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| **Street Lighting Inspection Checklist***(Note “X” Approved, “R” Rework and Re-Inspect, or “N” Not Inspected)**(Supplement “R” with comments, date, and final approval)* |

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| **Screw-In Anchor Base**  |
| 1.01 |  | Foundation located as shown on plans or as approved for relocation |
| 1.02 |  | Base plate is level  |
| 1.03 |  | If installed in a pre-drilled hole, foundation is backfilled with concrete or flowable fill |
| 1.04 |  | PVC conduits installed through the slots for distribution cables |
| 1.05 |  | Internal cavity is backfilled with appropriate material  |
| 1.06 |  | Cover skirt around base plate if base plate is not at finished grade elevation |

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| **Concrete Base**  |
| 2.01 |  | Foundation located and sized as shown on plans |
| 2.02 |  | Top of foundation is level, smooth, and edges are beveled |
| 2.03 |  | Leveling nut on the anchor bolts are buried in the concrete with only approximately 1/8” exposed. |
| 2.04 |  | PVC conduits installed through the foundation for distribution cables and grounding |
| 2.05 |  | Rebar type and location as shown on the plans |

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| **Poles** |
| 3.01 |  | Bracket arm(s) orientated perpendicular to travel way |
| 3.02 |  | Vertical orientation, leveling nuts (check with plumb bob) |
| 3.03 |  | Anchor bolts tightened |
| 3.04 |  | Breakaway bases installed level (less than ¼ inch shim at any bolt location) |
| 3.05 |  | Bolt covers installed |
| 3.06 |  | Hand holes oriented 180° from oncoming traffic and covers in place (North or East in medians) |
| 3.07 |  | All cables neatly laced up adjacent to hand hole |
| 3.08 |  | Break-away connectors securely attached to wires, protected with insulating boots |
| 3.09 |  | Poles on concrete or screw–in anchor foundations placed in flowable fill have ground wire, ground rods |
| 3.10 |  | All conduits packed with duct putty |
| 3.11 |  | Pole cap installed |
| 3.12 |  | Bracket arm end cap on lower member (this is normally factory installed/welded) |
| 3.13 |  | Grommet installed in pole at the bracket arm |
| 3.14 |  | Pole and bracket arm(s) have the manufacturer’s identification engraved and visible |
| 3.15 |  | Pole is labeled with the same number as shown on plans |
| 3.16 |  | Tree limbs need to be trimmed away from the pole and bracket arms at least two feet |
| 3.17 |  | Pole and bracket arms free of grease and mud |

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| **Luminaire** |
| 4.01 |  | Frontal view of the luminaire is parallel to the grade of the roadway |
| 4.02 |  | Side view of the luminaire is horizontal |
| 4.03 |  | NEMA label on the ballast matches luminaire wattage in the plans |
| 4.04 |  | Lamp is the proper wattage in the head |

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| **Pull or Junction Box** |
| 5.01 |  | All level and placed to grade |
| 5.02 |  | Good condition, no damage, covers in place and bolted down |
| 5.03 |  | Correct size and located as noted on plans |
| 5.04 |  | Concrete pad surrounding boxes in unpaved areas |
| 5.05 |  | Crushed rock below the box for drainage |
| 5.06 |  | All cables neatly laced up and labeled with aluminum tags  |
| 5.07 |  | Brass tags are attached with wire not zip ties (ends of wire taped up so no sharp edges remain) |
| 5.08 |  | Conduit rounded off to remove rough edges and extend into the box the proper distance |
| 5.09 |  | Cables fill less than 40% of the inside of conduits |
| 5.10 |  | All conduits packed with duct putty |
| 5.11 |  | Seal around any GRS conduits entering from the side |
| 5.12 |  | Splices contained in resin filled splice kits |

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| **Power Supply** |
| 6.01 |  | Location as shown on plans, elevated from ditch or low lying area |
| 6.02 |  | All cables neatly laced up and labeled with aluminum tags |
| 6.03 |  | All conduits packed with duct putty |
| 6.04 |  | Check wiring (proper connections, all ends terminated) |
| 6.05 |  | Photocell installed facing the north or east side of the cabinet  |
| 6.06 |  | Bottom of cabinet sealed to pad |
| 6.07 |  | Ground wire and ground rod installed properly (should be installed in the trench on the power side) |
| 6.08 |  | Wiring diagram and circuit directory shown on inside of cabinet door |
| 6.09 |  | As-built plans in drawing pouch  |
| 6.10 |  | Door locks and latches appropriately |
| 6.11 |  | Conduit rounded off to remove rough edges |
| 6.12 |  | Test the switch in the on, off, and auto positions |
| 6.13 |  | Check tightness of power service wires, neutral buss connections, and field terminals |
| 6.14 |  | Test incoming voltage |
| 6.15 |  | Control station is labeled with the address and the same number as shown on plans |
| 6.16 |  | Circuit numbers labeled on inside panel door adjacent to breakers |

