



## Approved Products for Roadway Lighting & Traffic Signals Infrastructure

\*\*\*Proposed Equivalents must be approved through the City's Approved Product Application process.

PRODUCT	SPECIFICATION	FEATURES	MANUFACTURER	CATALOGUE #/ IDENTIFIER	COMMENTS
<b>ELECTRICAL HANDHOLES</b>					
Electrical Handwells	OPSS.MUNI 2401	Precast Concrete w/Cover, 300mm DIA			OPSD 2112.010
		Precast Concrete w/Cover, 460mm DIA			OPSD 2112.020
		Precast Concrete w/Cover, 675mm DIA			OPSD 2112.030
<b>POWER SUPPLY EQUIPMENT</b>					
Power Supply Pedestal Assemblies, Base Mounted	R334 & R344	120/240 V, 100 Amp, 1 Ø, 3 Wire Assembly	Square D	Model # CQO112M100PC	The Contractor shall supply and install a Square D, Model # CQO112M100PC load centre complete with circuit breakers in a Pedestal enclosure at the supply location as specified on the Contract Drawings. The pedestal enclosure shall include a 120/240 V, 100 Amp, 1Ø, 3 Wire assembly. Stainless Steel Natural Finish from the manufacturer (i.e. the Downtown Core - powder coated Black). Circuit breakers shall be installed as shown on the wiring schematics and in accordance with the Operating Authority Standard Drawings. The Contractor shall install three (3), copper stranded RWU 90 conductors (Black, Red, & White) (size as per Contract drawings) from the hydro supply point to the load centre, leaving a sufficient length of cable coiled for the connection to the hydro feed. Each conductor must be one continuous piece, with no splices.
		One- Main Circuit Breakers - 2 pole - 240 V - 100 Amp common trip circuit breaker	Square D	Catalogue # QOM10VHL	
		Lighting Circuit Breakers (number as specified in the Contract) - 1 pole - 120 V - 40 Amp circuit breaker	Square D	Catalogue # QO-140	
		Lighting Circuit Breakers (number as specified in the Contract) - 2 pole - 240 V - 40 Amp circuit breaker	Square D	Catalogue # QO-240	
		One- Secondary Surge Arrester, 650 Vac phase to ground	Square D	Catalogue # QO2175SB	
		Pedestal assembly shall be a 42" SL42 Streetlighting Pedestal	Pedestal Solutions Inc. with Brooklin Concrete	Model # BCP20PED	
Power Supply Assemblies, Pole Mounted	R342	120/240 V, 60 or 100 Amp (size as specified in the contract), 1 Ø, 3 Wire Assembly	Square D	Model # CQO18M100RB60 or CQO18M100RB100	The Contractor shall supply and install a Square D, Model # CQO18M100RB60 load centre or CQO18M100RB100 complete with top entry hub and circuit breakers on the service pole in the location(s) shown on the Contract Drawings and in accordance with R342 & R343. The power supply enclosure shall include a 120/240V, 60Hz, Single Phase 3 Wire assembly. Circuit breakers shall be installed as shown on the wiring schematics and in accordance with the Operating Authority Standard Drawings. The Contractor shall install three (3), copper stranded RWU 90 conductors (Black, Red, & White) (size as per Contract drawings) from the hydro supply point to the load centre, leaving a sufficient length of cable coiled for the connection to the hydro feed. Each conductor must be one continuous piece, with no splices.
		One- Main Circuit Breakers - 2 pole - 240 V - 60 or 100 Amp common trip circuit breaker (size as specified in the Contract)	Square D	Catalogue # QOM100VHL or QOM60VHL	
		Lighting Circuit Breakers (number as specified in the Contract) - 1 pole - 120 V - 40 Amp circuit breaker	Square D	Catalogue # QO-140	
		Lighting Circuit Breakers (number as specified in the Contract) - 2 pole - 240 V - 40 Amp circuit breaker	Square D	Catalogue # QO-240	
		One- Secondary Surge Arrester, 650 Vac phase to ground	Square D	Catalogue # QO2175SB	
<b>POLES</b>					
Steel Poles, Base Mounted	R358	1.5m (5') - Standard Duty	VALMONT	WQ0720250B	All Steel Poles are to be Hot Dipped Galvanized and Powder Coated from the Manufacturer, where applicable.
	R360	3.7m (12') - Standard Duty	VALMONT/POLEFAB	8312	
		3.7m (12') - Standard Duty	VALMONT/POLEFAB	8512	
		6.1 m (20') - Standard Duty	VALMONT/POLEFAB	8520	
		6.1 m (20') - Heavy Duty	VALMONT/POLEFAB	8620	
		7.3 m (24') - Standard Duty	VALMONT/POLEFAB	8524	
		7.3 m (24') - Heavy Duty	VALMONT/POLEFAB	8624	
		9.1m (30') - Standard Duty	VALMONT/POLEFAB	8530	
		10.7 m (35') - Standard Duty	VALMONT/POLEFAB	8535	
13.7 m (45') - Standard Duty	VALMONT/POLEFAB	8545			
Concrete Poles, Direct Buried	R345	All poles shall have provision for #6AWG CU electrical ground. Poles shall be manufactured and placed so that the handhole orientations are in accordance with OPSD 2220.01.	Utility Structures Inc.	HA-285-B-1-PG-10	8.7 metres pole overall length
				HA-325-B-1-PG-10	9.9 metres pole overall length
				HA-400-B-1-PG-10	12.2 metres pole overall length
			Stresscrete Group	E285-BPR-G-M00 (BAR285B-R345-1)	8.7 metres pole overall length
				E325-BPR-G-M00 (BAR325B-R345-1)	9.9 metres pole overall length
				E400-BPR-G-M00 (BAR400B-R345-1)	12.2 metres pole overall length
Decorative Concrete Poles, Direct Buried	R337 & R339	All poles shall have provision for #6AWG CU electrical ground. Poles shall be manufactured and placed so that handhole orientations are in accordance with OPSD 2220.01.	Stresscrete Group	KCH18-G-S11-140 30/40	The manufacturer's catalogue number shall be as indicated on the Contract Drawings. These poles shall be complete with pole cap, handhole for underground wiring and handhole cover.
				KCH 27.5-G-S11-140 25/30	
			Utility Structures Inc.	CA-230-A-2-BE-30	
				CA-325-A-2-BE-30	



