glare. Any deviations shall be approved by UW Campus Planning and Landscape Architecture.
- 2.4. Post top (PT) mounted fixture shall be used.
- 2.5. Color of light fixture, pole and all components shall be black.
- 2.6. Poles shall be a 12 feet tall, 4 inch diameter, smooth, straight (12P4). The Williamsburg base shall be used.
- 2.7. Single fuse and holder (FHS) shall be included.
- 3. Concrete pedestals/footings for light poles shall be 36 inches above grade in parking lots and 6 inches above grade in all other areas.
  - 3.1. The base shall have a 1 inch beveled edge at a 45 degree angle and rubbed finish. The top of the base shall have a circular broom finish.
    - 3.1.1. Provide construction detail in 35% plan set.
  - 3.2. Diameter of concrete pedestals/footings shall be kept to a minimum but also provide required structural support and be larger than base cover (shroud) for the lamp base. The base cover shall not overhang the concrete pedestal/footing.
  - 3.3. The base cover shall sit flush on the concrete base without any gap.
  - 3.4. The concrete pedestals/footings of multiple light poles in proximity to one another shall have consistent heights.
- 4. For Parking Structure Lighting see *Division 34 09 05, #6*.
- 5. Provisions for control of exterior lighting circuits shall be made through the campus building control system (Johnson Controls METASYS).
- 6. Exterior lighting shall be limited to what is required for security and safety.
- 7. Seat wall lighting, step lights, hand rail lights, and bollard lights (LED and non-LED) are strongly discouraged for maintenance reasons and shall not be used
- 8. Control of light pollution continues to be an important issue on the campus. Uplighting and/or building accent lighting shall not be specified. All lights shall have sharp cut offs and be Night Sky Compliant.
- 9. Wall pack light fixtures shall be avoided. Use building mounted light fixtures instead if needed. Pole mounted lights are the campus preferred method of illumination and shall be used whenever possible.
- 10. Any exterior light fixtures within the project boundary shall be updated to meet current campus standards. Non-standard lights shall not be reinstalled.
- 11. An exterior lighting plan with schedule that identifies location and type of all exterior lights including pole mounted and building mounted fixtures shall be provided.



**Power Outage Planning** 

Completed form required for power outage on UW Madison Campus UW Electric Shop - Approved (Yes , No )

<u>Electrician Name</u> <u>Date</u>

Company Contact Phone #

Building Number

**Address** 

- 1. Requested Outage Date
- 2. Time of Day
- 3. Reason for outage
- 4. Work order Number
- 5. **Project #**

Contact the following people-

Bldg Manager

<u>Others</u>

Rick Werre------ 263-3089 Kurtis Johnson---- 262-7776 Classroom Timetable-Registrar's Office Cheryl Wise----- 265-6956

Please contact (BEFORE and AFTER) shutdown!!!

Doit Platform----- 263-2648 email (ns-field-repair@doit.wisc.edu)

email (noc@doit.wisc.edu)

UW Police----- 262-2957

262-4524 Fax (262-9768)