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| **Misc.** |
| 7.01 |  | Conduit markers installed in top of curbs where conduit crosses a street |
| 7.02 |  | As built plans updated, accurate |
| 7.03 |  | Verify system is bonded |
| 7.04 |  | 3-Point grounding test of system (<25 Ohms required) |
| 7.05 |  | System turns on and off with appropriate lighting levels |
| 7.06 |  | Sidewalk and property disturbance has been restored to previous or better condition |
| 7.07 |  | Clean up show up area |
| 7.08 |  | Check nighttime uniformity |
| 7.09 |  | Good overall condition, appearance |

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| **Comments:** |
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*(Attach additional comment sheets if necessary)*

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| **Traffic Signal Inspection Checklist***(Note “X” Approved, “R” Rework and Re-Inspect, or “N” Not Inspected)**(Supplement “R” with comments, date, and final approval)* |

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| **Concrete Foundations** |
| 1.01 |  | Foundation located and sized as shown on plans |
| 1.02 |  | Top of foundation is level, smooth, and edges are beveled |
| 1.03 |  | PVC conduits installed through the foundation for distribution cables and grounding |
| 1.04 |  | Rebar type and location as shown on the plans |
| 1.05 |  | Foundation for the power supply is the same height of the controller foundation if close together. |

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| **Poles** |
| 2.01 |  | Pole located as shown on plans |
| 2.02 |  | Mast arms orientated correctly, sag within limitation (2% typical), face plate |
| 2.03 |  | Vertical orientation, leveling nuts |
| 2.04 |  | Anchor bolts tightened |
| 2.05 |  | Hand hole covers in place |
| 2.06 |  | No cut or sliced cables in pole or hand hole |
| 2.07 |  | Pole caps |
| 2.08 |  | Mast arm end caps |
| 2.09 |  | Pole grounded, ground wire, ground rod |
| 2.10 |  | Wire supported inside of pole up to the hook which is near the cap |
| 2.11 |  | Grout around bolts at the base of the pole or wire mesh |
| 2.12 |  | If grouted - Drain tube installed below the pole through the grout |
| 2.13 |  | Conduit inside the pole cut to the proper height and edges smooth |
| 2.14 |  | Duct putty in conduit |

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| **Pull Boxes** |
| 3.01 |  | All concrete or composite type |
| 3.02 |  | All level and placed to grade |
| 3.03 |  | Good condition, no damage, covers in place |
| 3.04 |  | Correct size and located on each corner as noted on plans |
| 3.05 |  | Crushed rock in bottom for drainage |
| 3.06 |  | Conduit cut low (1”-2”) and rounded off to remove rough edges, bushings if required |
| 3.07 |  | All cables neatly coiled and labeled with brass tags wired on, no zip ties (ends of wire taped up so no sharp edges remain) |
| 3.08 |  | Duct putty in conduit |
| 3.09 |  | Closed unused openings |
| 3.10 |  | Conduit filled < 40%, minimum of two 4” conduits from main to controller |
| 3.11 |  | Cable hooks installed |
| 3.12 |  | Loop wires twisted 8-10 turns per foot |
| 3.13 |  | Conduit grounded, continuous system ground, ground wire connections secure |
| 3.14 |  | No cable splices, cuts or slices (splices are allowed on the ground wire They are also allowed on lighting “Tee” connections with proper splice kits) |

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| **Signal** |
| 4.01 |  | Aligned properly with respect to lanes |
| 4.02 |  | Pedestrian head clearance (7’ – 10’) and orientation |
| 4.03 |  | Watercaps, unused cable holes closed |
| 4.04 |  | Plumizers tight, don’t turn or twist, aerial equipment tightened down |
| 4.05 |  | Lamps are proper type, size, and wattage (LED) |
| 4.06 |  | Wiring conforms to City standard |
| 4.07 |  | Wiring connections made in terminal boxes on mounting brackets, no terminal block in base of pole, or in signal head |
| 4.08 |  | All neutral wires terminated |
| 4.09 |  | All unused cable capped or terminated |
| 4.10 |  | No chafed wires or splices and jackets extend into disconnect |
| 4.11 |  | Screws on disconnect door tightened |
| 4.12 |  | Lens type (glass or plastic) correct |
| 4.13 |  | Backplates, visors, and louvers in place and orientated correctly |
| 4.14 |  | Operation of indications correct, including overlaps |
| 4.15 |  | Doghouse opens out (not both the same direction).  |

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| **Luminaires** |
| 5.01 |  | Direction of luminaire arms correct |
| 5.02 |  | Heads power on |
| 5.03 |  | Proper wattage lamps |
| 5.04 |  | Fused connection installed in base of the pole |
| 5.05 |  | System operates properly |

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| **Interconnect** |
| 6.01 |  | Proper cable |
| 6.02 |  | No cable splices, cuts or slices |
| 6.03 |  | Communicates |

