Street Lighting Plan Review Check List

Cover Sheet:

- Check title for accurate description and spelling
- Check if Federal Project numbers are listed, if applicable
- Check signature blocks for accuracy and appropriateness
- Verify project location is shown accurately on map and scale is listed or "not to scale"
- Check telephone numbers for utility companies (See utility contact list in Project Procedures Manual, Exhibit No. II-9)
- Make sure "City of Overland Park Traffic Services" for Street Lighting, Traffic Signals and Fiber Optic is listed in the utility contacts
- Verify the table of contents match the plan sheets
- Review title block for accurate information

General Notes Sheet:

- Verify that the street lighting legend matches the standard Overland Park legend
- "Instructions for Disassembly of Traffic Signal Equipment". Delete the note that does not apply based on whether the project has federal funding. This is because the transportation of salvageable equipment or materials cannot be paid for on federally funded projects. Our maintenance staff will have to pick up all salvaged material the contractor stores on site.
- Verify that the "Miscellaneous Conduit Details" are included and are in conformance with the plan sheets.
- Verify the "Design Parameters" including proper luminance levels and uniformity ratios are specifically called out on the plans. Check to validate the proper pedestrian conflict area and street classification.

Plan Sheet:

- Make sure that all vertical and horizontal clearances, according to the National Electric Code, are maintained to all poles regardless of whether they are power lines, communication cable or cable lines. KCP&L requires 5' clearance to power lines. However, if the final pole location is within 10' from the power line, KCP&L will require the line to be sleeved during pole installation. KCP&L will require payment. We need to include a note that says the contractor is responsible for the payment.
- Verify that the controller address is shown on the plans at the appropriate location and in the lower right hand corner of the sheet. The street light controller address should be indicated with an "LC" extension. Verify that it is correct and check with Therese Lyons (895-6237) to make sure that it has not been previously assigned. Also have Therese input the address into the Tidemark system so the contractor can pull an electrical services permit

- If installing new control centers, coordinate locations between Public Works and Engineering Services to make sure that a developer project is not scheduled in the same area. Care should be taken to strategically locate new control centers to maximize all four circuits.
- Verify that KCP&L can provide power to the location of any new control centers if design is performed in-house. If consultant designed, request utility letter from consultant to verify that the power location has been coordinated. Request a copy of the utility letter from the consultant.
- Review old sets of plans if utilizing the existing controller to ensure that the plans are shown correctly for tying into existing cables.
- Review the voltage drop calculations if adding on to existing circuits.
- Verify the pole heights and lamp wattages or LED Classifications are consistent with Overland Park Street Lighting Resolution.
- Verify the pole spacing and locations. Lights on thoroughfares should be installed in the medians with twin luminaries if possible.
- Poles should be a minimum of 3' from the back of any curb. Poles should also be located so as to not conflict with storm drainage pipes or inlets. Poles should be located on the sidewalk side of residential or collector streets.
- Make sure that each pole is called out according to the legend with station, offset, control center, circuit number, pole number and conduit detail. Verify all pole stationing and offset callouts.
- Make sure that conduit between median noses is offset so as to not conflict with Object Marker sign location on median nose.
- Check to see if appropriate intersection illumination is achieved.
- Make sure all symbols match the plan legend.
- Make sure conduit legend matches what is shown on the plans. Verify HDPE conduit is continuous between light poles, junction boxes, etc.
- Verify 3" PVC conduit or 3" SDR 13.5 HDPE (black with red stripes) between the control center and the KCP&L power pole or sectionalizer for 4 circuit control centers. If using a 1 circuit control center, the conduit size can be 2".
- Check the location and types of junction boxes shown on the plans. Type 1 junction boxes should be used on each side of street crossings. Use a Type 2 junction box, if a branch circuit enters the same junction box. i.e. if more than 3-1c#4 cables enter and exit out of a junction box, use a Type 2 junction box.
- Verify north arrow and scale.
- Combination signal poles with street lights should indicate conduit and cable information to tie into existing or proposed street lighting control centers or circuits. Street lights on combination poles should not be shown to acquire power from the traffic signal controller.
- If fiber optic conduit is included with the street lighting plans, make sure the fiber optic service boxes are indicated correctly on the plans as well as the conduit. Review the Fiber Optic Plan Review Checklist for fiber optic plans.
- Check all Construction Notes for applicability.
- Verify pole numbering is consistent with circuit numbers.
- Provide street addresses on the plans for all street lighting poles. (Pole addresses are not required for OP14 pole series)

Bill of Materials Sheet:

- Verify that the latest details are inserted.
- Verify the quantity sheet is complete and accurate according to what is shown in the plans.
- Verify that the fused and un-fused disconnects and multi-tap connector quantities are split out and are accurate depending on whether twin or single luminaires are used.
- Verify that the 1-2c THHN pole and bracket cable quantity has been pulled off accurately.
- Verify that the 3-1c #4 cable quantity is accurate.
- Verify that the appropriate screw-in pole base has been used for the particular mounting height and bracket arm length.
- Verify that the aluminum control center is specified as 100 Amp and the voltage is 240 volt. If KCP&L cannot provide 240 volt, revise the voltage accordingly.
- Make sure Type 1 and 2 junction boxes are quantified accurately.
- Make sure to include ground rods, ground cable, photocell for the controller and concrete foundation
- Verify the proper pole and luminaire arm is used and the quantity is accurate
- Verify the appropriate class of LED is used.

Standard Detail Sheets:

- Verify that the standard detail sheets are the most current.