

1. DESIGN STANDARD:

- 1.1 International Energy Conservation Code (IECC) calculations are to be submitted to Rice University along with 100% review drawings.
- 1.2 Parking Lot: Illuminance of parking lot to be per Illumination Engineering Society (IES) handbook, latest edition.
- 1.3 Street Lights: In general, use 60 ft to 90 ft spacing for street lights.
- 1.4 Walkway Lights: Spacing of walkway lighting to be designed in order to provide illuminance values per IES handbook.
- 1.5 Code Blue Emergency Call Stations. In general, where exterior walkway lighting is required, a Code Blue emergency call station will also be required. Location of Code Blue emergency call stations to be determined by Rice University Campus Police. Discuss requirements for Code Blue emergency call stations with Rice University Project Manager.
- 1.6 Exterior Lighting, Not Used: As a Rice University policy, ground mounted building facade lighting and tree mounted lighting is not used.
- 1.7 Exterior Pole Foundations: Reference the appropriate Rice University standard pole base structural drawings. Rice University standard drawings are based on existing Walter P. Moore structural drawings. Coordinate pole base structural detail references with Rice University Project Manager.

2. PRODUCT STANDARD:

- 2.1 In general, interior lighting fixtures are to be Specification Grade, by major lighting fixture manufacturer
- 2.2 Where acrylic lenses are specified, minimum lens thickness to be 0.125.
- 2.3 Electronic ballasts to be specified for interior fluorescent lighting fixtures. Magnetic ballasts will not be allowed.
- 2.4 Electronic fluorescent ballasts shall have at least a 5 year warranty.
- 2.5 Lamp Color Temperature: Rice University prefers either 3500K or 4100K lamps for fluorescent fixtures at building interiors. A single lamp color temperature shall be used for all interior fluorescent fixtures throughout the project. Coordinate exact lamp color temperature with Architect and Rice University Project Manager prior to lamp selection.

- 2.6 Fluorescent Lamp Type: Typical fluorescent fixture to utilize T8 type lamps.
 - 2.7 Exit signs to be Light Emitting Diode (LED) type. Color of LED's may be red or green.
 - 2.8 Football Stadium Parking Lot: Standard fixture for Stadium parking lot is twin Widelite SLS800S square Supra-Lyte with two 400W HPS lamps per luminaire, 40 ft nominal mounting height.
 - 2.9 Parking Lot (other than Football Stadium): Standard fixture for non-Stadium parking lots is Gardco Form 10, arm mount with mast arm fitter. Standard lamp is HPS type, 70 -400 watts; height of pole to be proportional to lamp watts (but not greater than 40 ft). Poles for parking lots to be Valmont type DS330 straight square steel poles with MS401 bracket arm or equal.
 - 2.10 Street Lights: Decorative street lighting to be custom pole and luminaire by Antique Street Lamps, Inc., Austin Texas. Refer to Antique Street Lamps, Inc Drawing L1785. Rice University stocks a maintenance supply of 120V ballasts and prefers use of 120V ballast for all new Street Lights.
 - 2.11 Walkway Lights: Walkway lighting to be Hadco Old Boston, Catalog Number V092HR5NG150SE with 1/3 frosted globe. Pole to be Hadco P1400-10H pole. Note that the Hadco V092 product has replaced the Hadco V091 product.
 - 2.12 Circuitry for exterior lighting to be #6 AWG in 1" C.
 - 2.13 Control of exterior lighting to be based on a master photocell sending a signal to a controller, with "ON/OFF/AUTO" control at the controller (Maintenance, Override off, Automatic photocell operation). Photocell control at individual lighting fixtures will not be allowed.
 - 2.14 In general, exterior lighting is to be metered (sub-metered). Metering equipment to be similar to E-MON D-MON type meter from E-MON, L.P (a Hunt Power Company). Discuss exterior lighting metering with Rice University Project Manager.
 - 2.15 Code Blue Emergency Call Stations. In general, where exterior walkway lighting is required, a Code Blue emergency call station will also be required. Location of Code Blue emergency call stations to be determined by Rice University Campus Police. Discuss requirements for Code Blue emergency call stations with Rice University Project Manager. Code Blue emergency call station to be Code Blue Cat. No. Z-40.
3. **INSTALLATION STANDARD:**
- 3.1 Where exterior lighting is being designed (parking lot lighting, street lighting, walkway lighting), provide a stub-out from the appropriate pole bases for future extension and provide spare capacity in circuitry for similar additional future lighting fixtures. Discuss appropriate pole bases for stub-outs with Rice University Project Manager.