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| **Emergency Vehicle Pre-emption** |
| 7.01 |  | All detectors mounted properly – mounting and location |
| 7.02 |  | All detectors wired properly – no splices |
| 7.03 |  | Proper Operation – test detection range and sensitivity. Check with Operations Field Supervisor |

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| **Push Buttons** |
| 8.01 |  | Proper placement for appropriate street crossing |
| 8.02 |  | Signs are correct, directions correct |
| 8.03 |  | Test push buttons call to controller – activate pedestrian indications |
| 8.04 |  | Push button wiring stranded for low voltage |
| 8.05 |  | Push button is large ADA (2”) style button, no sticking |
| 8.06 |  | Mounted at proper height (42-48”) |
| 8.07 |  | Accessible from wheel chair – adjacent level sidewalk |

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| **Detection** |
| 9.01 |  | Detection works correctly, pick up & drop cars, trucks, and motorcycles  |
| 9.02 |  | All actuated lanes have presence detection |
| 9.03 |  | Verify video detection, camera location and mounting  |
| 9.04 |  | Review camera pictures for detection & advanced location |
| 9.05 |  | Proper size and shape of loops/zones, centered in lanes |
| 9.06 |  | Lead-in properly marked, twisted, soldered and sealed |
| 9.07 |  | Good seal over loops |
| 9.08 |  | No crosstalk/spillover |
| 9.09 |  | No cable splices, cuts or slices (except of Lead-in to loop at pull box) |
| 9.10 |  | Test loop continuity, resistance, and inductance |

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| **Cabinet/Controller** |
| 10.01 |  | Location as shown on plans, elevated from ditch or low lying area |
| 10.02 |  | All cables neatly bound, coiled, and labeled with brass tags wired on, no zip ties (ends of wire taped up so no sharp edges remain) |
| 10.03 |  | All conduits packed with duct putty |
| 10.04 |  | Check wiring (proper connections, all ends terminated) |
| 10.05 |  | Check grounding (cabinet, conduit, wiring) |
| 10.06 |  | Push button detectors on door |
| 10.07 |  | Light properly installed in cabinet and working |
| 10.08 |  | Cabinet fan operational, test thermostat |
| 10.09 |  | Push Buttons, Pre-emption, Field Wiring all terminated |
| 10.10 |  | Door opposite of street (tech faces street with door open) |
| 10.11 |  | Check surge suppressors, surrestors, and load resistors |
| 10.12 |  | Bottom of cabinet sealed to pad |
| 10.13 |  | Foundation at plan grade, clean, and level |
| 10.14 |  | Ground rod installed properly |
| 10.15 |  | Controller manual, timings, and as-built plans present |
| 10.16 |  | Door locks, latches appropriately  |
| 10.17 |  | Vehicle detector switches present, test operation |
| 10.18 |  | Conduit cut low (1”-2”) and rounded off to remove rough edges, bushings if required |
| 10.19 |  | Test power switch, signal switch, controller switch, stop time switch |
| 10.20 |  | Test manual operation |
| 10.21 |  | Test flash switch, entry and exit phases, flash rate (1 flash/sec), ped indications dark |
| 10.22 |  | Close all unused cabinet openings |
| 10.23 |  | All spare conductors grounded at neutral buss |
| 10.24 |  | Test conflict monitor, flash test and absence of signal test |
| 10.25 |  | Check tightness of power service wires, neutral buss connections, and field terminals |
| 10.26 |  | Check delay detector settings |
| 10.27 |  | Check detector operation mode |
| 10.28 |  | Check detector amplifier settings |

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| **Timings** |
| 11.01 |  | Walk across all pedestrian crossings to verify adequate clearance and walk times |
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| 11.02 |  | Check time and date |
| 11.03 |  | Check proper cycling |
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| **Electric Service** |
| 12.01 |  | Test incoming voltage |

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| **Misc.** |
| 13.01 |  | All pedestrian crossing have ADA compliant sidewalk ramps |
| 13.02 |  | Verify pavement markings, stop bars & crosswalks are installed properly & according to drawings |
| 13.03 |  | Verify signing properly placed (left turn, right turn, lane indicators, pedestrian, etc.) and existing conflicting signs removed |
| 13.04 |  | As built plans updated, accurate |
| 13.05 |  | Conduit markers installed in top of curbs where conduit crosses a street |
| 13.06 |  | No sight obstructions, clear view on all approaches |
| 13.07 |  | Any extra wire and conduit called for on the plans for future use are in place |
| 13.08 |  | Verify system is bonded |
| 13.09 |  | 3-Point grounding test of system (<25 Ohms desired) |
| 13.10 |  | Observe correct operation during daytime |
| 13.11 |  | Observe correct operation during nighttime |
| 13.12 |  | Sidewalk and property disturbance has been restored to previous or better condition |
| 13.13 |  | Clean up show up area |
| 13.14 |  | Good overall condition, appearance |

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| **Comments:** |
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*(Attach additional comment sheets if necessary)*