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<b>BRACKETS</b>					
Bracket Type	OPSS.MUNI 2428	Aluminum Tapered Elliptical Bracket			OPSD 2420.01
<b>LUMINAIRES</b>					
Roadway Lighting Type		LED IES Type II or Type III "cobra head" style with color temperature (CCT) of 4000 and prewired to operate at 120 Volts, C.S.A. approved.	Cree Lighting GE Lighting Phillips / Signify Lighting	XSP Series EVOLVE Series LUMEC Roadstar/Roadview Series	All luminaires shall have zero degree (0°) tilt and have the socket position factory set. Specific fixture type must achieve the performance specifications as defined in the supporting IES file and the latest version of ANSI/IES RP-8 Guidelines. Each fixture shall be, prewired to operate at 120 Volts, C.S.A. approved, and shall be equipped with photo control receptacle, ground lug and photocell.
Decorative Roadway Lighting Type	R336 & R338	LED IES Type III with color temperature (CCT) of 3000 and prewired to operate at 120 Volts, C.S.A. approved.	Quattro Lighting	Quattro Pro 301 - Post Top or Quattro Pro 351 Pendant	
Decorative Roadway Luminaire shall be per Standard Specification Drawings R336 & R338.					
<b>PARK WALKWAY LIGHTING</b>					
Concrete Pole		Pre-stressed, tapered, octagonal in an eclipse finish (black) with mounting for a side mounted fixture.	Utility Structures Inc.	MA-200-A-3-BE-55	
Luminaire		X-AL series (black) 120V, 37 Watt Lamp Driver with a 20 LED LAMP, and Photo Cell included	Cree	X-AL-3-2-D2-D-1-T-C-P	Luminaire to have an adjustable arm mounting structure, and to have a type 2 medium light distribution
Power Pedestal		Pedestal	Pedestal Solutions Inc.	Cat. #TSLM421-4-15	Meter Base to be Compatible with PowerStream Meter(mounted inside pedestal)
		Precast Concrete Base	Utilicon	Cat. #UP2022	Anchor Pedestal to Base, seal all openings