ELECTRICAL AND TRAFFIC ENGINEERING MANUAL

Appendix 900.1

Construction Check List

CONSTRUCTION CHECK LIST

Item	Stage of Project	Accepted Yes/No	Corrections Yes/No	Comments
ELECTRICAL UNDERGROUND REVIEW: PRIOR TO POLE INSTALLATION & WIRING				
Concrete Bases:				
1. Check for the correct type of bases by reviewing anchor bolt size, spacing, protrusion, and base type imprint (on top of the base)	Beginning			
2. Check for correct anchor bolt orientation.	Beginning			
3. Check concrete bases are installed in their specified locations at the correct elevations	Beginning			
4. Check concrete base backfill is properly compacted	Beginning			
5. Check concrete strength tests supplied by the contractor	Beginning			
6. Check top surfaces of concrete bases are level in all four directions	Beginning			
Conduit:				
1. Check RPVC conduits are labeled “CSA 22.2 No. 211.2”	Beginning			
2. Check all conduit trenches are a minimum of 600mm deep	Beginning			
3. Check conduits are properly glued together	Beginning			
4. Check backfill material is free of large rocks which will damage conduits. If Large rocks are encountered advise the contractor to surround conduits with 25mm WGBCA material	Beginning			
5. Check marker tape is installed above conduits/cables in trenches	Beginning			
6. Check trenches for proper compaction of backfill	End			
7. Check all empty conduits have pull strings	End			
Junction Boxes:				
1. Check boxes are installed flush with finished grade	End			
2. Check security bolts are installed and operate as designed	End			

3. Check lids are bolted down and steel lid is bonded	End			
ELECTRICAL REVIEW: POST CONSTRUCTION				
General:				
1. All work is complete and operating.	End			
2. Record drawing mark-up received from the contractor	End			
Signal and Lighting Poles:				
1. Check poles are installed plumb or in the case of signal poles with arm over 11m the pole may have to be racked back to offset arm sag. Signal arms should always have positive rise of 1 to 2 degrees.	End			
2. Check any scratches in the finished surface are repaired	End			
3. Check washers and nut covers are installed. Check for double nuts on signal poles and arms.	End			
4. Check hand hole covers are installed and secured	End			
5. Check breakaway bases are installed where noted	End			
6. Check pole is proper height and type	End			
Luminaires and Photocells:				
1. Check luminaires are installed level or plumb.	End			
2. Check luminaires are operational.	End			
3. For Cobra heads – Check for correct wattage and lighting source by checking NEMA wattage label	End			
4. For non-cobra head style luminaires check for correct luminaire type, wattage and light source	End			
Service Equipment:				
1. Check all service panels and conduits are securely attached	End			
2. Check wiring inside the panel is neat, correctly terminated and conforms to the requirements of the wiring diagram	End			
3. Check equipment is securely attached inside the panel	End			
4. Check ground conductor has no splices	End			
5. Check the ground rod or plate is installed and connected	End			
6. Check for correct breaker and contactor size and fault proper current ratings in electrical kiosks	End			
Wiring:				
1. Check all conductors inside poles are RW90 stranded.	End			

2. Check all conductors are the proper sizes and correctly color coded as indicated on the plans	End			
3. Check wiring in pole hand hole. Check all lighting circuits are correctly fused (check fused lines and load sides are correctly oriented)	End			
4. Check all bond conductors are green	End			
5. Check conductors are properly tagged in all hand holes and lighting control cabinets	End			
Restoration:				
1. Check all areas where work has been performed have been returned to their original condition or better	End			
2. Check all excess material has been removed from the work site	End			
Signals:				
1. Check all signals are properly aimed and visible from stop bars and 50m back.	End			
2. Check all pushbutton call up proper pedestrian display. If audible signals are installed make sure they call proper sound on activation.	End			
3. Check all detectors activate their proper phase	End			
4. Check controller cabinet is securely attached and silicone is installed between the cabinet and concrete base	End			
5. Check conductors are properly tagged in all hand holes	End			
6. Check proper cable and conductors are installed	End			

Project #_____

Location_____

Consultant_____ Phone_____ e-mail_____

Signed_____ Print Name _____

Date_____

Additional Comments:

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