

QA/QC Checklist

PENNSTATE



Construction Services

DIVISION 26 – Electrical

26 56 00 – Exterior Lighting

General Information	Programming/Design	Bidding/Preconstruction	Installation/Construction	Closeout/Warranty
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01 General

1. Existing site lighting must be maintained during construction for safety.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Site lighting is critical to public safety but may be overlooked by the project lighting designer; many times the site lighting is designed by the site engineer. Verify that it is included in the documents.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. If site lighting is shown on site/civil drawings, verify that the electrical drawings have the fixtures properly powered and circuited. Normally, there should be a minimum of three (3) exterior lighting circuits. Every third fixture should be on a different circuit; in the event a circuit is disrupted, two-thirds of the fixtures would still be lit.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Non-emergency architectural, landscaping, etc., lights should be on its own, separate circuit (interconnected with controls) so they can be shut down for energy conservation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. The automatic control of site lighting shall be done through CCS (via the internal Building Automation System). If exterior lighting is controlled through a central panel, there should be a dry contact input from CCS to tell the controlled breaker(s) in the panel when the campus photocell has sensed dusk or dawn in order to turn the lights on and off. CCS will need to know if this is a momentary or maintained contact. At remote, off-campus sites, it is OK to use photocell and time clock to control the site lighting. It is unacceptable for site lighting to be on 24/7.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. The automatic lighting control system shall have current transformers/sensors installed to monitor each walkway, parking lot, and/or roadway lighting circuit in order to verify to CCS that lights are being turned on and drawing the appropriate amount of current.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. The automatic lighting control system shall have a back up program incorporated to turn on and off the circuits if the signal from CCS is lost. The backup should be based on the astronomical time clock and set for 15 minutes after dusk (not sunset) and 15 minutes after sunrise (not dawn) to allow a buffer time for the Campus photocell activate or deactivate the system.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Verify that on larger projects PSU receives a laptop computer to control the automatic lighting system. This may be indicated in the specifications under the interior lighting package.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Junction boxes for site lights should be outside of pole in the walkway for every fixture.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Verify that pole bases for site lights are properly designed/sized for the pole	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

height.					
11. The use of wall paks and building maintained fixtures is discouraged.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Building-mounted emergency lighting shall be controlled via a single photocell for all lights (lights required at exit doors). These lights CAN NOT be CFL or HID types (HID can be used if the fixture also contains a quartz backup lamp).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. All exterior fixtures shall be labeled. Coordinate with Kevin Hahn (kxh22@psu.edu ; (814) 592-7145), OPP Supervisor Trades III Electrical Services and/or Frank Raymond (frr1@psu.edu ; (814) 777-1239), OPP Mapping Coordinator.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>